

## Supplementary Material

### Appendix S1: World Bank (WB) Reforms Codebook<sup>1</sup>

The dataset comprises 897 World Bank projects in primary and secondary education across 99 low- and middle-income countries, selected using the screening procedure described in the article. Twenty-seven illustrative coding examples appear in Table S1 of the online appendix, and the full codebook is provided below.

All variables are captured as proportions. As outlined in Box A1 of the appendix, a single WB project may contain multiple components, so the raw measure records the share of a project's components that target subnational education decentralization.

A component is counted as subnational decentralization if it seeks to:

1. establish subnational administrative bodies (e.g., district education offices);
2. transfer educational responsibilities, such as teacher recruitment and training, budgeting, curriculum decisions, or school-planning, to those bodies;
3. encourage citizen participation in decision-making at subnational levels; or
4. enhance the sustainability of these reforms through capacity-building for officials, provision of financial or technical resources, or creation of education information management systems (EMIS). *EMIS is included because the World Bank positions it as an e-governance tool that strengthens subnational decision-making and links regional offices to the centre.*

Variable: `subnational_wb`: the proportion of project components devoted to decentralizing the education system at the subnational level.

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<sup>1</sup> The codebook employs a similar approach to that in Hossain (2024).

**Box S1.** An example of World Bank's education project implemented in Honduras, 2008-2013

**Component 1: Enhancing and Scaling-Up Interventions that Address the Needs of the Poor.** This component would support pre-primary and primary school interventions focused on the poorest segments of the population. ...

**Component 2: Community Participation in School Management.** This component would foster community participation within an Integrated School Management System. It had three sub-components: (2.1) Consolidation and Institutionalization of the School Management System: This sub-component would finance analysis of existing school management modalities among traditional, ... educational networks to develop consolidated policies for community participation, social management, school planning, school systems for information, monitoring and evaluation, and financial administration. (2.2) School Planning and Resources for Quality Education: This sub-component would finance the review and development of instruments to support school and network planning and resource management through cooperative school networks. (2.3) School Management and Education Performance Monitoring and Evaluation: This sub-component would finance the development and implementation of a participatory monitoring and evaluation system for school management.

**Component 3: Governance and Institutional Strengthening of the Ministry of Education.** The component would finance efforts to strengthen SEDUC [*Ministry of Education*], including improving governance and management capacity. The component was divided into three sub-components: (3.1) Information for improved performance and greater accountability: ... expanding, strengthening, updating and maintaining the SIARHD [*Integrated System for the Administration of Teachers' Payroll*] at central and subnational levels to provide reliable information on teachers at all levels...; and strengthening the capacity for educational planning and the use of information for decision-making at the central and departmental levels. (3.2) National System of Assessment of Learning Outcomes: ... strengthen the institutional capacities of SEDUC to use the information for monitoring of learning outcomes and decision-making, and to increase overall transparency through dissemination of the results....

**Component 4. Project Administration:** This component would finance the cost of technical personnel (local consultants) and operating costs. ...

Source. World Bank (2013, 3-4)

**Table S1.** Examples of subnational-level decentralization reforms by the World Bank (WB)

No	Country	Project id	Starting year	Closing year	Education level	Examples of decentralization method
1	Bangladesh	P162619	2018	2023	Primary	Administrative and financial powers will be further devolved to divisional, district, and Upazila (sub-district) education offices.
2	Indonesia	P168076	2019	2024	Primary and Secondary	Electronic performance-based planning and budgeting, enabling budget management support and monitoring at the provincial and district levels system
3	Chile	P006668	1991	1998	Primary and Secondary	Gradually change the managerial and organizational culture in the central and decentralized parts of the Ministry of Education and the municipalities
4	Rwanda	P115816	2009	2010	Primary and Secondary	Adoption of a framework and procedures for the implementation of decentralized procurement
5	Nepal	P040612	1999	2004	Primary	Community mobilization programs through training of Village Development Committees (VDCs) and SMCs
6	India	P009955	1993	2000	Primary	A strengthened framework for state and district-level planning
7	Cambodia	P109925	2007	2012	Primary	Created educational 60 new District Offices of Education buildings; Capacity building was to occur with select province-level staff on accounting, record keeping, and financial monitoring
8	Cambodia	P144715	2013	2017	Primary and Secondary	Leadership training to principals to direct teachers and plan development program
9	Indonesia	P003833	1982	1990	Secondary	Creating links between units and expanding links to village level
10	Indonesia	P003842	1983	1990	Secondary	Running examinations at the provincial level
11	Indonesia	P003873	1989	1997	Secondary	Management training at the central, provincial and district levels
12	Indonesia	P003940	1991	1999	Primary	Training staff at the regional level and teachers in schools, community participation

