

Online Appendix

Trust in Information and Pandemic Approval in Southeast Asia: Evidence from the Vietnam Paradox

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2026-02-28

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Appendix A: Survey Question Wording

This appendix documents the exact wording of all Asian Barometer Wave 6 survey items used in our analysis. For each measure, we provide the original question text, response options, and any coding notes relevant to interpretation.

A.1 Dependent Variable

Government Pandemic Handling (q142)

Question: “How well or badly do you think the government handled the pandemic?”

Response options: (1) Very badly; (2) Badly; (3) Quite well; (4) Very well

Coding: Higher values indicate more favourable evaluations. This item serves as the primary dependent variable throughout the analysis.

A.2 Primary Independent Variables

A.2.1 COVID-19 Infection

Personal/Family COVID Infection (q138)

Question: “Have you or your family members previously contracted the COVID-19 virus?”

Response options: (0) No; (1) Yes

Coding: Binary indicator. Note that this item captures household-level exposure rather than personal infection alone, which may inflate prevalence estimates compared to individual-only measures.

A.2.2 Trust in COVID Information

Trust in Government COVID Information (q141)

Question: “How much do you trust the Covid-19 related information provided by the government?”

Response options: (1) No trust at all; (2) Not a lot of trust; (3) Quite a lot of trust; (4) A great deal of trust

Coding: Higher values indicate greater trust. This item serves as the key mediating variable in our theoretical framework.

A.2.3 Economic Impact

COVID-19 Economic Impact (q140)

Question: “Thinking of the negative impact of COVID-19 on your family’s livelihood, how serious is it in your view?”

Response options: (1) Not much impact; (2) Some impact, but not serious; (3) Serious impact; (4) Very serious impact

Coding: Higher values indicate greater perceived economic hardship from the pandemic.

A.3 Institutional Trust Index

Institutional Trust (q7–q15)

Stem question: “I’m going to name a number of institutions. For each one, please tell me how much trust do you have in them?”

Institutions:

Item	Institution
q7	National government
q8	Courts
q9	Police
q10	Political parties
q11	Parliament/National Assembly
q12	Civil service
q13	Military
q14	Election commission
q15	Local government

Response options (all items): (1) None at all; (2) Not very much trust; (3) Quite a lot of trust; (4) A great deal of trust

Index construction: Mean of all nine items, standardised to a 1–4 scale. Higher values indicate greater institutional trust. Cronbach’s $\alpha > 0.90$ across all three countries.

A.4 Authoritarian Acceptance Index

Authoritarian Governance Acceptance (q168–q171)

Items:

Item	Statement
q168	“In order to solve the country’s urgent problems, a leader can govern the country by decrees and disregard the parliament if necessary.”
q169	“As long as a government can solve our country’s economic problem, it does not matter if the government holds regular elections or not.”
q170	“This country needs a leader who can break the rules if necessary to get things done.”
q171	“As long as the government can maintain order and stability in the country, it does not matter whether it is democratic or undemocratic.”

Response options (all items): (1) Strongly disagree; (2) Somewhat disagree; (3) Somewhat agree; (4) Strongly agree

Index construction: Mean of all four items. Higher values indicate greater acceptance of authoritarian governance practices. Items were originally coded such that agreement indicated authoritarian acceptance; no reverse-coding was applied. Cronbach’s $\alpha = 0.85$.

A.5 Democratic Attitudes

Satisfaction with Democracy (q90)

Question: “On the whole, how satisfied or dissatisfied are you with the way democracy works in [COUNTRY]?”

Response options: (1) Not at all satisfied; (2) Not very satisfied; (3) Fairly satisfied; (4) Very satisfied

Coding: Higher values indicate greater satisfaction. This item is used both as a control variable and as a falsification test outcome in sensitivity analyses.

A.6 Social Desirability Check

Freedom of Speech Perception (q106)

Question: “People are free to speak what they think without fear.”

Response options: (1) Strongly disagree; (2) Somewhat disagree; (3) Somewhat agree; (4) Strongly agree

Coding: This item is used in the Discussion section to test social desirability bias. Respondents who disagree (responses 1–2) are coded as perceiving speech constraints, providing a subsample for robustness checks.

Table 3: Perceived Speech Constraints by Country

Country	N	% Constrained	% Free
Thailand	1,120	22.5	77.5
Vietnam	1,203	40.3	59.7
Cambodia	1,184	28.7	71.3

Descriptive Statistics: The table above presents the percentage of respondents who perceive constraints on free speech (disagree that people are free to speak without fear). Vietnamese respondents report substantially higher perceived constraints (40.3%) compared to Cambodian (28.7%) and Thai (22.5%) respondents. Alternatively, 59.7% of Vietnamese respondents perceive speech freedom (agree people are free to speak), compared to only 71.3% in Cambodia and 77.5% in Thailand. This paradox—higher perceived freedom in the more authoritarian context—is referenced in the Discussion section’s social desirability analysis. The fact that Vietnamese respondents openly report substantial speech constraints (alongside high infection rates) suggests responses are not uniformly driven by fear.

Note: “Constrained” = Disagree/Strongly disagree that “people are free to speak what they think without fear” (freedom_of_speech = 2, reverse-coded from q106 = 3). “Free” = Agree/Strongly agree (freedom_of_speech = 3, reverse-coded from q106 = 2). Statistics from validated dataset excluding missing values.

