Democratic consolidation is the process by which a newly established democratic regime becomes sufficiently durable that a return to nondemocratic rule is no longer likely. The authors examine a wide range of structural factors that may affect democratic consolidation in Third World countries, using three indicators of consolidation and multivariate statistical techniques. The authors’ main finding is that development-related socioeconomic factors, the contagion effect of democratic neighbors, and high inflation each strongly affect the likelihood of consolidation, although the latter was significant only in the early part of the period studied. Several other factors have no apparent effect, including several measures dealing with political culture and the design of democratic institutions. These three factors together strongly predict which Third World democracies achieve consolidation, suggesting that the process-centric literature on democratic consolidation has paid inadequate attention to the effects of structural factors.

THE STRUCTURAL DETERMINANTS OF DEMOCRATIC CONSOLIDATION
Evidence From the Third World

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In the 1980s, research on democratization focused largely on democratic transition—the circumstances under which nondemocratic regimes are replaced by democracies. More recently, and with the emergence of many new democracies worldwide, attention has turned to democratic consolidation—

AUTHORS’ NOTE: We are especially grateful to Hong Doan and David Huxsoll for their research assistance on this project. We would also like to thank Mary Clark, Larry Diamond, Luis Escobar, William Greene, Yoshinori Kamo, Christopher Kenney, Scott Mainwaring, Nancy Powers, Karen Remmer, Edward Shihadeh, and Roger Wotkiewicz for their generous help and advice.

COMPARATIVE POLITICAL STUDIES, Vol. 31 No. 6, December 1998 740-771
the factors that affect the durability and survival of new democracies. The literature on democratic transition emphasized the role of political processes in affecting regime change and asserted the autonomy of these processes from structural factors of the sort highlighted in earlier approaches to the study of democratization (Kitschelt, 1992; Schmitter, 1995). With a few exceptions, the new literature on consolidation has maintained this emphasis, privileging process over structure (Gunther, Diamandouros, & Puhle, 1995; Higley & Gunther, 1992; Mainwaring, O'Donnell, & Valenzuela, 1992; Tulchin & Romero, 1995). Commenting on this trend, Karen Remmer (1996) writes that “comparativists have all but abandoned efforts to generalize about the macrosocial prerequisites for political democracy in favor of more contingent understandings emphasizing the strategic choices of political actors” (p. 630). Thus, the current research program on democratic consolidation has become disengaged from earlier, more broad perspectives on democratization and the rich tradition of structuralist analysis has largely been ignored.

In this article, we attempt to reconnect the current interest in democratic consolidation with these earlier structuralist approaches. Although the emphasis on political process in the consolidation literature has yielded many valuable insights, we believe that this literature has been remiss in failing to explore more thoroughly how structural factors may affect consolidation. Prior to the 1980s, rich paradigms emerged that examined the impact of economic development, political culture, political institutions, and economic crises on democracy. More recent scholarship has focused on international influences and prior democratic experience. We argue here that although political processes are obviously crucial in affecting the consolidation (or demise) of new democratic regimes, these processes, in turn, may be influenced in important ways by the structural factors emphasized in these earlier bodies of literature. Thus, in our view, a comprehensive understanding of the determinants of consolidation must take into account both political processes and structural factors of this sort.

The empirical literature on consolidation that has appeared so far consists mainly of single-country case studies and comparative analyses focusing on Latin America and Southern Europe. This literature has helped elucidate the dynamics of consolidation. However, its limited geographical scope has obscured the effects of many structural factors whose impact would only be apparent in more broad, interregional analyses, such as socioeconomic factors associated with economic development, non-Western cultural attributes,

and international pressures for democratization. A fair evaluation of the impact of these factors clearly requires a more broad, more representative sample of new democracies seeking to achieve consolidation.

The foregoing observations suggest the need for a broad, cross-national study of consolidation that includes explanatory variables embodying both political processes and structural factors. Unfortunately, most of the relevant political-process factors are difficult to operationalize in a broad comparative framework, so a comprehensive study of this sort is not currently feasible. Alternatively, we could use a cross-national framework to explore how the structural factors emphasized in other branches of the democratization literature affect consolidation. Although such a study would not yield a comprehensive model, it would enable us to identify structural factors that affect consolidation and provide a rough assessment of how much of an impact these factors actually have.

In this article, we undertake such a study. We begin by discussing a wide range of structural factors that may affect consolidation, drawing on a variety of theoretical approaches that have appeared during the last few decades. Next, we present three operational measures of consolidation and a series of explanatory variables that embody many of these structural factors.

Based on a data set that covers 56 cases of successful or unsuccessful consolidation in Third World countries, we then use multivariate statistical techniques to explore how the structural factors we examine affect the likelihood of consolidation. Unfortunately, our inability to examine political-process factors and methodological problems caused by missing observations among our explanatory variables prevent us from rigorously testing a comprehensive model. Nevertheless, we obtain some important findings that shed considerable light on the determinants of consolidation.

### DEMOCRATIC CONSOLIDATION AND ITS CAUSES

We define democracy here as a type of political regime in which (a) meaningful and extensive competition exists among individuals and organized groups for all effective positions of government, at regular intervals and excluding the use of force; (b) a highly inclusive level of political participation exists in the selection of leaders and policies, such that no major (adult) social group is excluded; and (c) a sufficient level of civil and political liberties exists to ensure the integrity of political competition and participation. In practice, these conditions can only be met through the regular conduct
of free, fair, universal elections. A democratic transition is the process through which a democratic regime of this sort replaces a nondemocratic regime. Democratic transitions almost always culminate at distinct moments—usually at the inauguration of a freely elected government—that mark the beginning of the new regime (O'Donnell & Schmitter, 1986, p. 6).

Democratic consolidation refers to the process by which a newly established democratic regime becomes sufficiently durable that democratic breakdown—a return to nondemocratic rule—is no longer likely. Unfortunately, it is difficult to identify exactly what this durability consists of and when breakdown becomes unlikely. Most authors equate consolidation with the strengthening and legitimation of democratic institutions, but these concepts are notoriously difficult to define precisely. Some emphasize the importance of changes in certain political practices or socioeconomic conditions, such as the termination of veto power by leaders of the previous regime, changes in the antidemocratic practices of certain elites, and socioeconomic improvements that reduce the threat of popular unrest (O'Donnell, 1985, 1992, 1994; Przeworski, 1991; Valenzuela, 1992). Thus, although it is fairly easy to define consolidation in general terms, it is hard to specify precisely what it consists of and when it occurs. In the following section, we present three operational definitions that approach consolidation in different ways and enable us to measure it systematically.

Scholars working in other branches of the democratization literature have identified a wide variety of structural factors that may affect democracy. We argue that the political processes that directly affect consolidation or breakdown are embedded in multifaceted social contexts that are shaped by these structural factors, which influence the character and outcomes of these processes and thus indirectly affect the likelihood that consolidation will occur. Our aim here is to explore how some of the structural factors identified in this more broad literature affect consolidation and to assess their overall impact. Although several studies have sifted through the many structural factors featured in this literature and found some to be more important than others (Arat, 1991; Hadenius, 1991; Vanhanen, 1990), they have not focused specifically on consolidation and have not been entirely conclusive. Consequently, although we believe that some of these factors are more relevant than others, we proceed in an exploratory manner to examine all of the plausible structural factors that can be incorporated into our analytical framework. Before turning to our analysis, we briefly review the theoretical arguments associated with these factors.

2. This definition is based largely on Diamond, Linz, and Lipset (1990, pp. xvi-xvii), who draw heavily on Dahl (1971, pp. 2-3).
The most widely studied structural factors bearing on democracy are a group of interrelated socioeconomic variables associated with economic development, or modernization, including a country’s level of wealth, its degree of industrialization, the size of its middle and working classes, and the extent of education and urbanization. High levels of these factors are thought to promote democracy (Lipset, 1959; Rueschemeyer, Stephens, & Stephens, 1992), so we infer that they also increase the likelihood of consolidation. In a related vein, several authors who are working in the frameworks of dependency theory and world system theory have argued that economic dependence inhibits democratization (Bollen, 1983; Gasiorowski, 1988; Gonick & Rosh, 1988); therefore, it should also adversely affect consolidation.

