

Supplemental Materials for “Social Cleavages and the Number of Parties: How the Measures You Choose Affect the Answers You Get”

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This paper contains supplemental materials for “Social Cleavages and the Number of Parties: How the Measures You Choose Affect the Answers You Get”.

1 Linguistic Fractionalization for the Netherlands

In all of our sensitivity analyses, we correct a mistake in Alesina et al.’s (2003) score of linguistic fractionalization for the Netherlands. Their value of 0.514 is based upon the following list of linguistic groups and their population shares: Dutch 0%; ‘Netherlands Other’ 65%; Arabic 19.5%; and Turkish 15.4%. Data from the online *Ethnologue* (<http://www.ethnologue.com>) more accurately looks as follows: Dutch 85.5%; Vlaams 1.40%; Turkish 1.21%; Frisian 4.46%; Arabic 1.40%; and Other 6.06%. This yields a fractionalization score of 0.263, which we employ in the analyses that follow.

2 Replication Models Estimated Using the Maximally List-Wise Deleted Set of Cases

This section presents the results from a modified version of the sensitivity analysis from the main paper. Here, each replication model is estimated on the same maximally list-wise deleted set of thirty-nine cases. The goal of this exercise is to ensure that any differences in results are due to differences in measures, not to differences in cases.

For these models, versions of Table 1, Table 2, and Figure 1 from the main paper are presented below as Tables 1 and 2 and Figure 1, respectively. Comparing the conclusions drawn about H1 through H4 here (as summarized by Table 2) to the conclusions reported in the main paper yields the following. For H1, Models 3 (N, Ethnic, Alesina-Eth.) and 15

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(P, Religious, Alesina) are now supportive. For H2, Models 1 (N, Ethnic, ELF) and 5 (N, Ethnic, Roeder 1980s) are no longer supportive. For H3, Model 3 (N, Ethnic, Alesina-Eth.) is now supportive. Identical conclusions are drawn about H4.

3 Replication Models Including the Omitted ENPRES Main Effect Term

This section presents the results from yet another modified version of the sensitivity analysis from the main paper. Here, each replication model includes the ENPRES main effect term that was omitted from the original Amorim Neto and Cox (1997) model. All else is unchanged from the main paper.

For these models, versions of Table 1, Table 2, and Figure 1 from the main paper are presented below as Tables 3 and 4 and Figure 2, respectively. Comparing the conclusions drawn about H1 through H4 here (as summarized by Table 4) to the conclusions reported in the main paper yields the following. The only change is that for H4, Model 9 (P, Ethnic, Fearon) is no longer supportive.

Model	1	2	3	4	5	6	7	8
Measure	N, Ethnic (ELF)	N, Ethnic (Annett)	N, Ethnic (Alesina, Eth.)	N, Ethnic (Roeder 1960s)	N, Ethnic (Roeder 1980s)	N, Ethnic (Alesina, Lin.)	N, Ethnic (Fearon)	F, Ethnic (Fearon)
LATDIV	0.14 (0.42)	0.20 (0.13)	0.24 (0.43)	0.22 (0.15)	0.26 (0.15)	0.51 (0.30)	0.43 (0.27)	2.2 (1.3)
LML ×LATDIV	0.48 (0.25)	0.27 (0.16)	0.40 (0.27)	0.40 (0.20)	0.39 (0.20)	−0.011 (0.24)	0.16 (0.19)	−0.0085 (0.62)
<i>n</i>	39	39	39	39	39	39	39	39
Model	9	10	11	12	13	14	15	16
Measure	P, Ethnic (Fearon)	C (Fearon)	N, Religious (Annett)	N, Religious (F & L)	N, Religious (Alesina)	F, Religious (Alesina)	P, Religious (Alesina)	Index (Annett)
LATDIV	1.6 (1.2)	2.4 (1.7)	−0.14 (0.28)	0.11 (0.30)	0.15 (0.23)	−0.13 (1.8)	−5.9 (1.9)	1.3 (2.2)
LML ×LATDIV	0.029 (0.50)	0.0047 (0.96)	−0.16 (0.19)	−0.17 (0.16)	−0.18 (0.15)	−0.40 (0.89)	2.4 (0.95)	−0.18 (1.1)
<i>n</i>	39	39	39	39	39	39	39	39