13	Indonesia	P003987	1995	2004	Secondary	Train school principals and administrators; develop data analysis skills of district and provincial staff; institutional capacities of project management at the province, district and Directorate of Secondary Education at the national level
14	Bhutan	P078807	2005	2007	Primary	EMIS to decentralize the data collection system at the subnational and district levels.
15	Sri Lanka	P010343	1988	1996	Primary and Secondary	Constructing district-level offices, community involvement
16	Sri Lanka	P010525	1996	2005	Primary and Secondary	Strengthening the capacity of provincial education offices, EMIS
17	Egypt	P005169	1995	2006	Primary	Capacity building of governorates by funding and staffing
18	Burundi	P064557	2006	2012	Primary and Secondary	Capacity building: 149 inspectors would be trained
19	Afghanistan	P083964	2003	2010	Primary and Secondary	Providing grants to provincial and district education departments to strengthen school support
20	Argentina	P005992	1993	2001	Secondary	Quality improvement at the provincial level included curriculum development, provision of in-service teacher training, provision of textbooks and other learning materials; infrastructure improvement at the provincial level
21	Bangladesh	P009555	1992	2001	Secondary	Thana (Upazila) Project Offices; (e) School Level Coordinators; and (f) a Thana Advisory Committee (TAC)
22	Bangladesh	P009550	1997	2003	Primary	Support the development of institutional capacity at PMED, DPE (at central, regional, Districts and Upazila levels) and at the school level, to enhance the provision of quality primary education; SMC
23	Bangladesh	P044876	2001	2008	Secondary	Awareness training for Upazila Program Officers and Assistant Program Officers, field-level officials, educational institutions' School Management Committees and Parent Teachers

24	India	P035821	1995	2003	Primary	Establish EMIS, strengthening state institutions such as the State Institutes of Educational Management and Training (SIEMT)
25	India	P045050	1998	2005	Primary	Establishing and strengthening state and district project offices
26	India	P050667	1998	2006	Primary	Strengthening the State Project Office and Divisional Offices; strengthening the capacity of district project management structures
27	Pakistan	P010394	1991	2000	Primary	Separating responsibility for the management and administration of elementary and secondary education at provincial, divisional and district level

**Table S2. Descriptive statistics by country**

No	Country	Region	Year started	Last year	% decentralization components	Mean no of decentralization components
1	Armenia	Central and Western Asia	2003	2022	0.17	0.75
2	Azerbaijan	Central and Western Asia	1998	2016	0.13	0.89
3	Georgia	Central and Western Asia	1995	2026	0.06	0.45
4	Kazakhstan	Central and Western Asia	2016	2022	0	0
5	Kyrgyz Republic	Central and Western Asia	2003	2025	0.09	0.44
6	Tajikistan	Central and Western Asia	1998	2017	0.33	2.21
7	Turkey	Central and Western Asia	1989	2024	0.17	0.81
8	Cambodia	East Asia	1998	2024	0.08	0.45
9	China	East Asia	1991	2023	0.2	1.9
10	Indonesia	East Asia	1972	2024	0.24	2.98
11	Lao	East Asia	1968	1997	0.42	1.79
12	Malaysia	East Asia	1992	2020	0.16	0.88
13	Mongolia	East Asia	1968	2004	0	0
14	Papua New Guinea	East Asia	1994	2022	0.23	1.11
15	Philippines	East Asia	1979	2016	0.16	0.91
16	Korea	East Asia	1975	2022	0	0
17	Thailand	East Asia	1972	2006	0.07	0.24
18	Timor-Leste	East Asia	1999	2025	0.11	0.93
19	Vietnam	East Asia	1992	2021	0.27	1.92
20	Albania	Eastern Europe	1993	2013	0.32	1.05
21	Bosnia and Herzegovina	Eastern Europe	1995	2010	0.18	0.73
22	Bulgaria	Eastern Europe	1999	2004	0.14	0.83
23	Kosovo	Eastern Europe	2002	2020	0.41	1.44
24	Moldova	Eastern Europe	1996	2022	0.27	2.96
25	Romania	Eastern Europe	1993	2022	0.38	1.48
26	Russia	Eastern Europe	1996	2020	0.04	0.27
27	Argentina	Latin America and Caribbean	1993	2023	0.22	1.38
28	Bolivia	Latin America and Caribbean	1976	2021	0.2	1.08
29	Brazil	Latin America and Caribbean	1973	2023	0.11	1.39
30	Chile	Latin America and Caribbean	1969	2001	0.04	0.42
31	Colombia	Latin America and Caribbean	1967	2015	0.16	1.48
32	Dominican Republic	Latin America and Caribbean	1969	2022	0.22	0.9