Another important group of structural factors are political cultural traits that are thought to facilitate democracy, such as tolerance, trust, egalitarianism, and a willingness to compromise (Almond, 1980; Inglehart, 1988). Many authors have suggested that these traits are more common in predominantly Protestant societies than in societies based on Catholicism, Islam, and other faiths (Bollen, 1979; Esposito & Piscator, 1991). Similarly, some authors have argued that the organic-statist political culture of Latin America is ill-suited to democracy (Dealy, 1992; Wiarda, 1992). Others have argued that ethnically homogeneous societies are more stable and therefore more conducive to democracy (Dahl, 1971, pp. 105-123). We can infer from these arguments that countries with large Catholic or Moslem populations, Latin political culture, and high ethnic heterogeneity are less likely to achieve consolidation.

One of the main themes in the literature on the breakdown of democracy is the idea that economic crises can lead key actors to believe that economic conditions will only improve if the democratic regime is replaced with a bureaucratic-authoritarian regime capable of driving down wages, curbing inflation, and promoting investment (O’Donnell, 1973; Skidmore, 1977). Drawing on these arguments and on the work of Remmer (1990) and Huntington (1991), Gasiorowski (1995) has found that inflationary crises did, indeed, promote democratic breakdown before the mid-1970s, although not after. Because economic crises may be most threatening in new democracies, in which commitments to democracy often remain weak, they may have a particularly strong, adverse effect on consolidation.

A variety of institutional and political conditions may also affect consolidation. Several authors have argued that presidential democracies are less likely to consolidate than parliamentary democracies.3 Others have argued

that highly fragmented party systems also hinder consolidation, especially in presidential democracies (Mainwaring, 1993; Stepan & Skach, 1993). Much of the recent literature on new democracies warns of the veto power and institutional prerogatives of the armed forces, suggesting that politically powerful military apparatuses may hinder consolidation (Aguero, 1992; Stepan, 1988). Some writers argue that the existence of many democratic regimes in the neighboring region or in the Third World in general creates a contagion effect that facilitates both transition and consolidation by transmitting ideas, norms, and political pressures that are conducive to democracy (Starr, 1991; Whitehead, 1986). Huntington (1991) argues that certain historical conditions produced a pervasive third wave of democratization beginning in the mid-1970s and continuing today and that prior democratic experience facilitates democratization. These latter arguments suggest that consolidation has been more likely to occur in recent years and in countries with prior democratic experience.

The foregoing discussion has identified a large, diverse set of structural factors that may affect consolidation. Reasonably valid quantitative measures exist for each of these factors and are available for many countries. Unfortunately, we have not been able to quantify either the political-process factors emphasized in much of the consolidation literature or several important aspects of the international political environment, such as the existence of economic sanctions and diplomatic initiatives aimed at promoting democracy (Whitehead, 1986). This constitutes an important shortcoming in our analysis.

**EMPIRICAL MEASURES OF DEMOCRATIC CONSOLIDATION**

To examine how these structural factors affect democratic consolidation in a cross-national framework, we must develop a measure of consolidation that is empirically valid and that can be operationalized without too much difficulty in a large, diverse sample of countries. The consolidation literature is quite abstract, so this is not an easy task. The general tendency of this literature has been to specify consolidated democracy as an ideal type and then to show how a given regime meets, or fails to meet, this ideal. Although this approach has yielded valuable insights, it provides little guidance for determining precisely which democracies have achieved consolidation and when they achieved it. For example, it is easy enough to identify abstract characteristics of the democratic regimes in the United States and Costa Rica that render them consolidated—their degree of institutionalization, the broad acceptance of democratic practices, and so on—but it is much harder to
measure these characteristics objectively and specify precisely when they had reached levels that were sufficient to warrant designating these regimes as consolidated.

Because an appropriate operational measure does not appear in the consolidation literature, we were forced to develop one ourselves. Two major problems hampered our efforts. First, because democratic consolidation is a slippery concept, any single measure of it can easily be criticized. To obviate this problem, our analysis is based on three distinct indicators of consolidation. Although none of these indicators alone embodies the complexity of this concept, together they enable us to operationalize it in a fairly robust manner. If we obtain similar results with all three indicators, we can be reasonably confident that these results are valid.

Second, our indicators of consolidation cannot be based exclusively on democratic survival or the avoidance of democratic breakdown. Consolidation implies not that democracy has survived to a certain point but rather that qualitative changes have occurred in the country’s political institutions and practices that make breakdown unlikely—although not impossible—in the future. Our analysis must therefore be based on indicators of consolidation that somehow gauge whether these qualitative changes have occurred. Our first two indicators do so by assessing the performance of newly established democracies at certain junctures that have been identified in the consolidation literature as crucial milestones on the path of democratization.

Our first indicator of consolidation focuses on whether a new democratic regime survives the holding of a second election for the national executive, subsequent to the founding election that inaugurated the new regime. The successful conduct of such a post-founding election is an early but important indicator that incumbents and challengers have come to accept the conduct and outcome of the essential feature of a democratic regime—free, fair, universal elections (Valenzuela, 1992). Our second indicator is based on a similar theoretical argument, but it is more stringent: The indicator holds that consolidation occurs when a democratic regime survives an alternation in executive power through constitutional means, in which alternation in power refers to an unambiguous change in the partisan character of the executive branch. Huntington (1991, pp. 266-267) argues that such alternations in

4. For studies that examine democratic breakdown and survival, see Gasiorowski (1995); Przeworski, Alvarez, Cheibub, and Limongi (1996); and Remmer (1996).

5. In presidential systems, an alternation in power occurs when there is a change in the political party controlling the presidency. In parliamentary systems, we define an alternation in power to occur when a new prime minister is drawn from a party not represented in the previous cabinet. This usually occurs through elections, but 3 of the 29 successful alternations appearing in our data set occurred through constitutional means other than elections.
power are crucial milestones for young democracies and therefore good indicators of consolidation because they demonstrate the willingness of elites to surrender power in accordance with the rules of the new democratic regime. Similarly, Przeworski (1991) characterizes democracy as “a system in which parties lose elections” (p. 10).

These first two indicators measure consolidation by assessing whether the main contenders for power have come to accept the democratic rules of the game, as demonstrated by their behavior during elections or alternations in power. Our third measure holds that consolidation occurs when a democratic regime simply survives for an appropriate period of time. Rustow (1970) argued that democratic institutions become stable and acquire legitimacy in part through the passage of time, similar to how actors become habituated to democratic practices. If so, we should be able to identify a certain durational period following the establishment of a democratic regime, after which the likelihood of breakdown declines substantially. As discussed later in this article, we have determined that breakdown is much less likely to occur after a democratic regime has endured for 12 years.

To operationalize these three indicators, we first had to identify all democratic transitions that took place in an appropriate sample of countries in a given period. We then used decision rules based on the foregoing discussion to determine which of these transitions resulted in each of our three types of consolidation and which resulted in breakdown before each type of consolidation could occur. Because some of our explanatory variables are measured at the time of transition or consolidation, we also noted the dates at which transition and consolidation (or breakdown) occurred.

We used Gasiorowski’s (1996) Political Regime Change Data Set to identify a sample of 66 transitions to democracy. This data set focuses on the 97 Third World countries that had populations of at least 1 million in 1980, covering periods beginning with the date at which each country became independent or established a modern state and continuing through 1992.

6. Huntington (1991) argues that two such alternations in power provide a better criterion for identifying consolidation. We believe that this criterion—which the United States did not meet until 1840 and Japan did not meet until 1996—is unnecessarily demanding. Moreover, most Third World democracies have not yet met this criterion, so cross-national analyses of the sort undertaken here would be impractical.

