# Replication: How the Party Commands the Gun: The Foreign—Domestic Threat Dilemma in China

Mattingly, Daniel (2022)

By Caesar Zhang

# Explaining the Original Work: Operationalisation of Variables

- Research Question: Who is more likely to be promoted to general and the Central Military Committee (CMC)?
- Hypothesis: There is a trade-off in loyalty and professionalism.
- Outcome variables:

Central Committee Member: Yes (1) vs. No (0)

Promoted to General: Yes (1) vs. No (0)

Explanatory Variables:

Career Connection with Leader: Yes (1) vs. No (0)

Combat Experience after 1949: Yes (1) or No (0)

Education: 1=primary graduate, 2=college/military academy graduate, 3=postgraduate

#### Data Generation

Original Dataset

• "extensive biographical data on nearly all officers who reached the level of deputy military region commander or deputy commissar"

• 779 officers are included

#### Model Choice: OLS

• The author also ran the logit regression for the main table, but only OLS is included in the paper.

• The author ran OLS for the promotion & tie with different leaders, but did not run logit regression for it.

• The OLS is chosen, but the author did not give a reason for the selection.

# Findings by Author: Promotion to General

Table 23: Cross-Sectional Measure of Promotion to General by CMC Chairman, Restricted to Generals Eligible For Promotion During Each Chairmans' Term.

			$Dependent \ v$	variable:					
Promoted t	o General (Deng)	Promoted t	o General (Jiang)	eral (Jiang) Promoted to General (H			r) Promoted to General (Xi)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
0.203** (0.040)	0.185** (0.043)								
		0.034 $(0.112)$	0.061 (0.110)						
				0.090 $(0.251)$	-0.062 (0.238)				
						0.266** (0.097)	0.265** (0.097)		
0.024 (0.018)	$-0.228^*$ (0.092)	0.232** (0.025)	-0.226 (0.323)	0.244** (0.031)	-0.161 (0.413)	0.119** (0.025)	-0.155 (0.140)		
209	207	312	308	200	200	190	187		
$0.110 \\ 0.105$	0.198 $0.144$	$0.0003 \\ -0.003$	0.141 $0.100$	$0.001 \\ -0.004$	$0.166 \\ 0.122$	0.038 $0.033$	$0.162 \\ 0.114$		
	(1) 0.203** (0.040) 0.024 (0.018) 209 0.110	0.203**	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Promoted to General (Deng) Promoted to General (Jiang) (1) (2) (3) (4)  0.203** 0.185** (0.040) (0.043)  0.034 0.061 (0.112) (0.110)  0.024 -0.228* 0.232** -0.226 (0.018) (0.092) (0.025) (0.323)  209 207 312 308 0.110 0.198 0.0003 0.141	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		

## Findings by Author: Promotion to CMC (OLS)

Table 24: Cross-Sectional Measure of Promotion to CMC by CMC Chairman, Restricted to Generals Eligible For Promotion During Each Chairmans' Term.

				$Dependent \ v$	variable:			
	Promoted to CMC (Deng)		Promoted	to CMC (Jiang)	Jiang) Promoted to CMC (He		Promoted to CMC (X	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Career Tie to Deng Xiaoping	0.480** (0.043)	0.075* (0.030)						
Career Tie to Jiang Zemin			0.019 $(0.057)$	0.029 $(0.054)$				
Career Tie to Hu Jintao					-0.046 (0.149)	-0.098 (0.140)		
Career Tie to Xi Jinping							0.351** (0.063)	0.288** (0.059)
Constant	$0.020^{+}$ $(0.010)$	0.558** (0.048)	0.047** (0.012)	-0.145 (0.157)	0.046** (0.016)	0.991** (0.197)	0.034* (0.016)	0.373** (0.085)
Control variables		<b>√</b>		<b>√</b>		<b>√</b>		<b>√</b>
Observations	325	321	311	307	177	177	189	186
$\mathbb{R}^2$	0.274	0.806	0.0004	0.204	0.001	0.194	0.144	0.329
Adjusted R <sup>2</sup>	0.272	0.797	-0.003	0.166	-0.005	0.146	0.139	0.291

### Findings by author, binary logit regression

Table 1: Promotion to full general-level position and to the CCP Central Military Commis-

			Dependen	t variable:		
	Prom	oted to G	eneral	Promoted to CMC		
	(1)	(2)	(3)	(4)	(5)	(6)
Career Tie to Paramount Leader	0.200** (0.048)		0.133** (0.047)	0.176** (0.039)		0.128** (0.036)
Combat Experience, Post-1949		0.348** (0.052)	0.248** (0.057)		0.153** (0.042)	$0.077^*$ $(0.039)$
College-Level Education			0.129** (0.030)			0.049** (0.016)
Long March Participant			$0.095 \\ (0.095)$			0.248** (0.075)
Political Commissar Experience			0.106** (0.032)			-0.018 $(0.018)$
Ethnic Minority			0.145 $(0.124)$			$0.070 \\ (0.070)$
Princeling			0.010 (0.080)			-0.005 $(0.043)$
Rural Birth			$0.071^{+}$ $(0.042)$			0.076** (0.027)
Constant	0.218** (0.016)	0.217** (0.016)	$0.325^{+}$ $(0.173)$	0.045** (0.008)	0.055** (0.009)	0.250 $(0.157)$
Birth cohort fixed effects			✓			✓
Observations $R^2$ Adjusted $R^2$	764 $0.029$ $0.027$	779 0.071 0.069	755 0.160 0.144	764 0.061 0.060	779 0.039 0.037	755 0.231 0.216

Table 25: Logistic Regression, Main Table: Promotion to full general and to the CCP Central Military Commission

			Dependen	t variable:				
	Pror	noted to Ger	neral	Pro	Promoted to CMC			
	(1)	(2)	(3)	(4)	(5)	(6)		
Career Tie to Paramount Leader	0.946** (0.208)		0.751** (0.246)	1.793** (0.291)		1.619** (0.385)		
Combat Experience, Post-1949		1.543** (0.223)	1.239** (0.281)		1.515** (0.300)	0.855 <sup>+</sup> (0.450)		
College-Level Education			0.879** (0.218)			1.135* (0.443)		
Long March Participant			0.375 $(0.474)$			$1.717^{+}$ $(1.025)$		
Political Commissar Experience			0.667** (0.194)			-0.273 $(0.374)$		
Ethnic Minority			0.784 (0.589)			1.273 (0.864)		
Princeling			0.083 (0.473)			-0.140 (0.845)		
Rural Birth			0.383 $(0.234)$			1.077** (0.379)		
Constant	$-1.277^{**}$ (0.096)	$-1.284^{**}$ (0.093)	-1.136 (0.820)	$-3.051^{**}$ (0.190)	$-2.852^{**}$ (0.169)	-3.045** (1.150)		
Birth cohort fixed effects			<b>√</b>			<b>√</b>		
Observations	764	779	755	764	779	755		
Log Likelihood	-419.616	-423.659	-366.939	-182.641	-195.206	-141.371		
Akaike Inf. Crit.	843.231	851.317	763.878	369.282	394.412	312.741		