33	Ecuador	Latin America and Caribbean	1967	2020	0.11	0.22
34	El Salvador	Latin America and Caribbean	1968	2018	0.2	1.02
35	Guatemala	Latin America and Caribbean	1967	2020	0.11	0.52
36	Guyana	Latin America and Caribbean	1968	2023	0.09	0.39
37	Haiti	Latin America and Caribbean	1975	2022	0.09	1.23
38	Honduras	Latin America and Caribbean	1972	2013	0.3	0.97
39	Jamaica	Latin America and Caribbean	1965	2015	0.17	0.74
40	Mexico	Latin America and Caribbean	1990	2018	0.22	0.93
41	Nicaragua	Latin America and Caribbean	1967	2022	0.07	0.68
42	Panama	Latin America and Caribbean	1995	2014	0.3	1.37
43	Paraguay	Latin America and Caribbean	1971	2009	0.08	0.71
44	Peru	Latin America and Caribbean	1972	2020	0.2	0.73
45	Uruguay	Latin America and Caribbean	1993	2022	0.39	1.46
46	Djibouti	Middle East and North Africa	1984	2024	0.12	0.27
47	Egypt	Middle East and North Africa	1992	2023	0.08	0.57
48	Iraq	Middle East and North Africa	2003	2015	0	0
49	Jordan	Middle East and North Africa	1974	2025	0.09	0.58
50	Morocco	Middle East and North Africa	1964	2024	0.05	0.16
51	Tunisia	Middle East and North Africa	1965	2025	0.14	0.55
52	West Bank and Gaza	Middle East and North Africa	1994	2019	0.13	0.69
53	Yemen	Middle East and North Africa	1973	2017	0.13	1.18
54	Afghanistan	South Asia	1978	2023	0.39	1.47
55	Bangladesh	South Asia	1979	2023	0.21	2.05
56	Bhutan	South Asia	1987	2011	0.29	1.58
57	India	South Asia	1991	2025	0.3	3.85
58	Maldives	South Asia	1988	2024	0.05	0.28
59	Nepal	South Asia	1983	2021	0.27	1.58
60	Pakistan	South Asia	1976	2025	0.07	1.27
61	Sri Lanka	South Asia	1988	2024	0.22	1
62	Angola	Sub-Saharan Africa	1991	2021	0.13	0.62
63	Benin	Sub-Saharan Africa	1993	2024	0.06	0.42
64	Burkina Faso	Sub-Saharan Africa	1972	2013	0.12	1.05
65	Burundi	Sub-Saharan Africa	1976	2023	0.12	0.5
66	Cameroon	Sub-Saharan Africa	1968	2023	0.16	0.61
67	Cape Verde	Sub-Saharan Africa	1994	2023	0.17	0.57
68	Central African Republic	Sub-Saharan Africa	1970	2023	0.23	0.55