7. The Third World is defined here as the developing countries of Latin America, the Caribbean, Africa, the Middle East, Asia, and Oceania. Although “Third World” is a nebulous category, these 97 countries have much in common, including economic underdevelopment, foreign dependence, legacies of European colonialism (in most cases), and—most important—difficulties in achieving democratization. Although it is true that a few Third World countries (e.g., Argentina, Saudi Arabia) have at times had higher per capita incomes than certain developed countries (e.g., Portugal, Italy), they differ from these countries in other important ways. Moreover, the statistical controls we employ below adjust for these discrepancies.
Using the definition of democracy given above and corresponding definitions of semidemocracy and authoritarianism, Gasiorowski examined a variety of historical sources and made judgments about when changes occurred among these three types of regime in each country. He identified a total of 66 changes from semidemocracy or authoritarianism to democracy in this sample. Our analysis focuses on the outcome of these 66 democratic transitions, with their status as democracies updated through the end of 1995, when we began our analysis.

To determine which of these 66 transitions were followed by successful post-founding elections or alternations in power, we carefully examined the historical sources that Gasiorowski (1996) used in developing the Political Regime Change Data Set. We then created dummy variables called post-founding election and alternation in power, whose values are 1 if a successful consolidation of the appropriate type occurred and 0 if a democratic breakdown took place before this type of consolidation could occur. In 10 of the 66 cases, neither a post-founding election nor a democratic breakdown had occurred by the time that we coded these variables (in 1995), leaving us with 56 valid observations for post-founding election. Of these, 40 were successful consolidations and 16 were breakdowns. Similarly, alternation in power had only 54 valid observations, of which 29 were successful consolidations and 25 were breakdowns.

To choose an appropriate time period for our durational indicator, we calculated the percentages of the 66 new democracies that remained democratic in each of the first 30 years after their respective democratic transitions. These percentages fell sharply during the first 12 post-transition years, with only 37% of the new democracies remaining democratic for at least 12 years. However, after 12 years, the percentages fell much more slowly, with 22% still remaining democratic 30 years after their transitions. Therefore, we decided to use 12 years as the time period for our durational indicator and created a dummy variable called 12-year duration whose value is 1 for democracies that lasted at least 12 years and 0 for those that did not. Of the 66 transitions, 18 occurred after 1983; therefore, we have only 48 valid observations.

8. See Gasiorowski (1996) for a description of the data collection procedures used to create the data set and a complete listing of the data.

9. For a more detailed presentation of the breakdown rates in post-transition years, see Figure 1 in Power and Gasiorowski (1997). Interestingly, our 12-year duration criterion for consolidation corresponds closely with Philippe Schmitter’s observation more than a decade ago that three legislative sessions, or approximately 12 years, could be considered an appropriate time frame for the achievement of consolidation (see Mainwaring, 1986, p. 3).
observations for 12-year duration. Of these, 18 are consolidations and 30 are breakdowns.

Although our post-founding election and alternation in power indicators are probably more appealing on theoretical grounds, we believe that 12-year duration is actually the most valid of the three, for two reasons. First, it is demonstrably better at predicting which new democracies are durable enough to avoid breakdown. Of the 18 new democracies that met our 12-year duration criterion, 69% survived for at least 10 years after meeting this criterion, and 62% survived for at least 20 years. Of those achieving post-founding elections, 55% survived at least 10 more years, and only 30% survived at least 20 years; the corresponding figures for alternations in power are 65% and 31%. Second, both post-founding election and alternation in power identify not only junctures at which new democracies pass important milestones but also times at which major political events—elections and changes in government—occur. Consequently, if an explanatory variable is correlated with one of these indicators, we cannot be certain whether it affects the likelihood of consolidation or the likelihood of the event itself occurring. Because most elections are held at regular intervals and therefore cannot be triggered by any of our explanatory variables, this is a relatively minor problem for post-founding election. However, many factors—including several that are embodied in the explanatory variables that we use below—can trigger changes in government. Therefore, we exercise caution in interpreting the findings associated with these two indicators, especially those associated with alternation in power.10

Thus, we regard 12-year duration as our most valid indicator of consolidation. We include the other two indicators in our analysis mainly to gauge the robustness of our findings. If all three indicators produce similar findings, we can be more confident that these findings are valid.

STATISTICAL METHODS AND EXPLANATORY VARIABLES

Because our three consolidation indicators are dummy variables, we use multivariate logit (or logistic regression) analysis to examine the determinants of consolidation. Logit analysis is a regression-like statistical technique in which the dependent variable is a dummy variable indicating whether the

10. See Power and Gasiorowski (1997) for further details on these measures.
event of interest (consolidation) occurs; the explanatory variables embody factors that are assumed to affect the likelihood of this event occurring. As in ordinary least squares (OLS) regression, logit analysis enables us to evaluate the overall explanatory power of our multivariate model and to test whether each explanatory variable in the model significantly affects the dependent variable.

Table 1 lists 26 explanatory variables that embody the structural factors reviewed above and that may affect consolidation. Unless otherwise noted, our analyses use values of these variables for the calendar year in which consolidation or breakdown occurred. In some cases, we use the natural logarithm of the underlying variable to reduce skewness in the data.

The first seven variables listed in Table 1 are commonly used measures of the socioeconomic factors associated with economic development. These seven variables are highly intercorrelated, so they serve here as proxies for the broad range of changes that accompany development, rather than measures of specific factors that change as a result of development. Thus, we regard university enrollment, which emerges as an important explanatory variable in the analysis below, as a proxy for development-related socioeconomic factors in general, rather than a measure of the extent of higher education. Trade dependence is the sum of a country’s imports and exports divided by its gross domestic product (GDP)—a commonly used measure of economic dependence.11 We include the Catholic and Moslem population variables, Latin America dummy, and ethnolinguistic fractionalization to test the arguments dealing with political culture and ethnic heterogeneity. Values for the two religion variables and ethnolinguistic fractionalization are given only for 1 year in the source we used12 (see Taylor & Hudson, 1972, pp. 271-282). Because these variables change very slowly, we use these values for all years in our analysis.

The variables embodying current economic conditions enable us to test whether inflationary or recessionary economic crises affect consolidation. The two main variables embodying these factors are 2-year moving averages of the underlying variables—averages of their values in the year of consoli-

11. Real gross domestic product (GDP) per capita and trade dependence are the variables RGDPCH and OPEN, respectively, from the data set described in Summers and Heston (1991). The remaining variables in this group are from Banks (1979). Coverage in this data set extends only through 1989. Because these six variables change slowly and uniformly, we used the last values for each country given in the data set for subsequent years.
12. Because Protestants are not a majority in any of the countries we study, we do not include a variable giving their relative size.
Table 1

