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Abstract

Defections during war are extreme changes in loyalty. What motivates military officers to betray their motherland and serve the invaders? Using a novel dataset of career paths for over 2,800 high-ranking (colonels and generals) Nationalist (KMT) military officers during the Second Sino-Japanese War (as part of World War II), we examine defection cases to Japanese puppet regimes. Three findings emerge. First, high-ranking KMT officers who advanced more slowly in their careers were more likely to defect; suggesting that internal organizational recognition matters. Second, officers who were underpromoted compared to their schoolmates and townsmen were more likely to defect, suggesting that peer comparison matters. Third, officers were more likely to defect when their defected peers had better career prospects in the enemy's camp, suggesting that external recognition matters.

Key words: recognition; loyalty; career incentives; World War II; foreign influences

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1 Introduction

Individuals exit one organization and join another for internal and external reasons (Hirschman, 1972; Jovanovic, 1979; Topel and Ward, 1992). Among all exits, defections during wars are extreme changes in loyalty. The existing literature primarily examines defections in the context of rebellion (Hanson, 2021), civil war (Bolte, 2021), the network of heroes (Cage et al., 2023), and desertion of soldiers (Costa and Kahn, 2003); while less is known about high-ranking officers and their motivations to defect. What factors lead military officers to betray their motherland and serve the invaders during wartime? Focusing on defections during long, large wars, this paper aims to study this question regarding senior military officer defections from the Kuomintang¹ to the pro-Japan puppet regimes in World War II.

During the War, the Japanese persistently lured senior KMT officers to defect to Japan or its puppet regimes. Throughout the eight years of the War, around 3.8% of Kuomintang military officers with the rank of colonel or higher in 1936 defected to the enemy. To explore the reasons behind military officers' defections, this paper highlights the sense of *organizational recognition* perceived by these officers, as in studies of identity and self-image in economic decision-making (Akerlof and Kranton, 2000; Bénabou and Tirole, 2011). Organizational recognition may emerge internally and externally. Internally, the marginalization of power, status, or benefits by existing military members suggests a lower level of internal recognition. Externally, the favorable treatment or expectation of such, arising from joining the enemy, encourages defection. Thus, we predict that military officers with lower promotion prospects – either in individual promotion paces or compared with the pace of peers or defected acquaintances – had a higher likelihood of defection, consistent with theories of rank-based incentives and promotion systems (Lazear and Rosen, 1981; Benson et al., 2019).

To test these predictions, we compile from historical archives and books a novel data set of career paths of over 2,800 senior Kuomintang military officers in China during the Second Sino-Japanese War² from 1937 to 1945, with basic information on the names, official

¹Hereafter, we may use “Kuomintang” or simply “KMT” to refer to the Nationalist Party of China, the National Government of the Republic of China, or its military strength.

²The Second Sino-Japanese War, also known as the Chinese War of Resistance against Japanese Aggression, was fought between the Republic of China and the Empire of Japan from 1937 to 1945 as part of World War II.

ranks, graduated military academies, majors, class years, dates of birth, and places of origin. Moreover, we construct three cohort measures, including officers from the same hometown, the same military academy, and similar office positions, for peer comparison. Our main proxy for organizational recognition is the promotion incentives faced by KMT senior officers, consistent with models of internal influence and career concerns in organizations (Milgrom and Roberts, 1988). To measure promotion incentives, we collect promotion records for KMT senior officers in official ranks formally conferred by the Nationalist Government and in positional ranks that changed rapidly due to the War. Notably, the data analysis in this paper is among the first empirical investigations of KMT officers during the Second Sino-Japanese War in the primarily qualitative literature (e.g., Wang, 1999; Fu, 2002; Wang and Yang, 2000; Wang and Yang, 2003; Che, 2011).

We find that the slow pace of individual promotions predicts a higher likelihood that KMT senior officers will defect to the pro-Japan Wang regime. Regarding peer comparisons, we show that the officer is more likely to defect if under-promoted than his peers, defined by fellow schoolmates, hometown acquaintances, colleagues serving similar functionalities, or those in similar career stages, consistent with the broader peer-effects literature (Mas and Moretti, 2009; Guo et al., 2024). That is, not only does internal recognition matter in absolute promotions, but also in relative terms that under-recognized officers compared to peers tend to defect more.

Furthermore, we consolidate the role of external recognition by showing that better career prospects of defected peers increased the likelihood of defection. That is, a better prospect of future external recognition encouraged defection. The finding distinguishes our paper from Ager et al. (2022), which shows that recognition of peer performance profoundly shaped pilots' fighting incentives in war. We advance their discovery by showing that both internal peer comparison and external peer prospects, i.e., career development after defection, matter in the decision-making process, thereby pointing to a new channel in defection choices.

More generally, our findings reveal that, in the formation of organizational loyalty, both internal and external recognition matter, as do both absolute and relative performance. This complements the existing studies highlighting drivers of identity changes on the changing sides, such as natural disasters (Reinhardt and Ross, 2019), debt crises (Godreau and

Bonilla, 2021), and national security (Hutcheson et al., 2004); or those on the receiving sides, such as Aalberg et al. (2012), Hainmueller and Hangartner (2013), Goodman (2012), Dancygier and Laitin (2014), and Adida et al. (2014). Thus, the paper underscores the comprehensive considerations facing decision-makers in major decisions, such as betraying one’s motherland.

2 Background and Hypothesis

KMT and the War Against Japan. On July 7, 1937, Japan provoked the Marco Polo Bridge Incident to initiate an assault on China, beginning the war. In 15 months, the KMT sacrificed more than 1.04 million troops (Liu, 2005). Since November 1938, the Japanese formulated a new policy of focusing on recruiting pro-Japan Chinese elites and supporting the establishment of pro-Japan puppet regimes. In December 1938, Wang Jingwei, a prominent KMT leader, defected to Japan and established the puppet National Government of the Republic of China in March 1940. Since then, the Japanese had persistently induced defections by senior KMT military officers, although Wang Jingwei had no military power and did not establish an alliance with any other military factions. China and Japan continued to fight on the Chinese battlefield until August 15, 1945, when Japan officially announced its unconditional surrender. According to our dataset, approximately 3.8% of Kuomintang military officers with high official rank in 1936 defected to the enemy between 1937 and 1945.

Military Officers in KMT. Military officers in the KMT were mostly well-trained. The Baoding Military Academy, founded in 1912, recruited the largest number of talent and exerted the greatest influence in the Republic of China. During the war against Japan, its graduates remained the backbone of various armies and military departments. Later, the Whampoa Military Academy, founded by Sun Yat-sen, placed great emphasis on military and political education, whose graduates became the most important force within the Kuomintang and for Chiang Kai-shek. The establishment of military academies also led to the formation of factions among graduates: schoolmates formed strong bonds and sometimes provided mutual support in one another’s careers. In addition to domestic military

academies, sending talents overseas for military education was also popular. After the First Sino-Japanese War and China's humiliating defeat, China sent many students to Japan to learn advanced military skills. Until the Republican era, Japan remained the top choice for Chinese military academy students. Even Chiang Kai-shek himself had been studying in Japan for years. In addition to Japan, Britain, the United States, and Germany were important destinations for Chinese military academy students.

Promotions in KMT. In 1934, the Nationalist Government began to standardize the military ranks of officers and their appointment system, specifying the ranks of officers in the Army, Navy, and Air Force, referred to as *official ranks* (Xiao, 2019). These ranks did not change with job transfers. However, during the war against Japan, the official ranks could not keep pace with frequent military developments. Consequently, various departments often conferred military ranks changed with job transfers, known as *positional ranks* (Wang, 2014). As a result, the Military Commission often awarded higher positional ranks to officers holding higher positions but lower official ranks, aligning their positions with their ranks. Meanwhile, there was no distinction in salaries and benefits between positional ranks and official ranks. Thus, a promotion for military officers in KMT could be an increase in either official or positional ranks.³

Defection to Pro-Japan Regimes. The Japanese government had supported the creation of several pro-Japanese puppet regimes, all of which dissolved after the establishment of the Wang regime. On March 30, 1940, Wang Jingwei formally established the puppet National Government of the Republic of China. All its organizational and regulatory systems followed those of the Chongqing government (Yu et al., 2006). In the meantime, the decision to defect was influenced by personal interests and perceptions of internal and external organizational recognition.

Internally, officers from miscellaneous forces or those discriminated against by the regular troops might switch sides due to the lack of *recognition*, *promotion opportunities*, and

³Occasionally, for senior rank-holders such as lieutenant generals, a promotion could be a job transfer to more influential positions without rank increases because of the limited quota of generals. We also regard these occasions as promotions of positional ranks in our empirical study to reflect its nature of increased career prospects during war time.

dissatisfaction with their career prospects (Zhu, 1959). For example, Bao Wenyue, a former major general in the pre-war Nationalist Army and a Northeast Army commander involved in the Xi'an Incident, joined the Wang regime after being dismissed, realizing that returning to service under Chiang was hopeless. Another example is Colonel Hao Pengju of the Army Artillery, who originated from the Northwest Army. In 1939, he was dismissed and detained for offending Hu Zongnan and subsequently defected to the Wang regime. That is, under-recognition in the organization squeezes out the under-appreciated officers from the Chiang regime to the Wang regime. Thus, we have the first hypothesis:

H1: *military officers with lower individual promotion prospects were more likely to defect.*

Meanwhile, senior KMT officers were known for their emphasis on cohorts and factions. Officers' peers or those in the same cohort often substantially influenced their career development and decisions. Also, the perceived career prospects of one officer usually depended on his evaluation of his relative promotion rewards. If an officer did not receive a promotion but many in his cohort were promoted, the relative underpromotion might lead to a perception of being underappreciated. Thus, we have our second hypothesis:

H2: *military officers with lower relative promotion prospects than their cohort had a higher likelihood of defection.*

On the other hand, officers defecting to the Wang regime were often "promptly appointed". The Wang regime adopted the Chiang regime's appointment system, but with significantly fewer officials. Consequently, military officers defecting to the Wang regime often received much higher positions than those in the Chiang regime. The establishment of the Wang regime provided these officers with a fast track to promotion. Thus, regarding the expectation of promising external recognition, we have our third hypothesis:

H3: *military officers whose defected peers enjoyed better career advancements were more likely to defect.*

Note that a null hypothesis is (more likely) to stay in the Chiang Kai-shek regime.

3 Data

3.1 Data Sources

We construct a panel dataset on the career records of senior National Revolutionary Army (NRA) officers from 1936 to 1945, drawing on a range of official archives and supplementary sources. Our primary source is the *Roster of Army, Naval, and Air Force Officers* (hereafter referred to as the Roster) compiled by the Military Commission of the National Government in 1936, which provide basic information on the names, official ranks, graduated military academies, majors, grades, dates of birth, and places of origin of 34,052 officers of the National Revolutionary Army (NRA) with ranks of second lieutenants and above. We cross-check the omissions and errors in the Roster against the appointment orders in the Nationalist Government Gazette and compile the personal information of all officers with an official rank of colonel or higher conferred by the Nationalist Government as of December 31, 1936, for a total of 2,827 officers. Appendix B.1 provides details of the coding methods.

Next, to identify officers' career trajectories over the years, we utilize the *Register of Officers' Service Records* (hereafter referred to as the Register) compiled by the General Headquarters of the Army in 1944 and 1946 to obtain the officers' positions and corresponding ranks in 1944 and 1945, as well as the time when they received those positions and ranks. In this way, we can also recover an officer's previous years of service from the time of his appointment. On average, in the 1946 Register, an officer's positional rank had remained unchanged for 1.7 years, while his official rank had remained unchanged for 6.2 years. Appendix B.2 provides the details of our coding methods. Since the 1944 and 1946 Registers documented only officers with a positional rank of major general or above,⁴ the final sample excludes lower-ranking officers.