#### My Contribution

- 1. Why we should use logit regression here, despite "the results remain robust" as in OLS?
- 2. Run logit regression on promotion & tie with different leaders
  ("Which leader is more likely to promote the "loyal"?")
  Run logit regression on post-Deng officers
  ("With what features is an officers more likely to be promoted in post-Deng era?")
- 3. Add three interaction effects in the main model:
- rural : minority
- combat\_post\_1949 : commissar
- minority : commissar

# Promotion to General & Tie to leaders Original Code with OLS

```
lm1 <- lm(general_deng~deng.network, data=bio)</pre>
lm2 <- lm(general_deng~deng.network+combat_post_1949+college+participated_long_march+
            commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio)
lm3 <- lm(general_jiang~jiang.network, data=bio)</pre>
lm4 <- lm(general_jiang~jiang.network+combat_post_1949+college+participated_long_march+</pre>
            commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio)
lm5 <- lm(general_hu~hu.network. data=bio)</pre>
lm6 <- lm(general_hu~hu.network+combat_post_1949+college+participated_long_march+
            commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio)
lm7 <- lm(general_xi~xi.network, data=bio)</pre>
lm8 <- lm(general_xi~xi.network+combat_post_1949+college+participated_long_march+
            commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio)
stargazer(lm1, lm2, lm3, lm4, lm5, lm6, lm7, lm8, type = "latex",
          omit=c("combat_post_1949", "college", "participated_long_march", "commissar",
                 "minority", "parent_CCP_leader", "rural", "cohort_decade").
          label = "table_a18".
          omit.stat=c("f", "ser"),
          dep.var.labels = c("Promoted to General (Deng)", "Promoted to General (Jiang)",
                              "Promoted to General (Hu)", "Promoted to General (Xi)"),
          title = "Cross-Sectional Measure of Promotion to General by CMC Chairman,
          Restricted to Generals Eligible For Promotion During Each Chairmans' Term.",
          covariate.labels = c("Career Tie to Deng Xiaoping", "Career Tie to Jiang Zemin",
                                "Career Tie to Hu Jintao", "Career Tie to Xi Jinping"),
          star.char = c("+", "*", "**"),
          notes.append=FALSE.
          notes = c("\$^{+}\p$<\$0.1; \$^{*}\p$<\$0.05; \$^{**}\p$<\$0.01}"),
          out = "Table_A18.tex")
```

### Promotion to General & Tie to leaders Replicate with logit regression

```
glm1 <- glm(general_deng~deng.network, data=bio, family=binomial(link="logit"))</pre>
glm2 <- glm(general_deng~deng.network+combat_post_1949+college+participated_long_march+
              commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio, family=binomial(link="logit"))
glm3 <- glm(general_jiang~jiang.network, data=bio, family=binomial(link="logit"))
glm4 <- glm(general_jiang~jiang.network+combat_post_1949+college+participated_long_march+
              commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio, family=binomial(link="logit"))
glm5 <- glm(general_hu~hu.network, data=bio, family=binomial(link="logit"))
glm6 <- glm(general_hu~hu.network+combat_post_1949+college+participated_long_march+
              commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio, family=binomial(link="logit"))
glm7 <- glm(general xi~xi.network, data=bio, family=binomial(link="logit"))
glm8 <- glm(general_xi~xi.network+combat_post_1949+college+participated_long_march+c
            ommissar+minority+parent CCP leader+rural+cohort decade, data=bio, family=binomial(link="logit"))
stargazer(glm1, glm2, glm3, glm4, glm5, glm6, glm7, glm8, type = "latex",
          omit=c("combat_post_1949", "college", "participated_long_march",
                 "commissar", "minority", "parent_CCP_leader", "rural", "cohort_decade"),
         label = "table_a18".
          omit.stat=c("f". "ser").
          dep.var.labels = c("Promoted to General (Deng)", "Promoted to General (Jiang)",
                             "Promoted to General (Hu)", "Promoted to General (Xi)"),
         title = "Logit Regression, Cross-Sectional Measure of Promotion to General by CMC Chairman,
          Restricted to Generals Eligible For Promotion During Each Chairmans' Term.",
          covariate.labels = c("Career Tie to Deng Xiaoping", "Career Tie to Jiang Zemin",
                               "Career Tie to Hu Jintao", "Career Tie to Xi Jinping"),
          star.char = c("+", "*", "**"),
         notes.append=FALSE,
         notes = c("\$^{+}\$p\$<\$0.1; \$^{*}\$p\$<\$0.05; \$^{**}\$p\$<\$0.01"),
          out = "Table_A18.tex")
```

# Promotion to General & Tie to leaders OLS vs. Logit Regression

Table 23: Cross-Sectional Measure of Promotion to General by CMC Chairman, Restricted to Generals Eligible For Promotion During Each Chairmans Term.

		Dependent variable:							
	Promoted t	to General (Deng)	Promoted t	o General (Jiang)	Promoted	to General (Hu)	Promoted to General (Xi		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Career Tie to Deng Xiaoping	0.203** (0.040)	0.185** (0.043)							
Career Tie to Jiang Zemin			0.034 $(0.112)$	0.061 (0.110)					
Career Tie to Hu Jintao					$0.090 \\ (0.251)$	-0.062 (0.238)			
Career Tie to Xi Jinping							0.266** (0.097)	0.265** (0.097)	
Constant	0.024 (0.018)	$-0.228^*$ (0.092)	0.232** (0.025)	-0.226 (0.323)	0.244** (0.031)	-0.161 (0.413)	0.119** (0.025)	-0.155 $(0.140)$	
Observations R <sup>2</sup> Adjusted R <sup>2</sup>	209 0.110 0.105	207 0.198 0.144	312 0.0003 -0.003	308 0.141 0.100	200 0.001 -0.004	200 0.166 0.122	190 0.038 0.033	187 0.162 0.114	

Table 27: Logit Regression, Cross-Sectional Measure of Promotion to General by CMC Chairman, Restricted to Generals Eligible For Promotion During Each Chairmans' Term.