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Post-Founding Election</th>
<th>Alternation in Power</th>
<th>12-Year Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (significance)</td>
<td>Coefficient (significance)</td>
<td>Coefficient (significance)</td>
</tr>
<tr>
<td>Social factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log(real GDP per capita)</td>
<td>1.479 (.000) 31, 13</td>
<td>2.010 (.000) 24, 21</td>
<td>1.122 (.005) 15, 23</td>
</tr>
<tr>
<td>Industry as percentage of GDP</td>
<td>0.092 (.008) 37, 12</td>
<td>0.131 (.000) 28, 20</td>
<td>0.084 (.011) 18, 24</td>
</tr>
<tr>
<td>University enrollment rate</td>
<td>0.873 (.000) 40, 16</td>
<td>0.865 (.000) 29, 25</td>
<td>0.377 (.000) 18, 30</td>
</tr>
<tr>
<td>Secondary school enrollment rate</td>
<td>1.057 (.000) 40, 16</td>
<td>0.842 (.000) 29, 25</td>
<td>0.518 (.007) 16, 30</td>
</tr>
<tr>
<td>Literacy rate</td>
<td>0.042 (.000) 39, 16</td>
<td>0.071 (.000) 29, 25</td>
<td>0.058 (.000) 18, 30</td>
</tr>
<tr>
<td>Urbanization rate</td>
<td>0.808 (.004) 40, 16</td>
<td>1.265 (.000) 29, 25</td>
<td>0.635 (.015) 18, 30</td>
</tr>
<tr>
<td>Trade dependence rate</td>
<td>0.056 (.543) 32, 13</td>
<td>-0.008 (.893) 25, 22</td>
<td>-0.022 (.780) 15, 24</td>
</tr>
<tr>
<td>Political culture and ethnic character</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Catholic population per capita</td>
<td>0.017 (.044) 40, 16</td>
<td>0.020 (.008) 29, 25</td>
<td>0.021 (.009) 18, 30</td>
</tr>
<tr>
<td>Latin America dummy</td>
<td>1.540 (.035) 40, 16</td>
<td>1.925 (.003) 29, 25</td>
<td>1.609 (.015) 18, 30</td>
</tr>
<tr>
<td>Moslem population per capita</td>
<td>0.010 (.360) 40, 16</td>
<td>-0.003 (.776) 29, 25</td>
<td>-0.139 (.000) 18, 30</td>
</tr>
<tr>
<td>Ethnonlinguistic fractionalization index</td>
<td>-0.017 (.096) 40, 16</td>
<td>-0.022 (.019) 29, 25</td>
<td>-0.015 (.122) 18, 30</td>
</tr>
<tr>
<td>Current economic conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log(inflation), 2-year moving average</td>
<td>0.399 (.340) 31, 9</td>
<td>1.210 (.015) 23, 17</td>
<td>-0.023 (.279) 14, 20</td>
</tr>
<tr>
<td>Year*log(inflation), 2-year moving average</td>
<td>0.266 (.019) 31, 9</td>
<td>0.287 (.017) 23, 17</td>
<td>0.069 (.417) 14, 20</td>
</tr>
<tr>
<td>Log(real GDP growth), 2-year moving average</td>
<td>-1.454 (.660) 24, 9</td>
<td>-2.918 (.354) 23, 14</td>
<td>2.305 (.488) 13, 17</td>
</tr>
<tr>
<td>Year*log(real GDP growth), 2-year moving average</td>
<td>0.179 (.587) 24, 9</td>
<td>0.342 (.364) 23, 14</td>
<td>0.130 (.744) 13, 17</td>
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<td>Institutional and political conditions</td>
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<tr>
<td>Presidential system dummy</td>
<td>-0.310 (.007) 40, 16</td>
<td>-0.033 (.951) 29, 25</td>
<td>0.090 (.881) 18, 30</td>
</tr>
</tbody>
</table>

(continued)
Table 1 Continued

| Explanatory Variables | Post-Founding Election Alternation in Power | 12-Year Duration
<table>
<thead>
<tr>
<th></th>
<th>Coefficient (significance) $N_1, N_0^a$</th>
<th>Coefficient (significance) $N_1, N_0^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective number of parties</td>
<td>0.654 (.013) 39, 16 0.986 (.000) 28, 24</td>
<td>0.208 (.322) 18, 29</td>
</tr>
<tr>
<td>Presidentialism*effective number of parties</td>
<td>0.121 (.867) 39, 16 –0.488 (.531) 28, 24</td>
<td>0.741 (.106) 18, 29</td>
</tr>
<tr>
<td>Military expenditures per capita</td>
<td>0.142 (.002) 31, 11 0.179 (.000) 27, 16</td>
<td>0.028 (.113) 17, 20</td>
</tr>
<tr>
<td>Military personnel per capita</td>
<td>0.089 (.259) 33, 12 0.104 (.065) 27, 21</td>
<td>–0.080 (.324) 14, 26</td>
</tr>
<tr>
<td>Regional democratization rate</td>
<td>7.610 (.003) 39, 16 7.918 (.000) 28, 25</td>
<td>7.572 (.004) 16, 30</td>
</tr>
<tr>
<td>Third World democratization rate</td>
<td>–0.994 (.864) 39, 16 –4.602 (.429) 28, 25</td>
<td>–3.651 (.578) 16, 30</td>
</tr>
<tr>
<td>Historical factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log(prior semidemocratic/democratic years)</td>
<td>0.611 (.008) 40, 16 0.944 (.000) 29, 25</td>
<td>0.496 (.021) 18, 30</td>
</tr>
<tr>
<td>Number of prior democratic transitions</td>
<td>0.105 (.808) 40, 16 0.621 (.138) 29, 25</td>
<td>–0.290 (.618) 18, 30</td>
</tr>
<tr>
<td>Calendar year</td>
<td>0.024 (.266) 40, 16 0.058 (.012) 29, 25</td>
<td>0.043 (.096) 18, 30</td>
</tr>
</tbody>
</table>

Note: GDP = gross domestic product.
a. $N_1$ and $N_0$ indicate the number of 1 and 0 values of the dependent variable for which the explanatory variable has valid observations, with 1 indicating that consolidation occurred and 0 indicating that democratic breakdown precluded consolidation.

dation or breakdown and in the preceding year. We use these moving averages mainly to ensure that our findings capture the causal effects of these factors on consolidation and not the reverse effects. Along with log(inflation) and log(real GDP growth), we also include interaction terms in which these two variables are multiplied by calendar year to test whether their effects changed.

13. For most countries, inflation and real GDP growth are the annual percentage increase in the consumer price index (CPI) and real GDP, obtained from a tape version of the International Monetary Fund (1988) and updated wherever possible with data from the 1993 edition of this publication. Because adequate consumer price index (CPI) data were not available for Nicaragua, Bolivia, Chile, Argentina, Uruguay, and Indonesia, we used the GDP deflator (from the same sources) to calculate inflation for these countries. Similarly, for Burkina Faso, Togo, Congo, Kenya, Rwanda, Madagascar, Turkey, and the Philippines we used current-value GDP deflated with the CPI to calculate real GDP growth.

14. Note that these two variables merely give the average inflation and growth rates in the 2-year periods culminating in consolidation or breakdown. They do not indicate how these rates compare with inflation and growth in preceding periods.
over time during the period for which we had valid data for these two variables (1948-1992). 15

The next variables listed in Table 1 embody certain institutional and other political conditions that may affect consolidation. Presidential system is a dummy variable indicating whether the country’s effective executive is an elected president not subject to parliamentary votes of confidence. Effective number of parties is Laakso and Taagepera’s (1979) measure of party system fragmentation. 16 Presidentialism*effective number of parties is the product of these two variables, giving the effective number of parties in presidential systems only. Military expenditures per capita and military personnel per capita indicate the size of each country’s military apparatus and therefore serve as rough measures of its political power. Regional democratization and Third World democratization are the proportion of countries in the surrounding region (i.e., in Latin America, the Middle East and North Africa, Sub-Saharan Africa, South Asia, or East Asia) or in the entire Third World that were democratic at the time. These two measures test the contagion effect of democratic neighbors. 17

The last three variables test whether certain historical factors affect consolidation. Log(prior semidemocratic/democratic years) gives the total number of years prior to each transition that the country had a semidemocratic or democratic regime. Number of prior democratic transitions gives the number of transitions that the country had experienced before the one under study. These measures enable us to test whether prior democratic experience affects consolidation. 18 Finally, calendar year enables us to test whether the likelihood of consolidation increased during the period that we studied.

15. To reduce multicollinearity, we centered each pair of variables by subtracting out their means before multiplying them. We also included both centered variables in each logit model that contains their interaction term, although we do not always report their coefficients. This procedure does not affect the coefficient estimates or significance tests of the interaction terms (see Aiken & West, 1991, pp. 9-47). We followed this procedure for all of the interaction terms reported below.

16. Data for these two variables are mainly from Banks (1979), although we updated them where Banks’s data were missing with data from Keesing’s Record of World Events (various years), Facts on File (various years), Political Handbook of the World (various years), Wesson and Fleischer (1983), Gleijeses (1978), and Caoli (n.d.). In updating Banks’s (1979) data, we followed his convention of using the distribution of seats in the lower house of parliament on the first day of each calendar year. In cases in which no new elections were held and no major party realignment occurred, we used Banks’s (1979) last figure.