69	Chad	Sub-Saharan Africa	1977	2025	0.13	0.68
70	Comoros	Sub-Saharan Africa	1980	2004	0	0
71	Congo, DR	Sub-Saharan Africa	1975	2024	0.12	0.69
72	Congo, Republic of	Sub-Saharan Africa	1970	2022	0.09	0.64
73	Cote d'Ivoire	Sub-Saharan Africa	1969	2023	0.09	1.24
74	Eritrea	Sub-Saharan Africa	1997	2011	0.15	1.1
75	Ethiopia	Sub-Saharan Africa	1965	2023	0.2	0.97
76	Gambia	Sub-Saharan Africa	1989	2022	0.31	0.86
77	Ghana	Sub-Saharan Africa	1989	2025	0.21	1.55
78	Guinea	Sub-Saharan Africa	1989	2024	0.05	0.23
79	Guinea-Bissau	Sub-Saharan Africa	1987	2023	0.1	0.56
80	Kenya	Sub-Saharan Africa	1965	2023	0.09	0.64
81	Lesotho	Sub-Saharan Africa	1976	2021	0.12	0.51
82	Liberia	Sub-Saharan Africa	1971	2023	0.07	0.55
83	Madagascar	Sub-Saharan Africa	1966	2023	0.19	1.15
84	Malawi	Sub-Saharan Africa	1966	2025	0.23	1.13
85	Mali	Sub-Saharan Africa	1972	2017	0.12	0.38
86	Mauritania	Sub-Saharan Africa	1987	2021	0.24	1.96
87	Mauritius	Sub-Saharan Africa	1973	1998	0.2	0.85
88	Mozambique	Sub-Saharan Africa	1987	2025	0.09	0.9
89	Niger	Sub-Saharan Africa	1985	2026	0.28	1.33
90	Nigeria	Sub-Saharan Africa	1964	2025	0.25	1
91	Rwanda	Sub-Saharan Africa	1974	2024	0.31	1.76
92	Senegal	Sub-Saharan Africa	1974	2021	0.25	1.15
93	Sierra Leone	Sub-Saharan Africa	1968	2025	0.19	0.56
94	Somalia	Sub-Saharan Africa	1970	2023	0.09	0.28
95	Sudan	Sub-Saharan Africa	1967	2021	0.16	1.09
96	Tanzania	Sub-Saharan Africa	1972	2026	0.25	1.5
97	Togo	Sub-Saharan Africa	1979	2021	0.16	0.43
98	Uganda	Sub-Saharan Africa	1966	2024	0.09	0.41
99	Zambia	Sub-Saharan Africa	1968	2024	0.12	0.57

**Note:** The decentralization column represents the mean percentage of project components in WB decentralization efforts across all years.



## Appendix S2: Reliability

One might argue that the WB measure of subnational-level decentralization reforms could be biased by my coding choices, raising concerns about reliability. Inter-rater reliability is difficult to assess because a single researcher coded the dataset. To address this, I employ two strategies: (a) computer-assisted text analysis to produce an alternative measure and (b) time-lapse re-coding of a subsample of the manual data.

First, I apply automated text-analysis techniques to every World Bank project document in the sample to assess whether results based on the hand-coded measure can be replicated. The corpus contains 19,633 documents across all study countries. I lowercase, tokenize, and remove stop words and any tokens shorter than three characters. To capture subnational decentralization, I build a dictionary of key terms, listed in the upper panel of Table S3 with both American and British spellings, drawn from the decentralization literature (e.g., Ball and Youdell 2009; Gershberg and Winkler 2004; Gertler, Patrinos, and Rubio-Codina 2006; Florestal and Cooper 1997). The variable is defined as the frequency of these terms per 1,000 words, normalizing for document length.

Figure S1 shows that the yearly distribution of subnational-level decentralization reforms is broadly similar for the manual and automated measures.

