

ONLINE SUPPLEMENT to article in

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Labor Unions and Good Governance: A Cross-National, Comparative Analysis

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Supplement 1. Diagnosing Simultaneity Bias

This supplement diagnoses whether the dependent variable, governance, could affect two key regressors, economic development and the strength and popularity of unions. First, better governance might promote economic development by encouraging the investment activities of domestic and international capitals. Second, a more accountable and effective government might strengthen the power of unions by providing favorable legal environments and institutional channeling processes for unions.

Table S1 presents results from two stage least square (2SLS) using instrument variables. I use two instruments for economic development: share of population in temperate ecozones (Sachs 2001)¹ and latitude of a country from centroid (Sachs 2001), as quality of government is not likely to affect two instruments but both variables are moderately correlated with GDP per capita (corr = .65 and .43, respectively) and will affect governance only through economic development.

For unions' power centrality and membership density, I use the power centrality and membership density indices of sport associations as instruments, because better governance is not likely to affect sport groups' power centrality and membership indices, both of which are highly or moderately correlated with unions' power centrality (corr = .86) and unions' membership density (corr = .52). In addition, both instruments are expected to affect governance only through unions' embeddedness (centrality) or strength (membership), as hypothesized in the theoretical discussion. The results show that, using instrumental variables, union centrality is still moderately significant, while economic development is highly significant for different governance indicators. Union membership is statistically nonsignificant for the first three indicators of governance, while it is statistically meaningful for the last two accountability measures (but the signs of coefficients are negative, suggesting multicollinearity).

Hausman's endogeneity tests of all models (1 to 5) fail to reject the null hypothesis that endogeneity among regressors will not distort the OLS estimates. Independent variables used in the regression models are exogenous to governance indicators.

¹ It is measured as the percentage of population in Koeppen-Geiger temperate zones in 1995. The temperate zones include climate zones Cf and Cs (mild humid climate with no dry season or with a dry summer) and climate zones Df and DW (snowy-forest climate with a moist winter or with a dry winter) (Sachs 2001).

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Table S1. Unstandardized Coefficients from Two Stage Least Square and Hausman's Endogeneity Tests

| | Model (1) | Model (2) | Model (3) | Model (4) | Model (5) |
|---|--------------------|--------------------------|----------------------------------|-----------------------------|----------------------------|
| | The Rule of Law | Control of Corruption | Government Effectiveness | Voice and Accountability | Institutional Democracy |
| Economic & Regional Factors | | | | | |
| GDP per Capita (log) | .686 (2.88)** | .718 (3.02)** | .679 (3.08)** | .850 (3.44)** | 1.602 (1.83)+ |
| Africa (0,1 indicator) | .023 (.05) | .130 (.31) | .059 (.15) | .545 (1.01) | -2.415 (1.26) |
| South Asia (0,1 indicator) | .055 (.10) | .094 (.17) | .147 (.29) | .613 (.95) | -.060 (.03) |
| Latin America (0,1 indicator) | -.338 (1.07) | -.021 (.07) | -.240 (.82) | .225 (.67) | 1.179 (1.00) |
| Eastern Europe (0,1 indicator) | .444 (1.07) | .380 (.91) | .428 (1.11) | 1.142 (3.33)** | 3.521 (2.91)** |
| Social and Political Factors | | | | | |
| Procedural Democracy | -.163 (.34) | -.474 (.99) | -.356 (.81) | | |
| Protestant Countries | .604 (2.09)* | .857 (2.96)** | .619 (2.31)* | .396 (1.19) | .623 (.53) |
| Secondary School Enrollment | -.003 (.59) | -.001 (.18) | .001 (.16) | -.000 (.02) | .030 (1.26) |
| Former British Colony | -.160 (.60) | -.102 (.38) | -.096 (.39) | -.180 (.55) | .345 (.30) |
| Ethnic Fragmentation | -.155 (.35) | -.182 (.41) | -.026 (.06) | .333 (.63) | 1.073 (.57) |
| International Factors | | | | | |
| INGO Ties | .000 (.02) | .001 (.08) | -.005 (.58) | -.008 (.63) | -.007 (.17) |
| Trade Openness (log) | .150 (.77) | .189 (.97) | .068 (.38) | -.100 (.47) | -.905 (1.20) |
| Unions' Popularity and Strength | | | | | |
| Unions' Power Centrality | 1.719 (2.03)+ | 1.634 (1.92)+ | 1.809 (2.30)* | 1.936 (2.47)* | 8.505 (3.07)** |
| Unions' Membership Density | -.025 (1.43) | -.025 (1.42) | -.023 (1.43) | -.036 (2.09)* | -.127 (2.10)* |
| Constant | -6.540 (4.18)** | -6.910 (4.40)** | -6.209 (4.28)** | -7.462 (4.29)** | -9.759 (1.59) |
| Observations | 52 | 52 | 52 | 52 | 52 |
| R-squared | .85 | .87 | .85 | .71 | .71 |
| Endogeneity Tests | | | | | |
| Wu-Hausman F Test (p-value in parentheses) | .521 (.67) | 1.650 (.20) | .611 (.61) | 1.281(.30) | .336 (.80) |
| Decision ($\alpha = .05$) | | | Fail to Reject Null ^a | | |
| Durbin-Wu-Hausman Chi-sq Test (p-value in parentheses) | 2.286 (.52) | 4.129 (.09) | 2.661 (.47) | 5.134 (.16) | 1.454 (.69) |
| Decision ($\alpha = .05$) | | | Fail to Reject Null ^a | | |

^aNull hypothesis: Regressors are exogeneous.