17. The military size measures are from Banks (1979), updated with the procedure described in Note 11. We calculated regional and Third World democratization from the Political Regime Change Data Set (Gasiorowski, 1996).

18. We calculated these variables from the Political Regime Change Data Set (Gasiorowski, 1996).
These 26 explanatory variables enable us, in effect, to examine a wide range of compelling hypotheses about structural factors that may affect consolidation. Unfortunately, most of these variables have missing observations; none of our dependent variables have more than 56 observations. Therefore, it is impossible to include all, or even most, of the 26 variables in a single multivariate model because the number of explanatory variables would exceed or approach the number of valid observations. One solution to this problem would be to drop from our analysis those variables that have many missing observations. However, this would greatly reduce the scope of our study—most notably by preventing us from examining how current economic conditions affect the likelihood of consolidation. The only other way to examine these variables in a multivariate framework is to use some sort of stepwise regression technique. This is the approach that we follow.

Standard stepwise regression procedures are often unstable when some of the explanatory variables have missing observations because adding such a variable to the model necessarily changes the composition of the sample being used to estimate it, perhaps leading the search procedure erroneously to include or exclude another variable. We therefore use a two-stage stepwise regression procedure in the analysis that follows. The first stage focuses only on the explanatory variables that have no missing observations with any of our dependent variables. For each dependent variable, we use a standard forward stepwise regression approach to identify which of these variables remain significant at the .10 level when combined in a multivariate model. In the second stage, we consider the remaining explanatory variables, which all have one or more missing observations. We add each of these variables separately to each of the three models developed in the first stage and examine whether it significantly increases the model’s explanatory power (at the .10 level); if so, we include it in the model.19 This two-stage procedure ensures that missing observations associated with a particular explanatory variable do not affect sample composition until the final stage of the stepwise model-building process, when they can no longer affect the inclusion or exclusion of other variables. This approach obviates the problem of missing observations, enabling us to include all of our explanatory variables in a multivariate analysis.

19. For all significance tests, we use likelihood ratio chi-square tests (which are comparable to $t$ tests in ordinary least squares [OLS] regression) rather than the more common Wald tests because they are more reliable in small-sample analyses (Meeker & Escobar, 1995). See Hosmer and Lemeshow (1989, pp. 106-118) for a useful discussion of stepwise regression methods in logit analysis.
Stepwise regression has well-known liabilities that make it suitable for exploratory analysis but not for rigorous hypothesis testing (Hanushek & Jackson, 1977, pp. 95-96). Because our goal here is to examine a wide range of structural factors that may affect consolidation rather than develop a comprehensive model, these liabilities do not seriously undermine our analysis. Moreover, our use of three consolidation indicators enables us to cross-check the results of our stepwise analyses. If all three indicators produce similar results, we can be reasonably confident that our stepwise regression procedure has not distorted our findings.

EMPIRICAL ANALYSIS

Table 1 presents univariate logit analyses in which we regress our three dependent variables on each of the 26 explanatory variables. The three columns in the table give coefficient estimates for the explanatory variables listed on the left; the significance level of each coefficient in a likelihood ratio chi-square test (in parentheses); and the number of 1 and 0 values of the dependent variable for which the explanatory variable has valid observations ($N_1$ and $N_0$), with 1 indicating that consolidation occurred and 0 indicating that democratic breakdown precluded consolidation. Positive coefficients indicate that high values of the corresponding explanatory variables increase the likelihood of consolidation; negative coefficients indicate that they reduce it. Much like univariate OLS regression coefficients, these univariate logit coefficients can be interpreted as correlation coefficients that indicate the strength of association between the explanatory variable and the dependent variable.20

Table 1 contains some interesting preliminary findings. All seven development-related variables are positively correlated with all three consolidation indicators, implying that consolidation is more likely to occur in relatively developed Third World countries. Catholic population and Latin America dummy are also positively correlated with all three indicators, implying that Catholic and Latin American political culture facilitate consolidation, contrary to our expectations. Moslem population and ethnolinguistic fractionali-

20. We included intercept terms in these models but do not report them here. For each interaction term shown in the table, we included the corresponding component variables in the logit model but do not report their coefficients. The chi-square statistics used to test the significance of these interaction terms test whether they add to each model’s explanatory power independently of the component variables. All of the logit analyses reported in this study were estimated with PROC LOGIST in SAS version 6.04. This software package treats 0 values of the dependent variable as the events of interest, so we have reversed the signs of all coefficients.
zation are each negatively correlated with one of the consolidation indicators, suggesting that Islamic political culture and ethnic heterogeneity hinders consolidation. Log(inflation) is positively correlated with alternation in power, implying that high inflation facilitates consolidation, also contrary to our expectations. Year*log(inflation) is significantly positive in two of the models, implying that high inflation reduced the likelihood of consolidation in the early part of the period covered by this variable (1948-1992) and/or increased it in the latter part of this period. Effective number of parties, military expenditures, regional democratization, and log(prior semidemocratic/democratic years) are each positively correlated with two or three of our dependent variables, implying that countries with fragmented party systems, powerful military apparatuses, many democratic neighbors, and prior democratic experience are more likely to consolidate; the military expenditures finding is contrary to our expectations. Finally, calendar year is positively correlated with alternation in power, suggesting that consolidation was more likely to occur in the latter part of the period that we studied.

These univariate findings may, of course, change considerably when we use multivariate methods to control for the effects of other variables. The top panel of Table 2 presents the multivariate logit models that resulted from the first stages of our two-stage analyses, in which we used stepwise regression to examine the explanatory variables with no missing observations. The four columns give coefficient estimates from multivariate logit models in which the dependent variables listed at the top are regressed on some of the variables listed on the left, together with the significance levels of the likelihood ratio chi-square tests for each coefficient. \( N_1 \) and \( N_0 \) give the number of consolidations and breakdowns that occurred in the samples used to estimate each model. The \(-2\) log likelihood and percentages of concordant and discordant predictions are measures of the explanatory power of each model (Hosmer & Lemeshow, 1989, pp. 14-17, 146-147). The bottom panel of the table gives the second stages of our two-stage analyses, showing each of the explanatory variables with one or more missing observations that were significant at .10 or better when added to the first-stage models shown above them.

University enrollment was the first explanatory variable to enter our three main stepwise models, shown as Models 1 through 3 of Table 2; its coefficients in each model are significantly positive. Because this variable serves as a proxy here for the various socioeconomic factors associated with development, these findings indicate that these factors significantly increase the likelihood of all three types of consolidation, even after other causal factors have been controlled for. Moreover, as shown in the bottom panel of Table 2, another development-related variable (either log(real GDP per
capita] or literacy) had a significantly positive coefficient in the second stages of our two-stage analyses for Models 1 and 2, reinforcing this finding.

Moslem population has a significantly negative coefficient in Model 3 but does not appear in the other models, indicating that countries with Islamic culture are less likely to achieve 12-year duration consolidation but no less likely to achieve consolidation as measured by the other criteria. As discussed

