Appendices for "Where the Insurgents Are"

These appendices contain supplementary materials referenced in the text and alternate specifications of the model.

<u>Appendix A: Supplemental Results Tables</u>

1. Poisson and Negative Binomial models with normal/robust standard errors for the main model specifications
2. Pearson correlation for continuous variables in the main model
3. Negative Binomial Marginal Effects (using the mfx package in R) for the main model specifications
4. Main specification without Paris outlier.
5. Main specification with Forest and Mountains measured as a percentage of land cover.
6. Alternative model specification with percentage agricultural workers variable.
7. Alternative model specification with population density variable.
8. Alternative partisanship model with percentage rural and popular front/centrist measures.
9. Alternative partisanship model with percentage rural and right-left difference/centrist measures.
10. Alternative partisanship model with rural factor and popular front/centrist measures.
11. Alternative partisanship model with rural factor and right-left difference/centrist measures.
12. Main specification with agricultural workers measure.
13. Figure: Effects of population on MRF counts

<u>Appendix B: Bias in the CNMRF?</u>
- Biographical details of CNMRF members
- Casualty rate calculations

Appendix A: Supplemental Results

Table 1: Alternative Estimations for Overall MRF Models

| | Poisson | | Negative Binomial | |
	Normal	Robust	Normal	Robust
Occupied	0.079	0.079	0.130	0.130
	(0.121)	(0.192)	(0.170)	(0.173)
Bisected	−0.001	−0.001	0.042	0.042
	(0.135)	(0.229)	(0.195)	(0.242)
ln(Forest)	0.022	0.022	0.030	0.030
	(0.038	(0.058)	(0.058)	(0.056)
ln(Mountain)	0.032	0.032	0.040	0.040
	(0.024)	(0.035)	(0.034)	(0.034)
Paris	1.371***	1.371***	1.313**	1.313***
	(0.231)	(0.309)	(0.543)	(0.327)
%Rural	−1.205***	−1.205***	−1.301***	−1.301***
	(0.315)	(0.426)	(0.449)	(0.398)
ln(Population)	0.472***	0.472***	0.501***	0.501***
	(0.101)	(0.129)	(0.142)	(0.121)
Constant	−0.721	−0.721	−1.020	−1.020
	(0.933)	(1.103)	(1.286)	(1.039)
Observations	90	90	90	90
Log Likelihood (Null)	-590.025	-590.025	-284.509	284.509
Log Likelihood (Model)	-254.499	-254.499	-238.883	-238.883
AIC	524.998	522.998	495.766	493.766
BIC	544.997	540.497	518.265	513.765

Robust Standard Errors in Parentheses.
Two-Tailed Test: *$p<0.1$; **$p<0.05$; ***$p<0.01$

Table 2: Pearson correlations for continuous covariates

| | Pearson's r Coefficients | | | |
	%Rural	ln(pop)	ln(forest)	ln(mountain)
%Rural	–	–	–	–
ln(pop)	−0.656*	–	–	–
ln(Forests)	−0.006	−0.153	–	–
ln(Mountains)	0.167	−0.392*	0.271*	–
Observations	90	90	90	90

Table 3: Marginal Effects (Negative Binomial)

	MRF Counts
Occupied	0.822
	(1.173)
Bisected	0.279
	(1.558)
ln(Forests)	0.193
	(0.360)
ln(Mountains)	0.257
	(0.246)
Paris	17.139**
	(8.382)
ln(Population)	3.205***
	(0.855)
%Rural	−8.321***
	(2.704)

Robust Standard Errors in Parentheses.
Two-Tailed Test: *p<0.1; **p<0.05; ***p<0.01

Table 4: Percent Rural Regression without Paris

	MRF Counts
Occupied	0.131
	(0.173)
Bisected	0.044
	(0.242)
ln(Forests)	0.030
	(0.056)
ln(Mountains)	0.040
	(0.034)
ln(Population)	0.501***
	(0.121)
%Rural	−1.303***
	(0.782)
Constant	−1.024
	(1.038)
Observations	89
Log Likelihood (Null)	-257.027
Log Likelihood (Model)	-233.896
AIC	483.793
BIC	503.702