				$Dependent\ \iota$	variable:				
	Promoted t	o General (Deng)	Promoted to	Promoted to General (Jiang) Promoted to Gene			neral (Hu) Promoted to General (Xi		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Career Tie to Deng Xiaoping	2.471** (0.621)	2.692** (0.796)							
Career Tie to Jiang Zemin			0.184 (0.600)	0.475 $(0.672)$					
Career Tie to Hu Jintao					0.440 (1.236)	-0.353 (1.252)			
Career Tie to Xi Jinping							1.535* (0.616)	2.159** (0.788)	
Constant	-3.695** $(0.506)$	$-25.688 \\ (5,135.905)$	$-1.195^{**}$ $(0.137)$	$-19.186 \\ (2,795.266)$	-1.133** (0.166)	$ \begin{array}{c} -16.660 \\ (1,455.398) \end{array} $	-2.005** $(0.232)$	$ \begin{array}{c} -21.553 \\ (3,982.260) \end{array} $	
Observations	209	207	312	308	200	200	190	187	
Log Likelihood	-42.412	-30.839	-169.693	-144.408	-111.295	-92.642	-73.128	-56.742	
Akaike Inf. Crit.	88.824	89.678	343.386	318.816	226.590	207.285	150.255	135.483	

\*p<0.1; \*p<0.05; \*\*p<0.01

# Promotion to CMC & Tie to leaders Original Code with OLS

```
lm1 <- lm(cmc_deng~deng.network, data=bio)</pre>
lm2 <- lm(cmc_deng~deng.network+combat_post_1949+college+participated_long_march+
           commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio)
lm3 <- lm(cmc_iiang~iiang.network. data=bio)</pre>
lm4 <- lm(cmc_jiang~jiang.network+combat_post_1949+college+participated_long_march+
           commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio)
lm5 <- lm(cmc_hu~hu.network, data=bio)</pre>
lm6 <- lm(cmc_hu~hu.network+combat_post_1949+college+participated_long_march+commissar+
           minority+parent_CCP_leader+rural+cohort_decade, data=bio)
lm7 <- lm(cmc_xi~xi.network, data=bio)</pre>
lm8 <- lm(cmc_xi~xi.network+combat_post_1949+college+participated_long_march+commissar+</pre>
           minority+parent_CCP_leader+rural+cohort_decade, data=bio)
stargazer(lm1, lm2, lm3, lm4, lm5, lm6, lm7, lm8, type = "latex",
         omit=c("combat_post_1949", "college", "participated_long_march", "commissar",
                "minority", "parent_CCP_leader", "rural", "cohort_decade"),
         label = "table_a19",
         omit.stat=c("f", "ser"),
         dep.var.labels = c("Promoted to CMC (Deng)", "Promoted to CMC (Jiang)",
                            "Promoted to CMC (Hu)", "Promoted to CMC (Xi)"),
         title = "Cross-Sectional Measure of Promotion to CMC by CMC Chairman.
         Restricted to Generals Eligible For Promotion During Each Chairmans' Term.",
         covariate.labels = c("Career Tie to Deng Xiaoping", "Career Tie to Jiang Zemin",
                              "Career Tie to Hu Jintao", "Career Tie to Xi Jinping"),
         star.char = c("+", "*", "**"),
         notes.append=FALSE.
         notes = c("\$^{+}\$p\$<\$0.1; \$^{*}\$p\$<\$0.05; \$^{**}\$p\$<\$0.01"),
         out = "Table_A19.tex")
```

# Promotion to CMC & Tie to leaders Replicate with logit regression

```
glm1 <- glm(cmc_deng~deng.network, data=bio, family=binomial(link="logit"))</pre>
glm2 <- glm(cmc_deng~deng.network+combat_post_1949+college+participated_long_march+
              commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio, family=binomial(link="logit"))
alm3 <- glm(cmc iiang~iiang.network, data=bio, family=binomial(link="logit"))</pre>
glm4 <- glm(cmc_jiang~jiang.network+combat_post_1949+college+participated_long_march+
              commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio, family=binomial(link="logit"))
glm5 <- glm(cmc_hu~hu.network, data=bio, family=binomial(link="logit"))</pre>
glm6 <- glm(cmc_hu~hu.network+combat_post_1949+college+participated_long_march+
              commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio, family=binomial(link="logit"))
glm7 <- glm(cmc_xi~xi.network, data=bio, family=binomial(link="logit"))</pre>
glm8 <- glm(cmc_xi~xi.network+combat_post_1949+college+participated_long_march+
              commissar+minority+parent_CCP_leader+rural+cohort_decade, data=bio, family=binomial(link="logit"))
stargazer(glm1, glm2, glm3, glm4, glm5, glm6, glm7, glm8, type = "latex",
          omit=c("combat_post_1949", "college", "participated_long_march", "commissar", "minority",
                 "parent_CCP_leader", "rural", "cohort_decade"),
          label = "table_a19",
          omit.stat=c("f", "ser"),
          dep.var.labels = c("Promoted to CMC (Deng)", "Promoted to CMC (Jiang)", "Promoted to CMC (Hu)".
                             "Promoted to CMC (Xi)").
          title = "logit regression Cross-Sectional Measure of Promotion to CMC by CMC Chairman.
          Restricted to Generals Eligible For Promotion During Each Chairmans' Term.".
          covariate.labels = c("Career Tie to Deng Xiaoping", "Career Tie to Jiang Zemin",
                                "Career Tie to Hu Jintao", "Career Tie to Xi Jinpina").
          add.lines=list(c("Control variables", "", "$\\checkmark$","", "$\\checkmark$","", "$\\checkmark$"),
          star.char = c("+", "*", "**"),
          notes.append=FALSE.
          notes = c("\$^{+}\$p\$<\$0.1; \$^{*}\$p\$<\$0.05; \$^{**}\$p$<\$0.01}")
          out = "Table A19.tex")
```

### Promotion to CMC & Tie to leaders OLS vs. Logit Regression

				Dependent u	variable:			
	Promoted to CMC (Deng)		Promoted	to CMC (Jiang) Promoted		to CMC (Hu)	Promoted to CMC (X	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Career Tie to Deng Xiaoping	0.480** (0.043)	0.075* (0.030)						
Career Tie to Jiang Zemin			0.019 (0.057)	0.029 $(0.054)$				
Career Tie to Hu Jintao					-0.046 $(0.149)$	-0.098 (0.140)		
Career Tie to Xi Jinping							0.351** (0.063)	0.288** (0.059)
Constant	$0.020^{+}$ $(0.010)$	0.558** (0.048)	0.047** (0.012)	-0.145 (0.157)	0.046** (0.016)	0.991** (0.197)	0.034* (0.016)	0.373** (0.085)
Control variables		<b>√</b>		<b>√</b>		<b>√</b>		<b>√</b>
Observations	325	321	311	307	177	177	189	186
$\mathbb{R}^2$	0.274	0.806	0.0004	0.204	0.001	0.194	0.144	0.329
Adjusted R <sup>2</sup>	0.272	0.797	-0.003	0.166	-0.005	0.146	0.139	0.291

+p<0.1; \*p<0.05; \*\*p<0.01

Table 24: Cross-Sectional Measure of Promotion to CMC by CMC Chairman, Restricted to Generals Eligible For Promotion During Each Chairmans' Term. Table 28: logit regression Cross-Sectional Measure of Promotion to CMC by CMC Chairman, Restricted to Generals Eligible For Promotion During Each Chairmans' Term.