We also define cohorts of military officers based on shared features and experiences. In this paper, we focus on the following four definitions: (1) officers from the same hometown, (2) officers from the same military academy, (3) officers from the same type of position,

⁴Since we only collect officers with an official rank of colonel or higher from the primary source, the Roster, the average gap between the official rank and the positional rank is approximately one in our sample.

and (4) officers who share similar career stages. Details of the definitions can be found in Appendix E.1.

In total, we collect biographical information on the careers of 2,501 military officers in 1936-1945, which accounted for 88.5% of the total sample. Among them, 268 people died or withdrew from the military before the Second Sino-Japanese War. Therefore, a total of 2,233 military officers are covered in our sample. Descriptive statistics of basic information for matched officers are in Column B of Table 1.

3.2 Promotions

As mentioned in Section 2, the promotions of KMT officers can be categorized into official and positional ranks promotions. We confirm the rank and time of all officers' official and positional rank promotions in our sample based on the appointment orders in the Nationalist Government Gazettes. Appendix C.1 provides the coding details. For official ranks, between January 1, 1937, and August 15, 1945, 575 officers received official rank promotions, of whom five were promoted twice. In addition, two were demoted. The Wang Jingwei puppet regime also issued the Nationalist Government Gazette from 1943 onwards, from which we also collected the official promotion records of officers in the Wang regime. In our sample, by the fall of the Wang regime, 33 officers had been promoted in official rank, with one officer being promoted twice. We define a variable, *Promotion-official*, to track the status of whether promotions in official ranks took place, which takes the value of 1 for promotion, 0 for non-promotion, and -1 for demotion.

Moreover, we track the changes in positional ranks documented in the Books and supplementary materials to construct an alternative, more war-time-specific measure of promotion status, *promotion-positional*, which, again, takes the value of 1 for promotion, 0 for non-promotion, and -1 for demotion. The coding details are provided in Appendix C.2.⁵ In total, we identify the promotion status of 1,854 officers in the Chiang regime (83.0% of the corresponding sample) and 79 officers in the Wang regime (92.9% of the corresponding sam-

⁵As noted in the historical background, we also include the changes for senior officers, such as lieutenant generals, to more influential positions as positional rank promotions because of the limited quota of top ranks of generals. In doing so, we aim to reflect the nature of frequent position changes during wartime.

ple). Among them, 1,434 officers in the Chiang regime and 49 officers in the Wang regime received promotions in positional rank between January 1, 1937, and August 15, 1945.

The descriptive statistics are presented in Table C.1, where promotion status is measured using both official and positional ranks. Specifically, the promotion status of defected officers before defection is reported in Table C.2. The following section details the construction of the data for defected officers.

3.3 Defections

To compile the list of military officers who defected to the pro-Japan Wang regime, we consult the lists of defecting generals recorded in the official archives of the Kuomintang and the Chinese Communist Party, with supplementary materials detailed in Appendix D.1. The list includes those who defected to the Wang regime and then returned to the KMT before the end of the war. In total, out of the 2,233 officers with the official rank of colonel and above, 85 were recognized as defectors to Wang’s puppet regime, accounting for 3.8%. No individual was expressly dismissed before defection.⁶ Figure D.1 shows the number of defectors per year. The summary statistics are presented in Table C.1.

4 Empirical Strategies and Results

4.1 Empirical Strategies

We use career-path data on 2,233 senior officers of the National Revolutionary Army (NRA) from 1936 to 1945 to examine defections of KMT officers to the pro-Japanese Wang Jingwei regime. The baseline econometric specification is set as the following logistic form:

$$\log\left(\frac{p_{i,t}}{1-p_{i,t}}\right) = \alpha + \beta \cdot \text{Recognition}_{i,t} + \gamma \cdot X_i + \delta \cdot Z_{i,t} + \theta_t + \epsilon_{i,t} \quad (1)$$

In the equation, $p_{i,t}$ is a dummy variable indicating whether officer i defected to Wang’s regime in year t , $\frac{p_{i,t}}{1-p_{i,t}}$ is thus the odds of defection; $\text{Recognition}_{i,t}$ is a variable indicating

⁶10 of the defectors had no military position.

whether KMT promoted officer i in year t . As introduced in the data section, we track two related promotion measures, *Promotion-official*, and *Promotion-positional*. X_i is a series of time-invariant control variables, and $Z_{i,t}$ is a series of time-variant control variables, both elaborated below. θ_t is the time fixed effect. $\epsilon_{i,t}$ represents the error term.

4.2 Baseline Results

We present the baseline results in Table 2. In Column 1, we measure internal recognition using individual promotions proxied by promotions in official ranks. We further report the results for positional rank promotions in Column 2. Results in both columns confirm that the slow pace in individual promotions - thus lower internal recognition - predicts a higher likelihood for KMT senior officers to defect to the pro-Japan Wang regime.

Columns 3-4 further control a series of officers' features. First, we control the age of military officers. Age has multiple effects on defection decisions and may yield divergent implications. For example, older officers had more established social networks and longer service records, which may have discouraged defection. Meanwhile, older officers may have limited room for future promotion, thereby incentivizing defections. Second, we use the officers' 1936 (initial) ranks as a proxy for individual capability. Third, we control for whether an officer had overseas experience in Japan as a proxy for familiarity with their enemies' language and culture. Fourth, we control for whether an officer graduated from the Whampoa Military Academy, as Whampoa was renowned for its patriotic education and emphasis on loyalty toward the supreme leader (Chiang Kai-shek, in this case). Relatedly, we also control for whether an officer's hometown was in Zhejiang province, which was Chiang Kai-shek's home province, as patronage was more likely among fellow townsmen. Fifth, we control for whether an officer's hometown was in Northern China, as Northern officers had a long-standing reputation for being distant from the KMT central leadership (Luo, 2000).⁷ Lastly, we control the number of defecting hometown acquaintances and schoolmates in the given year for the officer. We also control the Year fixed effects and present the results in Columns 5-7 of Table 2.

⁷Northern China was defined as the collection of Heilongjiang, Liaoning, Jilin, Hebei, Shandong, Shanxi, Chahar, Suiyuan, Rehe (Jehol), and Henan.

Two sets of findings emerge. First, the baseline result remains robust across all columns. For both official and positional rank promotions, a slower pace of promotion is associated with a higher probability of defection after controlling for these individual features. Regarding magnitudes, promotion incentives – regardless of official or positional measures – have the most substantial impact on defection probabilities compared to all control variables. For example, in Column 5 of Table 2, the coefficient of promotion in official ranks is -2.717, equivalent to a ratio (0.066) of odds of defection when being promoted in official ranks over that when not being promoted. Since the probability of defection is very small,⁸ the odds of defection are approximately the probability of defection; therefore, the probability of defection decreased by 93.4% due to promotion in official rank.

Moreover, when including both measures of individual promotions in Column 7 of Table 2, the effect for official rank, though remaining negative, has been absorbed by that of positional ranks. This suggests that the material benefits reflected in the salary increases with positional changes matter more than the title benefits reflected in official rank changes for defection choices.

Second, regarding the individual features, we find that internal identity, peer influence, and external recognition jointly and substantially influence defection incentives. Internally, northern officers who were distant from the KMT central leadership were substantially more likely to defect.⁹ Moreover, more defectors among peers also encourage defection. Externally, studying experience in Japan significantly increases the probability of defection. We elaborate on the impact of peer and external recognition in the following sections.

Controls for Loyalty Culture. Stronger loyalty traditions in an officer’s hometown might discourage defection through shared values. Thus, we collect data on the presence of hometown loyalty culture along several dimensions: presence of Confucian temples, Loyalty temples, and Guanyu temples in the officer’s hometown (Mu, 1934), records of Ming loyalists (Sun, 1985), and records of Ming martyrs who resisted the Qing conquest (Qu, 1947), and

⁸The fraction of defectors among the officials who were never promoted in official rank during wartime was around 4.9‰.

⁹Notably, whether an officer was a Whampoa graduate had a limited impact on defection choices. We argue that this may be because many Whampoa graduates were from southern China, and thus the effect was absorbed by the control of northern China identities.

show that none of these hometown loyalty measures significantly predict defection once officers' promotion status is controlled for, confirming that our baseline results are robust to the inclusion of loyalty-related controls. Meanwhile, we control for whether an officer received political education during their studies at the military academy. Interestingly, the effect is significant standalone, but becomes insignificant when interacting with promotion status, suggesting that political education on loyalty played an independent role in discouraging defection. The results can be found in Appendix Table A.1.

Robustness Checks. We perform three sets of robustness checks of our baseline results. First, we show that the baseline results are robust across a series of alternative econometric models. Second, we address the missing variables concern that the self-perception of military officers might be a driver of defection. Third, we address the measurement error in our definitions of promotions. Our findings remain robust throughout the robustness checks included in Appendix E.2.

4.3 Relative Recognition Among Peers

Beyond individual promotion outcomes, the perception of being under-promoted may stem from peer comparisons within the same cohort. Specifically, we highlight two types of relative performance cohort impact. First, we examine the effects of hometown and schoolmates. If an officer is underpromoted compared to his fellow schoolmates or hometown acquaintances, he is more likely to be prone to defection. Second, we examine positional heterogeneity in defection incentives: Officers at the battlefield were more likely to engage in communication with the enemy; thus, they were more likely to receive defection offers than their back-office colleagues; relatedly, officers compare with colleagues in similar career stages to determine whether they are under-recognized. In what follows, we examine these relative performance impacts.

Impact of Hometown and Schoolmates. We refer to hometown acquaintances as the group of officers who share the same hometown, i.e., the same county in the same province. Meanwhile, we refer to schoolmates as officers who graduated from the same

military academy. The measure for relative performance is defined as follows:

$$RePromotion_{i,t} = Promotion_{i,t} - CohortPromotion_{i,t} \quad (2)$$

In the equation, $Promotion_{i,t}$ is a variable indicating whether a military officer i was promoted in official or positional ranks in year t . $CohortPromotion_{i,t}$ is a dummy variable indicating the promotion pace for officer i 's cohort in year t . In the baseline analysis for relative promotion, if all other officers in the cohort were promoted, then $CohortPromotion_{i,t}$ equals 1, indicating the cohort is a fast-paced group. Otherwise, $CohortPromotion_{i,t}$ equals 0, indicating a slow-paced cohort. Consequently, $RePromotion_{i,t}$ becomes the measure of the relative pace of promotion. Intuitively, when an officer is in a fast-paced cohort and receives a promotion, his relative pace – and thus his perception of being under- or over-promoted – is 0, as everyone around him also gets a promotion. However, if an officer in a fast-paced cohort does not receive a promotion, he should have a strong perception of being under-promoted. Thus, his relative promotion measure equals -1. Similarly, if an officer is in a slow-paced cohort, a promotion yields a relative promotion measure of 1, while a non-promotion yields a relative measure of 0.

We replace the independent variable in equation (1) with the above relative promotion measures and present the results in Columns 1-4 of Table 3. Columns 1 and 3 examine the impact of relative official rank promotion in hometown and school cohorts, while Columns 2 and 4 examine the impact of relative positional rank promotion. The results indicate that, regardless of the promotion method, higher relative promotion measures in both cohorts predict lower defection probabilities, with magnitudes comparable to those in the baseline. The results indicate that relative promotion rewards with peers in the same hometown and school significantly shape incentives to defect.¹⁰

Battle-front vs. Back-office. Peer comparison occurs beyond hometowns and schools. Specifically, officers on the battlefield often consider their colleagues there to be their peers.

¹⁰Appendix Table A.7 and Appendix Table A.8 present the results under alternate definitions of fast-paced cohorts, as the group having at least one fellow officer promoted and having more than half of fellow officers promoted, respectively. Our findings remain robust.