Note: Absolute value of t statistics in parentheses.

+ $p < .10$; * $p < .05$; ** $p < .01$ (two-tailed tests).

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Supplement 2. Supplementary Regression Results: Testing Other Associations' Power Centrality and Membership Density

Table S2. Unstandardized Coefficients from Linear Regression of Governance Indicators on Politicized and Nonpoliticized Associations' Power Centrality and Membership Density (Using HC3)

| | The Rule of Law | | Control of Corruption | | Government Effectiveness | | Voice and Accountability | | Institutional Democracy | |
|---|--------------------|--------------------|-----------------------|--------------------|--------------------------|--------------------|--------------------------|--------------------|-------------------------|-------------------|
| | Model (1) | Model (2) | Model (3) | Model (4) | Model (5) | Model (6) | Model (7) | Model (8) | Model (9) | Model (10) |
| Economic and Regional Factors | | | | | | | | | | |
| GDP per Capita (log) | .523 (5.75)** | .585 (5.98)** | .584 (6.26)** | .636 (6.15)** | .510 (4.59)** | .546 (4.95)** | .380 (2.24)* | .433 (2.69)* | .865 (1.06) | 1.203 (1.62) |
| Africa (0,1 indicator) | .013 (.02) | .113 (.21) | .136 (.26) | .217 (.40) | .082 (.15) | .136 (.27) | -.144 (.23) | .006 (.01) | -3.691 (1.26) | -2.767 (1.02) |
| South Asia (0,1 indicator) | .156 (.33) | .029 (.06) | .252 (.59) | .138 (.32) | .286 (.61) | .188 (.40) | -.378 (.51) | -.495 (.70) | -2.217 (.60) | -2.931 (.85) |
| Latin America (0,1 indicator) | -.487 (.93) | -.392 (.73) | -.147 (.27) | -.062 (.11) | -.393 (.76) | -.322 (.61) | .089 (.21) | .167 (.39) | .580 (.42) | 1.062 (.79) |
| Eastern Europe (0,1 indicator) | .050 (.19) | .080 (.31) | .029 (.12) | .059 (.25) | .061 (.24) | .084 (.35) | .581 (1.81)+ | .561 (1.68) | 2.391 (1.72)+ | 2.275 (1.64) |
| Social and Political Factors | | | | | | | | | | |
| Procedural Democracy | .163 (.36) | .075 (.18) | -.175 (.43) | -.260 (.68) | -.034 (.07) | -.116 (.27) | | | | |
| Protestant Countries | .470 (2.93)** | .520 (2.88)** | .685 (3.59)** | .725 (3.38)** | .476 (2.57)* | .496 (2.38)* | .266 (1.19) | .283 (1.11) | .280 (.29) | .339 (.28) |
| Secondary School Enrollment | -.005 (1.06) | -.005 (.99) | -.003 (.55) | -.002 (.44) | -.000 (.06) | .000 (.07) | -.000 (.01) | .001 (.20) | .013 (.44) | .021 (.69) |
| Former British Colony | .016 (.05) | .019 (.06) | .089 (.36) | .086 (.35) | .063 (.26) | .039 (.16) | .167 (.47) | .136 (.39) | 1.020 (.72) | .920 (.71) |
| Ethnic Fragmentation | -.193 (.36) | -.193 (.40) | -.175 (.36) | -.179 (.39) | -.015 (.03) | -.020 (.04) | -.019 (.03) | .020 (.03) | -.117 (.05) | .184 (.09) |
| International Factors | | | | | | | | | | |
| INGO Ties | .007 (.99) | .005 (.74) | .007 (.89) | .006 (.69) | .002 (.33) | .001 (.16) | .011 (1.33) | .009 (1.16) | .034 (.93) | .018 (.51) |
| Trade Openness (log) | .303 (1.70)+ | .284 (1.80)+ | .325 (1.87)+ | .311 (1.82)+ | .207 (1.27) | .201 (1.27) | .060 (.27) | .047 (.23) | -.647 (.73) | -.767 (.88) |
| Associations' Popularity and Strength | | | | | | | | | | |
| Politicized Associations' Power Centrality ^a | .662 (.91) | | .555 (.88) | | .480 (.72) | | 1.127 (1.14) | | 7.458 (2.51)* | |
| Politicized Associations' Membership Density ^b | -.013 (.42) | | -.008 (.30) | | .002 (.07) | | -.011 (.31) | | -.107 (.78) | |
| Nonpoliticized Associations' Power Centrality | | .998 (1.63) | | .881 (1.52) | | .807 (1.39) | | 1.287 (1.54) | | 7.870 (2.74)** |
| Nonpoliticized Associations' Membership Density | | -.031 (1.47) | | -.026 (1.27) | | -.018 (.82) | | -.032 (1.13) | | -.206 (1.90)+ |
| Constant | -5.520 (6.21)** | -6.163 (6.04)** | -6.063 (6.81)** | -6.638 (6.54)** | -5.083 (4.22)** | -5.570 (4.82)** | -4.182 (2.38)* | -4.782 (2.78)** | -3.977 (.49) | -7.392 (1.00) |
| Observations | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 |
| R-squared | .84 | .85 | .88 | .88 | .85 | .85 | .71 | .72 | .69 | .70 |