	Dependent variable:							
	Promoted	to CMC (Deng)	Promoted t	to CMC (Jiang)	Promoted t	o CMC (Hu)	Promoted to CMC (2	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Career Tie to Deng Xiaoping	3.915** (0.626)	$21.346 \\ (24,859.740)$						
Career Tie to Jiang Zemin			0.364 $(1.071)$	0.747 $(1.297)$				
Career Tie to Hu Jintao					-13.528 $(1,696.734)$	-18.893 (12,531.920)		
Career Tie to Xi Jinping							2.874** (0.705)	3.511** (1.091)
Constant	-3.915** $(0.412)$	7.095 (308,115.800)	-3.003** $(0.274)$	$-21.648 \\ (7,025.609)$	-3.039** $(0.362)$	4.584 (17,849.010)	-3.344** $(0.415)$	$-2.832^{+}$ (1.572)
Control variables		✓		✓		<b>√</b>		<b>√</b>
Observations	325	321	311	307	177	177	189	186
Log Likelihood	-42.028	-0.000	-60.056	-44.017	-32.497	-21.875	-34.831	-20.063
Akaike Inf. Crit.	88.056	30.000	124.112	118.033	68.994	65.750	73.661	62.126

### logit regression on post-Deng officers, not OLS

• Outcome variables, promotion to general & promotion to CMC are binary;

• The coefficients in the OLS model can only tell direction, but we can't interpret individual coefficient (the partial effect);

#### OLS vs. Logit regression: Code

```
lm1 <- lm(general~cmc_chair_connection_current, data=bio, subset=post_deng==1)</pre>
lm2 <- lm(general~combat_post_1949, data=bio, subset=post_deng==1)</pre>
lm3 <- lm(general~cmc_chair_connection_current+combat_post_1949+
            college+participated long march+commissar+minority+parent CCP leader+rural, data=bio, subset=post deng==1)
lm4 <- lm(cmc~cmc_chair_connection_current, data=bio, subset=post_deng==1)</pre>
lm5 <- lm(cmc~combat_post_1949, data=bio, subset=post_deng==1)</pre>
1m6 <- lm(cmc~cmc_chair_connection_current+combat_post_1949</pre>
          +college+participated_long_march+commissar+minority+parent_CCP_leader+rural, data=bio, subset=post_deng==1)
rob.fit1
                <- coeftest(lm1, function(x) vcovHC(x, type="HC3"))</pre>
rob.fit2
                <- coeftest(lm2, function(x) vcovHC(x, type="HC3"))
                <- coeftest(lm3, function(x) vcovHC(x, type="HC3"))</pre>
rob.fit3
rob.fit4
                <- coeftest(lm4, function(x) vcovHC(x, type="HC3"))
rob.fit5
                <- coeftest(lm5, function(x) vcovHC(x, type="HC3"))
                <- coeftest(]m6. function(x) vcovHC(x, type="HC3"))
rob.fit6
stargazer(lm1, lm2, lm3, lm4, lm5, lm6, type = "latex",
          se = list(rob.fit1[,"Std. Error"], rob.fit2[,"Std. Error"],
                    rob.fit3[,"Std. Error"], rob.fit4[,"Std. Error"],
                    rob.fit5[."Std. Error"]. rob.fit6[."Std. Error"]).
          omit=c("cohort_decade"),
          label = "table_a11".
          omit.stat=c("f", "ser"),
          dep.var.labels = c("Promoted to General", "Promoted to CMC"),
          title = "Post-Deng Officers Only: Promotion to full general-level
          position and to the CCP Central Military Commission",
          star.char = c("+", "*", "**"),
          notes.append=FALSE.
          notes = c("\$^{+}\$p\$<\$0.1; \$^{*}\$p\$<\$0.05; \$^{**}\$p\$<\$0.01}"),
          covariate.labels = c("Career Tie to Paramount Leader",
                                "Combat Experience, Post-1949", "College-Level Education",
                                "Long March Participant", "Political Commissar Experience",
                                "Ethnic Minority", "Princeling", "Rural Birth"),
          out = "Table A11.tex"
```

### OLS vs. Logit regression: Code

```
glm1 <- glm(general~cmc_chair_connection_current, data=bio, subset=post_deng==1, family=binomial(link="logit"))</pre>
glm2 <- glm(general~combat_post_1949, data=bio, subset=post_deng==1, family=binomial(link="logit"))
glm3 <- glm(general~cmc_chair_connection_current+combat_post_1949+college+participated_long_march+
             commissar+minority+parent_CCP_leader+rural, data=bio, subset=post_deng==1, family=binomial(link="logit"))
glm4 <- glm(cmc~cmc_chair_connection_current, data=bio, subset=post_deng==1, family=binomial(link="logit"))
glm5 <- glm(cmc~combat_post_1949, data=bio, subset=post_deng==1, family=binomial(link="logit"))
glm6 <- glm(cmc~cmc_chair_connection_current+combat_post_1949+college+participated_long_march+
             commissar+minority+parent_CCP_leader+rural, data=bio, subset=post_deng==1, family=binomial(link="logit"))
rob.fit1
                <- coeftest(qlm1, function(x) vcovHC(x, type="HC3"))
rob.fit2
                <- coeftest(g1m2, function(x) vcovHC(x, type="HC3"))</pre>
                <- coeftest(glm3, function(x) vcovHC(x, type="HC3"))
rob.fit3
                <- coeftest(q]m4. function(x) vcovHC(x. tvpe="HC3"))
rob.fit4
                <- coeftest(glm5, function(x) vcovHC(x, type="HC3"))
rob.fit5
                <- coeftest(glm6, function(x) vcovHC(x, type="HC3"))
rob.fit6
stargazer(glm1, glm2, glm3, glm4, glm5, glm6, type = "latex",
          se = list(rob.fit1[,"Std. Error"], rob.fit2[,"Std. Error"],
                    rob.fit3[,"Std. Error"], rob.fit4[,"Std. Error"],
                    rob.fit5[,"Std. Error"], rob.fit6[,"Std. Error"]),
          omit=c("cohort_decade").
          label = "table a11".
          omit.stat=c("f", "ser"),
          dep.var.labels = c("Promoted to General", "Promoted to CMC"),
          title = "qlm, Post-Deng Officers Only: Promotion to full general-level
          position and to the CCP Central Military Commission".
          star.char = c("+", "*", "**"),
          notes.append=FALSE.
          notes = c("\$^{+}\$p\$<\$0.1; \$^{*}\$p\$<\$0.05; \$^{**}\$p\$<\$0.01]"),
          covariate.labels = c("Career Tie to Paramount Leader",
                               "Combat Experience, Post-1949", "College-Level Education",
                               "Long March Participant", "Political Commissar Experience",
                               "Ethnic Minority", "Princeling", "Rural Birth"),
          out = "Table A11.tex")
```