Table 2

<table>
<thead>
<tr>
<th>Explanatory Variables with no missing observations</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.258 (.557)</td>
<td>-1.932 (.001)</td>
<td>0.426 (.623)</td>
<td>-1.482 (.001)</td>
</tr>
<tr>
<td>University enrollment rate</td>
<td>0.873 (.000)</td>
<td>0.696 (.000)</td>
<td>0.237 (.038)</td>
<td>0.423 (.000)</td>
</tr>
<tr>
<td>Moslem population per capita</td>
<td>-0.162 (.000)</td>
<td>0.583 (.062)</td>
<td>0.560 (.088)</td>
<td></td>
</tr>
<tr>
<td>Presidential system dummy</td>
<td>-2.372 (.111)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explanatory variables with missing observations</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log(real GDP per capita)</td>
<td>1.018 (.041)</td>
<td>0.988 (.100)</td>
<td>0.167 (.025)</td>
<td></td>
</tr>
<tr>
<td>Industry as percentage of workforce</td>
<td>0.209 (.088)</td>
<td>0.060 (.002)</td>
<td>0.040 (.009)</td>
<td></td>
</tr>
<tr>
<td>Literacy rate</td>
<td>0.060 (.002)</td>
<td>0.040 (.009)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade dependence rate</td>
<td>0.209 (.088)</td>
<td>0.060 (.002)</td>
<td>0.040 (.009)</td>
<td></td>
</tr>
<tr>
<td>Log(inflation), 2-year moving average</td>
<td>0.301 (.044)</td>
<td>0.868 (.002)</td>
<td>0.996 (.009)</td>
<td></td>
</tr>
<tr>
<td>Year*Log(inflation), 2-year moving average</td>
<td>0.301 (.044)</td>
<td>0.868 (.002)</td>
<td>0.996 (.009)</td>
<td></td>
</tr>
<tr>
<td>Effective number of parties</td>
<td>0.301 (.044)</td>
<td>0.868 (.002)</td>
<td>0.996 (.009)</td>
<td></td>
</tr>
<tr>
<td>Military personnel per capita</td>
<td>-1.254 (.002)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional democratization rate</td>
<td>6.412 (.057)</td>
<td>8.172 (.017)</td>
<td>6.199 (.057)</td>
<td></td>
</tr>
</tbody>
</table>

Note: GDP = gross domestic product.

\(N_1, N_0\) indicate the number of 1 and 0 values of the dependent variable for which the explanatory variables have valid observations, with 1 indicating that consolidation occurred and 0 indicating that democratic breakdown precluded consolidation.
below, these different findings reflect important differences in the samples used to estimate the three models.

Presidential system also has a significantly negative coefficient in Model 3, suggesting that presidential democracies are less likely to consolidate than parliamentary democracies. Because the corresponding coefficient in Table 1 is not significant, this finding holds only when the other variables in Model 3 have been controlled for. To determine which was responsible, we dropped each, in turn, from the model. Presidential system became insignificant only when we dropped Moslem population, indicating that its significance in Model 3 is a spurious artifact of the presence of the latter variable. As discussed below, the (spurious) significance of presidential system in Model 3 but not Models 1 and 2 also reflects differences in the samples used to estimate these three models.

Log(prior semidemocratic/democratic years) has marginally significant, positive coefficients in Models 2 and 3 of Table 2, implying that prior democratic experience marginally increases the likelihood of consolidation. In the bottom panel of Table 2, trade dependence has a positive coefficient that is significant at .09 in Model 1, implying that trade dependence has a very marginally positive effect on consolidation, contrary to our expectations.

Log(inflation) has a negative coefficient in Model 3, indicating that high inflation hinders 12-year duration consolidation. The coefficients of year*log(inflation) in Models 1 and 2 are both significantly positive, indicating that whatever adverse effect high inflation had on post-founding election and alternation in power consolidation was greater during the early part of the period under study than during the latter part. To examine these time-varying effects more closely, we created the dummy variables below-mean

21. The reason for the spurious relationship between these two variables became clear when we looked at which presidential democracies in this sample achieved 12-year duration consolidation and which did not. Of the 10 presidential democracies that achieved 12-year duration consolidation, 9 were Latin American countries with Moslem populations of 0 and the 10th (the Philippines) had a Moslem population of only 3%. In the 16 presidential democracies that did not achieve 12-year duration consolidation, Moslem population averaged 8.5%. Consequently, although presidential democracies in general are no less likely to achieve 12-year duration consolidation, those with significant Moslem populations are less likely to do so. Because there is no a priori reason to think this should be so, we regard the relationship between these two variables as spurious.

22. The best way to examine these issues would be to use the simple slope analysis techniques discussed by Aiken and West (1991, pp. 12-27). For an application of these techniques in a similar context, see Gasiorowski (1995). We cannot use simple slope analysis here because our likelihood-based significance testing methods do not permit us to estimate the covariances of the coefficients of log(inflation) and year*log(inflation), which are needed to calculate significance levels for the simple slopes of log(inflation) at different values of year.
We then multiplied these dummy variables by log(inflation) and included the resulting interaction terms in the appropriate logit models. As shown in Model 1 of Table 3, the interaction terms giving log(inflation) in the below-mean and above-mean categories in the post-founding election model both had insignificant coefficients, implying that high inflation did not adversely affect consolidation of this type in either period, despite the significant trend shown in Model 1 of Table 2. However, as shown in Model 2 of Table 3, high inflation did have a significant, adverse effect on alternation in power consolidation in the early part of the period under study, although not in the latter part. Thus, high inflation hindered 12-year duration consolidation throughout the period under study; it hindered alternation in power consolidation only in the early part of this period; and, although we could not identify any period in which it significantly affected post-founding election consolidation, it did have a decreasing effect.

Effective number of parties has a significantly positive coefficient in Model 2 of Table 2, implying that countries with highly fragmented party systems are more likely than those with less-fragmented party systems to achieve alternation in power consolidation. Military personnel has a signifi-

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Additional Multivariate Logit Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Post-Founding</td>
<td>Alternation</td>
</tr>
<tr>
<td>Election</td>
<td>in Power</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.115 (.818)</td>
</tr>
<tr>
<td>University enrollment rate</td>
<td>0.769 (.004)</td>
</tr>
<tr>
<td>Log(prior semidemocratic-democratic years)</td>
<td>1.057 (.027)</td>
</tr>
<tr>
<td>Below-mean year dummy</td>
<td>14.862 (.186)</td>
</tr>
<tr>
<td>Below-mean year dummy*log(inflation)</td>
<td>-5.036 (.124)</td>
</tr>
<tr>
<td>Above-mean year dummy*log(inflation)</td>
<td>-0.491 (.733)</td>
</tr>
<tr>
<td>N1, N0a</td>
<td>31, 9</td>
</tr>
<tr>
<td>–2 log likelihood</td>
<td>31.09</td>
</tr>
<tr>
<td>Concordant, discordant predictions</td>
<td>83.9%, 15.1%</td>
</tr>
</tbody>
</table>

a. N1 and N0 indicate the number of 1 and 0 values of the dependent variable for which the explanatory variables have valid observations, with 1 indicating that consolidation occurred and 0 indicating that democratic breakdown precluded consolidation.
cantly negative coefficient in Model 3, indicating that 12-year duration consolidation is less likely to occur in countries in which the military apparatus is relatively large and therefore powerful. Finally, regional democratization has positive coefficients significant at .06 or better in Models 1 and 2, indicating that post-founding election and alternation in power consolidation are more likely to occur in countries that have many democratic neighbors.

The sample used to estimate the 12-year duration models discussed so far differs considerably from those used to estimate the post-founding election and alternation in power models because it excludes the eight transitions in our sample that occurred after 1983,23 which could not have achieved 12-year duration consolidation by the end of 1995. Similarly, the sample used to estimate the alternation in power models necessarily excludes two transitions appearing in the post-founding election sample because they had not produced either a breakdown or an alternation in power by the end of 1995. Because the results in Table 2 associated with our preferred indicator of consolidation—12-year duration—differ considerably from those associated with our other two indicators, it is important to determine whether these differences are caused by the very different samples used to estimate these results or by differences in the indicators themselves.

We can distinguish which of these factors is responsible by reestimating the models on identical samples. One way to do this would be to focus only on the 48 transitions that either broke down or consolidated according to all three indicators. However, this would exclude the eight post-1983 transitions, which is clearly undesirable. We decided instead to reestimate the 12-year duration and alternation in power models on samples in which (a) the dependent variables were set at 1 for all excluded observations in each sample, and (b) each explanatory variable was set at the last value appearing for it in our data set for all excluded observations. In effect, these reestimated models portray the determinants of 12-year duration and alternation in power consolidation under the assumptions that (a) all excluded observations will eventually result in consolidation of the given type rather than breakdown, and (b) the values of the explanatory variables will not change by the time that these consolidations occur. Although these are rather bold assumptions, we feel that they are reasonable because current global conditions are very conducive to consolidation and because most of our explanatory variables either do not change at all after a transition or change slowly and uniformly.