^a The average of six politically activated (mostly middle-class) associations' (party, local action, human rights, environmental, women, and peace) power centrality indices.

^b The average of seven politically nonactivated (mostly community-based) associations' (welfare, church, culture, professional, youth, sports, and health) power centrality indices.

Note: Absolute value of t statistics in parentheses.

+ $p < .10$; * $p < .05$; ** $p < .01$ (two-tailed tests).

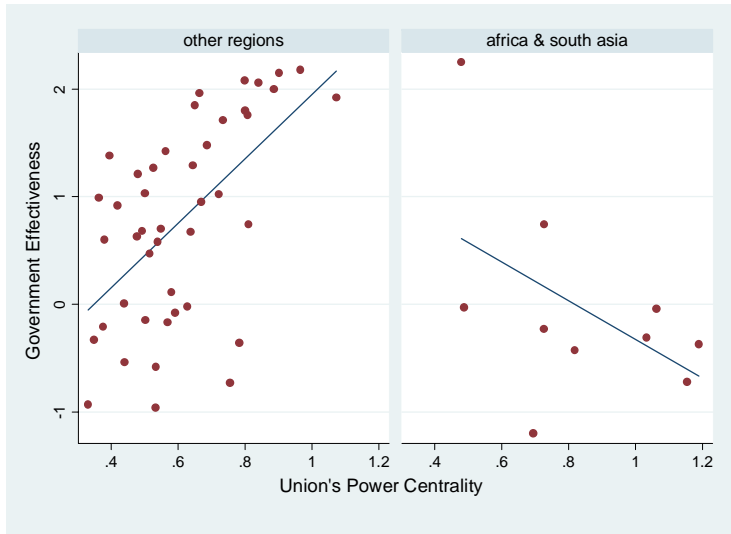
Supplement 3. Explanations for Influential Outliers, Table 3 and Figure 3

Contrary to the positive relationship between union centrality and governance within high- and mid-income groups, low-income groups do not follow the same patterns. While Group 6 shows much higher values for centrality measures than Group 7 (.85 versus .48), its governance indicators have much lower values than those of Group 7, suggesting potentially negative associations between unions' centrality and governance indicators. However, I presume that this unexpected pattern in the low-income group is mainly due to the strongly outlying cases that belong to African and South Asian rural societies. These countries show the highest centrality scores and comemberships and very low levels of governance performance across four indicators. In Figure 3, these outlying cases are mostly located in the lower-right bottom.² Correlation coefficients between union centrality and governance indicators also confirm this scenario: they are almost close to 0 in the full sample, being heavily influenced by these influential outliers, but once 10 African and South Asian rural societies are dropped, the correlation coefficients for the rest of the sample reach impressive values of .6 or higher. The heterogeneous patterns in low-income rural African and South Asian countries are illustrated in Figure S3. In each panel, the relationship between unions' power centrality and governance indicator is shown separately for African and South Asian rural societies and other regions.

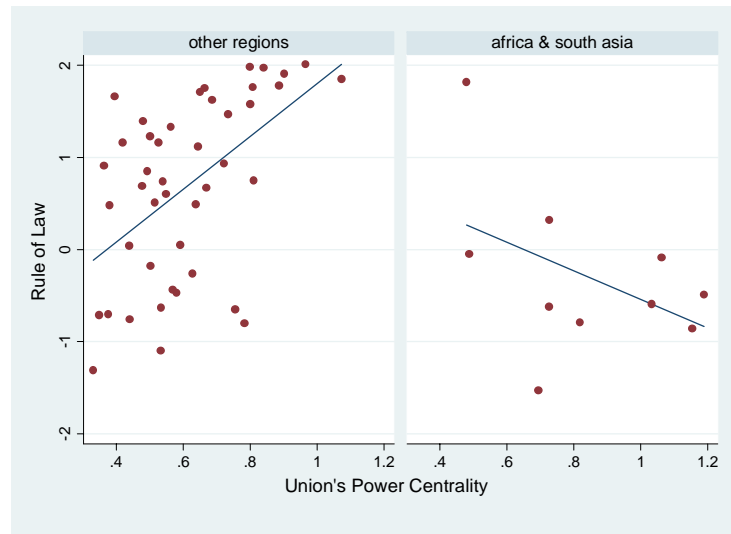
² In a separate analysis not shown here, I found that the level of economic development has a strong curvilinear relationship with the centrality measures of associations. At the very low level of economic development, people in traditional rural village communities are heavily associated with informal community gatherings and meetings regarding harvests, disease control, ceremonies, and the maintenance of community rule and norms, and are connected to each other closely in everyday lives. Therefore, in these premodern rural communities, associations are not organically differentiated by types, but they are communally integrated virtually within a single village with the same members. In reviewing the raw data, I found that those who answered "yes" for one association also answered "yes" for almost all other associations in these societies, suggesting that respondents recognized the questions asking differentiated types of memberships merely as different "functions and activities" of a single village community.