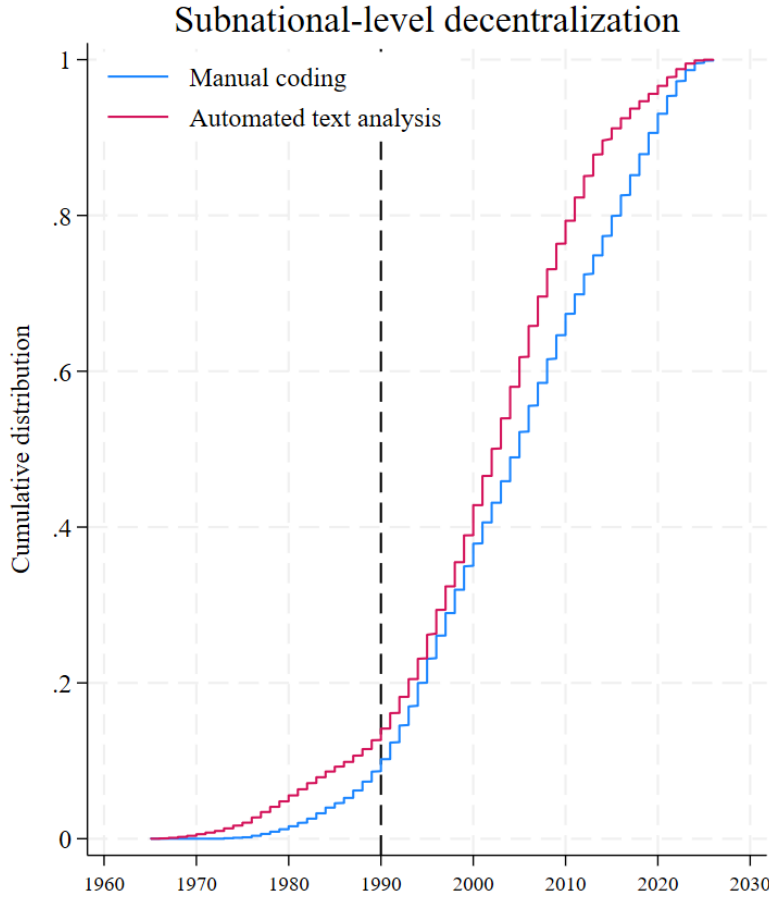
**Table S3.** List of keywords about subnational-level decentralization

Decentralization channels	List of keywords
Subnational	'decentralization', 'decentralize', 'decentralizing', 'decentralized', 'decentralisation', 'decentralise', 'decentralising', 'decentralised', 'devolution', 'devolved', 'devolving', 'devolve', 'devolves', 'delegation', 'delegate'

Note: The list is constructed based on the literature as suggested.

Separate analyses with the manual and automated coding yield closely aligned growth trajectories for subnational-level decentralization. Table S4 shows that models 1–2 (manual) and models 5–6 (automated) each point to a sharp initial surge in reforms, followed by a downward curvature.

**Figure S1.** The cumulative distribution of subnational-level decentralization reforms using manual and computer-assisted coding techniques.



Notes: The vertical dash lines signify the initial stage of the neoliberal era after the Washington Consensus in 1989.

Source. Own data.

Models 1, 2, 5, and 6 are estimated with generalized linear mixed models (GLMMs) because the dependent variable contains many zeros, creating skewness and heteroscedasticity. Linear models would predict values beyond the 0–1 range that bounds the share of decentralization components, whereas GLMMs keep fitted values within bounds while allowing me to trace the predicted growth trajectories of World Bank (WB) decentralization projects.

$$\text{logit}(\mu_{it}) = \beta_0 + \beta_1 Y_i + \beta_2 Y_{2i} + \beta_3 S_i + \beta_4 \mathbf{Z}_{it} + a_i + Y_t + u_{it} \quad (\text{S1})$$

In Equation S1,  $D$  identifies country  $t$  in country-project-year  $i$ ;  $\mu_{it}$  is the expected probability that that  $D_{it} = 1$  with  $D_{it} = 1 \mid Y_i, Y_{2i}, S_i, \mathbf{Z}_{it} \sim \beta(1, \mu_i)$ .  $\beta_1$  and  $\beta_2$  capture linear and quadratic yearly trends ( $Y_i, Y_{2i}$ );  $S_i$  is a regional dummy ( $\beta_3$ );  $\beta_4$  is the vector of control variable coefficients for  $\mathbf{Z}_{it}$  (see the variable section); and  $u_{it}$  is the country-level random intercept.

A linear link is used in models 1, 2, 5, and 6 because the automated variable ranges from 0 to 9. For comparability, the hand-coded proportion (0–1) is also estimated with a linear link. Running a logit link in models 3 and 4 yields the same substantive pattern: an initial surge in subnational decentralization reforms followed by a downward curvature.