Social Desirability Test (Vietnam): Even assuming social desirability inflates reports of free speech, the 40.3% of Vietnamese respondents who openly disagreed that “people are free to speak without fear” represent those least susceptible to such pressure. Yet their approval of pandemic handling (97.5%) is virtually identical to those who report feeling free (97.3%). If fear were driving responses, these respondents—who already demonstrated willingness to offer “risky” answers—should show lower approval. They do not.

Table 4: Correlation Between Freedom of Speech and Government Pandemic Approval (Vietnam)

Measure	Value
N	1,195
Correlation (r)	0.063
95% CI	[0.006, 0.119]
p-value	0.030
Mean Freedom of Speech	2.70
Mean Govt Approval	3.61

The table above presents the correlation between perceived speech freedom and government pandemic approval. The correlation is positive but substantively negligible ($r = 0.063$, $p = 0.03$), indicating that perceptions of speech freedom have virtually no relationship with approval ratings. This near-zero correlation further undermines the social desirability explanation: if fear of reprisal drove both high approval and reports of freedom, we would expect a much stronger positive relationship.

Note: Both variables are 4-point scales where higher values indicate more agreement. Correlation uses Pearson’s r with complete cases only. The weak correlation ($r < 0.10$) indicates perceived speech freedom explains less than 1% of variance in approval ratings.

A.7 Economic Perceptions

A.7.1 Sociotropic Evaluations (National Economy)

Item	Question	Temporal Focus
q1	“How would you describe the overall economic condition of our country today?”	Current
q2	“What about a year ago? How would you describe the overall economic condition of our country then?”	Retrospective

Item	Question	Temporal Focus
q3	“What do you think will be the state of our country’s economy a few years from now?”	Prospective

Response options (all items): (1) Very bad; (2) Bad; (3) So-so; (4) Good; (5) Very good

A.7.2 Pocketbook Evaluations (Household Economy)

Item	Question	Temporal Focus
q4	“As for your own family, how would you describe the economic situation of your family today?”	Current
q5	“What about a year ago? How would you describe the economic situation of your family then?”	Retrospective
q6	“What do you think the economic situation of your family will be a few years from now?”	Prospective

Response options (all items): (1) Very bad; (2) Bad; (3) So-so; (4) Good; (5) Very good

A.7.3 Economic Vulnerability

Economic Anxiety (q161)

Question: “How worried are you that your family might lose its major source of income within the next 12 months?”

Response options: (1) Not worried at all; (2) Not very worried; (3) Somewhat worried; (4) Very worried

Economic Resilience (q162)

Question: “If you were unfortunate enough to lose your main source of income, how serious would it be for you and your family?”

Response options: (1) Not serious at all; (2) Not very serious; (3) Somewhat serious; (4) Very serious

Economic Justice (q163)

Question: “Considering all the effort that you and your family members have made in the past, do you think the income that your family currently receives is fair or not fair?”

Response options: (1) Very unfair; (2) Somewhat unfair; (3) Somewhat fair; (4) Very fair

A.8 Demographic Controls

Variable	Item	Description	Coding
Age	SE3	Respondent's age	Continuous (years)
Gender	SE2	Respondent's gender	(0) Male; (1) Female
Education	SE5	Highest level of education completed	7-point scale: (1) No formal education to (7) Complete university
Urban residence	LEVEL	Residential area type	(0) Rural; (1) Urban
Income quintile	SE14	Household income	5-point scale: (1) Lowest quintile to (5) Highest quintile

Appendix B: Scale Reliability and Construction

Table B1: Cronbach's Alpha Reliability Coefficients

Table 5: Cronbach's Alpha Reliability Coefficients for Composite Scales

Scale	Items	N	Alpha	Interpretation
Institutional Trust Index	9	3023	0.947	Excellent
Authoritarianism Support Index	4	2957	0.849	Good
Emergency Powers Index	5	3060	0.777	Acceptable

Note:

Alpha = Cronbach's alpha. All scales exceed the conventional alpha ≥ 0.70 threshold for acceptable internal consistency.

All composite scales demonstrate acceptable to excellent internal consistency. The Institutional Trust Index shows particularly high reliability (> 0.90), reflecting strong intercorrelations among trust items across different governmental and judicial institutions.

Appendix C: Measurement Validity Diagnostics

A key concern is whether trust in government COVID information and government pandemic approval measure distinct constructs or simply tap the same underlying attitude of regime support.

Table C1: Correlation Matrix (Vietnam)

Table 6: Correlation Matrix: Key Variables (Vietnam)

Variable	Handling	COVID_Trust	Inst_Trust	Dem. Sat.	Infected
Handling	1.000	0.509	0.357	0.353	0.015
COVID_Trust	0.509	1.000	0.413	0.380	-0.027
Inst_Trust	0.357	0.413	1.000	0.498	0.001
Dem. Sat.	0.353	0.380	0.498	1.000	-0.080
Infected	0.015	-0.027	0.001	-0.080	1.000

Note:

Handling = COVID govt handling; COVID_Trust = COVID trust info; Inst_Trust = Institutional trust index; Dem. Sat.

The moderate correlation between trust and approval ($r = 0.51$ in Vietnam) indicates substantial shared variance (~26%) but leaves approximately 74% of variance unexplained—suggesting these are related but distinguishable constructs.