Because this procedure added only two observations to the alternation in power sample, the resulting model differed only in trivial ways from Model 2 of Table 2; therefore, we do not report it. The 12-year duration model based on this expanded sample is Model 4 of Table 2. Several major differences are apparent between this model and the previous 12-year duration model (Model 3). The coefficient of university enrollment has a much higher significance level, indicating that development-related socioeconomic factors have a much clearer effect on consolidation in the expanded sample. Moslem population, presidential system, log(prior semidemocratic/democratic years), log(inflation), and military personnel are no longer significant. Because log(inflation) lost its significance when we added eight post-1983 transitions, we used the methods described previously to examine whether inflation affected consolidation in the early part of the period under study in the expanded sample. As shown in Model 3 of Table 3, the interaction term giving log(inflation) in the below-mean category has a significantly negative coefficient, indicating that high inflation did adversely affect consolidation in the early part of the period under study in this sample.24 (The mean of calendar year in this sample was 1973.9.) Regional democratization now has a coefficient that is positive and significant at the .06 level, indicating, in this sample, that consolidation is marginally more likely to occur in countries with many democratic neighbors.

These findings make the 12-year duration model resemble the post-founding election and alternation in power models much more closely. Most of the differences among Models 1 through 3 of Table 2 are therefore due to differences among the samples used to estimate these models rather than differences among the three indicators of consolidation. In other words, our three consolidation indicators give remarkably similar portraits of the determinants of consolidation, after we adjust for differences among the three samples.

As discussed earlier in this article, we believe that post-founding election and alternation in power are less valid indicators of consolidation than 12-year duration, in part because they identify not only important milestones in democratization but also important political events, which may correlate with some of our explanatory variables and thus distort our analysis. This is especially true of alternation in power. Of the explanatory variables that appear in Models 1 and 2 in Table 2, Year*log(inflation) and effective number

24. Log(inflation) changes more erratically than any of our other variables and therefore is the worst violator of the second assumption made in the previous paragraph. Although this implies that we cannot have much confidence in the above-mean year dummy*log(inflation) coefficient in Model 3 of Table 3, it has little or no effect on the below-mean year dummy*log(inflation) coefficient, which is of primary interest here.
of parties are especially likely to trigger the changes in government that underlie our alternation in power indicator. Because year*log(inflation) is also significant in Model 1 of Table 2 and below-mean year dummy*log(inflation) is significant in Model 3 of Table 3, we do not believe year*log(inflation) has distorted our alternation in power findings in this way. However, effective number of parties is not significant in any of our post-founding election or 12-year duration models. Therefore, we believe the findings associated with this variable in Model 2 of Table 2 may be spurious because they reflect the adverse effect of party system fragmentation on changes in government rather than on democratic consolidation.25

If we discard (a) the variables that became insignificant in the 12-year duration model when we added the eight post-1983 transitions; (b) effective number of parties, which appears only in the alternation in power model and seems spurious; (c) trade dependence, which is significant only at the .09 level in only one of the multivariate models; and (d) the redundant development-related variables, we are left with only three variables that unambiguously seem to affect consolidation: university enrollment, regional democratization, and time-varying inflation (as measured by either year*log[inflation] or the interaction terms giving inflation before and after the mean value of year). Thus, development-related socioeconomic factors, democratic neighbors, and inflation during the early part of the period we studied are the only factors we examined that clearly affect consolidation, and their effects are remarkably uniform across all three consolidation indicators. This finding suggests that the drawbacks of our three consolidation indicators and the liabilities of our stepwise regression procedure did not adversely affect our analysis. Indeed, our results are quite robust.

Table 4 presents logit models that show the effects of these three variables on our three consolidation indicators and on 12-year duration in the expanded sample.26 These models differ in minor ways from the corresponding models in Tables 2 and 3, mainly because missing observations associated with log(inflation) and regional democratization in some cases changed the samples used to estimate the models. However, the effects of these three variables remain apparent. The most important finding in Table 4 is that the percentage of concordant predictions in these models ranges from 93.2% to 96.9%.27

25. See Powell (1982, pp. 144-151) for a discussion of how party system fragmentation can trigger changes of government.

26. We use below-mean year dummy*log(inflation) rather than year*log(inflation) in this article because it more clearly shows the effect of inflation in the early part of the period that we studied. The means of calendar year used in Models 1 through 4 are 1971.0, 1972.7, 1969.9, and 1973.9, respectively.
Therefore, these three variables together have a very high success rate in predicting which democratic transitions result in consolidation and which result in breakdown.

Finally, we note that 32 coefficients were significant at .10 or better in the univariate models shown in Table 1 but did not remain significant at this level in our two-stage stepwise analyses and therefore did not enter the multivariate models shown in Table 2. Because university enrollment had the most highly significant coefficients in Table 1 and therefore was the first explanatory variable to enter each of our stepwise models, we decided to examine whether it was responsible for the declining significance of these coefficients by adding it to each of the 32 univariate models. In 29 of the 32 cases, the coefficient of the other variable was no longer significant at the .10 level when university enrollment was included with it in these two-variable models. This suggests that these variables failed to enter the corresponding multivariate models in Table 2 because of the presence of university enrollment in these models. Thus, the apparent significance of these variables as determinants of

Table 4
Final Multivariate Logit Models

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post-Founding Election</td>
<td>Alternation in Power</td>
<td>12-Year Duration</td>
<td>12-Year Duration (expanded sample)</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.549 (.939)</td>
<td>−2.728 (.740)</td>
<td>33.049 (0.30)</td>
<td>4.172 (.119)</td>
</tr>
<tr>
<td>University enrollment rate</td>
<td>0.532 (.093)</td>
<td>0.751 (.007)</td>
<td>0.935 (.001)</td>
<td>0.308 (.022)</td>
</tr>
<tr>
<td>Below-mean year dummy</td>
<td>25.028 (.147)</td>
<td>28.112 (.101)</td>
<td>−3.430 (.882)</td>
<td>8.865 (.426)</td>
</tr>
<tr>
<td>log(inflation)</td>
<td>−9.239 (.047)</td>
<td>−9.467 (.041)</td>
<td>−11.778 (.071)</td>
<td>−5.054 (.119)</td>
</tr>
<tr>
<td>Above-mean year dummy</td>
<td>−0.621 (.747)</td>
<td>0.135 (.950)</td>
<td>−11.434 (.000)</td>
<td>−1.583 (.055)</td>
</tr>
<tr>
<td>Regional democratization rate</td>
<td>18.211 (.003)</td>
<td>11.737 (.019)</td>
<td>22.426 (.001)</td>
<td>7.911 (.033)</td>
</tr>
<tr>
<td>(N_1, N_0)^a</td>
<td>31, 9</td>
<td>23, 17</td>
<td>14, 20</td>
<td>22, 20</td>
</tr>
<tr>
<td>−2 log likelihood</td>
<td>22.53</td>
<td>20.94</td>
<td>16.57</td>
<td>32.25</td>
</tr>
<tr>
<td>Concordant, discordant predictions</td>
<td>93.2%, 6.8%</td>
<td>96.9%, 3.1%</td>
<td>96.1%, 3.9%</td>
<td>93.2%, 6.8%</td>
</tr>
</tbody>
</table>

\(N_1\) and \(N_0\) indicate the number of 1 and 0 values of the dependent variable for which the explanatory variables have valid observations, with 1 indicating that consolidation occurred and 0 indicating that democratic breakdown precluded consolidation.

Therefore, these three variables together have a very high success rate in predicting which democratic transitions result in consolidation and which result in breakdown.

Finally, we note that 32 coefficients were significant at .10 or better in the univariate models shown in Table 1 but did not remain significant at this level in our two-stage stepwise analyses and therefore did not enter the multivariate models shown in Table 2. Because university enrollment had the most highly significant coefficients in Table 1 and therefore was the first explanatory variable to enter each of our stepwise models, we decided to examine whether it was responsible for the declining significance of these coefficients by adding it to each of the 32 univariate models. In 29 of the 32 cases, the coefficient of the other variable was no longer significant at the .10 level when university enrollment was included with it in these two-variable models. This suggests that these variables failed to enter the corresponding multivariate models in Table 2 because of the presence of university enrollment in these models. Thus, the apparent significance of these variables as determinants of

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27. The procedures used to calculate these percentages are described in SAS Institute (1990, p. 1090).
consolidation in Table 1 is merely an artifact of their covariation with university enrollment, which is a proxy for a wide range of development-related socioeconomic factors; they do not affect consolidation independently of this variable.