Similarly, back-office staff compare their relative performance with other back-office staff. We report the results in Column 5 of Table 3. Due to sample limitations, the relative promotion of official ranks was omitted in the regression analysis, so we only used the relative promotion of positional ranks. The result is similar to those in Columns 2 and 4: higher relative promotion rewards among peers significantly predict lower defection probabilities. Regarding magnitudes, the peer effect of battle-front vs. back-office is stronger than that of shared hometowns or schoolmates. This indicates that peer comparison is more effective than comparison with colleagues.¹¹

In Columns 1-2 of Appendix Table A.10, we further examine the impact of individual (absolute) promotion on defection decisions for the back-office subsample and the battle-front subsample, respectively. The results show that individual (absolute) promotion incentives affect officers at both the frontline and the back offices, but the effect is much stronger in the frontline – probably because officers at the back offices were not in direct or frequent contact with the Japanese or the Wang regime. Thus, the costs of defection were high.

Career Stages. Officers often regard colleagues with similar lengths of military service as their peers. To capture heterogeneity in relative performance measures across career stages, we categorize officers into three groups based on their total years of service since the establishment of the Guangzhou Nationalist Government in 1925: (i) officers with fewer than 15 years of service; (ii) officers with 15–20 years of service; and (iii) officers with more than 20 years of service. We treat officers within the same service-length category as peers and examine the effect of their relative promotion measures on defection decisions. Similarly, the relative promotion of official ranks was omitted in the regression analysis, so we only used the relative promotion of positional ranks. The results are reported in Column 6 of Table 3: higher relative promotion rewards among peers are significantly associated with lower probabilities of defection. In terms of magnitude, the peer effect based on service-length cohorts is the same as the effect of battle-front vs. back-office; this may be due to the

¹¹Appendix Table A.9 presents the results under alternative definitions of fast-pace cohorts: the group with at least one fellow officer promoted, and the group with more than half of fellow officers promoted, respectively.

limited number of categories, so the average promotion speed of officers in the battle front vs. back office and career stages is coincidentally equal.¹²

Columns 3-5 of Appendix Table A.10 further examines the impact of individual (absolute) promotion on defection decisions for each service-length subsample. The results indicate that absolute promotion incentives are most salient for officers at the shortest and longest service lengths. In contrast, they have no statistically significant effect on those at intermediate service lengths. This pattern may reflect the fact that junior officers face intense competition for early-career advancement, whereas senior officers, approaching the top of the hierarchy, are highly responsive to any remaining promotion opportunities. By contrast, mid-career officers may perceive fewer immediate prospects for advancement and therefore respond less strongly to such incentives.

4.4 External Recognition: Defectors' Career Prospects

The baseline results indicate that officers who studied in Japan were more likely to defect to the pro-Japan Wang regime, thus suggesting that foreign exposure might facilitate military defection.¹³ In this section, we further elaborate on the role of external recognition in shaping defection decisions. External recognition relies on the cost-benefit analysis of the external return after defection. Intuitively, when the defecting destination makes greater efforts to accommodate previous defectors, the expected benefit of defection increases.

For a KMT officer considering defection, the career trajectories of previous defectors can serve as an important benchmark. To examine this empirically, we reconstruct our key independent variable in two alternative ways and replicate the baseline analysis. First, following the approach in Section 4.3, we redefine the independent variable as the relative promotion pace—measured by both official and positional ranks—of defectors within the schoolmate cohort. Consequently, we construct two new variables, *DefectPromotion – official – relative*

¹²Appendix Table A.11 presents the results under alternative definitions of fast-pace cohorts: the group having at least one fellow officer promoted, and the group having more than half of fellow officers promoted, respectively. Similarly, due to the limited number of categories, the average promotion speed of officers across the battle front and back office, and across career stages, is coincidentally equal.

¹³Interestingly, as we show in Appendix Table A.12, non-Japan foreign exposure has a limited impact on defection choices. Thus, better local knowledge of Japan – regarding language, culture, or other aspects, rather than generic foreign exposure or unequal treatment for foreign-trained officers, incentivizes defection.

and *DefectPromotion – positional – relative*, where higher values indicate better career advancement for the officer relative to defectors. The results, reported in Columns 1–3 of Table 4, show that when defectors in the enemy regime enjoy better career prospects, the likelihood of defection increases.

Second, we directly measure the absolute difference in promotion pace between a KMT officer and the average pace of defectors in his schoolmate cohort. This yields two additional variables, *DefectPromotion – official – absolute* and *DefectPromotion – positional – absolute*, with results presented in Columns 4–6 of Table 4. Consistent with the relative measure, larger absolute promotion advantages for defectors are associated with higher probabilities of defection.¹⁴

5 Identification: Large-Scale Defeats

To further strengthen the causal relationship between organizational recognition and defection, an ideal design entails that a group of military officers - randomly mixed with well-recognized and under-recognized ones - encounter an unanticipated event that requires them to choose between defection and retention of loyalty. If our baseline finding holds, we expect under-recognized officers to be more prone to defection.

In the context of the Sino-Japanese war, the loyalty changes after large-scale battles offer a valuable opportunity to implement this design. In the same large-scale battle, especially after the KMT’s defeat, every officer faced a dilemma about whether to defect. We focus on combats with unanticipated Japanese assaults, which limited the room for strategic deployment of KMT forces. We then separate the officers into two groups, the well-recognized group and the under-recognized group. Moreover, officers fighting in the same large-scale battle tended to have similar status, risk factors, and decision windows regarding defection choices, thus making the two groups comparable in many aspects except for organizational recognition.

Specifically, we restrict our attention to three large-scale battles in which the KMT

¹⁴Consistent with the relative measure, we also redefine fast-pace cohorts as the group with at least one colleague promoted, and with more than half of the members promoted. The results are shown in Appendix Table A.13.

forces were heavily defeated in unanticipated Japanese-initiated assaults with substantial casualties: 1. Battle of Madang-Hukou in July-August, 1938 (马当湖口战斗); 2. Battle of Zhongtiaoshan in May 1941 (中条山战役); 3. Combats of South Taihang from April to July, 1943 (南太行游击区扫荡战). All three battles were confined to concentrated battlefields and ended in relatively short periods, thus creating highly intense decision windows for defection choices, which consequently determined life and death. For example, in the Battle of Zhongtiaoshan, 160,000 KMT soldiers were involved in the fights, ending with 60,000 casualties. Among the 47 high-ranked officers in the battle, seven died and three defected upon defeat. Notably, none of these three defectors received a promotion in the most recent year.

In sum, there were 104 officers in all three battles, and eight defected upon defeat. We define our treatment group as those recently promoted (i.e., promoted in the most recent year) among these 104 officers, with the rest as the control group. We expect the treatment group, representing those well-recognized in the organization, to have a lower likelihood of defection upon defeat.

Since each of the three battles lasted short periods and in distinctive years, we follow a panel data econometric specification as follows:

$$\log\left(\frac{p_i}{1-p_i}\right) = \alpha + \beta \cdot \text{Recognition}_i + \gamma \cdot X_i + \epsilon_i \quad (3)$$

In the equation, p_i is the indicator of defection. Recognition_i tracks whether the officer received a promotion from the previous year's first day to the date of the battle. X_i captures the time-invariant control variables, such as the official ranks of officers in 1936, their military academy, and their places of origin. We report the results in Table 5. As shown in Column 1 of the table, the treatment group had a significantly lower likelihood of defection, consistent with our baseline findings. The results are also robust to various alternative estimation models presented in Columns 2-5. Thus, analyzing large-scale battle defeats consolidates the causal relationship between organizational recognition and defection.

6 Discussion

It should be noted that defection is not the only wartime exit for military officers. During the war, 516 officers (23.1% of the sample) left the National Revolutionary Army for reasons other than defection. Appendix Table A.14 and A.15 present the results for the impact of official-rank and positional-rank promotion on alternate exits, where we find that promotions significantly increase departure from current office — possibly because higher-ranked officers have better alternative career opportunities or can negotiate favorable wartime transfers. We leave the broader analysis of exit-option comparisons for future work.

More broadly, we intend to highlight the multiple triggers and reasons for entering, exiting, and switching organizations, where insights from military defections may shed light on. For example, employees job-hop for career advancement (Huang and Zhang, 2016); athletes transfer to a new team for titles and better training facilities (Kramer, 2023); and migrants move to a new country for better lives (Docquier and Rapoport, 2012). From an organization’s perspective, most organizations strive to cultivate and retain loyal participants: countries honor patriots (Ager et al., 2022), whereas airlines and hotels launch membership programs (Dowling and Uncles, 1997; Lederman, 2007). It is also well-established in the existing literature that social integration and mutual recognition play important roles in defections (e.g., Westphal and Zajac, 1997), brain drain (e.g., Docquier and Rapoport, 2012), and corporate turnovers (O’Reilly III et al., 1989). Classical organizational economics literature also suggests that promotions are useful incentives for shaping organizational loyalty (Lazear, 1979; Gibbons, 1998). We add to the discussion by highlighting that sufficient career incentives – especially in relative terms, and both internally and externally – are key determinants of changes in loyalty.

7 Conclusion

Defections in war are extreme forms of changes in loyalty. Using a novel dataset of career paths for over 2,800 high-ranking Nationalist (KMT) military officers during World War II, we examine cases of defection to the Japanese puppet regime and show that organi-

zational recognition helps explain why military officers might betray their motherland to serve the invaders. Specifically, when officers experienced internal under-recognition, such as marginalization of power, status, or benefits, they were more likely to defect. Empirically, we show that high-ranking KMT officers who advanced more slowly, in either absolute or relative terms, were more likely to defect. Conversely, better prospects of external recognition encouraged defection. We show that better career advancement among previous defectors encouraged their peers in the KMT to defect. Thus, the paper highlights the coexistence of internal and external motivations in the formation of loyalty. It underscores the importance of absolute and relative performance-based rewards in generating high-powered organizational incentives.

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Figures and Tables

Table 1: Descriptive Statistics of Officer Basic Information

Samples	A. All			B. Matched		
	N	Mean	Std	N	Mean	Std
Schools Attended	2,827	1.763	1.086	2,501	1.856	1.120
Age in 1937	2,827	43.126	5.764	2,501	43.257	5.771
	N			N		
Officers	2,827			2,501		
General	44			44		
Lieutenant General	298			296		
Major General	940			923		
Colonel	1,545			1,238		
Place of Origin						
Province	26			26		
County	894			843		
Students						
Baoding Academy	1,115			1,066		
Army University	660			652		
Whampoa Academy	360			340		
Overseas Study						
Japan	283			277		
Other Countries	65			54		

Notes: This table presents descriptive statistics of personal basic information for senior KMT officers. Column A provides statistics for all officers with official ranks of colonel and above as of 1936, while column B presents statistics for officers with a matched career history in this study. Data sources are detailed in Section 3.1 and Appendix B.