Table 1: Selected estimated coefficients and standard errors for the sixteen replication models (Models 1–16) estimated on the same maximally list-wise deleted set of cases. All numbers rounded to two significant digits. The dependent variable is the effective number of electoral parties. Each model employs a different measure of latent diversity.

Model	Measure	H1	H2	H3	H4
1	N, Ethnic (ELF)	Y ($p = 0.017$)	N ($p = 0.070$)	Y	Y
2	N, Ethnic (Annett)	Y ($p = 0.033$)	N ($p = 0.10$)	Y	Y
3	N, Ethnic (Alesina, Eth.)	Y ($p = 0.033$)	N ($p = 0.15$)	Y	Y
4	N, Ethnic (Roeder 1960s)	Y ($p = 0.018$)	Y ($p = 0.050$)	Y	Y
5	N, Ethnic (Roeder 1980s)	Y ($p = 0.0098$)	N ($p = 0.056$)	Y	Y
6	N, Ethnic (Alesina, Lin.)	N ($p = 0.20$)	N ($p = 0.96$)	N (Insignificant)	N
7	N, Ethnic (Fearon)	Y ($p = 0.040$)	N ($p = 0.42$)	Maybe (Insignificant for large M)	Y
8	F, Ethnic (Fearon)	Y ($p = 0.039$)	N ($p = 0.99$)	Maybe (Insignificant for large M)	N
9	P, Ethnic (Fearon)	N ($p = 0.075$)	N ($p = 0.95$)	Maybe (Insignificant for large M)	Y
10	C (Fearon)	N ($p = 0.12$)	N ($p = 0.99$)	Maybe (Insignificant for medium to large M)	Y
11	N, Religious (Annett)	N ($p = 0.33$)	N ($p = 0.41$)	N (Insignificant; negative)	N
12	N, Religious (Fearon & Laitin)	N ($p = 0.51$)	N ($p = 0.28$)	N (Insignificant; negative for medium to large M)	N
13	N, Religious (Alesina)	N ($p = 0.48$)	N ($p = 0.23$)	N (Insignificant; negative)	N
14	F, Religious (Alesina)	N ($p = 0.65$)	N ($p = 0.65$)	N (Insignificant; negative for medium to large M)	N
15	P, Religious (Alesina)	Y ($p = 0.014$)	Y ($p = 0.016$)	N (Significant and negative for small to medium M; insignificant for large M)	Y
16	Index (Annett)	N ($p = 0.72$)	N ($p = 0.87$)	N (Insignificant)	N

Table 2: Summary of conclusions drawn about Hypotheses 1–4 from the sixteen replication models (Models 1–16) estimated on the same maximally list-wise deleted set of cases. Each model employs a different measure of latent diversity.