### OLS vs. Logit regression: Output

+p<0.1; \*p<0.05; \*\*p<0.01

Table 17: Post-Deng Officers Only: Promotion to full general-level position and to the CCP Central Military Commission

			Dependen	nt variable:			
	Pror	moted to Ge	neral	Pro	Promoted to CMC		
	(1)	(2)	(3)	(4)	(5)	(6)	
Career Tie to Paramount Leader	0.169** (0.055)		$0.125^*$ $(0.055)$	0.129** (0.041)		0.100** (0.038)	
Combat Experience, Post-1949		0.349** (0.066)	0.245** (0.072)		0.117* (0.047)	0.058 $(0.043)$	
College-Level Education			0.133** (0.031)			0.039** (0.015)	
Long March Participant			0.459** (0.159)			0.429* (0.214)	
Political Commissar Experience			0.110** (0.034)			-0.017 $(0.017)$	
Ethnic Minority			0.022 $(0.131)$			0.017 $(0.069)$	
Princeling			-0.014 (0.078)			0.007 $(0.044)$	
Rural Birth			$0.088^{+}$ $(0.048)$			$0.055^{+}$ $(0.031)$	
Constant	0.203** (0.017)	0.207** (0.017)	$0.040 \\ (0.024)$	0.034** (0.008)	0.042** (0.008)	-0.0005 (0.011)	
Observations R <sup>2</sup> Adjusted R <sup>2</sup>	648 0.019 0.017	663 0.057 0.056	648 0.114 0.103	648 0.040 0.038	663 0.024 0.022	648 0.110 0.099	

Note:

Table 18: glm, Post-Deng Officers Only: Promotion to full general-level position and to the CCP Central Military Commission

Promoted to G (2) (** (9)  1.568** (0.277)	(3) 0.707* (0.284) 1.262** (0.336) 0.937**	(4) 1.715** (0.377)	(5) 1.468** (0.406)	(6) 1.497** (0.425) 0.740
** (9) 1.568**	0.707* (0.284) 1.262** (0.336)	1.715**	1.468**	1.497** (0.425) 0.740
1.568**	(0.284) 1.262** (0.336)			(0.425) 0.740
	(0.336)			
	0.937**			(0.545)
	(0.240)			1.153* (0.487)
	$2.679^+$ $(1.433)$			$2.374^{+}$ $(1.291)$
	0.693** (0.206)			-0.403 (0.430)
	$0.171 \\ (0.707)$			0.434 $(1.275)$
	-0.070 (0.469)			0.151 (0.777)
	$0.508^+\ (0.262)$			0.929* (0.464)
9** -1.345** 95) (0.101)	-2.569** $(0.243)$	-3.353** (0.234)	-3.135** (0.205)	-4.436** (0.478)
8 663 195 -348.983 90 701.965	648 -310.012 638.024	$ 648 \\ -121.236 \\ 246.473 $	663 -131.489 266.979 1	$ \begin{array}{c} 648 \\ -109.285 \\ 8 \ 236.570 \end{array} $
3	663 95 -348.983	663 648 95 -348.983 -310.012	65) (0.101) (0.243) (0.234) 663 648 648 95 -348.983 -310.012 -121.236 00 701.965 638.024 246.473	65) (0.101) (0.243) (0.234) (0.205) 663 648 648 663 95 -348.983 -310.012 -121.236 -131.489

### Interaction 1 Minority: Rural

```
## additive model: general promotion
glm_general <- glm(general~cmc_chair_connection_current+combat_post_1949</pre>
                    +college+participated_long_march+commissar+minority+
                      parent_CCP_leader+rural+cohort_decade, data=bio, family=binomial(link="logit"))
summary(glm_general)
starqazer(qlm_qeneral, titile = "logit model, additive: general")
                                                                           test <- anova(glm_gen, glm_int_gen_mr, test="LRT")</pre>
                                                                            test
                                                                            stargazer(test, title="Test: Interactive Model or not, general, minority: rural")
## interaction model: general promotion
glm_int_general <- glm(general~cmc_chair_connection_current+combat_post_1949</pre>
                        +college+participated_long_march+commissar+minority+
                          parent CCP leader+rural+cohort decade +
                          minority: rural, data=bio, family=binomial(link="logit"))
summary(glm_int_general)
stargazer(glm int general, titile = "logit model, additive; general")
## additive model: cmc promotion
glm_cmc <- glm(cmc~cmc_chair_connection_current+combat_post_1949</pre>
              +college+participated_long_march+commissar+minority+
                parent_CCP_leader+rural+cohort_decade. data=bio. family=binomial(link="logit"))
summary(qlm)
stargazer(glm, title = "logit model, additive: cmc")
                                                                             test <- anova(glm_cmc, glm_int_cmc_mr, test="LRT")
                                                                              test
                                                                              stargazer(test, title="Test: Interactive Model or not, cmc, minority : rural")
## interaction model: cmc promotion
glm_int_cmc <- glm(cmc~cmc_chair_connection_current+combat_post_1949</pre>
                  +college+participated_long_march+commissar+minority+
                    barent_CCP_leader+rural+cohort_decade + minority : rural, data=bio, family=binomial(link="logit"))
summary(glm_int)
stargazer(glm_int, title = "logit model, interaction: cmc")
```

#### Additive vs. Interaction: General Promotion

Holding other covariates constant, if an officer from ethnic minority background is born in rural China, the log odds of that officer being promoted to general are by 0.516 larger than those officers from ethnic minority families and born in urban on average.

But the interaction effect is not significantly different from 0.

Therefore, the effect of being born in rural China does not have a different effect (that statistically significantly different from 0) between officers from Han ethnicity and ethnic minority on being promoted to general or not.