Figure S3. Scatterplots and Fitted Regression Lines of Governance Indicators Against Unions' Power Centrality by Region

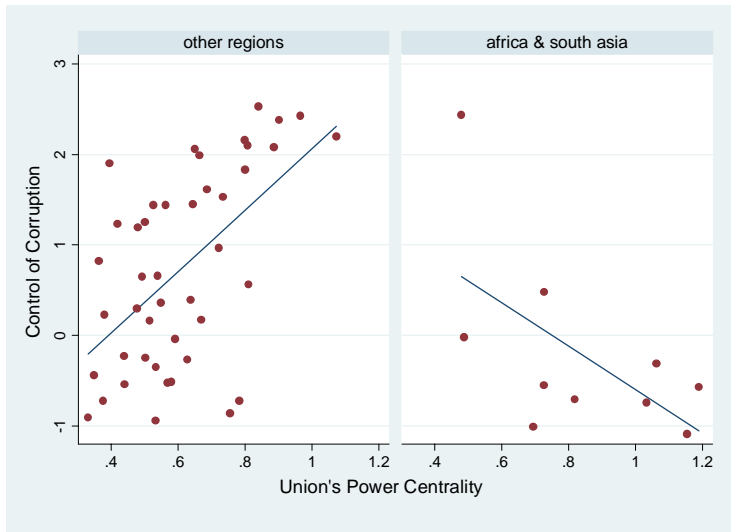
a) Government Effectiveness



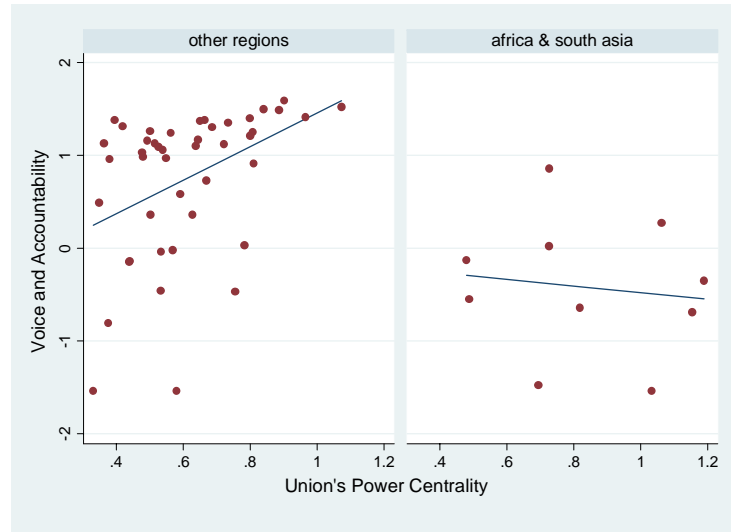
b) Rule of Law



c) Control of Corruption



d) Voice and Accountability



Supplement 4. Cohesiveness and Connectedness of Interorganizational Linkages

Affiliation network data based on the World Values Survey may raise some issues regarding measurement and validity. One critique is that interorganizational linkage is based on “latent intraorganizational linkage,” in which multiple associations of the same type are treated as a cohesive single organizational unit. Another critique is that interorganizational linkage is based on “shared memberships” rather than “direct organizational linkage of leadership” such as interlocking directorates.³ I defend the usefulness of “latent intraorganizational linkage” in response to the first critique, using the notion of “cohesiveness” and “connectedness” of an associational type and its predictive validity. I contend that the union power centrality index as a measure of interorganizational linkage may be strengthened by highlighting the historical internal cohesiveness of labor unions based on higher-level union confederations. Internal “cohesiveness” of an associational type may not be directly measured in the power centrality index, but cohesiveness may be divulged by its predictive power in accounting for governance.

Two key elements that determine the effectiveness of organizational linkages are “cohesiveness” and “connectedness.” The former is related to the strength and autonomy of an organization, while the latter is more closely associated with the potential of an organization to influence or be influenced by other organizations, thereby boosting the power of the entire organizational community. I extend this basic idea to “an organizational type” that is composed of multiple (unknown) numbers of the same types of organizations within a country, proposing the following:

Proposition 1. If a hypothetical organizational type (e.g., unions) is more cohesive among its members than other organizational types, it is more likely to be integrated in terms of common organizational ideas and resources.