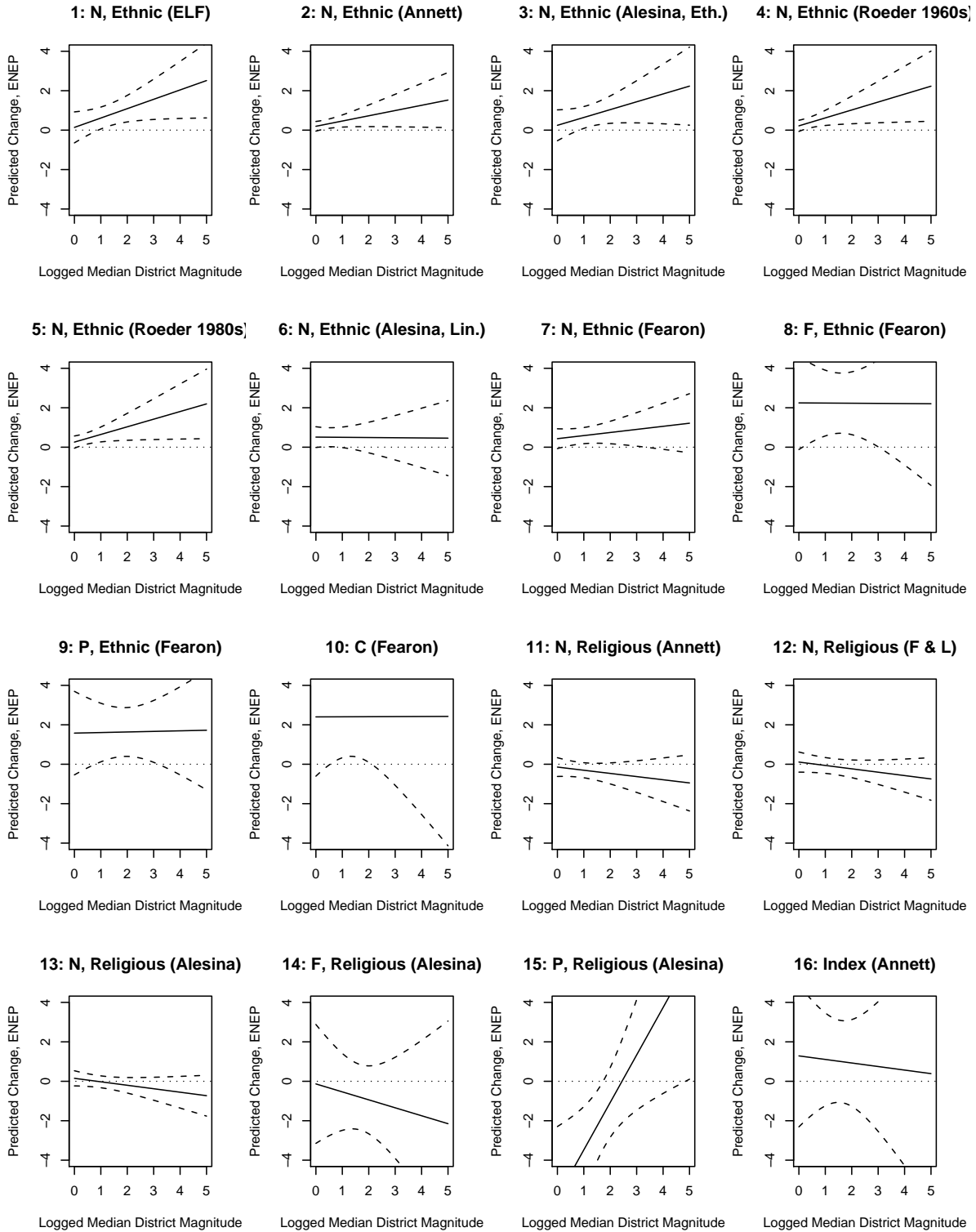


Figure 1: Estimated marginal effects of latent diversity on the effective number of electoral parties (ENEP) for the sixteen maximally list-wise deleted replication models (Models 1–16), all calculated over the range of logged median district magnitude. Each model employs a different measure of latent diversity.