Table 2: The Impact of Individual Promotion on Defection: Baseline

Variables	<i>Defection</i>						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Promotion-official	-2.951*** (0.411)		-2.769*** (0.416)		-2.717*** (0.403)		-0.654 (0.593)
Promotion-positional		-2.210*** (0.357)		-2.213*** (0.437)		-2.162*** (0.436)	-2.087*** (0.475)
Age			0.043* (0.023)	0.030 (0.023)	0.058** (0.024)	0.049** (0.024)	0.049** (0.024)
Origin-rank			0.083 (0.130)	0.087 (0.129)	0.031 (0.137)	0.040 (0.131)	0.039 (0.131)
Japan			1.006*** (0.300)	1.098*** (0.307)	0.894*** (0.285)	1.014*** (0.298)	1.015*** (0.298)
Whampoa			-0.295 (0.498)	-0.465 (0.539)	-0.245 (0.483)	-0.379 (0.542)	-0.376 (0.542)
Zhejiang			-0.437 (0.622)	-0.202 (0.611)	-0.398 (0.601)	-0.189 (0.607)	-0.188 (0.608)
NorthChina			0.875*** (0.258)	0.842*** (0.266)	0.853*** (0.234)	0.855*** (0.243)	0.855*** (0.242)
Defection-hometown			0.650** (0.274)	0.709** (0.275)	0.477** (0.236)	0.547** (0.231)	0.545** (0.232)
Defection-school			0.082*** (0.021)	0.074*** (0.021)	0.027 (0.022)	0.026 (0.023)	0.026 (0.023)
Year FE	NO	NO	NO	NO	YES	YES	YES
Constant	-5.714*** (0.672)	-5.287*** (0.753)	-8.958*** (1.571)	-7.643*** (1.617)	-9.085*** (1.481)	-8.200*** (1.303)	-8.196*** (1.299)
Observations	17,866	14,619	17,866	14,619	17,866	14,619	14,619
Number of ID	2,233	1,859	2,233	1,859	2,233	1,859	1,859

Notes: This table reports the regression results regarding the absolute promotion speed in Equation 1. *Promotion-official* is a variable indicating whether the officer's official rank was promoted in the current year; *Promotion-positional* is a variable indicating whether the officer's positional rank was promoted in the current year; *Origin Rank* represents the official rank of each officer as of December 31, 1936; *Japan* is a dummy variable indicating whether the officer studied in Japan before the war; *Whampoa* is a dummy variable indicating whether the officer attended the Whampoa Military Academy. *Zhejiang* and *NorthChina* are dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China, respectively. *Defection-hometown* and *Defection-school* represent the number of hometown acquaintances and schoolmates who defected in the given year. Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 3: The Impact of Relative Promotion on Defection

	<i>Hometown</i>		<i>School</i>		<i>Front-Back</i>	<i>Seniority</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)
Promotion-official-hometown	-1.541** (0.630)					
Promotion-positional-hometown		-1.058*** (0.334)				
Promotion-official-school			-2.400*** (0.229)			
Promotion-positional-school				-1.979*** (0.375)		
Promotion-positional-front					-2.749*** (1.024)	
Promotion-positional-senior						-2.749*** (1.024)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Constant	-9.320*** (2.489)	-10.048*** (2.086)	-8.977*** (1.457)	-7.782*** (1.346)	-8.102*** (1.244)	-8.102*** (1.244)
Observations	13,360	10,542	17,162	13,926	14,619	14,619
Number of ID	1,866	1,498	2,145	1,772	1,859	1,859

Notes: This table presents the regression results regarding the relative promotion speed in Equation 2, where the fast-paced group is defined as all promoted colleagues. *Promotion-official-hometown* and *Promotion-positional-hometown* measure the officer's relative promotion speed in official and positional ranks compared to hometown peers in the current year, respectively. *Promotion-official-school* and *Promotion-positional-school* measure the officer's relative promotion speed in official and positional ranks compared to schoolmates in the current year, respectively. *Promotion-positional-front* measures the officer's relative promotion speed in positional ranks compared to colleagues in the same battle-front or back-office category. *Promotion-positional-senior* measures the officer's relative promotion speed in positional ranks compared to colleagues in the same service-length category. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 4: The Impact of Promotion on Defection: The Influence of Defectors

Variables	<i>Defection</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
DefectPromotion-official-relative	-1.927*** (0.335)		-0.872** (0.426)			
DefectPromotion-positional-relative		-1.036*** (0.259)	-0.982*** (0.272)			
DefectPromotion-official-absolute				-2.073*** (0.764)		-0.427 (0.771)
DefectPromotion-positional-absolute					-1.489*** (0.311)	-1.450*** (0.329)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Constant	-8.784*** (1.339)	-8.658*** (1.470)	-8.597*** (1.470)	-8.732*** (1.283)	-9.031*** (1.300)	-8.981*** (1.312)
Observations	14,080	11,140	11,140	14,080	11,140	11,140
Number of ID	1,801	1,448	1,448	1,801	1,448	1,448

Notes: This table presents the regression results regarding the career prospects of defectors in the schoolmate cohort. *DefectPromotion-official-relative* and *DefectPromotion-positional-relative* measure the promotion pace of defectors in the schoolmate cohort relative to the officer in official and positional ranks, respectively. *DefectPromotion-official-absolute* and *DefectPromotion-positional-absolute* measure the absolute difference in promotion pace between the average defector in the schoolmate cohort and the officer in official and positional ranks, respectively. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 5: The Impact of Promotion on Defection: Large-Scale War as a Natural Experiment

	(1)	(2)	(3)	(4)	(5)
Variables	<i>logit</i>	<i>probit</i>	<i>cox-hazard</i>	<i>cloglog</i>	<i>nbreg</i>
Promotion-positional	-1.296** (0.633)	-0.773** (0.358)	-1.057** (0.477)	-1.061** (0.513)	-1.057** (0.477)
Controls	YES	YES	YES	YES	YES
Constant	-0.398 (3.597)	-0.143 (1.941)		-1.174 (3.257)	-0.761 (2.467)
Observations	104	104	104	104	104

Notes: This table presents the regression results using large-scale battle defeats as a natural experiment, following Equation 3, estimated using alternative econometric models to ensure robustness. Column 1 reports results from a logit model, Column 2 from a probit model, Column 3 from a Cox proportional hazards model, Column 4 from a complementary log-log model, and Column 5 from a negative binomial regression model. *Promotion-positional* is a variable indicating whether the officer's positional rank was promoted in the year prior to the battle. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Appendix

A Additional Figures and Tables

Table A.1: The Impact of Promotion on Defection: The Influence of Loyalty Background

Variables	Defection					
	(1)	(2)	(3)	(4)	(5)	(6)
	Confucian temple	Loyalty temple	Guanyu temple	Loyalists of Ming	Martyrs of Ming	Politics course
Promotion-positional	-2.507*** (0.220)	-2.709*** (0.273)	-2.156*** (0.439)	-1.997*** (0.506)	-2.025*** (0.531)	-2.149*** (0.494)
Confucian temple	0.159 (0.237)					
Promotion-positional*Confucian temple	0.809 (0.836)					
Loyalty temple		-0.067 (0.242)				
Promotion-positional*Loyalty temple		1.241 (0.791)				
Guanyu temple			-0.898 (1.007)			
Promotion-positional*Guanyu temple			-0.719 (0.733)			
Loyalists of Ming				0.409 (0.284)		
Promotion-positional*Loyalists of Ming				-1.010* (0.556)		
Martyrs of Ming					0.300 (0.263)	
Promotion-positional*Martyrs of Ming					-0.567 (0.534)	
Politics course						-20.186*** (0.554)
Promotion-positional*Politics course						-0.028 (0.527)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Constant	-8.271*** (1.316)	-8.184*** (1.352)	-8.209*** (1.309)	-8.207*** (1.278)	-8.256*** (1.320)	-8.105*** (1.291)
Observations	14,619	14,619	14,619	14,619	14,619	14,619
Number of ID	1,859	1,859	1,859	1,859	1,859	1,859

Notes: This table presents the regression results regarding the impact of hometown loyalty culture on the relationship between promotion and defection. *Promotion-positional* is an indicator variable indicating whether the officer's positional rank was promoted in the current year. *Confucian temple*, *Loyalty temple*, and *Guanyu temple* represent the number of Confucian temples, loyalty temples, and Guanyu temples built in officers' hometowns, respectively. *Loyalists of Ming* is the number of loyal ministers in the Ming Dynasty who were from the officers' hometown. *Martyrs of Ming* is the number of Ming loyalists who resisted the Qing conquest in the officer's hometown during the Ming–Qing transition. *Politics course* is a dummy variable indicating whether the officer has received political education while studying at the military academy. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.2: The Impact of Individual Promotion on Defection: Alternate Models (1)

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	xtprobit	xtprobit	relogit	relogit	cox-hazard	cox-hazard
Promotion-official	-1.009*** (0.188)		-2.475*** (0.381)		-2.686*** (0.388)	
Promotion-positional		-0.754*** (0.195)		-2.109*** (0.419)		-2.137*** (0.419)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Constant	-3.885*** (0.644)	-3.626*** (0.652)	-8.065*** (1.077)	-7.337*** (1.105)		
Observations	17,866	14,619	17,866	14,619	17,851	14,604
Number of ID	2,233	1,859			2,233	1,859

Note: This table presents the regression results using alternative econometric models. Columns 1–2 report results from a random-effects probit model (xtprobit), Columns 3–4 from a rare-events logit model (relogit), and Columns 5–6 from a Cox proportional hazards model. *Promotion-official* is a variable indicating whether the officer’s official rank was promoted in the current year; *Promotion-positional* is a variable indicating whether the officer’s positional rank was promoted in the current year. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer’s hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.3: The Impact of Individual Promotion on Defection: Alternate Models (2)

	(1)	(2)	(3)	(4)
Variables	cloglog	cloglog	nbreg	nbreg
Promotion-official	-2.687*** (0.391)		-2.686*** (0.388)	
Promotion-positional		-2.141*** (0.418)		-2.138*** (0.418)
Controls	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Constant	-9.070*** (1.112)	-8.181*** (1.128)	-9.049*** (1.086)	-8.161*** (1.095)
Observations	17,866	14,619	17,866	14,619

This table presents the regression results using alternative econometric models. Columns 1–2 report results from a complementary log-log model (cloglog), and Columns 3–4 from a negative binomial regression model (nbreg). *Promotion-official* is a variable indicating whether the officer’s official rank was promoted in the current year; *Promotion-positional* is a variable indicating whether the officer’s positional rank was promoted in the current year. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer’s hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.4: The Impact of Absolute Promotion on Defection: Missing Variable

Variables	<i>Defection</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion-official	-3.400*** (0.737)		-2.715*** (0.403)		-2.616*** (0.456)	
Promotion-positional		-1.620* (0.978)		-2.171*** (0.440)		-2.127*** (0.432)
Seniority	-0.312*** (0.079)	-0.318*** (0.065)				
Medal			0.083 (0.370)	0.217 (0.386)		
Defection-hometown-sum					0.166 (0.138)	0.155 (0.142)
Defection-school-sum					0.020 (0.014)	0.023* (0.013)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Constant	-7.579*** (2.585)	-7.403*** (2.614)	-9.046*** (1.452)	-8.087*** (1.240)	-9.057** (3.838)	-8.156*** (1.770)
Observations	10,142	8,088	17,866	14,619	17,866	14,619
Number of ID	1,518	1,221	2,233	1,859	2,233	1,859

Notes: This table presents the regression results addressing the missing variable concern. *Promotion-official* is a variable indicating whether the officer's official rank was promoted in the current year; *Promotion-positional* is a variable indicating whether the officer's positional rank was promoted in the current year. *Seniority* measures the officer's total years of service since July 1, 1925. *Medal* is a dummy variable indicating whether the officer received a medal prior to the war. *Defection-hometown-sum* and *Defection-school-sum* denote the cumulative number of defectors among the officer's hometown acquaintances and schoolmates from 1937 to the current year, respectively. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.5: The Impact of Absolute Promotion on Defection: Measurement Error (1)

Variables	<i>Defection</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
L.Promotion-official	-3.410*** (0.581)		-4.969*** (0.825)			
L.Promotion-positional		-0.887** (0.414)		-0.900** (0.420)		
Promotion-official			-3.126*** (0.549)			
Promotion-positional				-2.049*** (0.516)		
Promotion-official-sum					-1.005*** (0.399)	
Promotion-positional-sum						-0.349** (0.164)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Constant	-8.189*** (1.254)	-7.865*** (1.340)	-8.107*** (1.223)	-7.430*** (1.396)	-8.862*** (1.378)	-8.783*** (2.088)
Observations	15,632	12,759	15,632	12,759	17,866	17,866
Number of ID	2,154	1,780	2,154	1,780	2,233	2,233