**Table S4.** Comparison between the growth trajectories of subnational decentralization reforms when coded manually and using automated text analysis

	Subnational-level decentralization					
	Manual-linear (1)	Manual-linear (2)	Manual-logit (3)	Manual-logit (4)	Automated-linear (5)	Automated-linear (6)
Year	0.66*** (0.12)	0.42** (0.16)	16.4*** (2.39)	11.0*** (3.24)	2.92*** (0.42)	2.61*** (0.56)
Year quadratic	-0.00016*** (0.000030)	-0.00010** (0.000040)	-0.0041*** (0.00060)	-0.0027*** (0.00081)	-0.00073*** (0.00011)	-0.00065*** (0.00014)
Region fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Starting time		Yes		Yes		Yes
Project cost (log)		Yes		Yes		Yes
Education levels		Yes		Yes		Yes
Constant	-662.2*** (120.6)	-420.3** (161.7)	-16402.5*** (2390.2)	-11009.7*** (3242.8)	-2916.6*** (421.2)	-2602.9*** (566.2)
$\Sigma u$ (Country)	0.0062*** (0.0010)	0.0063*** (0.0010)	1.45*** (0.39)	1.52*** (0.37)	0.11** (0.035)	0.11** (0.035)
$\Sigma e$ (Country-project year)	0.022*** (0.0018)	0.021*** (0.0018)			0.28*** (0.064)	0.28*** (0.064)
N	3312	3312	3312	3312	3313	3313

Robust standard errors in parentheses. \*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

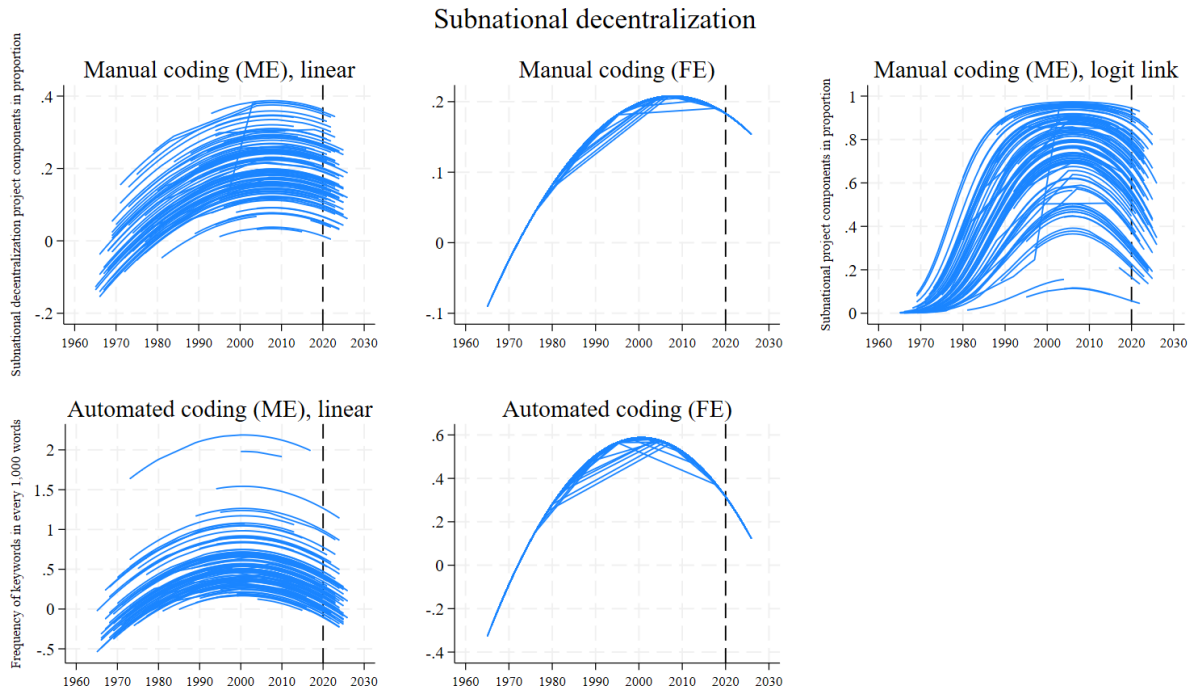
Notes: (a) *Manual* refers to the hand-coded subnational-decentralization variable drawn from WB projects; *Automated* denotes the version created through computer-assisted text analysis.

(b) *Linear* designates estimates from generalized linear mixed models fitted with an identity (linear) link, whereas *Logit* marks models estimated with a logit link.

(c) In the linear specifications based on the hand-coded variable, coefficients represent the proportion of WB project components devoted to subnational decentralization. For example, the Year term in model 2 indicates an immediate annual increase of 0.66 (66 percentage points), while the quadratic term  $-0.00010$  signals a gradual tapering, producing a downward bend in the trajectory. For the automated variable, coefficients indicate the change in the frequency of decentralization-related terms per 1,000 words of WB project text. In the logit models, coefficients express the log-odds that a WB project component targets subnational decentralization.