Model	1	2	3	4	5	6	7	8
Measure	N, Ethnic (ELF)	N, Ethnic (Annett)	N, Ethnic (Alesina, Eth.)	N, Ethnic (Roeder 1960s)	N, Ethnic (Roeder 1980s)	N, Ethnic (Alesina, Lin.)	N, Ethnic (Fearon)	F, Ethnic (Fearon)
LATDIV	0.033 (0.31)	0.21 (0.12)	0.24 (0.33)	0.24 (0.14)	0.29 (0.15)	0.42 (0.26)	0.45 (0.28)	2.4 (1.3)
LML ×LATDIV	0.53 (0.21)	0.27 (0.14)	0.21 (0.21)	0.42 (0.19)	0.40 (0.18)	−0.016 (0.19)	0.17 (0.19)	−0.014 (0.62)
<i>n</i>	51	50	51	43	44	51	39	39
Model	9	10	11	12	13	14	15	16
Measure	P, Ethnic (Fearon)	C (Fearon)	N, Religious (Annett)	N, Religious (F & L)	N, Religious (Alesina)	F, Religious (Alesina)	P, Religious (Alesina)	Index (Annett)
LATDIV	1.8 (1.2)	2.5 (1.7)	−0.062 (0.23)	0.12 (0.31)	0.15 (0.19)	0.18 (1.4)	−3.6 (1.6)	1.4 (1.5)
LML ×LATDIV	−0.0064 (0.51)	0.20 (0.99)	−0.18 (0.18)	−0.18 (0.17)	−0.12 (0.13)	−0.26 (0.72)	1.6 (0.77)	−0.14 (0.86)
<i>n</i>	39	39	49	39	51	51	51	49

Table 3: Selected estimated coefficients and standard errors for the sixteen replication models (Models 1–16) that include the ENPRES main effect term. All numbers rounded to two significant digits. The dependent variable is the effective number of electoral parties. Each model employs a different measure of latent diversity.

Model	Measure	H1	H2	H3	H4
1	N, Ethnic (ELF)	Y ($p = 0.0061$)	Y ($p = 0.014$)	Y	Y
2	N, Ethnic (Annett)	Y ($p = 0.0087$)	N ($p = 0.060$)	Y	Y
3	N, Ethnic (Alesina, Eth.)	N ($p = 0.14$)	N ($p = 0.32$)	Maybe (Insignificant for medium to large M)	Y
4	N, Ethnic (Roeder 1960s)	Y ($p = 0.0075$)	Y ($p = 0.033$)	Y	Y
5	N, Ethnic (Roeder 1980s)	Y ($p = 0.0030$)	Y ($p = 0.035$)	Y	Y
6	N, Ethnic (Alesina, Lin.)	N ($p = 0.22$)	N ($p = 0.93$)	N (Insignificant)	N
7	N, Ethnic (Fearon)	Y ($p = 0.034$)	N ($p = 0.38$)	Maybe (Insignificant for large M)	Y
8	F, Ethnic (Fearon)	Y ($p = 0.031$)	N ($p = 0.98$)	Maybe (Insignificant for large M)	N
9	P, Ethnic (Fearon)	N ($p = 0.065$)	N ($p = 0.99$)	Maybe (Insignificant for large M)	N
10	C (Fearon)	N ($p = 0.087$)	N ($p = 0.84$)	Maybe (Insignificant for medium to large M)	Y
11	N, Religious (Annett)	N ($p = 0.35$)	N ($p = 0.30$)	N (Insignificant; negative)	N
12	N, Religious (Fearon & Laitin)	N ($p = 0.53$)	N ($p = 0.29$)	N (Insignificant; negative for medium to large M)	N
13	N, Religious (Alesina)	N ($p = 0.61$)	N ($p = 0.34$)	N (Insignificant; negative for medium to large M)	N
14	F, Religious (Alesina)	N ($p = 0.89$)	N ($p = 0.72$)	N (Insignificant; negative for medium to large M)	N
15	P, Religious (Alesina)	N ($p = 0.086$)	Y ($p = 0.048$)	N (Significant and negative for small to medium M; insignificant for large M)	Y
16	Index (Annett)	N ($p = 0.48$)	N ($p = 0.87$)	N (Insignificant)	N

Table 4: Summary of conclusions drawn about Hypotheses 1–4 from the sixteen replication models (Models 1–16) that include the ENPRES main effect term. Each model employs a different measure of latent diversity.