Robust Standard Errors in Parentheses.
Two-Tailed Test: *p<0.1; **p<0.05; ***p<0.01

Table 5: Forest and Mountains as Percentage of Land Cover

	MRF Counts
Occupied	0.083
	(0.159)
Bisected	0.064
	(0.248)
%Forest	−0.135
	(0.769)
%Mountain	1.757
	(1.690)
Paris	1.007***
	(0.280)
%Rural	−1.224***
	(0.396)
ln(Population)	0.515***
	(0.126)
Constant	−0.534
	(0.926)
Observations	90
Log Likelihood (Null)	-284.509
Log Likelihood (Model)	-239.239
AIC	494.479
BIC	514.478

Robust Standard Errors in Parentheses.
*Two-Tailed Test: *$p<0.1$; **$p<0.05$; ***$p<0.01$*

Table 6: Alternative Models with Percentage Agricultural Workers Measure

	MRF Counts
Occupied	0.098
	(0.189)
Bisected	0.007
	(0.284)
ln(Forests)	−0.014
	(0.063)
ln(Mountains)	0.037
	(0.033)
Paris	1.145***
	(0.350)
ln(Population)	0.748***
	(0.130)
%Agricultural Workers	−0.665
	(0.778)
ln(electric consumption)	0.102
	(0.066)
%Popular Front	−0.029
	(0.247)
Luftwaffe Bases	−0.039**
	(0.019)
Constant	−3.102
	(1.125)
Observations	90
Log Likelihood (Null)	-284.509
Log Likelihood (Model)	-240.010
AIC	502.020
BIC	529.518

Robust Standard Errors in Parentheses.
Two-Tailed Test: *$p<0.1$; **$p<0.05$; ***$p<0.01$

See also Table 12.

Table 7: Alternative Models with Population Density Measure

	MRF Counts
Occupied	0.251
	(0.181)
Bisected	0.025
	(0.268)
ln(Forests)	0.023
	(0.061)
ln(Mountains)	0.053
	(0.036)
Paris	−0.100
	(0.416)
ln(Population)	0.373***
	(0.143)
ln(Population Density)	0.498***
	(0.140)
ln(electric consumption)	0.089
	(0.060)
%Popular Front	0.1007
	(0.231)
Luftwaffe Bases	−0.036*
	(0.019)
Constant	−3.720***
	(0.897)
Observations	90
Log Likelihood (Null)	-284.509
Log Likelihood (Model)	-237.134
AIC	496.268
BIC	523.766

Robust Standard Errors in Parentheses.
Two-Tailed Test: *$p<0.1$; **$p<0.05$; ***$p<0.01$

Table 8: %Rural with Popular Front and Centrist Partisanship Measures

	MRF Counts
Occupied	0.159
	(0.164)
Bisected	0.051
	(0.255)
ln(Forests)	−0.026
	(0.057)
ln(Mountains)	0.043
	(0.032)
Paris	1.056***
	(0.304)
ln(Population)	0.626***
	(0.116)
%Rural	−1.228***
	(0.378)
ln(electric consumption)	0.078
	(0.059)
%Popular Front	−0.245
	(0.274)
%Centrist Vote	1.238
	(0.787)
Luftwaffe Bases	−0.033*
	(0.018)
Constant	−1.727
	(1.065)
Observations	90
Log Likelihood (Null)	-284.509
Log Likelihood (Model)	-235.755
AIC	495.510
BIC	525.508

Robust Standard Errors in Parentheses.
*Two-Tailed Test: *p<0.1; **p<0.05; ***p<0.01*