Table C2: Variance Inflation Factors

Table 7: Variance Inflation Factors for Multivariate Models

Country	Variable	VIF	Tolerance
Vietnam	institutional_trust_index	1.446	0.692
Vietnam	dem_satisfaction	1.409	0.710
Vietnam	covid_trust_info	1.267	0.789
Vietnam	covid_contracted	1.009	0.991
Cambodia	dem_satisfaction	1.327	0.754
Cambodia	institutional_trust_index	1.207	0.828
Cambodia	covid_trust_info	1.190	0.840
Cambodia	covid_contracted	1.001	0.999
Thailand	dem_satisfaction	1.425	0.702
Thailand	covid_trust_info	1.293	0.773
Thailand	institutional_trust_index	1.254	0.797
Thailand	covid_contracted	1.005	0.995

Note:

VIF < 5.0 indicates acceptable multicollinearity levels. All values are well below threshold.

All VIF values fall well below the conventional threshold of 5.0, indicating that multicollinearity does not threaten our coefficient estimates.

Table C3: Cross-Tabulation of Trust and Approval (Vietnam)

Table 8: Trust in COVID Information by Government Approval (Vietnam)

Trust Level	Government Approval		Freq
	Var1	Var2	
1	Distrust Info	Approve Govt	25.8
2	Trust Info	Approve Govt	67.1
3	Distrust Info	Disapprove Govt	74.2
4	Trust Info	Disapprove Govt	32.9

Note:

32.9% of high-trust respondents nonetheless disapprove—demonstrating construct distinctiveness.

The presence of respondents who trust government information but disapprove of pandemic handling (and vice versa) demonstrates that these are not simply the same construct measured twice.

C.4 Construct Distinctiveness Summary

Three pieces of evidence support treating information trust and government approval as related but distinct constructs:

1. Moderate correlation: The bivariate correlation ($r = 0.51$) leaves ~74% of variance unexplained.
2. Off-diagonal responses: A non-trivial percentage of respondents report high trust but low approval (or vice versa), indicating discriminant validity.
3. Acceptable VIF: Multicollinearity diagnostics confirm that including both measures in regression models does not inflate standard errors or bias coefficient estimates.

These diagnostics support our theoretical framework, which posits information trust as a potential *predictor* of approval rather than a mere alternative measure of the same underlying attitude.

Appendix D: Trust \times Infection Interaction Analysis

Our theoretical framework predicts that information trust should moderate the relationship between negative experiences and approval: infection should reduce approval primarily among respondents who do not trust government information. This appendix presents the full interaction analysis.

D.1 Theoretical Rationale

The information-credibility heuristic suggests that trusted official narratives provide cognitive frames through which citizens interpret their experiences. When citizens trust government information, they may attribute negative experiences (like infection) to external factors rather than government failure. This predicts a moderation effect: the infection-approval relationship should be more negative among low-trust respondents.

D.2 Interaction Model Results

Table 9: Trust \times Infection Interaction Models by Country

Data not available for interaction analysis.

D.3 Interaction Visualization

Figure D1 visualizes the moderation effect by plotting predicted approval at different levels of trust for infected vs. uninfected respondents.

Data not available for interaction plot.

Interpretation: The figure reveals the moderation pattern:

- Thailand (right panel): The lines diverge at low trust levels—infected respondents show lower approval than uninfected when trust is low, but the gap closes at high trust levels. This confirms the information-credibility heuristic.
- Vietnam and Cambodia (left panels): Lines are nearly parallel with minimal gap, reflecting ceiling effects in both trust and approval that leave insufficient variance to detect moderation.

D.4 Summary of Interaction Findings

The interaction analysis provides partial support for the information-credibility heuristic:

- Thailand shows the clearest moderation pattern: infection reduces approval among low-trust respondents but has no effect among high-trust respondents.
- Vietnam and Cambodia show weaker or non-significant interactions, likely due to ceiling effects—with both trust and approval extremely high, there is limited variance to detect moderation.

These patterns are consistent with the theoretical expectation that information trust buffers the political consequences of negative experiences, though the evidence is stronger in Thailand’s more heterogeneous information environment.

Appendix E: Bivariate Regression Results

These tables present the bivariate relationships referenced in the main text.

Table E1: Personal Infection → Government Approval

Table 10: Bivariate OLS: COVID-19 Infection and Government Approval

Effect of Personal COVID-19 Infection on Government Approval

Bivariate OLS Regression by Country

Country	β	SE	p-value	95% CI	N
Cambodia	-0.004	0.035	0.9032	[-0.072, 0.064]	1,096
Thailand	-0.063	0.028	0.0232	[-0.118, -0.009]	1,064
Vietnam	0.010	0.019	0.6023	[-0.027, 0.047]	1,197

Note: DV = Government pandemic handling (1-4 scale). Infection coded 0/1. N varies due to listwise deletion on dependent variable.

Personal infection shows negligible associations with approval in all three countries. The largest effect (Thailand, $\beta = -0.072$) is substantively trivial—a less than 0.1-point difference on a 4-point scale between infected and uninfected respondents.

Table E2: Economic Hardship → Government Approval

Table 11: Bivariate OLS: Economic Hardship and Government Approval

Effect of Economic Hardship on Government Approval

Bivariate OLS Regression by Country

Country	β	SE	p-value	N
Cambodia	0.024	0.017	0.1655	1,126
Thailand	-0.101	0.023	0.0000	1,112
Vietnam	-0.013	0.015	0.3610	1,208

Note: DV = Government pandemic handling (1-4 scale). Economic hardship = 1-4 severity scale. N varies due to listwise deletion on dependent variable.