Proposition 2-1. If an organization (or an organizational type) is more connected to other organizations of other types in terms of shared memberships, it is more likely to influence or be influenced by other organizations.

Proposition 2-2. However, whether the organization will be influential or be influenced by others hinges on its internal cohesiveness. If an organization is more cohesive and more connected, it is more likely to influence other organizations, in terms of the diffusion of ideas and resources.

Proposition 2-3. On the other hand, if an organization is less cohesive and more connected, it is more likely to be influenced by other organizations, in terms of the diffusion of ideas and resources.

These propositions can be rephrased using Figure S4, which is based on the actual format of affiliation network data from the World Values Survey. Person 1 is affiliated with both union A and church A. Person 2 is affiliated with both union B and women’s organization A. Person 3 is a member of three organizations, union B, church B, and women’s organization B. In terms of organizations, church A and union A are directly connected by the shared membership of person 1. Union B and women’s organization A are also directly connected by person 2. In the same vein, church B and union B or union B and women’s organization B are connected by person 3. At the higher organizational-type level, as unions A and B or churches A and B belong to the same organizational types, in the power centrality index, unions (A and B) and churches (A and B) share two comemberships, person 1 and person 3. However, we are not sure that union A and union B or church A and church B share exactly the same ideas and resources, and, therefore, we are not sure whether we can say that church and union as organizational types have

³ The second critique is valid, in that shared associational memberships and interlocking directorates reflect two different aspects of interorganizational linkages. However, shared memberships are no less important than interlocking directorates or at least the necessary condition for the success of interlocking directorates: the former will steer the latter in the long term. The latter will eventually fail without the former. For example, the AFL-CIO’s support for social movement unionism resulted from bottom-up pressure from local union leaders and grassroots activists, who led unions’ alliances with other SMOs, launching wide-range social and community reform projects. In addition, using interlocking directorates of some higher-level leadership as a measure for interorganizational linkage at country level has another limitation: it cannot guarantee an appropriate level of the representativeness of the entire population of organizations in a country. It is impossible to map “all names” of organizations in a country and construct “interlocking directorates” among them. The lack of representativeness of interlocking directorates in turn dissuades us from conducting a cross-national comparison. The best way to map the configuration of associational networks at the country level is to use a nationwide survey based on random sampling.

certain numbers of comemberships. In the main text, the unknown intraorganizational linkages between church A and church B, or between union A and union B, are simply assumed to exist “latently.”⁴

I contend that the notion of internal cohesiveness that I developed earlier can supplement the lack of information on the unknown latent linkages within each associational type, with historical knowledge on organizational development of each associational type and the concept of predictive validity. First, we know that labor unions developed industrial and national-level confederations such as the AFL-CIO (United States) or LO (Sweden) to enhance their bargaining power against employers. Compared to other associations, unions, as a group of multiple associations, are the most internally cohesive, with strong bureaucratic leaderships governing local individual unions. Second, we know that churches also developed national-level higher church organizations. However, we presume that higher church organizations are severely divided and segmented by their denominations, which makes local churches of different denominations less likely to share common ideas and resources. Women’s organizations are more likely to share common ideologies, such as women’s rights, but are known to be less cohesive in their internal structure as a confederation, as are most new social movement organizations. Therefore, we can order hypothetical internal cohesiveness parameters of three associational types as follows, with the assumption that the degree to which comembers share common ideological ideas, goals, education, resources, and leadership are only proportional to the strength of higher organizational confederation:

$$u (\text{union}) > c (\text{church}) > w (\text{women’s organization}) \text{ or } u > w > c$$

With this ordering of cohesiveness parameters and earlier propositions, we can develop a new proposition:

Proposition 3-1. If an organizational type is more cohesive among its member organizations and simultaneously more connected with other organizations of different types, it is more likely to be influential in terms of its ideas and resources.

Proposition 3-2. Because unions as an organizational type are the most cohesive among associational communities, when connected, they are likely to be more influential in terms of their ideas and resources, compared to other organizational types with similar levels or even higher levels of connectedness.

Table S4 summarizes these propositions. The four cells represent the combinations of two variables, cohesiveness and connectedness of associational types. The low cohesiveness and high connectedness combination may be helpful in boosting the power of the entire associational community, providing others (cohesive and connected associations) with more memberships and higher legitimacy, but it may not be influential on its own in generating a better institutional outcome, governance. Most new social movement organizations belong to this cell. Unions may belong to either high cohesiveness and low connectedness or high cohesiveness and high connectedness combinations. For the former case, unions, as one of the typical “bonding associations” (Paxton 2002), may not influence other organizations in the associational community and further, they may be harmful to favorable institutional outcomes if they are co-opted by the ruling authoritarian or populist elites. Unions may bring about good governance only for the right-bottom corner case, where unions are connected to other associations and boost the power of the entire associational community, which has been theoretically discussed and empirically supported in this article. The relative significance of unions in predicting good governance over other associational types can be further confirmed in supplementary regression analyses in Table S2 (results for politicized and nonpoliticized associations).