Table 9: %Rural with Right-Left Difference and Centrist Partisanship Measures

	MRF Counts
Occupied	0.186
	(0.180)
Bisected	0.031
	(0.262)
ln(Forests)	−0.022
	(0.057)
ln(Mountains)	0.044
	(0.034)
Paris	1.068***
	(0.323)
ln(Population)	0.628***
	(0.120)
%Rural	−1.198***
	(0.368)
ln(electric consumption)	0.077
	(0.058)
Right-Left Vote Difference	0.095
	(0.222)
%Centrist Vote	0.957
	(0.665)
Luftwaffe Bases	−0.035*
	(0.018)
Constant	−1.924*
	(1.035)
Observations	90
Log Likelihood (Null)	-284.509
Log Likelihood (Model)	-236.241
AIC	496.482
BIC	526.480

Robust Standard Errors in Parentheses.
*Two-Tailed Test: *$p<0.1$; **$p<0.05$; ***$p<0.01$*

Table 10: Rural Factor with Popular Front and Centrist Partisanship Measures

	MRF Counts
Occupied	0.047
	(0.161)
Bisected	0.102
	(0.276)
ln(Forests)	−0.023
	(0.058)
ln(Mountains)	0.044
	(0.033)
Paris	0.388
	(0.389)
ln(Population)	0.682***
	(0.121)
Rural(Factor)	−0.233**
	(0.091)
ln(electric consumption)	0.071
	(0.060)
%Popular Front	−0.245
	(0.282)
%Centrist Vote	1.256
	(0.780)
Luftwaffe Bases	−0.033*
	(0.019)
Constant	−2.734***
	(1.047)
Observations	90
Log Likelihood (Null)	-284.509
Log Likelihood (Model)	-236.839
AIC	497.678
BIC	527.675

Robust Standard Errors in Parentheses.
Two-Tailed Test: *p<0.1; **p<0.05; ***p<0.01

Table 11: Rural Factor with Right-Left Difference and Centrist Partisanship Measures

	MRF Counts
Occupied	0.083
	(0.179)
Bisected	0.075
	(0.277)
ln(Forests)	−0.019
	(0.058)
ln(Mountains)	0.045
	(0.035)
Paris	0.429
	(0.409)
ln(Population)	0.684***
	(0.125)
Rural(Factor)	−0.233**
	(0.090)
ln(electric consumption)	0.070
	(0.059)
Right-Left Vote Difference	0.085
	(0.223)
%Centrist Vote	0.969
	(0.659)
Luftwaffe Bases	−0.035*
	(0.018)
Constant	−2.931***
	(1.042)
Observations	90
Log Likelihood (Null)	-284.509
Log Likelihood (Model)	-237.3273
AIC	498.654
BIC	528.652

Robust Standard Errors in Parentheses.
Two-Tailed Test: *p<0.1; **p<0.05; ***p<0.01

Table 12: Percent Agricultural Workers and MRF counts

	Overall MRFs
Occupied	−0.041
	(0.180)
Bisected	0.079
	(0.264)
ln(Forests)	0.042
	(0.060)
ln(Mountains)	0.038
	(0.035)
Paris	1.455***
	(0.347)
%Agricultural Workers	−1.118†
	(0.750)
ln(Population)	0.683***
	(0.128)
Constant	−2.639**
	(1.224)
Observations	90
Log Likelihood (Null)	-284.509
Log Likelihood (Model)	-241.889
AIC	499.778
BIC	519.777

Robust Standard Errors in Parentheses.
Two-Tailed Test: *p<0.1; **p<0.05; ***p<0.01
One-Tailed Test: †p<0.1