Figure S2 plots country-specific slopes over time. The upper and lower left panels show virtually identical trajectories for the manual and automated measures. Adding country fixed effects (middle panels) compresses cross-national variation, yet both measures still trace the same trend, mirroring the pattern visible in every panel.

**Figure S2.** Growth trajectories of subnational decentralization reforms using both manual and automated coding



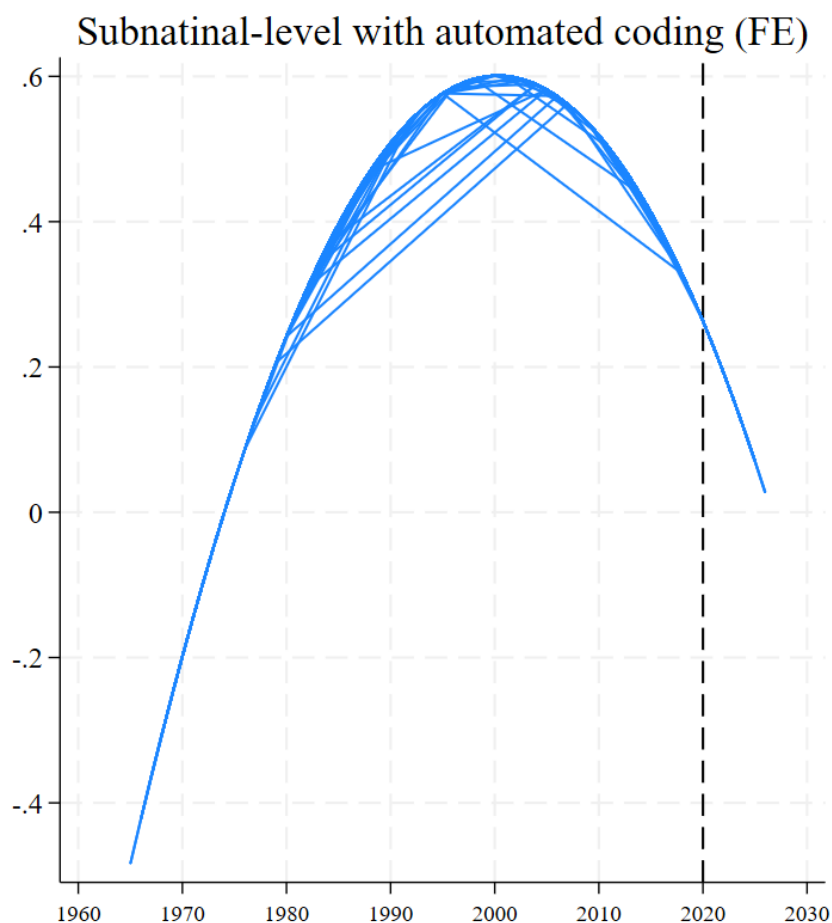
To rule out bias from unequal numbers of project documents, I estimate an OLS model with country fixed effects for the automated variable. The results, shown in Figure S3, are unchanged, underscoring the measure's robustness.

These checks collectively indicate that the decentralization-reform variable is reliable and that the findings are not artefacts of coding choices.

For an additional test, I re-coded 5 percent of the data more than six months after the original exercise, following the single-coder procedure recommended by Mackey and Gass (2015).<sup>2</sup>

<sup>2</sup> Detailed results are omitted here to avoid repetition but are available upon request.

**Figure S3.** Growth trajectories of subnational-level decentralization reforms by automated measure, weighted by the number of documents in each WB project



Notes: (a) FE stands for fixed effects. (b) Estimates come from OLS models with country fixed effects, a setup that accommodates analytic weighting even when the weights vary within clusters (countries).

## References

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**Table S5:** The effect of the degree of authoritarianism on subnational decentralization reforms using different lags.