Overall, hypothetical ordering of cohesiveness parameters based on historical knowledge confirms a series of propositions developed above. Even if we cannot directly observe the intraorganizational linkages among member associations of the same type, the notion of cohesiveness, its relationship with connectedness, and their combinational institutional outcomes are consistent with the theoretical framework and main findings in the text. Therefore, even without direct information on intraorganizational linkages, the power centrality index nicely captures not only the explicit effect of connectedness, but also the implicit effect of cohesiveness of unions on

⁴ The indirect/latent feature of within-organizational type linkage does not mean that interorganizational linkages are also indirect/latent. Person 3 is directly connecting two organizations, church B and union B. The linkage is not indirect. The only indirect part is whether “union A and union B” or “church A and church B” belong to the power of the same organizational grouping, of which strengths differ across different organizational types.

governance. In sum, the issue of “organizational types,” that members of the same types of associations are only latently and indirectly connected to each other, is less problematic for unions: they are ideologically and organizationally more homogeneous, as they are more integrated by a higher level of union confederations, compared to other civic associations. The implicit but significant role of union confederation provides an additional rationale for why unions uniquely matter in civic association communities.

Figure S4. Associational Comembership and Higher Organizational Grouping

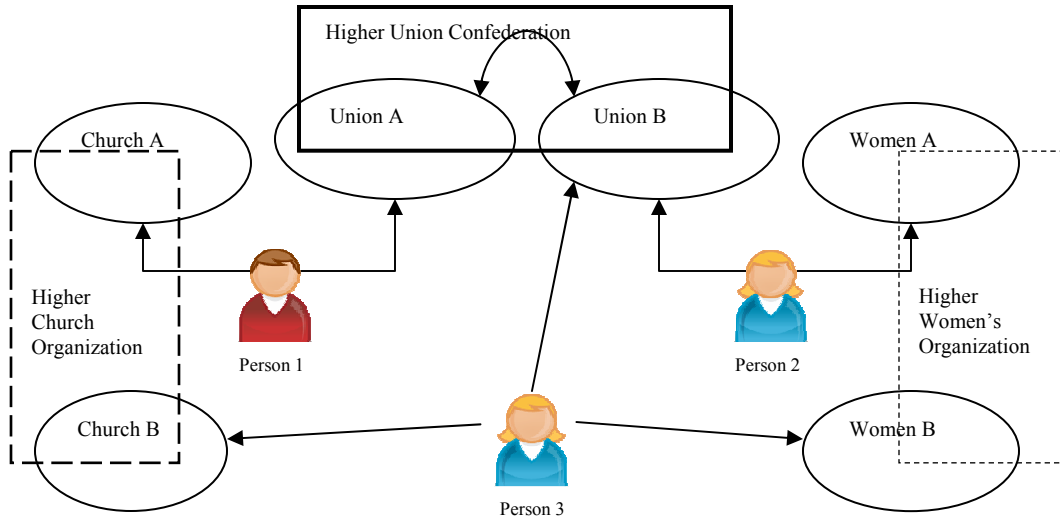


Table S4. Cohesiveness, Connectedness, and their Organizational and Institutional Outcomes

| | | Cohesiveness of an Associational Type | |
|--|------|--|--|
| | | Low | High |
| Connectedness of an Associational Type | Low | Isolated from Other Orgs Internally Fragmented Influential Power on Associational Community: – or 0 Influential Power on Institutions: 0 Example: Sports | Isolated from Other Orgs Internally Integrated Influential Power on Associational Community: – or 0 Influential Power on Institutions: – or 0 Example: Isolated Church, Isolated Union |
| | High | Connected to Other Orgs Internally Fragmented Influential Power on Associational Community: + Influential Power on Institutions: 0 Example: Connected Church, New Social Movement Orgs | Connected to Other Orgs Internally Integrated Influential Power on Associational Community: + Influential Power on Institutions: + Example: Connected Union |

Supplement 5. Test for Heteroskedasticity and Robust Standard Error Regression Analyses

Table S5-1. Test for Heteroskedasticity

| | Model (1) The Rule of Law | Model (2) Control of Corruption | Model (3) Government Effectiveness | Model (4) Voice and Accountability | Model (5) Institutional Democracy |
|---|--|---------------------------------------|--|--|---|
| Breusch-Pagan/Cook-Weisberg Test for Heteroskedasticity (<i>p</i> -value in parentheses) | 9.15 (.0025) | 1.81 (.1782) | 10.01 (.0016) | 12.03 (.0005) | 11.43 (.0007) |
| Decision ($\alpha = .05$) | Reject Null ^a | Fail to Reject Null | Reject Null | Reject Null | Reject Null |
| Overall Decision | Constant Variance Assumption Does Not Hold | | | | |

^a Null hypothesis: All cases have constant variance (homoskedasticity).