Effect of Population Level on Insurgency
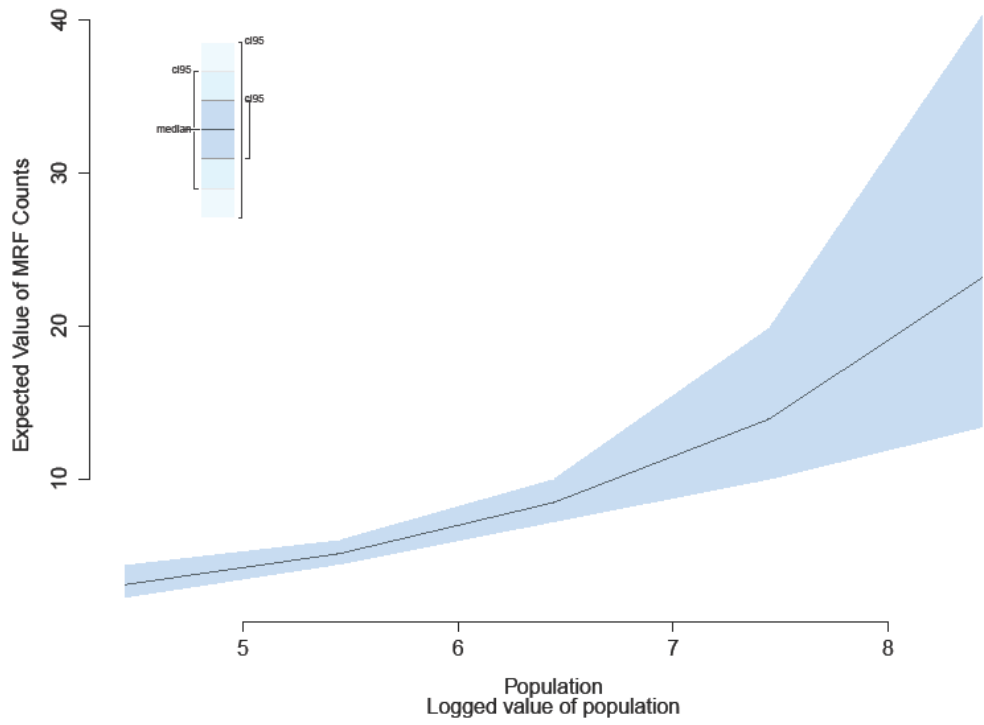
Appendix B: Bias in the CNMRF?

In this appendix we present information relative to the question of whether or not the Commission National de la Médaille de la Resistance Française was politically biased against left-wing and communist resistants. Our data is of two types.

First, we present information about the individuals who were members of the CNMRF. These details demonstrate that powerful representatives of the Left sat alongside Gaullists (and other non-Gaullists) on the Commission. The charts below sum up key affiliations.

The 1944 CNMRF

Left	Neither Left Nor Gaullist	Gaullist
Brossolette	Cochet	de Boislambert
Decheselles	Petit	Soustelle
	Parent	de Miribel
		Allegret

The 1945 CNMRF

Left	Neither Left Nor Gaullist	Gaullist
Brossolette	Cochet	de Boislambert
Pierre-Bloch	Petit	Soustelle
	Parent	de Miribel
	Maunoury (PM in 1957)	Allegret
	Le Thomas	Morandat ("left-wing Gaullist ")
	Sommer	Malbrant

While there were relatively few leftists, they were unusually powerful. Brossolette was a parliamentarian and the widow of a major Left-wing resistance figure. By 1948, she was Vice President of the Senate. Pierre-Bloch, also a parliamentarian, led the interior ministry during the provisional government. The "neither-nor" category includes a variety of different types of affiliations: some were largely non-political (military, technocrats), others were members of Centrist parties, and Petit was a major figure in Francs-Tireur, a resistance movement.

Second, we present an analysis of Communist fatalities and MRF recipients and demonstrate that there is considerable similarity in the percentages of Communists who were pre-D-Day fatalities and the percentages of Communists who were MRF recipients. Pre-D-Day fatalities were selected because almost all MRF recipients began resistance activity before D-Day, and after D-Day the nature of the conflict changed considerably. According to French Government sources, **9.7%** of resistance fatalities prior to D-Day (when resistance shifted changed from clandestine activity to open war) were members of the Communist group FTPF. Approximately **9.1%** of the MRF recipients were members of the FTPF or the FN (predecessor to the FTPF) or both. The difference is rates is thus **.005**, or **.5%.** This small difference suggests that there was little or no bias against Communists in awarding the medals.