Notes: This table reports the regression results considering measurement errors. *L.Promotion-official* is a variable indicating whether the officer's official rank was promoted in the previous year; *L.Promotion-positional* is a variable indicating whether the officer's positional rank was promoted in the previous year; *Promotion-official* is a variable indicating whether the officer's official rank was promoted in the current year; *Promotion-positional* is a variable indicating whether the officer's positional rank was promoted in the current year; *Promotion-official-sum* represents the cumulative times of official rank promotion for the officer from 1937 to the current year; *Promotion-positional-sum* represents the cumulative times of positional rank promotion for the officer from 1937 to the current year. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.6: The Impact of Absolute Promotion on Defection: Measurement Error (2)

Variables	<i>Defection</i>			
	(1)	(2)	(3)	(4)
Promotion-gap	-2.058*** (0.488)			
Years-since-promotion-official		0.320** (0.161)		0.259 (0.157)
Years-since-promotion-positional			0.155*** (0.069)	0.128** (0.058)
Controls	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Constant	-8.447*** (1.500)	-9.561*** (1.377)	-9.152*** (3.981)	-9.413*** (1.717)
Observations	14,619	17,866	17,866	17,866
Number of ID	1,859	2,233	2,233	2,233

Notes: This table reports the regression results considering measurement errors. *Promotion-gap* is the difference between *Promotion-positional* and *Promotion-official*. *Year-since-promotion-official* is the number of years since the officer's last official rank promotion. *Year-since-promotion-positional* is the number of years since the officer's last positional rank promotion. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.7: Hometown and School Cohort: One-person promotion

Variables	<i>Defection</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion-official-hometown	-0.379 (0.290)		-0.059 (0.360)			
Promotion-positional-hometown		-0.605*** (0.226)	-0.596*** (0.228)			
Promotion-official-school				-1.460*** (0.485)		-1.363** (0.566)
Promotion-positional-school					-2.996*** (1.019)	-2.753*** (1.030)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Constant	-9.491* (5.088)	-9.953** (4.424)	-9.973** (4.976)	-10.385*** (1.683)	-10.503*** (1.380)	-11.544*** (1.495)
Observations	13,360	10,542	10,542	17,162	13,926	13,926
Number of ID	1,866	1,498	1,498	2,145	1,772	1,772

Notes: This table presents the regression results for Equation 2 regarding the relative promotion speed, where the fast-paced group is defined as having at least one colleague promoted. *Promotion-official-hometown* and *Promotion-positional-hometown* measure the officer's relative promotion speed in official and positional ranks compared to hometown peers in the current year, respectively. *Promotion-official-school* and *Promotion-positional-school* measure the officer's relative promotion speed in official and positional ranks compared to schoolmates in the current year, respectively. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.8: Hometown and School Cohort: Half-promotion

Variables	<i>Defection</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion-official-hometown	-1.384** (0.585)		-0.230 (0.325)			
Promotion-positional-hometown		-0.791** (0.313)	-0.774** (0.337)			
Promotion-official-school				-2.240*** (0.192)		-1.415*** (0.304)
Promotion-positional-school					-1.522*** (0.281)	-1.450*** (0.290)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Constant	-9.345*** (2.299)	-9.698*** (3.542)	-9.689*** (3.489)	-8.977*** (1.474)	-8.278*** (1.861)	-8.230*** (1.734)
Observations	13,360	10,542	10,542	17,162	13,926	13,926
Number of ID	1,866	1,498	1,498	2,145	1,772	1,772

Notes: This table presents the regression results for Equation 2 regarding the relative promotion speed, where the fast-paced group is defined as having more than 50% of colleagues promoted. *Promotion-official-hometown* and *Promotion-positional-hometown* measure the officer's relative promotion speed in official and positional ranks compared to hometown peers in the current year, respectively. *Promotion-official-school* and *Promotion-positional-school* measure the officer's relative promotion speed in official and positional ranks compared to schoolmates in the current year, respectively. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.9: Battle-Front Cohort: One-person and Half promotion

Variables	<i>One-person promotion</i>			<i>Half promotion</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion-positional-front	-2.988*** (1.005)	-2.788*** (1.016)	-2.757*** (1.024)	-0.813*** (0.125)	-0.976*** (0.177)	-1.422*** (0.400)
Controls	NO	YES	YES	NO	YES	YES
Year FE	NO	NO	YES	NO	NO	YES
Constant	-7.997*** (1.368)	-10.209*** (1.827)	-10.854*** (1.442)	-5.170*** (0.520)	-8.048*** (1.969)	-9.226*** (1.845)
Observations	14,619	14,619	14,619	14,619	14,619	14,619
Number of ID	1,859	1,859	1,859	1,859	1,859	1,859

Notes: This table presents the regression results regarding the relative promotion speed among battle-front colleagues, following Equation 2, estimated under alternative definitions of the fast-paced cohort. Columns 1–3 define the fast-paced group as having at least one colleague promoted, and Columns 4–6 define the fast-paced group as having more than 50% of colleagues promoted. *Promotion-positional-front* measures the officer's relative promotion speed in positional ranks compared to colleagues in the same battle-front or back-office category. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses.

*** p<0.01, ** p<0.05, * p<0.1.

Table A.10: The Impact of Relative Promotion on Defection: Front-Back & Career Stages

Variables	<i>Front-Back</i>			<i>Career Stages</i>	
	(1)front=0	(2)front=1	(3)Seniority $\leq$ 14	(4) 15 $\leq$ Seniority < 20	(5)Seniority $\geq$ 20
Promotion-positional	-2.194*** (0.744)	-5.418*** (1.412)	-3.186*** (0.868)	0.202 (1.248)	-2.743*** (0.299)
Controls	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES
Constant	-20.458*** (5.477)	-12.841*** (4.875)	-5.381* (3.065)	-17.774*** (4.036)	-6.857*** (1.459)
Observations	5,664	4,061	1,025	2,113	7,094
Number of ID	1,075	929	242	448	903

Notes: This table presents the regression results regarding the impact of individual promotion on defection across subsamples defined by battle-front status and career stages. *Promotion-positional* is a variable indicating whether the officer's positional rank was promoted in the current year. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.11: Career Stages Cohort: One-person and Half promotion

Variables	<i>One-person promotion</i>			<i>Half promotion</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion-positional-senior	-2.988*** (1.005)	-2.788*** (1.016)	-2.757*** (1.024)	-0.813*** (0.125)	-0.976*** (0.177)	-1.422*** (0.400)
Controls	NO	YES	YES	NO	YES	YES
Year FE	NO	NO	YES	NO	NO	YES
Constant	-7.997*** (1.368)	-10.209*** (1.827)	-10.854*** (1.442)	-5.170*** (0.520)	-8.048*** (1.969)	-9.226*** (1.845)
Observations	14,619	14,619	14,619	14,619	14,619	14,619
Number of ID	1,859	1,859	1,859	1,859	1,859	1,859

Notes: This table presents the regression results regarding the relative promotion speed among battle-front colleagues, following Equation 2, estimated under alternative definitions of the fast-paced cohort. Columns 1–3 define the fast-paced group as having at least one colleague promoted, and Columns 4–6 define the fast-paced group as having more than 50% of colleagues promoted. *Promotion-positional-senior* measures the officer's relative promotion speed in positional ranks compared to colleagues in the same service-length category. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses.

*** p<0.01, ** p<0.05, * p<0.1.

Table A.12: The Impact of Japanese Exposure on Defection

Variables	<i>Defection</i>				
	(1)	(2)	(3)	(4)	(5)
Japan Exposure	0.886*** (0.332)		0.879*** (0.332)	0.886*** (0.271)	1.014*** (0.301)
Non-Japan Exposure		-0.559 (1.025)	-0.404 (1.024)	-0.389 (1.023)	0.004 (1.043)
Promotion-official				-2.711*** (0.404)	
Promotion-positional					-2.162*** (0.437)
Controls	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES
Constant	-9.258*** (2.109)	-9.528*** (1.110)	-9.249*** (2.065)	-9.078*** (1.462)	-8.200*** (1.300)
Observations	17,866	17,866	17,866	17,866	14,619
Number of ID	2,233	2,233	2,233	2,233	1,859

Notes: This table reports the regression results for the impact of foreign exposure. *Japan Exposure* is a dummy variable indicating whether the officer studied in Japan; *Non-Japan Exposure* is a dummy variable indicating whether the officer studied in countries other than Japan; *Promotion-official* is a variable indicating whether the officer's official rank was promoted in the current year; *Promotion-positional* is a variable indicating whether the officer's positional rank was promoted in the current year. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.13: The Influence of Defectors of School Cohort: One-person and Half promotion

Variables	<i>One-person promotion</i>			<i>Half promotion</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
DefectPromotion-official-relative	-0.642 (0.550)		-0.337 (0.645)	-1.927*** (0.335)		-1.024** (0.459)
DefectPromotion-positional- relative		-1.426*** (0.389)	-1.392*** (0.382)		-0.816*** (0.220)	-0.764*** (0.232)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Constant	-8.754*** (1.264)	-9.033*** (1.286)	-8.958*** (1.269)	-8.784*** (1.339)	-8.592*** (1.346)	-8.523*** (1.342)
Observations	14,080	11,140	11,140	14,080	11,140	11,140
Number of ID	1,801	1,448	1,448	1,801	1,448	1,448

Notes: This table presents the regression results regarding the career prospects of defectors in the schoolmate cohort, estimated under alternative definitions of the fast-paced cohort. Columns 1–3 define the fast-paced group as having at least one colleague promoted, and Columns 4–6 define the fast-paced group as having more than 50% of colleagues promoted. *DefectPromotion-official-relative* and *DefectPromotion-positional-relative* measure the promotion pace of defectors in the schoolmate cohort relative to the officer in official and positional ranks, respectively. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors are reported in parentheses.

*** p<0.01, ** p<0.05, * p<0.1.

Table A.14: The Impact of Promotion on Other Potential Outcomes: Official Rank

	(1)	(2)	(3)	(4)	(5)
Variables	<i>Defection</i>	<i>Departure</i>	<i>KIA</i>	<i>Removal</i>	<i>Transfer</i>
Promotion-official	-3.122*** (0.579)	0.909*** (0.327)	0.369 (0.456)	-27.639*** (2.090)	-12.973*** (0.737)
Controls	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES
Constant	-9.067*** (1.120)	-4.920*** (0.502)	-4.526*** (1.124)	-3.162*** (1.551)	-9.699*** (2.113)
Observations	17,866	17,866	17,866	17,866	17,866

Notes: This table presents the regression results regarding the impact of official rank promotion on alternative wartime exits. Column 1 reports results for defection to the puppet regime, Column 2 for departure from office, Column 3 for being killed in action, Column 4 for removal after legal violations, and Column 5 for transfer to government posts. *Promotion-official* is a variable indicating whether the officer's official rank was promoted in the current year. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.15: The Impact of Promotion on Other Potential Outcomes: Positional Rank

	(1)	(2)	(3)	(4)	(5)
Variables	<i>Defection</i>	<i>Departure</i>	<i>KIA</i>	<i>Removal</i>	<i>Transfer</i>
Promotion-positional	-2.136*** (0.437)	1.208*** (0.135)	0.677** (0.275)	-1.204 (1.009)	2.122* (1.287)
Controls	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES
Constant	-8.193*** (1.140)	-5.656*** (0.535)	-4.530*** (1.201)	-2.736* (1.431)	-12.047*** (1.780)
Observations	17,866	17,866	17,866	17,866	17,866

Notes: This table presents the regression results regarding the impact of positional rank promotion on alternative wartime exits. Column 1 reports results for defection to the puppet regime, Column 2 for departure from office, Column 3 for being killed in action, Column 4 for removal after legal violations, and Column 5 for transfer to government posts. *Promotion-positional* is a variable indicating whether the officer's positional rank was promoted in the current year. Control variables include age, the official rank of each officer as of December 31, 1936 (*Origin rank*), a dummy variable indicating whether the officer studied in Japan before the war (*Japan*), a dummy variable indicating whether the officer attended the Whampoa Military Academy (*Whampoa*), two dummy variables indicating whether the officer's hometown was in Zhejiang province or Northern China (*Zhejiang* and *NorthChina*), and the number of defecting hometown acquaintances and schoolmates in the given year (*Defection-hometown* and *Defection-school*). Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

B Senior Military Officers and Their Career Histories

B.1 Officer Basic Information

The *Roster of Army, Naval, and Air Force Officers* (hereafter referred to as the Roster) records basic biographical information for each officer. Figure B.1 presents an illustrative example.