Table S5-2. Unstandardized Coefficients from the OLS Regression of Governance Indicators on Economic, Regional, Social, and Political Controls and Unions' Power Centrality

| | Model (6) The Rule of Law | Model (7) Control of Corruption | Model (8) Government Effectiveness | Model (9) Voice and Accountability | Model (10) Institutional Democracy |
|--|---------------------------------|---------------------------------------|--|--|--|
| Economic and Regional Factors | | | | | |
| GDP per Capita (log) | .571 (5.95)** | .627 (6.75)** | .561 (6.37)** | .431 (4.06)** | 1.036 (2.39)* |
| Africa (0,1 indicator) | -.077 (.20) | .037 (.10) | -.026 (.07) | -.155 (.37) | -3.877 (2.30)* |
| South Asia (0,1 indicator) | -.027 (.09) | .080 (.26) | .111 (.38) | -.556 (1.58) | -2.707 (1.87)+ |
| Latin America (0,1 indicator) | -.355 (1.31) | -.004 (.02) | -.246 (.99) | .190 (.64) | .945 (.77) |
| Eastern Europe (0,1 indicator) | .218 (.92) | .190 (.82) | .231 (1.06) | .706 (2.92)** | 2.770 (2.79)** |
| Social and Political Factors | | | | | |
| Procedural Democracy | .021 (.08) | -.299 (1.15) | -.211 (.85) | | |
| Protestant Countries | .456 (2.06)* | .611 (2.84)** | .489 (2.40)* | .354 (1.41) | .387 (.38) |
| Secondary School Enrollment | -.003 (.61) | -.001 (.21) | .001 (.32) | .003 (.47) | .026 (1.12) |
| Former British Colony | .054 (.25) | .145 (.68) | .074 (.37) | .125 (.50) | .964 (.94) |
| Ethnic Fragmentation | -.203 (.55) | -.137 (.38) | -.024 (.07) | -.060 (.14) | .145 (.08) |
| International Factors | | | | | |
| INGO Ties | .004 (.50) | .004 (.64) | -.001 (.20) | .004 (.54) | .007 (.21) |
| Trade Openness (log) | .257 (1.63) | .281 (1.84)* | .167 (1.16) | .029 (.17) | -.923 (1.29) |
| Unions' Popularity and Strength | | | | | |
| Unions' Power Centrality | 1.317 (2.54)* | 1.265 (2.52)* | 1.426 (3.00)** | 1.874 (3.59)** | 8.173 (3.82)** |
| Unions' Membership Density | -.013 (1.67) | -.008 (1.08) | -.012 (1.71)+ | -.023 (2.88)** | -.090 (2.79)** |
| Constant | -6.062 (7.13)** | -6.656 (8.09)** | -5.727 (7.35)** | -4.765 (4.91)** | -4.348 (1.09) |
| Observations | 54 | 54 | 54 | 54 | 54 |
| R-squared | .86 | .89 | .87 | .76 | .69 |

Note: Absolute value of t statistics in parentheses.

+ $p < .10$; * $p < .05$; ** $p < .01$ (two-tailed tests).

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Table S5-3. Unstandardized Coefficients from Linear Regression of Governance Indicators on Economic, Regional, Social, and Political Controls and Unions' Power Centrality (Using the standard Huber-White robust standard errors HC0)

| | Model (1) | Model (2) | Model (3) | Model (4) | Model (5) |
|--|--------------------|-----------------------|--------------------------|--------------------------|-------------------------|
| | The Rule of Law | Control of Corruption | Government Effectiveness | Voice and Accountability | Institutional Democracy |
| Economic and Regional Factors | | | | | |
| GDP per Capita (log) | .571 (8.16)** | .627 (10.15)** | .561 (8.26)** | .431 (3.70)** | 1.036 (1.91)+ |
| Africa (0,1 indicator) | -.077 (.19) | .037 (.11) | -.026 (.07) | -.155 (.35) | -3.877 (1.85)+ |
| South Asia (0,1 indicator) | -.027 (.09) | .080 (.30) | .111 (.36) | -.556 (1.20) | -2.707 (1.10) |
| Latin America (0,1 indicator) | -.355 (.83) | -.004 (.01) | -.246 (.60) | .190 (.63) | .945 (.93) |
| Eastern Europe (0,1 indicator) | .218 (1.13) | .190 (1.18) | .231 (1.58) | .706 (2.72)** | 2.770 (2.22)* |
| Social and Political Factors | | | | | |
| Procedural Democracy | .021 (.08) | -.299 (1.25) | -.211 (.77) | | |
| Protestant Countries | .456 (3.25)** | .611 (4.11)** | .489 (3.73)** | .354 (1.97)+ | .387 (.49) |
| Secondary School Enrollment | -.003 (.85) | -.001 (.27) | .001 (.47) | .003 (.66) | .026 (1.18) |
| Former British Colony | .054 (.25) | .145 (.82) | .074 (.43) | .125 (.43) | .964 (.83) |
| Ethnic Fragmentation | -.203 (.45) | -.137 (.33) | -.024 (.06) | -.060 (.12) | .145 (.09) |
| International Factors | | | | | |
| INGO Ties | .004 (.62) | .004 (.77) | -.001 (.27) | .004 (.75) | .007 (.24) |
| Trade Openness (log) | .257 (1.82)+ | .281 (2.28)* | .167 (1.55) | .029 (.19) | -.923 (1.50) |
| Unions' Popularity and Strength | | | | | |
| Unions' Power Centrality | 1.317 (2.47)* | 1.265 (2.75)** | 1.426 (3.27)** | 1.874 (2.84)** | 8.173 (3.18)** |
| Unions' Membership Density | -.013 (1.51) | -.008 (1.04) | -.012 (1.58) | -.023 (2.13)* | -.090 (2.28)* |
| Constant | -6.062 (9.33)** | -6.656 (10.97)** | -5.727 (7.34)** | -4.765 (4.10)** | -4.348 (.78) |
| Observations | 54 | 54 | 54 | 54 | 54 |
| R-squared | .86 | .89 | .87 | .76 | .69 |