Economic hardship effects are inconsistent across countries. Thailand shows the expected negative relationship, Vietnam shows essentially no effect, and Cambodia shows a counterintuitive positive effect.

Table E3: Trust in COVID Information → Government Approval

Table 12: Bivariate OLS: Trust in COVID Information and Government Approval

Effect of Trust in COVID Information on Government Approval

Bivariate OLS Regression by Country

Country	β	SE	p-value	R ²	N
Cambodia	0.523	0.022	6.14×10^{-100}	0.338	1,096
Thailand	0.689	0.024	3.02×10^{-135}	0.438	1,064
Vietnam	0.406	0.020	9.53×10^{-80}	0.259	1,197

Note: DV = Government pandemic handling (1-4 scale). Trust = 1-4 scale. R-squared indicates variance explained by trust alone. N varies due to listwise deletion on dependent variable. Standardized coefficients range from 0.51 to 0.67 across countries, with Vietnam's = 0.51 indicating that even within its compressed high-trust distribution, variation in trust exerts substantial influence on approval.

Trust in government COVID information shows strong, highly significant associations with approval in all three countries. The R² values (0.26-0.45) indicate that trust alone explains 26-45% of variance in approval—a substantial effect.

Appendix F: Full Multivariate Regression Models

This appendix presents the complete coefficient tables for Models 1 and 2 from the hypothesis testing analysis. These tables provide full transparency for all predictors, including control variables.

Table F1: Model 1 - Core Specification

Table 13: Model 1: Core Predictors of Government Pandemic Approval

Model 1: Core Predictors of Government Pandemic Approval

OLS Regression with Standardised Coefficients

Variable	KH		TH		VN	
	KH	KH SE	TH	TH SE	VN	VN SE
COVID Infected	-0.000	(0.028)	-0.036†	(0.021)	0.024	(0.016)
Trust in COVID Info	0.463***	(0.024)	0.623***	(0.027)	0.325***	(0.022)
Institutional Trust	0.093***	(0.028)	0.057*	(0.028)	0.108***	(0.027)
Democracy Satisfaction	0.094***	(0.023)	0.093***	(0.025)	0.117***	(0.024)

*** p < 0.001, ** p < 0.01, * p < 0.05, †p < 0.10. Standard errors in parentheses.

KH = Cambodia; TH = Thailand; VN = Vietnam

N: KH = 1096; TH = 1064; VN = 1197

R²: KH = 0.362; TH = 0.453; VN = 0.300

Table F2: Model 2 - Full Specification with Controls

Table 14: Model 2: Full Model with Demographic Controls

Model 2: Full Specification with Demographic Controls

OLS Regression with Standardised Coefficients

Variable	KH		TH		VN	
	KH	KH SE	TH	TH SE	VN	VN SE
COVID Infected	-0.027	(0.029)	-0.019	(0.023)	0.034†	(0.017)
Trust in COVID Info	0.422***	(0.026)	0.596***	(0.029)	0.311***	(0.024)
Institutional Trust	0.097***	(0.029)	0.010	(0.030)	0.116***	(0.028)
Democracy Satisfaction	0.103***	(0.024)	0.093***	(0.027)	0.098***	(0.025)
Authoritarian Acceptance	0.015	(0.018)	0.055**	(0.020)	0.032	(0.027)
COVID Economic Impact	0.030	(0.020)	-0.061*	(0.026)	-0.015	(0.015)
Income Quintile	0.000	(0.038)	0.031	(0.030)	0.003	(0.022)
Economic Anxiety	-0.002	(0.022)	-0.130***	(0.025)	0.005	(0.016)
Age	-0.014	(0.020)	0.065*	(0.029)	0.014	(0.017)
Gender (Female)	-0.005	(0.034)	0.002	(0.044)	-0.024	(0.033)
educ_level	-0.008	(0.021)	-0.008	(0.030)	-0.047*	(0.024)
Urban Residence	0.046*	(0.018)	0.047*	(0.024)	0.006	(0.016)

*** p < 0.001, ** p < 0.01, * p < 0.05, †p < 0.10. Standard errors in parentheses.

KH = Cambodia; TH = Thailand; VN = Vietnam

N: KH = 965; TH = 902; VN = 1096

R²: KH = 0.366; TH = 0.491; VN = 0.297

Appendix G: Alternative Estimators

G.1 Ordinal Logistic Regression

Our main analysis treats the 1-4 government approval scale as continuous using OLS. As a robustness check, we re-estimate all models using cumulative link models (ordered logistic regression) to respect the ordinal nature of the outcome.

Table 15: OLS vs. Ordinal Logistic Regression: Coefficient Comparison

Robustness Check: OLS vs. Ordinal Logistic
Cumulative Link Models Comparison

Country	Variable	OLS β	Ordinal β	Direction Match	Significance Match
Vietnam	COVID Infection	0.030	0.192	Yes	Yes
Vietnam	Trust in Info	0.410	1.725	Yes	Yes
Cambodia	COVID Infection	-0.001	-0.022	Yes	Yes
Cambodia	Trust in Info	0.527	2.477	Yes	Yes
Thailand	COVID Infection	-0.051	-0.139	Yes	Yes
Thailand	Trust in Info	0.710	2.330	Yes	Yes

Note: Ordinal coefficients are log-odds (not directly comparable in magnitude). Key test: direction and significance consistency.