Table 11: logit model, additive: general

Table 11: logic mov	dei, additive. generar
	$Dependent\ variable:$
	general
cmc_chair_connection_current	0.751***
	(0.237)
combat_post_1949	1.239***
	(0.274)
college	0.879***
	(0.217)
participated_long_march	0.375
	(0.446)
commissar	0.667***
	(0.188)
minority	0.784
	(0.538)
parent_CCP_leader	0.083
	(0.451)
rural	0.383*
	(0.232)
cohort_decade1	-0.782
	(0.706)
cohort_decade2	-1.751**
	(0.754)
cohort_decade3	-1.397*
	(0.742)
cohort_decade4	-1.608**
	(0.733)
cohort_decade5	-1.139
	(0.729)
cohort_decade6	-2.087**
	(0.944)
Constant	-1.136
	(0.736)
Observations	755
Log Likelihood	-366.939
Akaike Inf. Crit.	763.878
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 12: logit model, interaction, general

_	$Dependent\ variable:$
	general
cmc_chair_connection_current	0.755***
	(0.237)
combat_post_1949	1.234***
•	(0.274)
college	0.880***
	(0.217)
participated_long_march	0.372
	(0.447)
commissar	0.670***
	(0.188)
minority	0.694
	(0.599)
parent_CCP_leader	0.093
	(0.452)
rural	0.372
	(0.234)
cohort_decade1	-0.784
	(0.706)
cohort_decade2	-1.765**
	(0.755)
cohort_decade3	-1.398*
	(0.742)
cohort_decade4	-1.614**
	(0.733)
cohort_decade5	-1.143
	(0.729)
cohort_decade6	-2.085**
	(0.943)
minority:rural	0.516
	(1.446)
Constant	-1.131
	(0.736)
Observations	755
Log Likelihood	-366.874
Akaike Inf. Crit.	765.747 20
Note:	*p<0.1; **p<0.05; ***p<0.01

#### Additive vs. Interaction: CMC Promotion

Holding other covariates constant, if an officer from ethnic minority background is born in rural China, the log odds of that officer being promoted to CMC are by 1.055 larger than those officers from ethnic minority families and born in urban on average.

But the interaction effect is not significantly different from 0.

Therefore, the effect of being born in rural China does not have a different effect between officers from Han ethnicity and ethnic minority on being promoted to CMC or not.

Table 9: logit model, additive: cmc

	Dependent variable:
	cmc
mc_chair_connection_current	1.619*** (0.356)
ombat_post_1949	0.855** (0.425)
llege	1.135*** (0.440)
rticipated_long_march	1.717** (0.741)
mmissar	-0.273 (0.350)
nority	1.273 (0.845)
rent_CCP_leader	-0.140 (0.815)
ral	1.077*** (0.386)
nort_decade1	-1.924** (0.847)
nort_decade2	-3.041*** (1.063)
nort_decade3	-1.886* $(1.016)$
hort_decade4	-1.279 (0.955)
nort_decade5	-1.257 $(0.957)$
hort_decade6	-1.519 (1.373)
onstant	-3.045*** (0.974)
oservations og Likelihood saike Inf. Crit.	755 -141.371 312.741
ote:	*p<0.1: **p<0.05: ***p

Table 10: logit model, interaction: cmc

	Dependent variable:
	cmc
cmc_chair_connection_current	1.630***
	(0.356)
combat_post_1949	0.868**
	(0.426)
college	1.129**
	(0.440)
participated_long_march	1.717**
	(0.745)
commissar	-0.278
	(0.350)
minority	0.933
	(1.111)
parent_CCP_leader	-0.100
	(0.815)
rural	1.051***
	(0.390)
cohort_decade1	-1.943**
	(0.848)
cohort_decade2	-3.111***
	(1.077)
cohort_decade3	-1.870*
	(1.017)
cohort_decade4	-1.283
	(0.956)
cohort_decade5	-1.257
	(0.958)
cohort_decade6	-1.502
	(1.374)
minority:rural	1.055
	(1.851)
Constant	-3.028***
	(0.975)
Observations	755
Log Likelihood	-141.207
Akaike Inf. Crit.	314.415
Note:	*p<0.1; **p<0.05; ***p<0.01

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

#### Model Comparison with "LRT"

- P-value > 0.05 # General Promotion
- P-value > 0.05 # CMC Promotion

• We cannot deny the null hypothesis that the interaction model is not better than the additive model in explaining the general and CMC promotion.

Table 34: Test: Interactive Model or not, general, minority: rural

Statistic	Ν	Mean	St. Dev.	Min	Max
Resid. Df	2	739.500	0.707	739	740
Resid. Dev	2	733.813	0.093	733.747	733.878
Df	1	1.000		1	1
Deviance	1	0.131		0.131	0.131
Pr(>Chi)	1	0.718		0.718	0.718

Table 35: Test: Interactive Model or not, cmc, minority: rural

Statistic	Ν	Mean	St. Dev.	Min	Max
Resid. Df	2	739.500	0.707	739	740
Resid. Dev	2	282.578	0.231	282.415	282.741
Df	1	1.000		1	1
Deviance	1	0.326		0.326	0.326
Pr(>Chi)	1	0.568		0.568	0.568

# Interaction 2 combat\_post\_1949 : commissar

```
## interaction model (combat_post_1949 : commissar): general promotion
glm_int_gen_cc <- glm(general~cmc_chair_connection_current+combat_post_1949</pre>
                       +college+participated_long_march+commissar+minority+
                         parent_CCP_leader+rural+cohort_decade +
                         combat_post_1949 : commissar, data=bio, family=binomial(link="logit"))
summary(glm_int_gen_cc)
stargazer(glm_int_gen_cc, title = "logit model, interaction (combat_post_1949 : commissar): general")
## interaction model (combat_post_1949 : commissar): cmc promotion
glm_int_cmc_cc <- glm(cmc~cmc_chair_connection_current+combat_post_1949
                   +college+participated_long_march+commissar+minority+
                     parent CCP leader+rural+cohort decade +
                     combat_post_1949 : commissar, data=bio, family=binomial(link="logit"))
summary(glm_int_cmc_cc)
stargazer(glm_int_cmc_cc, title = "logit model, interaction (combat_post_1949 : commissar): cmc")
test <- anova(glm_gen, glm_int_gen_cc, test="LRT")
test
stargazer(test, title="Test: Interactive Model or not, general, combat : commissar")
test <- anova(glm_cmc, glm_int_cmc_cc, test="LRT")
test
stargazer(test, title="Test: Interactive Model or not, cmc, combat : commissar")
```

#### Additive vs. Interaction: General Promotion

Holding other covariates constant, if an officer with combat experience after 1949 has commissar experience at the same time, the log odds of that officer being promoted to general are by 0.371 smaller than those combat experienced officers without commissar experience.