	Dependent variable: Decentralization reforms by the WB					
	(1)	(2)	(3)	(4)	(5)	(6)
Degree of authoritarianism	0.13** (0.049)					
Degree of authoritarianism (lag 1)		0.14* (0.054)				
Degree of authoritarianism (lag 2)			0.14* (0.060)			
Degree of authoritarianism (lag 3)				0.15* (0.065)		
Degree of authoritarianism (lag 4)					0.15* (0.067)	
Degree of authoritarianism (lag 5)						0.16* (0.068)
Controls with lags	Yes	Yes	Yes	Yes	Yes	Yes
Constant	18.4* (7.45)	18.9* (7.38)	19.0* (7.54)	19.9* (7.68)	21.5** (7.53)	28.2*** (5.71)
Observations	2937	2737	2574	2431	2296	2172
Country	99	99	99	98	98	97

*Notes:* (a) Lags of all controls (as in the main models) included. (b) The coefficients can be explained as the percentage point changes in WB project components on decentralization due to changes in the independent variables. (c) Standard error in parentheses robust to heteroskedasticity and clustering at the country level. \* p<0.05 \*\* p<0.01 \*\*\* p<0.001.

**Table S6.** The link between the decentralization and subnational-level decentralization reforms by the World Bank, lagged regression.

	Dependent variable: Decentralization reforms financed by the WB		
	Two-way fixed effects models		
	(1)	(2)	(3)
Local government relative power (lag 4)	-0.0099 (0.015)		
Local government index (lag 4)		-0.029 (0.070)	
Regional government index (lag 4)			-0.055 (0.056)
Population size (log and lag 4)	-0.00*** (0.00)	-0.00** (0.00)	-0.00** (0.00)
Share of ethnic groups (lag 4)	0.0067 (0.022)	0.011 (0.021)	0.013 (0.020)
GDP per capita (log and lag 4)	0.030 (0.029)	0.019 (0.028)	0.019 (0.028)
Constant	-0.56 (0.61)	-0.34 (0.60)	-0.35 (0.59)
Observations	2232	2288	2284
Countries	97	98	98

*Notes:* (a) The additional controls include the lag of the educational level in which WB projects have been implemented, that is, primary, secondary, or both. (b) The coefficients can be explained as the percentage point changes in WB project components on decentralization due to changes in the independent variables. (c) Standard error in parentheses robust to heteroskedasticity and clustering at the country level. \* p<0.05 \*\* p<0.01 \*\*\* p<0.001.



**Table S7.** The link between the degree of authoritarianism and subnational-level decentralization reforms by the World Bank (by initially high- and low-degree of authoritarianism).

	Dependent variable: Decentralization reforms financed by the WB	
	Two-way fixed effects models	
	(1)	(2)
	Initial degree of authoritarianism...	
	High	Low
Degree of authoritarianism	0.18* (0.076)	0.16 (0.15)
Population size (log)	-16.5** (4.63)	-30.0* (11.5)
Share of ethnic groups	0.015 (0.057)	0.073 (0.039)
GDP per capita	0.0070 (0.034)	-0.0053 (0.032)
Constant	207.1** (57.8)	377.7* (145.2)
Observations	808	672
Countries	22	19

*Notes:* (a) The additional controls include the educational level at which WB projects have been implemented, that is, primary, secondary, or both. (b) The coefficients can be explained as the percentage point changes in WB project components on decentralization due to changes in the independent variables. (c) Standard error in parentheses robust to heteroskedasticity and clustering at the country level. \*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$ . (d) The initial degree of authoritarianism is defined by countries' state of authoritarianism in and before 1995. (e) The number of observations decreased due to the selection of countries by the initial cutoff year of 1995.

**Table S8.** The link between authoritarianism and subnational-level decentralization reforms by the World Bank.

	Dependent variable: Decentralization reforms financed by the WB
	OLS regression
Authoritarianism (ref. A small decrease)	
A large decrease	-0.047 (0.061)
No change	0.73*** (0.19)
An increase	0.80*** (0.16)
Country and year fixed effects	Yes
Controls	Yes
Constant	0.077 (0.26)
Observations	2937
Country	99

*Notes:* (a) The additional controls include population size, the share of ethnic groups, GDP per capita in log, and the educational level in which WB projects have been implemented, that is, primary, secondary, or both. (b) The degree of authoritarianism is divided into four categories based on changes in authoritarianism relative to countries' starting years available in the dataset. Because of this categorization, this independent variable now does not vary over time, for which I use OLS regression with country and year fixed effects. (c) Standard error in parentheses robust to heteroskedasticity and clustering at the country level. \*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$ .