Note: Absolute value of t statistics in parentheses.

+ $p < .10$; * $p < .05$; ** $p < .01$ (two-tailed tests).

Supplement 6. Supplementary Regression Results: Additional Specifications Suggested by Reviewers

Table S6. Unstandardized Coefficients from the Linear Regression (Using HC3): Controlling for a Third Variable (Income Inequality)⁵

| | Model (1) | Model (2) | Model (3) | Model (4) | Model (5) |
|--|--------------------|-----------------------|--------------------------|--------------------------|-------------------------|
| | The Rule of Law | Control of Corruption | Government Effectiveness | Voice and Accountability | Institutional Democracy |
| Economic and Regional Factors | | | | | |
| GDP per Capita (log) | .532 (4.58)** | .592 (5.09)** | .537 (4.65)** | .374 (2.53)* | 1.054 (1.29) |
| Africa (0,1 indicator) | .206 (.43) | .276 (.62) | .087 (.17) | .382 (.73) | -3.561 (1.19) |
| South Asia (0,1 indicator) | .159 (.28) | .246 (.49) | .189 (.31) | -.174 (.30) | -1.940 (.61) |
| Latin America (0,1 indicator) | -.121 (.23) | .199 (.39) | -.139 (.28) | .530 (1.11) | .725 (.40) |
| Eastern Europe (0,1 indicator) | .263 (.97) | .248 (1.07) | .271 (1.18) | .762 (2.48)* | 3.443 (2.12)* |
| Social and Political Factors | | | | | |
| Procedural Democracy | -.042 (.11) | -.370 (.99) | -.258 (.63) | | |
| Protestant Countries | .447 (2.41)* | .598 (3.05)** | .475 (2.75)** | .333 (1.35) | .178 (.15) |
| Secondary School Enrollment | -.001 (.32) | .000 (.08) | .002 (.56) | .005 (.71) | .027 (.77) |
| Former British Colony | .038 (.13) | .119 (.51) | .066 (.26) | .021 (.06) | -.029 (.02) |
| Ethnic Fragmentation | -.071 (.12) | .002 (.00) | .055 (.09) | .231 (.40) | 1.641 (.71) |
| International Factors | | | | | |
| INGO Ties | .007 (.88) | .008 (1.12) | .001 (.21) | .009 (1.24) | .032 (.76) |
| Trade Openness (log) | .234 (1.16) | .260 (1.61) | .163 (1.00) | -.024 (.13) | -1.053 (1.16) |
| Unions' Popularity and Strength | | | | | |
| Unions' Power Centrality | 1.310 (1.84)+ | 1.278 (2.09)* | 1.443 (2.23)* | 1.784 (2.15)* | 8.448 (2.61)* |
| Unions' Membership Density | -.018 (1.63) | -.013 (1.41) | -.016 (1.53) | -.029 (1.93)+ | -.099 (1.91)+ |
| Income Inequality | | | | | |
| Gini | -.013 (.66) | -.011 (.75) | -.005 (.28) | -.020 (1.08) | .017 (.21) |
| Constant | -5.386 (3.30)** | -6.105 (4.11)** | -5.450 (3.20)** | -3.749 (2.02)+ | -6.070 (.68) |
| Observations | 52 | 52 | 52 | 52 | 52 |
| R-squared | .87 | .89 | .87 | .80 | .72 |

Note: Absolute value of t statistics in parentheses. + p < .10; * p < .05; ** p < .01 (two-tailed tests).

References for Supplements

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⁵ Income inequality data (Gini) are drawn from World Income Inequality Database V 2.0a (United Nations University 2005, WIDER). Considering potential biases from the specification of different income receiving units and definitions of income in the WIDER data, I selected the Gini indices based on household disposable income (circa 2000). Where they are not available, I alternatively used household consumption/expenditure, or rarely, household gross income, with adjustment (expenditure based Gini + 6.6 ≈ income based Gini) as recommended by Deininger and Squire (1996). As the difference between gross and net income-based Gini indices is statistically nonsignificant in the previous studies on income inequality (Lee 2005), I do not adjust the difference.