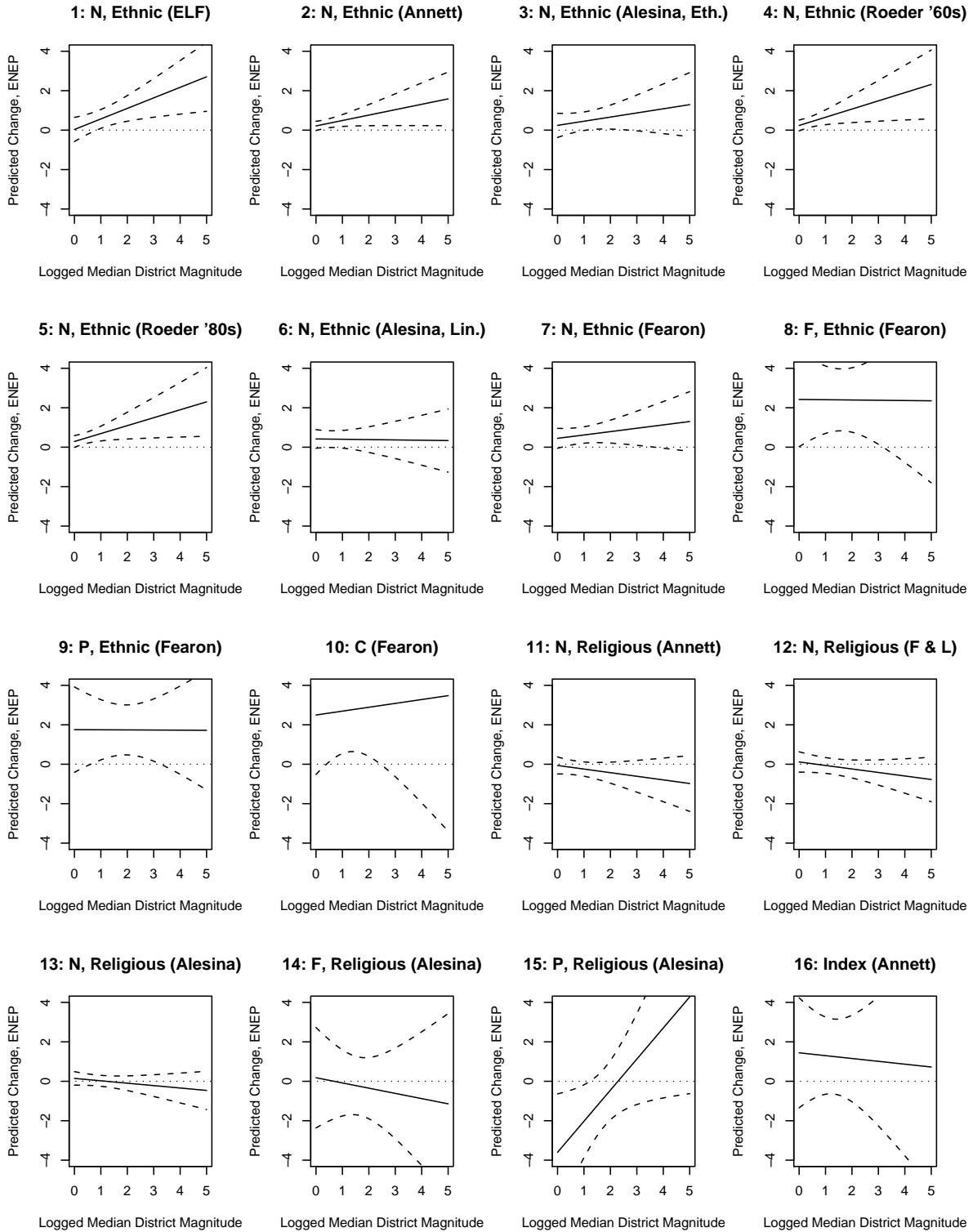


Figure 2: Estimated marginal effects of latent diversity on the effective number of electoral parties (ENEP) for the sixteen replication models (Models 1–16) that employ the ENPRES main effect term, all calculated over the range of logged median district magnitude. Each model employs a different measure of latent diversity. 8