Figure B.1: Illustration of Basic Officer Information in the Roster

王 肇	王 夢熊	王 薌庭	王 式垣	王 志遠	王 奇峯	王 士	王 校鵬	王 清瀚	姓	Name: WANG, Qinghan
二四、四、二二、	二五、二、七、	二五、二、四、	二四、四、二二、	二五、二、二七、	二四、四、一五、	二五、二、二七、	二五、二、二五、	二四、四、一六、	名	
									陸軍少將	Official Rank: Major General
									王	
步科	陸軍大學	輜重科	保定軍校三期	陸軍大學六期	陸軍檢閱使署	騎科	保定軍校八期	四川講武堂	學	Major: Logistics
四川軍校三期									保定軍校六期	School: Baoding Military Academy
									資	Class Year: 6
									出生	Date of Birth: 1898.7.5
前二七、四、二二、	前二二、九、一二、	前一六、五、一八、	前一七、四、一〇、	前一三、二、二二、	前一五、三、五、	前二〇、八、二三、	前三、四、二二、	前三、七、五、	年	
									月	
									日	
大四川	臨湖	於浙	大河	開河	康遼	西四	安湖	交河	籍貫	Place of Birth: Jiaohe County, Hebei Province
足川	湘南	潛江	城北	封南	平寧	充川	化南	河北		

Source: Academia Historica. File Number: 141-010109-0220-001, 141-010109-0221-001, 141-010109-0222-001, 141-010109-0223-001.

For each officer, the Roster provides information such as name, official rank, military academy attended, major, class (cohort) year, date of birth, and place of origin. These variables constitute the basis of our panel dataset. Additional information on military academies is supplemented using the sources listed in B.3.

B.2 Career Appointments of Officers

We matched the information in the Roster with that in the *Register of Officers' Service Records* (hereafter referred to as the Register) using officers' names. According to Articles 7–9 of the Regulations on Military Registration of the Army, Navy, and Air Force, when an individual enters the military registry, their name is formally recorded, and duplication is not permitted. In cases where identical names arise, the military registration authority must assign a different name based on criteria such as the order of entry into the registry, rank seniority, and age. Consequently, no two officers in the Roster or the Register share the same name. To prevent mismatches due to variant characters or typographical errors, we further verified matches using information on officers' place of origin and date of birth.

We use the Register of Officers' Service Records to obtain information on the appointment histories of officers holding the rank of colonel or above in the Roster from 1936 onward. Figure B.2 provides an illustrative example.

Figure B.2: Illustration of Officers' Career Appointments in the Register

[illegible]

Source: Archives Management Bureau of the National Development Commission. File Number: B5018230601/0033/305.4/3750.

Figure B.2 displays information recorded in the 1944 Register of Officers' Service Records. Two types of information can be extracted. First, the date when the officer assumed the current position. For example, Major General Liu Jialuan was appointed Senior Staff Officer of the Military Commission, with the positional rank of Lieutenant General, on April 2, 1942, and his position remained unchanged through 1944. This allows us to identify at least part of his appointments in 1942 and 1944, and his full appointment in 1943. Second, the date when the officer obtained the current positional rank. As of 1944, Major General Liu Jialuan had not received a promotion in positional rank for 11 years and 10 months. This implies that his positional rank remained unchanged as lieutenant general throughout the period 1936–1944.

B.3 Supplementary Books

For career information that cannot be confirmed using official archives, we rely on non-KMT publications, including: 1. county gazetteers; 2. compendiums of generals graduating from various military academies; 3. provincial directories of military leaders 4. Other biographical dictionaries. These sources are prioritized according to the following rules. First, county gazetteers and publications issued by various provincial Committees of the Chinese People's Political Consultative Conference (CPPCC) are given the highest priority. Second, among privately published works, monographs specifically focusing on military officers are prioritized. Third, when multiple works are written by the same author, earlier publications are prioritized. Finally, when works are written by different authors, priority is given to those that cover more career information.

Following this prioritization, the non-Kuomintang official publications used in this study (excluding county gazetteers) include the following eleven works:

- *Three Thousand Kuomintang Generals from Hunan and Hubei provinces*
- *Generals of the Northeastern Military Academy*
- *Generals Who Studied at the Imperial Japanese Army Academy*
- *Generals of the Yunnan Military Academy*

- *Generals of the Army University*
- *Generals of the Baoding Military Academy*
- *Generals of the Whampoa Military Academy*
- *Military Leaders of Republican Guangdong*
- *Political and Military Figures of the Jin-Sui Clique in the Republican Era*
- *Dictionary of the Republic of China Figures*
- *Comprehensive Biographical Compendium of One Hundred Years of Kuomintang Figures*

These sources are used not only to supplement career information but also to provide additional information on military academy attendance, including academy names, majors, and cohort (class) years.

B.4 Identification of Military Academies

The military academy information provided in the Roster largely originates from officers' self-reported descriptions. As a result, abbreviations and nicknames are frequently used. For example, the Nanyuan Aviation School may appear under several names, including the Beijing Aviation School, Beiping Aviation School, and Beiping Nanyuan Aviation School. Similarly, the supplementary sources listed in Appendix B.3 often use different names for the same academy.

An additional complication arises from the frequent mergers, splits, and renamings of military academies during the late Qing and early Republican periods. It is sometimes difficult to determine whether two differently named institutions refer to the same academy. For example, the Army University traces its origins to the Beiyang Rapid Military Academy established by Yuan Shikai in Baoding. This institution later merged with several other schools—including the Beiyang Military Normal School, Military Medical School, Cavalry School, Ordnance School, and Logistics School—and was renamed the Rapid Military Academy, also known as the National Rapid Military Academy or the Army Concordia

Rapid Military Academy. In 1909, it merged with the Beiyang Officers' School (formerly the Beiyang Field Headquarters Officers' School), becoming the Rapid Military Academy. In 1911, it was renamed the Army Preparatory University, and after 1912, it was formally renamed the Army University.

As a result, an officer might report different names for the same institution at the time of admission, graduation, and commission. To avoid mistakenly treating multiple names for the same institution as different academies, we systematically identified all academy names collected using the following procedure.

First, we relied on published works describing military academies to identify official names, former names, and predecessor institutions. These include the publications listed in Appendix B.3 as well as works such as:

- *History of the Development of Chinese Military Academies*
- *Institutional History of the National Revolutionary Army*
- *Short Biographies of Republican Figures*
- *Nine Thousand Kuomintang Generals*
- *Warlord Cliques in the Republican Era*
- *Dictionary of Modern Chinese Biographical Names*

Second, we searched for academy names in the China National Knowledge Infrastructure (CNKI) database and used information from relevant journal articles and graduate theses.

Third, for academy names that could still not be identified, we searched online resources, including memoirs and historical documents.

Finally, we conducted searches using officers' names rather than academy names. Specifically, we repeated the three procedures above using officer names in order to retrieve educational information and perform cross-validation.

From the Roster and the supplementary sources in Appendix B.3, we obtained 1,835 distinct academy names. Using the identification procedures above, we successfully identified 1,638 names and excluded 132 names that were clearly unidentifiable (such as "Military

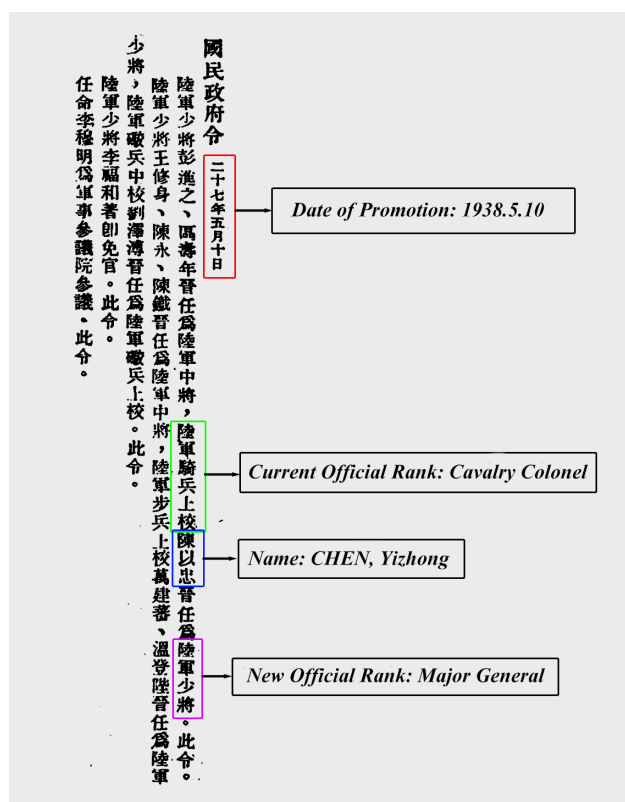
Officers School”). This represents 89.3% of all collected academy names, leaving 65 unidentified names. The identified names correspond to 247 distinct military academies, implying that each academy had an average of 6.63 different names. The unidentified academies are treated as independent institutions. In total, we identify 312 pre-war military academies, each of which is assigned a unique identification number.

C Promotions

C.1 Official Rank Promotion

The *Gazette of the Nationalist Government* (Bulletin of the Republic of China Government) and the *Gazette of the Reorganized Nationalist Government* (Wang Jingwei regime) record official appointment orders for official rank promotions in the two regimes. Figure C.1 presents an illustrative example.

Figure C.1: Illustration of Official Rank Promotions



Source: Bureau of Engraving and Printing of the national government (1972). Bulletin of the Republic of China Government (Volume 119-196). Taipei: Cheng Wen Publishing Co., Ltd.

Using these sources, we collected all Nationalist Government decrees regarding official rank appointments published between January 1, 1937, and August 15, 1945, thereby identifying the promotion histories of individual officers.