CONCLUSION

Our empirical analysis has identified three structural factors that clearly affect democratic consolidation. First, development-related socioeconomic factors have a strong, positive effect on the likelihood of consolidation. Thus, the rich ideas about the impact of economic development and modernization on political life advanced by Seymour Martin Lipset and other authors several decades ago provide important insights into the determinants of consolidation and remain a fundamental cornerstone in our understanding of democratization.

Second, high inflation clearly undermined the likelihood of consolidation before the early 1970s, although apparently not afterward. Thus, the provocative ideas advanced by O'Donnell, Skidmore, and others about how economic crises can trigger the collapse of democracy have important implications for our understanding of consolidation, although only in the period prior to the early 1970s. It is not clear from our analysis exactly why high inflation no longer hindered consolidation after this period. Remmer (1990) argues that the general conditions affecting democratization in Latin America had changed considerably by the 1980s, with the United States now making important efforts to promote democracy, business and military elites increasingly embracing democratic norms, and democratic leaders governing in a more pragmatic and inclusive manner. Huntington (1991) makes the same point at a more general level. Remmer (1990) argues further that these changes helped insulate democracies from the adverse effects of the economic crises that plagued Latin America in the 1980s, as potential coup leaders felt strong pressures not to overthrow democratic regimes and realized that they would receive little support if they did so. Gasiorowski’s (1995) finding that inflationary crises hindered democratic transition and facilitated democratic breakdown before the early 1970s but not afterward provides strong support for Remmer’s (1990) argument. Our finding that high inflation undermined the likelihood of consolidation before the early 1970s but not afterward extends this finding and provides further support for this argument.

Third, the contagion effect of democratic neighbors increases the likelihood of consolidation, especially if we make certain reasonable assumptions about the outcomes of eight recent transitions. This finding suggests that
democratization in the Third World is affected not only by domestic social and economic conditions but also by ideas, norms, and political pressures transmitted from abroad.

Of the many structural factors that we examined, these three are the only ones that clearly affect consolidation. Their effects are remarkably uniform across our three indicators of consolidation, suggesting that these indicators together provide a robust portrait of consolidation and that the stepwise regression procedure we were forced to use did not adversely affect our analysis. These three factors together had a success rate of between 93% and 97% in predicting which democratic transitions in our sample resulted in consolidation and which resulted in breakdown. Although this does not imply that nothing else systematically affects consolidation, it does indicate that these three factors are very important determinants of it. It is worth noting that Gasiorowski (1995) found that these three factors are also important determinants of democratic transition, implying that the transition and consolidation phases of democratization are influenced by similar—although not identical28—conditions.

Perhaps the most surprising finding of this study is that none of the other variables that we examined clearly affect consolidation. Some of these variables were significant in our univariate analyses but lost their significance when we controlled for development-related socioeconomic factors in multivariate analyses. This indicates that univariate analyses provide a very misleading picture of the causal processes affecting consolidation because many variables that seem to affect consolidation are correlated with development-related socioeconomic factors and therefore actually reflect the effects of these factors rather than their own effects in univariate analyses. We can fully evaluate the impact of these variables only with multivariate analyses that enable us to control for development-related factors and other determinants of consolidation.29 Although our stepwise regression procedure has obvious liabilities, it enabled us to carry out such multivariate analyses.

It is worth briefly noting the factors that did not emerge as significant determinants in our analysis. The trade dependence measure was very mar-

28. Although these three factors each affect transition and consolidation in the same direction (i.e., positively or negatively), their effects on transition and consolidation are not necessarily of the same magnitude. Gasiorowski (1995) also found that democratic transitions are more likely to occur from military-dominated rather than civilian-dominated authoritarian regimes and that economic dependence has a marginally negative effect on the likelihood of transition.

29. This does not, of course, imply that quantitative analysis is the only valid approach for studying consolidation. Comparative historical studies can incorporate controls of this sort through careful case selection (Ragin, 1987), combining the rigor of multivariate models with the richness of historical analysis.
ginally significant in only one of our three models, indicating that economic dependence has no clear effect on consolidation. The Catholic, Latin American, and Islamic political culture measures were not significant in our full multivariate analysis, indicating that the aspects of political culture embodied in these measures—although certainly not political culture in general—do not affect consolidation. Ethnic homogeneity also seems to have no effect. Although inflation had a decreasing effect on consolidation during the period that we studied, economic growth rates had no effect. Presidentialism and party system fragmentation do not seem to affect consolidation, suggesting that the emphasis on these institutional features in some of the consolidation literature has been misplaced.30 The size of a country’s military apparatus and prior democratic experience also do not seem to have any effect.

Finally, our finding that development-related socioeconomic factors, high inflation (before the early 1970s), and democratic neighbors together have a very high success rate in predicting consolidation and breakdown implies that theories of consolidation that focus only on political processes provide only a partial understanding of this phenomenon—the prevailing social, economic, and international political contexts must also be taken into account. This finding challenges the assumption underlying much of the consolidation literature that the political processes that directly affect consolidation are autonomous from structural factors. It suggests that the failure of much of this literature to incorporate the insights of modernization theory and other structural approaches has been a serious oversight—structural factors must be “brought back in” to the comparative study of political regime change.31

Our inability to incorporate process-oriented variables into our analysis prevented us from evaluating the relative importance of structural and process-oriented factors. Nevertheless, the strength of our findings suggests that scholars who focus on the role of political processes in facilitating or hindering consolidation should consider how these processes are affected by the broader contexts within which they occur, producing models that link agency with structure.32 Similarly, scholars who focus on constitutional frameworks should explore how political institutions perform in different

30. For a more detailed analysis of these particular findings, see Power and Gasiorowski (1997). In what appears to be a very thorough empirical study of the determinants of democratic survival, Przeworski et al. (1996) found that parliamentary systems have higher survival rates than presidential systems and that highly fractionalized presidential systems are especially likely to break down. These findings appear to be based on a sample that includes both developed and underdeveloped countries. (The article reports very few details of the authors’ analysis.) Because almost all developed democracies have parliamentary systems and have remained democratic throughout the post–World War II era, it is not surprising that these findings differ from ours.

31. For similar arguments, see Karl (1990) and Remmer (1995).
contexts, such as periods of economic crisis and differing levels of development. Institutionalists might also follow the lead of several recent studies (Carey & Shugart, 1997; Shugart & Carey, 1992; Shugart & Mainwaring, in press; Tsebelis, 1995) that have moved beyond the familiar debates about presidentialism and party system structure to consider less-aggregated features of institutions, which may have a more discernible effect on democratic governability and are more easily modified by practitioners seeking to strengthen nascent democratic regimes.

We conclude by acknowledging again the difficulties inherent in trying to measure democratic consolidation. In the absence of widely accepted measures of consolidation, we were forced to develop three such measures ourselves. Although each of these measures draws on important aspects of consolidation, our 12-year duration indicator seems more valid than the others, for reasons discussed previously. These three measures produced nearly identical results, implying that these results are quite robust. Nevertheless, we recognize that our measures do not embody all of the aspects of democratic consolidation discussed in the literature on this subject. We expect and hope that other researchers will develop alternative measures of consolidation that can be used to verify our cross-national findings and generate new ones, complementing and extending the case-study-based analyses that have dominated research in this area so far.

REFERENCES


32. For more extensive discussions of this issue, see Kitschelt (1992) and Rueschemeyer, Stephens, and Stephens (1992).

33. For recent attempts to classify and categorize concepts of democratic consolidation, see Schedler (1997) and Collier and Levitsky (1997).


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