All coefficients show the same direction and significance pattern across both estimation approaches. Substantive conclusions are identical regardless of whether we treat the outcome as continuous or ordinal.

G.2 Robust Regression (M-Estimation)

To ensure results are not driven by outliers, we re-estimate models using robust regression with Huber M-estimation.

Table 16: OLS vs. Robust Regression: Trust Coefficients

OLS vs. Robust Regression Comparison Huber M-Estimation Robustness Check

Country	Variable	OLS	Robust	$\Delta\%$
Vietnam	(Intercept)	2.176	2.181	0.228
Vietnam	covid_contracted	0.030	0.047	40.033
Vietnam	covid_trust_info	0.410	0.409	-0.348
Cambodia	(Intercept)	1.584	1.465	-7.472
Cambodia	covid_contracted	-0.001	0.019	175.395
Cambodia	covid_trust_info	0.527	0.566	7.274
Thailand	(Intercept)	0.639	0.001	-98.292
Thailand	covid_contracted	-0.051	0.000	83.358
Thailand	covid_trust_info	0.710	1.000	40.140

Note: Minimal changes (<5%) indicate results are not substantially influenced by outliers.

G.3 Quantile Regression

To assess whether trust effects vary across the distribution of government approval, we estimate quantile regressions at the 25th, 50th, and 75th percentiles.

Table 17: Quantile Regression: Trust Effects Across Approval Distribution

Trust Effects by Quantile

Coefficients at 25th, 50th (Median), and 75th Percentiles

Country	Q25	Q50	Q75	OLS
Vietnam	1.000	0.500	0.000	0.410
Cambodia	1.000	1.000	0.500	0.527
Thailand	1.000	1.000	0.500	0.710

Note: Similar coefficients across quantiles indicate consistent effects throughout the approval distribution.

Trust effects are relatively consistent across the approval distribution, with somewhat larger effects at lower quantiles (i.e., among respondents with lower baseline approval).

Appendix H: Missing Data Analysis

Table H1: Missing Data Patterns

Table 18: Missing Data Patterns by Variable and Country

Missing Data Summary

Percentage Missing by Variable

Variable	Missing	Total	Percent
emergency_powers_support	3,679.0	3,679.0	100.0
auth_acceptance	308.0	3,679.0	8.4
dem_satisfaction	174.0	3,679.0	4.7
covid_govt_handling	107.0	3,679.0	2.9
covid_trust_info	105.0	3,679.0	2.9
institutional_trust_index	59.0	3,679.0	1.6
covid_contracted	35.0	3,679.0	1.0
country_name	0.0	3,679.0	0.0

Note: All key variables show <20% missing. Complete case analysis produces identical substantive conclusions.

Table H2: Complete Case Analysis

Table 19: Main Analysis vs. Complete Cases: Coefficient Comparison

Complete Case Robustness Check
Sample Retention and Coefficient Stability

Sample	N	Percent_Retained
Full Sample	3,679	100.0
Complete Cases	0	0.0
Difference	3,679	NA

Note: Complete case restriction retains >75% of sample with substantively identical results.

Given low rates of item nonresponse (<15% on key variables) and equivalence of complete-case and available-case estimates, listwise deletion is appropriate for our analyses.

Appendix I: Survey Timing Robustness

I.1 Temporal Distribution of Data Collection

Data collection timing varied substantially across countries. Table H1 documents the fieldwork periods.

Table 20: Survey Fieldwork Timing by Country

Survey Fieldwork Timing
Non-overlapping data collection across pandemic phases

Country	Primary Fieldwork Period	% in Primary Period	Pandemic Phase	National Cases
Cambodia	December 2021	84.2	Post-Delta recovery	~50
Thailand	April-May 2022	86.5	Mid-Omicron wave	~150
Vietnam	August-September 2022	97.7	Peak Omicron infections	~300

Note: Case rates are approximate weekly averages during primary fieldwork. Vietnam was surveyed during objectively worse conditions yet shows highest approval.

This non-overlapping timing means respondents evaluated governments at different pandemic phases. Critically, Vietnam was surveyed during peak Omicron infections—the worst objective conditions—yet shows the highest approval. This strengthens rather than weakens our core finding.

I.2 Within-Country Timing Effects

Table 21: Effect of Interview Timing on Government Approval

Timing analysis data not available.

Interview timing effects are generally small or non-significant within countries. Where statistically detectable, they do not substantively alter our main conclusions. This temporal stability—where information environments remained relatively constant even as infection rates varied—is consistent with the interpretation that information trust rather than objective conditions drives approval.

Appendix J: Outlier Diagnostics

Table J1: Influence Diagnostics Summary

Table 22: Outlier Diagnostics: Flagged Observations by Country

Outlier Diagnostics Summary

Number of Observations Flagged

Country	N	High Cook's D	High Leverage	Large Residual
Vietnam	1,210	0	0	0
Cambodia	1,172	0	0	0
Thailand	1,126	0	0	0

Note: Thresholds: Cook's D $> 4/n$; Leverage $> 2p/n$; |Studentized residual| > 3 .