C.2 Positional Rank Promotion

1. Criteria for Identifying Promotions

- (a) General principle: All changes in positions or positional ranks are categorized into only two possibilities: promotion or no promotion, except explicit mentions of demotions in the records. Cases subject to disciplinary action are as follows:
 - i. If an officer was dismissed due to disciplinary action and did not return to work in the same year, he is considered to be demoted in the year of punishment; If he returned to work in the same year after being dismissed, and the new position was higher than the previous one, it is considered as a promotion for that year, otherwise regarded as not being promoted for that year.
 - ii. If one returned to work in another year after being dismissed, regardless of the position, it will be considered a promotion for that year. The intervening years will be considered unpromoted.
- (b) Imputation of positional ranks: Positional ranks are inferred from the promotion dates recorded in the Register. If an officer has recorded position-based ranks in at least two different years, then starting from the first observed year, the position-based rank is assumed to remain constant each year until the next observed update.
- (c) Priority rule: When positional rank information is available, promotion is determined primarily based on changes in positional rank.
- (d) Rank consistency: An officer's positional rank cannot be lower than his official rank.
- (e) Inferring rank from organizational tables: If positional rank information is unavailable and cannot be inferred from official rank or seniority, but can be inferred from official organizational charts of the Military Commission or other government de-

partments (i.e., a position corresponds to one and only one positional rank), we first assign the corresponding positional rank and then apply rules (2)–(4). Specifically:

i. Military units:

I. Theater Commander: General; Chief of Staff of Theater Command: Lieutenant General¹⁵

II. Deputy Commander of a Group Army, Lieutenant General; Senior Staff Officer of a Group Army, Major General¹⁶

III. Division Commander (including Cavalry Division): Lieutenant General; Deputy Division Commander: Major General¹⁷

IV. Brigade Commander (Infantry, Artillery, Independent): Major General¹⁸

V. Regimental Commander (Infantry, Artillery, Cavalry): Colonel¹⁹

¹⁵ 《军事委员会颁布战区司令长官部编制表及其组织大纲》，1939年1月。中国第二历史档案馆编. 中华民国史档案资料汇编（第5辑第2编，“军事”（1））[M]. 南京: 江苏古籍出版社, 1998. “Jun-shi wei-yuan-hui ban-bu zhan-qu si-ling-zhang-guan bian-zhi-biao ji qi zu-zhi da-gang” (The staffing table and organizational outline of the theater command headquarters issued by the Military Commission) (January 1939). The Second Historical Archives of China (1998). Comprehensive Collection of Archival Papers on the History of the Republic of China (Volume 5, Part 2, “Military Affairs” (1)). Nanjing: Jiangsu Ancient Book Publishing House.

¹⁶ 《军事委员会修正集团军总司令部编制表及其组织大纲》，1940年1月。中国第二历史档案馆编. 中华民国史档案资料汇编（第5辑第2编，“军事”（1））[M]. 南京: 江苏古籍出版社, 1998. “Jun-shi wei-yuan-hui xiu-zheng ji-tuan-jun zong-si-ling-bu bian-zhi-biao ji qi zu-zhi da-gang” (The staffing table and organizational outline of group army headquarters issued by the Military Commission) (January 1940). The Second Historical Archives of China (1998). Comprehensive Collection of Archival Papers on the History of the Republic of China (Volume 5, Part 2, “Military Affairs” (1)). Nanjing: Jiangsu Ancient Book Publishing House.

¹⁷ 《军事委员会颁布陆军暂行编制纲领》，1938年12月。中国第二历史档案馆编. 中华民国史档案资料汇编（第5辑第2编，“军事”（1））[M]. 南京: 江苏古籍出版社, 1998. “Jun-shi wei-yuan-hui ban-bu lu-jun zan-xing bian-zhi gang-ling” (The provisional organization program of the army issued by the Military Commission) (December 1938). The Second Historical Archives of China (1998). Comprehensive Collection of Archival Papers on the History of the Republic of China (Volume 5, Part 2, “Military Affairs” (1)). Nanjing: Jiangsu Ancient Book Publishing House.

¹⁸ 《军事委员会颁布陆军暂行编制纲领》，1938年12月。中国第二历史档案馆编. 中华民国史档案资料汇编（第5辑第2编，“军事”（1））[M]. 南京: 江苏古籍出版社, 1998. “Jun-shi wei-yuan-hui ban-bu lu-jun zan-xing bian-zhi gang-ling” (The provisional organization program of the army issued by the Military Commission) (December 1938). The Second Historical Archives of China (1998). Comprehensive Collection of Archival Papers on the History of the Republic of China (Volume 5, Part 2, “Military Affairs” (1)). Nanjing: Jiangsu Ancient Book Publishing House.

¹⁹ 《陆军独立旅系统编制表》，1934年10月；《参谋本部关于骑兵旅编制草案给军委会呈文稿》，1933年12月。中国第二历史档案馆编. 中华民国史档案资料汇编（第5辑第1编，“军事”（1））[M]. 南京: 江苏古籍出版社, 1998. “Lu-jun du-li-lv xi-tong bian-zhi-biao” (Army independent brigade system organization table) (October 1934), “Can-mou-ben-bu guan-yu qi-bing-lv bian-zhi cao-an gei jun-wei-hui cheng wen-gao” (The draft of the cavalry brigade organization submitted by the General Staff Headquarters to the Military Commission) (December 1933). The Second Historical Archives of China (1998). Comprehensive Collection of Archival Papers on the History of the Republic of China (Volume 5, Part 1, “Military Affairs” (1)). Nanjing: Jiangsu Ancient Book Publishing House.

ii. Nationalist Government:

I. Minister: General; Heads of subordinate units (e.g., bureaus, divisions):
Lieutenant General²⁰

- (f) First entry into office: If an individual held no military or governmental position prior to the war, the first year in which a position is held is classified as a promotion.
- (g) Residual classification rules: If none of the above rules apply, promotion is determined based on changes in positions. Specifically:

i. Officers serving within the military:

I. Command positions: Promotion is determined by the unit's hierarchical level. Specifically, Theater Command > Group Army Command > Army > Division > Brigade > Regiment. Within the same unit level, Commander > Deputy Commander > Chief of Staff. Transferring to a higher-level unit is considered a promotion. Within the same unit, movement to a higher-ranked position is also considered a promotion. Otherwise, it is not a promotion.

II. Non-command positions: Promotion is determined solely by unit hierarchy. Specifically, Theater Command > Group Army Command > Army > Division > Brigade > Regiment. Transferring to a higher-level unit is considered a promotion. Otherwise, it is not a promotion.

III. Transition between command and non-command roles:

- From command to non-command: If the new unit is at least two levels higher, the transfer is considered a promotion; otherwise, it is not a promotion.

²⁰ 《国民政府修正军政部组织法训令》，1942年4月；《国民政府军事委员会政治部编制表》，1944年12月；《兵役部奉发本部组织法训令》，1945年4月。中国第二历史档案馆编. 中华民国史档案资料汇编（第5辑第2编，“军事”（1））[M]. 南京: 江苏古籍出版社, 1998. “Guo-min zheng-fu xiu-zheng jun-zheng-bu zu-zhi-fa xun-ling” (Directive of the Nationalist Government on amending the organization law of the Ministry of Military and Political Affairs) (April 1942), “Guo-min zheng-fu jun-shi wei-yuan-hui zheng-zhi-bu bian-zhi-biao” (Organizational table of the Political Department of the Military Commission of the National Government) (December 1944), “Bing-yi-bu feng fa ben-bu zu-zhi-fa xun-ling” (The directive issued by the Ministry of Military Service regarding the organizational law of the department) (April 1945). The Second Historical Archives of China (1998). Comprehensive Collection of Archival Papers on the History of the Republic of China (Volume 5, Part 2, “Military Affairs” (1)). Nanjing: Jiangsu Ancient Book Publishing House.

- From non-command to command: If the new unit is at most one level lower, the transfer is considered a promotion; otherwise, it is not.
- IV. Regular vs. irregular forces: Transfer from irregular forces (without a designation from the National Revolutionary Army) to regular forces is considered a promotion; otherwise, it is not a promotion.
- V. Special commands equivalence:
- The commander of the Garrison Command, the Division-level District Command, or the Security Command is considered equivalent to the acting Division Commander.
 - The commander of the Army-level District Command or the provincial Command is considered equivalent to the acting Army Commander.
- VI. Acting vs. formal roles: Changing from a deputy commander to an acting commander or from an acting commander to a commander is considered a promotion.
- ii. Officers serving within the Nationalist Government:
- I. Within the same ministry: Promotion is based on the internal hierarchy of positions.
- II. Across ministries: All ministries are treated as equivalent; promotion is assessed using the rule (I).
- III. Each Commissioner's Office and each ministry's Executive Office are considered at the same level, and the criteria provided earlier (I and II) will be used to determine whether it constitutes a promotion.
- IV. Wang Jingwei regime: Its organizational hierarchy is mapped to the closest corresponding unit in the National Government.
- iii. Officers serving across the military and government:
- I. Transfer from military non-command roles to advisory roles, such as staff officer, consultant, or advisor in the Nationalist Government is considered a promotion.
- II. Transfer from military command roles to advisory roles is considered a

promotion only if the original unit is at least two levels below the Theater Command; otherwise, it is not considered a promotion.

iv. Officers serving in other systems:

- I. Within the same organization: Clear hierarchical advancement (e.g., from deputy to principal, from member to group leader) is considered a promotion.
- II. Cross-system transitions: Transfer from military command or government leadership to non-military/non-government roles is not a promotion. Transfer from outside both systems into military command or government leadership is considered a promotion.

(h) Supplementary Rules:

i. Multi-year sequences:

- I. The law of transitivity may not hold: If an officer holds positions a , b , c in any three consecutive years, and according to the above criteria, a position change from a to b is not defined as a promotion, neither for a change from a to c , but a change from b to c is defined as promotion, then the change from a to b is still not treated as a promotion, and the change from b to c is still treated as a promotion.
- II. If an officer holds position a in year A and then holds position a again in year B, without clear disciplinary information and without violating any of the above promotion standards, the period from year A to year B is considered not a promotion.

ii. Party positions:

- I. If an officer never experiences promotion under the above criteria, but
 - was not elected as a Central Committee member (or alternate) at the 5th National Congress of the Kuomintang (1935), and
 - was elected as an alternate or full member at the 6th National Congress (1945)then the year 1945 is classified as a promotion.

II. If the officer has already experienced promotion in any year, party positions are not used to determine promotion.

2. Criteria for Exit from Military or Political Careers

- (a) If the officer dies and receives no new appointment that year, exit is recorded starting from the year of death; otherwise, from the following year.
- (b) If dismissed due to disciplinary action and never reinstated, exit begins the year after dismissal.
- (c) If leaving office for other reasons, exit begins the following year.
- (d) If transferred to a non-military and non-political position and never returns, the exit begins in that year.
- (e) If an officer in the matched sample has no appointment information at all, the officer is considered to have already exited the military or political sphere.

3. Cases where the appointment or appointment year cannot be determined are excluded from promotion analyses.

D Defections

D.1 Sources on Officers Who Defected to Puppet Regimes

To identify officers who defected to puppet regimes, we consulted the following sources:

- Kuomintang sources: the *Biographical Records of Puppet Troop Officers* collected by Chen Cheng, then Minister of Military Affairs, and the *Order of the Nationalist Government for the Arrest and Investigation of Seventy-Seven Individuals Including Chen Gongbo for Treason*.
- Communist Party sources: *National Selected Historical Materials* and *Selected Historical Materials of Jiangsu*, compiled and published by the National Committee and the Jiangsu Provincial Committee of the Chinese People's Political Consultative Conference (CPPCC).

Table C.1: Descriptive Statistics of Officer Career History Information

	A.Chiang Regime N=2,233	B.Wang Regime N=85
Average Length of Service	7.963	4.988
Average Number of Positions per Person	3.063	3.482
Promotion in Official Ranks		
N	2,233	85
Average Number of Promotions per Person	0.260	0.400
Average Number of Promotions per Person per Year	0.033(0.260/7.963)	0.080(0.400/4.988)
Promotion in Positional Ranks		
N	1,854	79
Average Number of Promotions per Person	1.569	1.684
Average Number of Promotions per Person per Year	0.197(1.569/7.963)	0.338(1.684/4.988)

Notes: This table presents descriptive statistics of the personal career information of senior Nationalist Party (KMT) officers from 1937 to 1945. Column A provides statistics for officers under the jurisdiction of Chiang Kai-shek's (Chongqing) regime, while column B provides statistics for officers under the jurisdiction of Wang Jingwei's (Nanjing) regime. Data sources are detailed in Appendix C.