Membership of the Commission National de la Medaille de la Resistance Francaise

Décret du 13-4-44

Member	Biographical Details
Claude Hettier de Boislambert (President)	Farmer, Cavalry Reserve Officer (Chef d'escadrons) Rallied to France Libre in June 1940 Held captive by Vichy 1941-43. Thereafter, high functionary for FFL, the Provisional Government, IV Republic, and V Republic governments. 1951-6, member (RPF) of the National Assembly. http://www.ordredelaliberation.fr/fr/les-compagnons/463/claude-hettier-de-boislambert http://www.assemblee-nationale.fr/sycomore/fiche.asp?num_dept=3831
Gilberte Brossolette née Bruel	Journalist (pre-war). FFL functionary, radio broadcast editor. Member (SFIO/socialist) of the Consultative Assembly (1944-5). Member of the National Assembly (1946), Senator [Conseil de la Republique] (1946-1948). Vice President of the Senate 1948-54. Voted against full powers for De Gaulle in 1958. Widow of Pierre Brossolette, a resistant tortured to the point of suicide in 1944. http://www.assemblee-nationale.fr/sycomore/fiche.asp?num_dept=1256 http://www.ordredelaliberation.fr/fr/les-compagnons/152/pierre-brossolette
Jacques Soustelle	Professor of Anthropology, Vice-Director of the Museum of Man. Rallied to FFL in 1940. Functionary. Member of the Consultative Assembly (1944-6), National Assembly (RPF), 1951-59, 1973-78 (no party). Governor General of Algeria. Founder, OAS (amnestied 1968). Elected member of the Academie Français 1983. http://www.assemblee-nationale.fr/sycomore/fiche.asp?num_dept=6892 http://www.academie-francaise.fr/les-immortels/jacques-soustelle http://www.nytimes.com/1990/08/09/obituaries/jacques-soustelle-leader-in-fight-for-a-french-algeria-dies-at-78.html
Elisabeth de Miribel	Pre-war (diplomat/functionary). FFL, secretary to De Gaulle. Carmellite nun (1949-54) Diplomat http://www.lysias-avocats.com/fr/nos-valeurs/%C3%A9lisabeth-de-miribel
Gabriel Cochet	Général de division aérienne Vichyo-resistant. Made independent calls for resistance in 1940-1. Arrested by Vichy, escaped twice. Joined FFL in 1943. Led various operations. Sometime partisan of Giraud. http://www.histoire-politique.fr/documents/05/autresArticles/pdf/HP5-Albertelli-Barasz-def.pdf

Eugene Petit (« Claudius »)	Pre-war : Cabinet-maker, Sometime CGT activist. Professer of Design Member of Executive Committee, Francs-Tiers. Founding Member, National Council of the Resistance. President, MLN (1945) Member of the Consultative Assembly Member of the National Assembly (USDR, and various others), 1946-78. Cabinet Minister in IV Republic. http://www.ordredelaliberation.fr/fr/les-compagnons/752/eugene-claudius-petit http://www.assemblee-nationale.fr/sycomore/fiche.asp?num_dept=1837
Pierre Parent	Pre-War : WWI amputee. Functionary in Morrocco. FFL funcitonary in Morocco. Member of the Consultative Assembly ("Resistance and Republicans") http://www2.assemblee-nationale.fr/sycomore/fiche/(num_dept)/5680
Yves Decheselles	Pre-War: Lawyer, SFIO militant, PCF activist (1937-9). Resistant in Algeria. Human Rights lawyer, anti-colonialist activist. http://www.lacommune.org/Parti-des-travailleurs/blog/Les-notres/Yves-DECHEZELLES,i440.html http://www.lemonde.fr/disparitions/article/2007/01/16/yves-dechezelles-avocat-defenseur-des-droits-de-l-homme_856009_3382.html?xtmc=yves_dechezelles&xtcr=1
Eric Allegret	Chef de bataillon, later Lt. Colonel. Deputy-Chief of De Gaulle's Military cabinet in FFL and the Provisional Government. Active in Africa before and (per less credible sources) after the war. http://www.cairn.info/revue-histoire-politique-2009-2-page-82.htm http://www.charles-de-gaulle.org/pages/l-homme/documents-et-ressources/archives/etat-general-des-fonds-conserves-a-la-fondation.php