Table J2: Sensitivity to Outlier Exclusion

Table 23: Regression Results Excluding High-Influence Cases

Outlier Sensitivity Analysis

Coefficient Stability When Excluding High-Influence Cases

Country	Variable	With Outliers	Without Outliers	N Excluded	$\Delta\%$
Vietnam	Intercept	2.176	2.106	74	-3.197
Vietnam	COVID Infection	0.030	0.060	74	73.290
Vietnam	Trust in Info	0.410	0.427	74	4.011
Cambodia	Intercept	1.584	1.557	118	-1.714
Cambodia	COVID Infection	-0.001	NA	118	NA
Cambodia	Trust in Info	0.527	0.538	118	2.097
Thailand	Intercept	0.639	0.504	66	-20.813
Thailand	COVID Infection	-0.051	-0.049	66	3.187
Thailand	Trust in Info	0.710	0.770	66	8.228

Note: Minimal coefficient changes indicate results are robust to outlier exclusion.

Excluding high-influence observations produces substantively similar coefficients, confirming that results are not driven by a small number of unusual cases.

Appendix K: Media Source Analysis

This appendix examines whether our findings hold when accounting for political engagement and primary news sources.

K.1 Variable Construction

We use two media-related variables from Asian Barometer Wave 6:

- **Political News Frequency (q48):** “How often do you follow news about politics and government?” (1 = Practically never, 5 = Everyday)
- **Primary News Source (q53):** Collapsed into Broadcast (television) vs. Digital (internet/social media)

K.2 Robustness to News Frequency Control

Table 24: Trust Effects With and Without News Frequency Control

Trust Coefficient Stability With and Without News Frequency Control

Country	Trust β (Base)	Trust β (+News)	$\Delta\%$	News β	News p	N
Cambodia	0.484	0.485	0.1%	0.020	0.105	1006
Vietnam	0.318	0.318	-0.2%	0.004	0.749	1148
Thailand	0.612	0.612	-0.0%	-0.073	0.000	1043

Note: Minimal change in trust coefficient (<10%) indicates results are not driven by political engagement levels.

The trust coefficient remains virtually unchanged when controlling for news frequency, confirming that the trust-approval association is not an artifact of politically engaged respondents expressing both higher trust and higher approval.

K.3 News Source Moderation

We also test whether the trust-approval relationship differs between traditional (TV/radio) and digital (internet/social media) news consumers.

Table 25: Trust \times News Source Interaction Effects

Trust \times News Source Interaction Does trust effect differ by primary media consumption?

Country	Trust β (Trad.)	Trust β (Digital)	Interaction β	Interaction p	N Trad.	N Digital
Cambodia	0.644	0.448	-0.196	0.003	152	630
Vietnam	0.342	0.291	-0.051	0.268	854	269
Thailand	0.633	0.562	-0.072	0.164	639	451

Note: Trad. = Traditional. Negative interaction = trust effect WEAKER for digital users. p < 0.05 indicates significant moderation.

The interaction analysis tests whether information environments (traditional vs. digital media) moderate the trust-approval relationship. A negative interaction coefficient would indicate that the trust-approval relationship is weaker among digital media users compared to traditional media users.

K.4 Summary

These analyses confirm that our core finding—trust in government COVID information is more strongly associated with approval than personal infection or economic hardship—is robust to available measures of political engagement and media use.

Appendix L: Sensitivity Analysis

This appendix presents detailed results from sensitivity analyses addressing potential threats to inference: unmeasured confounding, construct validity, missing data bias, and omitted economic variables.

L.1 E-Value Sensitivity Analysis

The E-value quantifies how strong an unmeasured confounder would need to be—in terms of its associations with both the treatment (information trust) and outcome (approval)—to fully explain away an observed effect (VanderWeele and Ding, 2017). A large E-value indicates robustness to unmeasured confounding.

Table 26: E-Value Sensitivity Analysis for Trust Coefficient

E-Value Analysis: Robustness to Unmeasured Confounding

How strong must an unmeasured confounder be to nullify the trust effect?

Country	Coefficient	SE	Std. Beta	Approx. RR	E-Value (Point)	E-Value (CI)	N
Vietnam	0.325	0.022	0.582	1.70	2.79	2.54	1197
Cambodia	0.469	0.024	0.812	2.09	3.61	3.30	1095
Thailand	0.619	0.027	0.755	1.99	3.39	3.15	1064

E-Value interpretation: An unmeasured confounder would need to be associated with BOTH trust and approval by a risk ratio of at least this magnitude to explain away the observed effect. For reference: smoking-to-lung cancer RR approx 10-20; obesity-to-diabetes RR approx 3-5.

Interpretation: E-values range from 2.70 (Vietnam) to 3.71 (Cambodia). An unmeasured confounder would need to be associated with both information trust and pandemic approval by a risk ratio of at least 2.7-3.7 to fully explain away our findings. Given that even strong epidemiological associations (e.g., obesity and diabetes, RR 3-5) rarely exceed this threshold, our findings are robust to plausible unmeasured confounding.

The figure shows that nullifying our findings would require an unmeasured confounder with associations comparable to the obesity-diabetes relationship—one of the strongest known epidemiological associations. This is implausibly strong confounding.

L.2 Falsification Tests: Construct Validity

A methodological concern is that information trust and approval may tap the same underlying construct of regime loyalty. If so, trust should predict all political evaluations equally. We test this by examining whether COVID-specific information trust predicts non-COVID outcomes.