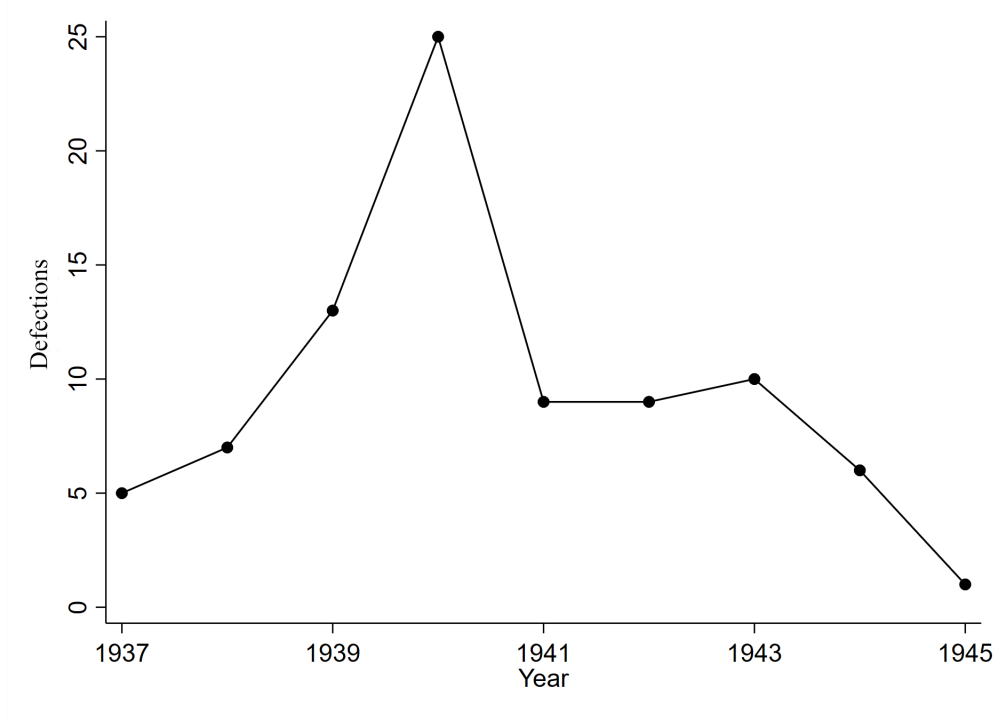
Table C.2: Promotion Frequency of the Defected Officers When in the Chiang Regime

Officers Defecting to the Puppet Regime by Year							
Year	Number of individuals	Official Rank Promotions (Current Year)	Positional Rank Promotions (Current Year)	Official Rank Promotions (1937-Current Year)	Positional Rank Promotions (1937-Current Year)		
1937	5	0	0	0	0		
1938	7	0	0	0	1		
1939	13	0	0	1	5		
1940	25	0	0	2	6		
1941	9	0	0	1	9		
1942	9	0	1	1	13		
1943	10	0	0	1	11		
1944	6	0	0	1	2		
1945	1	0	0	0	0		

Notes: This table presents the number of military officers who defected to the puppet regime over the years and their previous promotions before defection. Data sources are detailed in Appendix C and Appendix D.

- Other sources: all publications listed in Appendix B.3.

Figure D.1: The Number of Defections to the Puppet Regimes Over the Years



E Additional Information and Results

E.1 Cohorts of Military Officers

Shared Hometown. Hometown bias played a pivotal role in the KMT officers. As Sun Yat-sen pointed out, Chinese people had a deep hometown mentality, “it is effortless to connect to people from the same province, county and village” (Sun, 1981). Among the revolutionists led by Sun, the proportion of people from Guangdong, Sun’s hometown, was exceptionally high. After the Zhejiang native Chiang Kai-shek became the leader of the KMT, the “Zhejiang Gang” replaced the “Guangdong Gang” as the ruling faction in the KMT, with Chen Cheng, Hu Zongnan, and Tang Enbo, the leaders of the three main military groups of the KMT Central Army, all coming from Zhejiang. The hometown bias was even more substantial among the local factions. For example, the Shanxi-born warlord Yan Xishan

almost exclusively trusted Shanxi officers in the army. Therefore, we use the information on officers' places of origin in the Books to identify officers' fellow hometown cohorts. Notably, the Books did not distinguish between the place of origin and the place of residence, so an officer might not have grown up in the recorded place of origin. However, because the Books were completed firsthand by the officers, the recorded place of origin reflected the officers' self-identification with hometown preferences. Therefore, we strictly follow the Books to define hometown cohorts as officers from the same county within the same province.

Schoolmates. Military academy experience is also essential for faction formation in KMT. Each faction has unique preferences for military academy graduates. For example, the Central Army preferred graduates of the Whampoa Military Academy, while the northern factions preferred graduates of the Baoding Military Academy. Thus, we identify and code officers' military academy experiences from the Books and the supplemental materials in Appendix B.3. The detailed coding methods are included in Appendix B.4. Specifically, we consider officers who attended the same academic academy in the same cohort. If an officer attended more than one academy, then his cohort includes the schoolmates from all the academies attended.

Battle-front vs. Back-office Positions. Officers who served in similar positions were more likely to have close communications with one another. During wartime, officers in battlefield military positions carried substantially different responsibilities than those in the back-office civilian positions. Specifically, battle-front officers could have frequent encounters with the enemy, thereby gaining better knowledge of the war's outcome. On the other hand, battlefield officers were also more likely to become targets for enemy recruitment. Therefore, we use the career records of officers from 1936 to 1945 and categorize them into three groups based on whether they served on the front line. The first group consisted of officers who served in military positions on the front lines of the war. The second group consists of officers who served in civilian positions away from the front line. The third group comprises officers who held two successive positions in the same year. We treat officers within the same group as members of the same cohort.

E.2 Robustness Checks

Alternate Econometric Models. We use a logit model in our baseline estimation. To address concerns about ad hoc model selection, we use several alternative models to re-estimate the baseline. We present the results in Table A.2. Specifically, Columns 1-2 rule out the impact of selecting the logit and probit models.

Furthermore, as only a small fraction of senior officers defected to the enemy’s camp, using a logit model may underestimate the defection probabilities. Therefore, following King and Zeng (2001), we use a relogit model to re-estimate the baseline and present the results in Columns 3-4. Additionally, we adopt the Cox proportional hazards model to estimate the likelihood with the equation below:

$$D_{i,t} = D_0(t) \cdot \exp[\beta \cdot Promotion_{i,t} + B \cdot X_i + \epsilon_{i,t}] \quad (1)$$

where $D_0(t)$ stands for the baseline hazard function evaluated at year t (i.e., the baseline probability of defection for any officer t years after entering the war); $Promotion_{i,t}$ is the same dummy variable as in Equation 1. The results are presented in Columns 5-6. In addition to the relogit model, we use the complementary log-log model to estimate rare events, such as senior officers’ defections. We present the results in Columns 1-2 of Table A.3. We also employ negative binomial regression to assess the probability of the (rare) occurrence of defection with the results reported in Columns 3-4 in Table A.3. Throughout the alternate model estimates, our baseline results remain robust for both official and positional rank promotions.

Missing Variables. The baseline results point to the importance of internal recognition (in terms of promotions) in defection decisions. However, a missing piece in the discussion is whether the officer deserved such (non)promotions: an officer feels underrecognized only when deserved promotions are delayed or denied. We collect and control additional proxies for individual quality to address this concern. Specifically, we control three additional variables. First, we collect the data on officers’ seniority, calculated by individual service length since July 1, 1925, when the Republican government was established in Guangzhou.

Higher seniority indicates more experience, higher social status, and more established personal networks.²¹ Second, we collect the data on medals awarded to KMT officers before the War.²² Third, we calculate the count of defectors within any officer’s hometown and schoolmate cohorts. We present the results in Table A.4, where our baseline results remain robust across all columns.

Measurement Error. The baseline measures for individual promotion may suffer from measurement error in three aspects, which we address in this subsection. First, because our promotion records report only the year of promotion rather than precise dates, they may misrepresent the promotion (dis)incentives facing the officer during the year. To address this issue, we use the previous year’s promotion status as the independent variable and report the results in Columns 1-2 of Table A.5. The results show that the impact of one-period lagged promotions is highly significant across measures of official and positional ranks, i.e., an officer’s previous promotion performance also influences the officer’s choice of defection. Columns 3-4 further control for current-period promotion status, and the results remain robust.

Second, the promotion measures in the baseline are dummy variables, which may misrepresent the actual promotion frequencies. To address this issue, we use officers’ cumulative count of promotions since 1936 as an alternate promotion measure and report the results in Columns 5-6 in Table A.5. As shown, the baseline findings remain robust.

Third, more than the separate use of official and positional ranks may be required to capture the gap between the two ranks and the consequent incentive implications. To address the issue, we replace the independent variable in the baseline estimation with the difference between official and positional ranks and report the re-estimated results in Column 1 of Table A.6. The rank difference is also a highly significant predictor of reduced defection. This indicates that informal promotions – accompanied by salary and benefit increases – are highly effective in retaining talent without official promotions.

Finally, we consider the number of years since an officer’s last promotion. For officers who have never been promoted, we instead use the number of years since their initial commission.

²¹The variable construction details can be found in Figure B.2

²²Specifically, we focus on the Medal for the 10th anniversary of the founding of the NRA.

The results, reported in Columns 2–4 of Table A.6, indicate that the longer the time since the last promotion, the greater the likelihood of defection.

E.3 Foreign Exposure

Following the baseline findings, we decompose the influence of foreign experience into Japan and non-Japan exposure, respectively. It should be noted that the influence could go both ways: on the one hand, familiarity with foreign powers increases the likelihood of defection due to lower adjustment costs post-defection - which applies more effectively for officers with Japan exposure; on the other hand, foreign experience increases defection likelihood because foreign-trained officers might be harder to receive equal recognition compared to domestically-trained colleagues - which applies to all officers with foreign training. Thus, the decomposition allows us to disentangle the influence of generic foreign experience from Japan-specific influence. We present the results in Table A.12. First, Column 1 of Table A.12 presents the standalone effect of Japan exposure, defined as whether the officer studied in Japan. As shown, Japanese exposure significantly predicts a higher probability of defection. By contrast, as shown in Columns 2-3, non-Japan foreign exposure has a limited impact on defection choices. Thus, better local knowledge of Japan – regarding language, culture, or other aspects, rather than generic foreign exposure or unequal treatment for foreign-trained officers, incentivizes defection. Columns 4-5 further control for the two promotion measures on top of Column 3, and the results remain robust.

E.4 Non-defection Exits

To further account for alternative wartime exits beyond defection, we estimate a multinomial logit model using officers who remain in service as the benchmark. During the war, 516 officers (23.1% of the sample) left the National Revolutionary Army for reasons other than defection, which mainly fell into seven categories: departure from office (including both resignation and dismissal, 68.4%), killed in action (KIA, 12.8%), death from illness (12.0%), removal after legal violations (3.7%), accidental death (1.4%), transfer to non-military government posts (1.0%), and retirement (0.8%). In the regression analysis, we exclude cases

of death from illness, accidental death, and retirement, and focus on five outcomes of active decision-making: defection, departure from office, KIA, removal after legal violations, and transfer to non-military government posts.

Tables A.14 and A.15 report the results for official-rank and positional-rank promotions, respectively. For official-rank promotions, advancement significantly reduces the likelihood of removal after legal violation, and transfer to non-military posts, but increases the likelihood of departure from office. The estimates for KIA are statistically insignificant. For positional-rank promotions, we find that faster advancement similarly increases departure. In addition, positional-rank promotions are positively associated with the probability of KIA and transfer to non-military posts, but the coefficients for removal after legal violations are statistically insignificant.

Overall, these results suggest that career advancement discourages defection, while increasing departure from office—possibly because higher-ranked officers have better alternative career opportunities or favorable negotiation terms in non-military post transfers.