But the interaction effect is not significantly differen from 0.

Therefore, the effect of having combat experience does not have a different effect (that statistically significantly different from 0) between officers with commissar experience and those without commissar experience.

	Dependent variable:
	general
cmc_chair_connection_current	0.751***
	(0.237)
combat_post_1949	1.239***
combat_post_1343	(0.274)
college	0.879***
conege	(0.217)
participated_long_march	0.375 (0.446)
commissar	0.667***
	(0.188)
minority	0.784
	(0.538)
parent_CCP_leader	0.083
parent con conde	(0.451)
rural	0.383*
rurar	(0.232)
ashant dasadat	0.700
cohort_decade1	-0.782 $(0.706)$
	, ,
cohort_decade2	-1.751** (0.754)
	(0.754)
cohort_decade3	-1.397*
	(0.742)
cohort_decade4	-1.608**
	(0.733)
cohort_decade5	-1.139
	(0.729)
ashart decedes	-2.087**
cohort_decade6	(0.944)
Constant	-1.136
	(0.736)
Observations	755
Log Likelihood	-366.939
Akaike Inf. Crit.	763.878
Note:	*p<0.1; **p<0.05; ***p<

Table 13: logit model, interaction (combatpost 1949: commissar): general

	Dependent variable:		
	general		
cmc_chair_connection_current	0.753***		
	(0.237)		
combat_post_1949	1.377***		
	(0.337)		
college	0.873***		
	(0.217)		
participated_long_march	0.360		
	(0.445)		
commissar	0.722***		
	(0.204)		
minority	0.746		
	(0.542)		
parent_CCP_leader	0.081		
	(0.453)		
rural	0.387*		
	(0.232)		
cohort_decade1	-0.791		
	(0.708)		
cohort_decade2	-1.773**		
	(0.756)		
cohort_decade3	-1.390*		
	(0.743)		
cohort_decade4	-1.620**		
	(0.734)		
cohort_decade5	-1.157		
	(0.731)		
cohort_decade6	-2.092**		
	(0.945)		
combat_post_1949:commissar	-0.371		
	(0.525)		
Constant	-1.147		
	(0.737)		
Observations	755		
Log Likelihood	-366.691		
Akaike Inf. Crit.	765.381		
Note:	*p<0.1; **p<0.05; ***p<0.0		

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#### Additive vs. Interaction: CMC Promotion

Holding other covariates constant, if an officer with combat experience after 1949 also has career experience in commissar, the log odds of that officer being promoted to CMC are by 0.221 larger than those officers with combat experiences but have no experience in commissar.

But the interaction effect is not significantly different from 0.

Therefore, the effect of being born in rural China does not have a different effect (that statistically significantly different from 0) between officers from Han ethnicity and ethnic minority on being promoted to CMC or not.

Table 9: logit model, additive: cmc

	Dependent variable:
	cmc
cmc_chair_connection_current	1.619***
	(0.356)
combat_post_1949	0.855**
	(0.425)
college	1.135***
	(0.440)
participated_long_march	1.717**
par orespaced 2.01182.1111	(0.741)
commissar	-0.273
	(0.350)
minority	1.273
	(0.845)
parent_CCP_leader	-0.140
P	(0.815)
rural	1.077***
	(0.386)
cohort_decade1	-1.924**
	(0.847)
cohort_decade2	-3.041***
	(1.063)
cohort_decade3	-1.886*
	(1.016)
cohort_decade4	-1.279
	(0.955)
cohort_decade5	-1.257
	(0.957)
cohort_decade6	-1.519
	(1.373)
Constant	-3.045***
	(0.974)
Observations	755
Log Likelihood	-141.371
Akaike Inf. Crit.	312.741
Note:	*p<0.1; **p<0.05; ***p<

Table 14: logit model, interaction (combat post 1949 : commissar): cmc

<u> </u>	Dependent variable:
	cmc
cmc_chair_connection_current	1.624***
	(0.357)
combat_post_1949	0.787
	(0.496)
college	1.137***
	(0.440)
participated_long_march	1.719**
	(0.740)
commissar	-0.324
	(0.402)
minority	1.304
	(0.853)
parent_CCP_leader	-0.139
	(0.815)
rural	1.074***
	(0.387)
cohort_decade1	-1.924**
	(0.847)
cohort_decade2	-3.044***
	(1.065)
cohort_decade3	-1.901*
	(1.018)
cohort_decade4	-1.278
	(0.955)
cohort_decade5	-1.250
	(0.958)
cohort_decade6	-1.525
	(1.373)
combat_post_1949:commissar	0.221
	(0.828)
Constant	-3.031***
	(0.976)
Observations	755
Log Likelihood	-141.335
Akaike Inf. Crit.	314.671
Note:	*p<0.1; **p<0.05; ***p<0.01

#### Model Comparison with "LRT"

- P-value > 0.05 # General Promotion
- P-value > 0.05 # CMC Promotion

• We cannot deny the null hypothesis that the interaction model is not better than the additive model in explaining the general and CMC promotion.

Table 31: Test: Interactive Model or not, general, combat : commissar

Statistic	Ν	Mean	St. Dev.	Min	Max
Resid. Df	2	739.500	0.707	739	740
Resid. Dev	2	733.630	0.351	733.381	733.878
Df	1	1.000		1	1
Deviance	1	0.497		0.497	0.497
Pr(>Chi)	1	0.481		0.481	0.481

Table 28: Test: Interactive Model or not, cmc, combat: commissar

Statistic	Ν	Mean	St. Dev.	Min	Max
Resid. Df	2	739.500	0.707	739	740
Resid. Dev	2	282.706	0.050	282.671	282.741
Df	1	1.000		1	1
Deviance	1	0.071		0.071	0.071
Pr(>Chi)	1	0.791		0.791	0.791

#### My Further Thoughts

- Overall, officers with combat experiences are more likely to be promoted to CMC if they have experience in commissar, but they are less likely to be promoted to general if they are former commissars.
- Theoretically coherent and relevant: CMC is the military decision-making organ, so the promotion is more politicalised.

(Loyalty to the regime is essential, and experienced commissars will be preferred because their careers are binding with the regime.)

• But this interaction model is not better than additive.