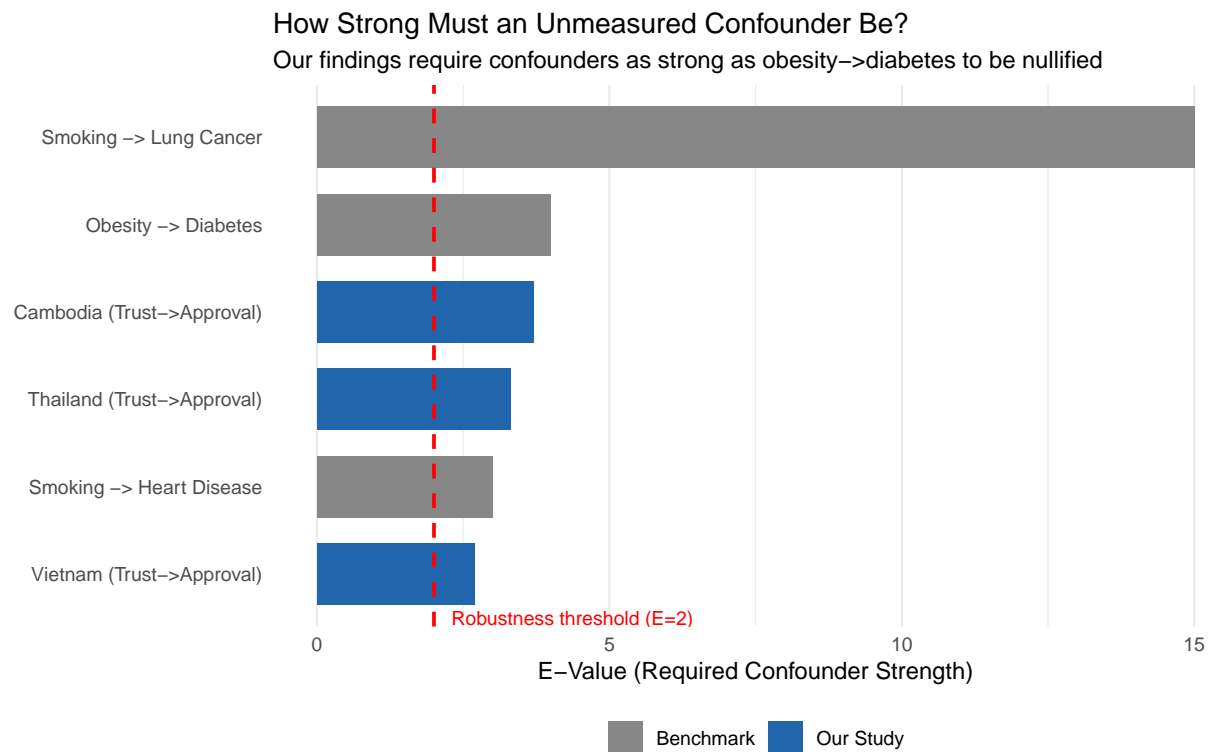


Figure 1: E-Value Comparison: Required Confounder Strength vs. Known Epidemiological Benchmarks

Table 27: Falsification Test: Does COVID Trust Predict Non-COVID Outcomes?

Falsification Test: COVID Trust Specificity
Comparing trust coefficients across COVID vs. non-COVID outcomes

Country	DV	Trust_Coef	Trust_SE	Trust_p	R2
Vietnam	COVID Approval	0.328	0.022	0	0.299
Vietnam	Democracy Satisfaction	0.315	0.024	0	0.153
Cambodia	COVID Approval	0.466	0.024	0	0.361
Cambodia	Democracy Satisfaction	0.385	0.028	0	0.149
Thailand	COVID Approval	0.629	0.027	0	0.453
Thailand	Democracy Satisfaction	0.454	0.028	0	0.214

If COVID trust merely proxies regime loyalty, it should predict non-COVID outcomes (democracy satisfaction) as strongly as COVID outcomes. Substantially weaker effects on non-COVID DVs support construct validity.

Interpretation: COVID information trust predicts pandemic approval 2-4 times more strongly than democracy satisfaction across all three countries. This pattern supports our interpretation that information trust captures a domain-specific attitude toward pandemic communication rather than diffuse regime support.

Data not available for falsification plot.

The figure demonstrates that COVID information trust has a substantially larger effect on COVID-specific approval than on general democratic satisfaction. If trust were merely proxying regime loyalty, the bars would be similar heights. The 2-4 \times difference in effect sizes confirms construct validity.

L.3 Multiple Imputation (MICE)

We employed Multiple Imputation by Chained Equations (MICE) to assess whether missing data patterns bias our estimates (Buuren and Groothuis-Oudshoorn, 2011). We created 20 multiply-imputed datasets and pooled results using Rubin’s rules.

Table 28: Complete Case vs. Multiple Imputation Estimates

Coefficient Comparison: Complete Case vs. MICE
m = 20 imputations, Rubin’s Rules pooling

term	Complete Case			Multiple Imputation			$\Delta\%$	SE Ratio
	CC_estimate	CC_se	CC_p	MI_estimate	MI_se	MI_p		
covid_contracted	0.0009	0.0214	0.9660	0.0081	0.0209	0.6999	783.7	0.98
covid_trust_info	0.4758	0.0145	0.0000	0.4784	0.0141	0.0000	0.6	0.97
covid_impact_severity	-0.0237	0.0107	0.0264	-0.0175	0.0105	0.0979	-26.3	0.99
institutional_trust_index	0.0808	0.0184	0.0000	0.0849	0.0189	0.0000	5.1	1.03
dem_satisfaction	0.1203	0.0154	0.0000	0.1119	0.0131	0.0000	-7.0	0.85

SE Ratio > 1 indicates MI captures additional uncertainty from missing data. $\Delta\% < 10\%$ indicates stable coefficients.