Décret du 29-1-45

Name	Biographical Details
Claude Hettier de Boislambert (President)	See above
Gilberte Brossolette née Bruel	See above
Jacques Soustelle	See above
Elisabeth de Miribel	See above
Eugene Petit (« Claudius »)	See above
Pierre Parent	See above
Eric Allegret	See above
Yvon Morandat	Pre-war: Salesman, CFTC unionist. Member of the Ligue de la Jeune Republic, which affiliated with the Front Populaire in 1936. Mobilised in 1939. Executive committee member of Liberation-Sud; member of the Socialist Action Committee. Associated with left-wing Gaullist parties after the war. Functionary in the IV and V republics. http://www.ordredelaliberation.fr/fr/les-compagnons/681/yvon-morandat
Rene Malbrant	Pre-War : Veterinarian, colonial service in Chad. Active in the resistance in Chad. Affiliated with Combat. Represents Chad in the Consultative Assembly then the National Assembly 1945-59. "Fervent Gaullist" during the IV Republic. http://www.assemblee-nationale.fr/sycomore/fiche.asp?num_dept=4923.
Maurice Bourges Maunoury	Pre-war : Lawyer. Mobilized in 1939. FFL from 1942. Functionary for and Lt. Col in FFL. Member of the Consultative Assembly and National Assembly (1945-1958). Leading member of the Radical Party. Held a succession of ministerial positions. Prime minister in 1957. http://www.assemblee-nationale.fr/sycomore/fiche.asp?num_dept=1089 http://www.ordredelaliberation.fr/fr/les-compagnons/130/maurice-bourges-maunoury
Henri Le Thomas	Pre-War: Naval officer, then Director of radio posts for Air Afrique in Chad. Rallies to FFL in 1940, joins Naval forces. Officer des Equipages. Telecommunications functionary after the war. http://www.ordredelaliberation.fr/fr/les-compagnons/590/henri-le-thomas

Jean Pierre-Bloch	Pre-War: Journalist, Member of the National Assembly (SFIO). Mobilized in 1939. POW, escapes November 1940. Executive Committee, Clandestine Socialist Party. 1942 forced to flee to London, joins FFL. Functionary for FFL. Interior Commisioner, 1944-5 Juror, Haute Cour de justice. Member of the National Assembly 1945-6 (SFIO). Supported Thorez (PCF) for prime minister in 1946. Active in Journalistic organizations, operated a publicity business. From 1968, President of the Ligue internationale contre le racisme et l'antisémitisme. http://www.assemblee-nationale.fr/sycomore/fiche.asp?num_dept=5920 http://www.liberation.fr/societe/1999/03/18/deces-de-jean-pierre-bloch_267872 http://www.independent.co.uk/arts-entertainment/obituary-jean-pierre-bloch-1083009.html
Francois Sommer	Pre-War: Businessman Mobilized in 1939, air force pilot. Upon demobilization, affiliated with Ceux de la Liberation. Flees France in 1942. Joins FFL air force in 1943. Fighter-pilot (Lietuenant), then staff officer. Post-War, returns to family business. http://www.ordredelaliberation.fr/fr/les-compagnons/911/francois-sommer

Calculations on Communist Participation and MRF Recognition

Resistance deaths during the war
Source: http://www.memoiredeshommes.sga.defense.gouv.fr/

Dates used for search: 1 July 1940 to 5 Jun 1944

Communist group:	Francs Tireurs et Partisans Français	263
Non Communist Groups	Armée Secrete	1
	Corps Francs Pommies (ORA)	0
	DGER	82
	Forces Françaises Combatants	189
	Forces Françaises Combattantes de la Intérieur	48
	Forces Françaises de la Intérieur	2132
	Réseau Confrères Notre Dame-Castile	5
		2720

Communist Fatalities relative to all Resistance Fatalities	263/2720 =	0.096691

*Excluded Groups:
Corps Francs Afriques, Because they were active in Africa
defense passives, because they weren't resistance deaths

MRF Recipients

Number of FTPF or FN MRF recipients in sample	68
Number of MRF Recipients in sample	751

Communist MRF's Relative to MRF's in Sample	68/751 =	0.090546