# Interaction 3 commissar: minority

```
## interaction model (minority: commissar): general promotion
glm_int_gen_mc <- glm(cmc~cmc_chair_connection_current+combat_post_1949</pre>
                      +college+participated_long_march+commissar+minority+
                        parent_CCP_leader+rural+cohort_decade +
                        minority : commissar, data=bio, family=binomial(link="logit"))
summary(glm_int_gen_mc)
stargazer(glm_int_gen_mc, title = "logit model, interaction (minority : commissar): general")
## interaction model (minority: commissar): cmc promotion
glm_int_cmc_mc <- glm(cmc~cmc_chair_connection_current+combat_post_1949</pre>
                      +college+participated_long_march+commissar+minority+
                        parent_CCP_leader+rural+cohort_decade +
                        minority: commissar, data=bio, family=binomial(link="logit"))
summary(qlm_int_cmc_mc)
stargazer(glm_int_cmc_mc, title = "logit model, interaction (minority : commissar): cmc")
test <- anova(glm_gen, glm_int_gen_mc, test="LRT")
test
stargazer(test, title="Test: Interactive Model or not, general, minority: commissar")
test <- anova(glm_cmc, glm_int_cmc_mc, test="LRT")
test
stargazer(test, title="Test: Interactive Model or not, cmc, minority: commissar")
```

#### Additive vs. Interaction: General Promotion

Holding other covariates constant, if an officer from ethnic minority background has commissar experience, the log odds of that officer being promoted to general are by 0.458 larger than other ethnic minority officers without commissar experience.

But the interaction effect is not significantly different from 0.

Therefore, the effect of having commissar experience does not have a different effect (that statistically significantly different from 0) between officers from Han ethnicity and ethnic minority on being promoted to general or not.

Table 11: logit model, additive: general

·	$Dependent\ variable:$
	general
cmc_chair_connection_current	0.751***
	(0.237)
combat_post_1949	1.239***
	(0.274)
college	0.879***
	(0.217)
participated_long_march	0.375
	(0.446)
commissar	0.667***
	(0.188)
minority	0.784
	(0.538)
parent_CCP_leader	0.083
	(0.451)
rural	0.383*
	(0.232)
cohort_decade1	-0.782
	(0.706)
cohort_decade2	-1.751**
	(0.754)
cohort_decade3	-1.397*
	(0.742)
cohort_decade4	-1.608**
	(0.733)
cohort_decade5	-1.139
	(0.729)
cohort_decade6	-2.087**
	(0.944)
Constant	-1.136
	(0.736)
Observations	755
Log Likelihood	-366.939
Akaike Inf. Crit.	763.878
Note:	*p<0.1; **p<0.05; ***p<0.0

able 15: logit model, interaction (minority: commissar): general

general
0.752***
(0.237)
1.252***
(0.275)
0.875***
(0.217)
0.373
(0.447)
0.654***
(0.191)
0.555
(0.774)
0.093
(0.451)
0.387*
(0.232)
-0.788
(0.706)
-1.752**
(0.754)
-1.391*
(0.742)
-1.602**
(0.733)
-1.139
(0.729)
-2.100**
(0.946)
0.458
(1.083)
-1.132
(0.736)
755
-366.849
765.698

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#### Additive vs. Interaction: CMC Promotion

Holding other covariates constant, if an officer from ethnic minority background is born in rural China, the log odds of that officer being promoted to CMC are by 0.285 larger than those officers from ethnic minority born in urban on average.

But the interaction effect is not significantly different from 0.

Therefore, the effect of being born in rural China does not have a different effect (that statistically significantly different from 0) between officers from Han ethnicity and ethnic minority on being promoted to CMC or not.

Table 9: logit model, additive: cmc

	Dependent variable:
	cmc
cmc_chair_connection_current	1.619***
	(0.356)
combat_post_1949	0.855**
	(0.425)
college	1.135***
	(0.440)
participated_long_march	1.717**
	(0.741)
commissar	-0.273
	(0.350)
minority	1.273
	(0.845)
parent_CCP_leader	-0.140
	(0.815)
rural	1.077***
	(0.386)
cohort_decade1	-1.924**
	(0.847)
cohort_decade2	-3.041***
	(1.063)
cohort_decade3	-1.886*
	(1.016)
cohort_decade4	-1.279
	(0.955)
cohort_decade5	-1.257
	(0.957)
cohort_decade6	-1.519
	(1.373)
Constant	-3.045***
	(0.974)
Observations	755
Log Likelihood	-141.371
Akaike Inf. Crit.	312.741
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 15: logit model, interaction (minority: commissar): cmc

	Dependent variable:		
	cmc		
cmc_chair_connection_current	1.619***		
	(0.356)		
combat_post_1949	0.865**		
	(0.429)		
college	1.129**		
	(0.441)		
participated_long_march	1.713**		
	(0.742)		
commissar	-0.285		
	(0.358)		
minority	1.148		
	(1.155)		
parent_CCP_leader	-0.122		
72	(0.820)		
rural	1.076***		
	(0.386)		
cohort_decade1	-1.930**		
	(0.848)		
cohort_decade2	-3.040***		
	(1.063)		
cohort_decade3	-1.883*		
	(1.017)		
cohort_decade4	-1.278		
	(0.955)		
cohort_decade5	-1.262		
	(0.958)		
cohort_decade6	-1.533		
	(1.376)		
commissar:minority	0.285		
	(1.727)		
Constant	-3.036***		
	(0.975)		
Observations	755		
Log Likelihood	-141.357		
Akaike Inf. Crit.	314.714		
Note:	*p<0.1; **p<0.05; ***p<0.01		

#### Model Comparison with "LRT"

- P-value > 0.05 # General Promotion
- P-value > 0.05 # CMC Promotion

• We cannot deny the null hypothesis that the interaction model is not better than the additive model in explaining the general and CMC promotion.

Table 33: Test: Interactive Model or not, general, minority: commissar

Statistic	Ν	Mean	St. Dev.	Min	Max
Resid. Df	2	739.500	0.707	739	740
Resid. Dev	2	733.788	0.127	733.698	733.878
Df	1	1.000		1	1
Deviance	1	0.180		0.180	0.180
Pr(>Chi)	1	0.671		0.671	0.671

Table 30: Test: Interactive Model or not, cmc, minority: commissar

Statistic	Ν	Mean	St. Dev.	Min	Max
Resid. Df	2	739.500	0.707	739	740
Resid. Dev	2	282.728	0.019	282.714	282.741
Df	1	1.000		1	1
Deviance	1	0.027		0.027	0.027
Pr(>Chi)	1	0.869		0.869	0.869

#### My Further Thoughts

• Overall, officers from ethnic minority are more likely to be promoted to genera and CMC if they have experience in commissar.

• Theoretically coherent and relevant: loyalty to the regime may be the prior concern for promotion regarding the officers from ethnic minority.

• But this interaction model is not better than additive.

### Bibliography

• Mattingly, Daniel. "How the Party Commands the Gun: The Foreign-Domestic Threat Dilemma in China." American Journal of Political Science. Forthcoming.

### Q&A