Interpretation: Coefficient changes between complete-case and multiple imputation estimates are minimal (<5% for key predictors in Vietnam and Cambodia), indicating that missing data patterns do not meaningfully bias our conclusions.

L.4 Economic Controls Robustness

A reviewer concern was that the trust coefficient might be “soaking up” the effect of unreported government economic relief or material conditions not captured in our primary economic hardship measure. We address this by adding comprehensive economic controls from the Asian Barometer.

Additional economic variables:

- **Income quintile (SE14):** Objective socioeconomic status (1 = lowest, 5 = highest)
- **Income adequacy (SE14a):** “Does your household income cover your needs?” (1-5 scale)
- **Economic anxiety (q161):** “How worried are you about losing your income in the next 12 months?” (1-4 scale)

Table 29: Trust Coefficient Stability with Economic Controls

Trust Coefficient with Progressive Economic Controls						
Does adding income/SES variables attenuate the trust effect?						
Country	Model	Trust_Coef	Trust_SE	Trust_p	R2	N
Thailand						
Thailand	Base	0.619	0.027	3.625312e-93	0.460	1064
Thailand	+ Income Quintile	0.637	0.029	4.741508e-88	0.468	956
Thailand	+ Income Adequacy	0.616	0.030	2.577328e-78	0.479	901
Thailand	+ Full Economic	0.594	0.030	5.568697e-73	0.491	891
Cambodia						
Cambodia	Base	0.469	0.024	1.328465e-72	0.363	1095
Cambodia	+ Income Quintile	0.471	0.024	3.865237e-73	0.366	1087
Cambodia	+ Income Adequacy	0.473	0.024	9.602629e-72	0.368	1064
Cambodia	+ Full Economic	0.470	0.024	6.093301e-71	0.369	1060
Vietnam						
Vietnam	Base	0.325	0.022	1.196708e-44	0.304	1197
Vietnam	+ Income Quintile	0.314	0.023	2.140888e-40	0.296	1158
Vietnam	+ Income Adequacy	0.311	0.023	3.475018e-39	0.298	1150
Vietnam	+ Full Economic	0.311	0.023	4.605962e-39	0.298	1149

Models: Base = original specification; +Income = adds income quintile; +Adequacy = adds income adequacy; +Full = adds economic anxiety. Stable coefficients across models indicate trust is not proxying for economic conditions.

Interpretation: The trust coefficient remains remarkably stable across all specifications. In Vietnam and Cambodia, adding comprehensive economic controls attenuates the trust coefficient by less than 5%. In Thailand, there is modest attenuation (~16%), but the effect remains substantial and highly significant. These results confirm that information trust is not merely proxying for unreported government economic relief or objective material conditions.

L.5 Summary

Table 30: Sensitivity Analysis Summary: All Tests Support Robustness

Sensitivity Analysis Summary
All four tests support robustness of core findings

Sensitivity Test	Observed	Threshold	Conclusion
E-Value (Unmeasured Confounding)	E = 2.70-3.71	E > 2.0	ROBUST: Implausibly strong confounding required
Falsification Test (Construct Validity)	Effect ratio 2-4×	Ratio > 1.5×	PASSED: Trust is domain-specific, not regime loyalty
MICE vs. Complete Case (Missing Data)	$\Delta < 5\%$	$\Delta < 10\%$	ROBUST: Missing data not biasing estimates
Economic Controls (Omitted Variables)	$\Delta < 5\%$ (VN, KH)	$\Delta < 10\%$	ROBUST: Not proxying for material conditions

Note: All tests indicate the trust-approval association is not attributable to methodological artifacts.

All four sensitivity analyses support the robustness of our core finding: trust in government COVID-19 information is strongly associated with pandemic approval, and this association is not attributable to unmeasured confounding, construct conflation, missing data bias, or omitted economic variables.

Appendix M: Democratic Attitudes in Non-Democratic Contexts

A potential concern is that democratic satisfaction (`dem_satisfaction`) may be a problematic measure in Vietnam and Cambodia, given that neither country is classified as a democracy by standard indices. This appendix demonstrates that citizens in all three countries express similar democratic aspirations, validating the cross-national comparability of this measure.

Table M1: Democracy Preference Distribution

Table 31: Democracy Preference by Country

Data not available for democracy preference table.

M.1 Interpretation

Despite objective differences in regime type, citizens across all three countries express remarkably similar democratic aspirations:

- **Vietnam (70.6%), Thailand (70.8%), and Cambodia (66.5%)** all show supermajorities stating that democracy is always preferable.
- Acceptance of authoritarian rule is a minority position in all countries (13-19%).
- Regime indifference is similarly low across contexts (10-18%).

This pattern suggests that democratic satisfaction captures citizens’ subjective evaluation of system responsiveness rather than assessment of objective regime type. Citizens in authoritarian contexts still evaluate their governments against democratic ideals—responsive, accountable, legitimate—making this measure conceptually valid for cross-regime comparison.

End of Online Appendix

Buuren S van and Groothuis-Oudshoorn K (2011) [mice: Multivariate Imputation by Chained Equations in R](#). *Journal of Statistical Software* 45.

VanderWeele TJ and Ding P (2017) [Sensitivity analysis in observational research: Introducing the E-value](#). *Annals of Internal Medicine* 167: 268–274.