
Who Is Purged? Determinants of Elite Purges in North Korea

ABSTRACT The existing literature on elite purges in dictatorships claims that the risk of coups to replace dictators is the main cause of the dictator's choice of purge strategy. Why then do elite purges occur even in well-established dictatorships with a consistently low risk of coups? This article argues that elite purges in consolidated dictatorships have a different purpose and logic. Dictators, who have consolidated their position, seek to maximize the efficiency of rule by making the elite obedient through purges. For this purpose, dictators carefully select the purge target by considering various factors. To test this theory, the article examines the pattern of elite purges in North Korea based on an original individual-level dataset, which contains the personal background of 367 North Korean elites and their purge records between 1948 and 2019. The result of survival analysis shows that the purge risk of the elite is not significantly associated with their military background but is associated with the characteristics of the institution to which the individual elite member belongs. Other individual factors, including the elite's educational background, the experience of studying abroad, and the career path, are also significantly related to the probability of being purged. The finding suggests that coup-proofing is not the only purpose of elite purges but that ensuring the leader's political superiority is another purpose of elite purges in consolidated dictatorships.

KEYWORDS elite purges, North Korea, elite management strategy, established dictatorship

INTRODUCTION

Why do dictators eliminate their inner circle elites? Existing literature on elite purges in dictatorships explains that the risk of coups to replace dictators is the main cause of the dictator's choice of purge strategy (Egorov & Sonin, 2011; Gallego & Pitchik, 2004; Geddes, 2003; Geddes, Wright & Frantz, 2018; Sudduth, 2017; Svoblik, 2009, 2012). Since the vast majority of dictators are ousted by internal coups rather than by popular uprisings, the inner circle elites can be dangerous for dictators. Existing data on leadership changes in dictatorships suggest that more than two-thirds of dictators are removed by regime insiders: individuals from the dictator's inner circle, the government, the military, the party, or the repressive apparatus (Svoblik, 2012, p. 4). Given the fact that most dictators are ousted from office through coups, it makes sense that the dictators strategically use purges to eliminate potential challengers to help them remain in power.

However, elite purges are widespread even in consolidated dictatorial systems with little risk of coups. Established autocracy emerges after a dictator succeeds in consolidating enough power that he can no longer be credibly threatened by the ruling coalition. Under this circumstance, the ruling coalition is entirely subservient to the dictator and

does not share power with a dictator. Stalin's rise to power is perhaps the most prominent example of the transition from contested to established power system (Svolik, 2012, pp. 61–62). By the end of the 1920s, Stalin eliminated from the Communist Party key opposition groups associated with Trotsky, Zinoviev, and Bukharin (Suny, 1998, p. 165). Likewise, the Cultural Revolution of China—Mao Zedong's monumental campaign against “revisionist” opponents—began in 1965 and eventually destroyed most of the party and state apparatus (MacFarquhar & Schoenhals, 2006). These examples suggest that the purpose of purge could be something beyond coup-proofing, especially under stable dictatorships. How can we explain purges in dictatorships in which the dictator's rule is sufficiently secure, and the monitoring system for control is highly developed—that is, a regime with a very low coup risk?¹ Are there other reasons to engage in purges?

To address this question, I examine the case of North Korea (Democratic People's Republic of Korea). North Korea is widely known as one of the most stable and well-established dictatorships. It has maintained a highly consolidated regime without even a single coup attempt since the August Faction Incident in the late 1950s—however, elite purges have consistently occurred.²

I argue that the dictator's decision on elite purge is based on two main purposes. The first purpose is associated with the “survival of the leader” in response to the elites' threat to remove leaders, as previous studies pointed out. Dictators want to eliminate their potential rivals, especially those from the military, because they have a concentration of power, resources, and discretion in their hands. Weapons, know-how, and the command system of troops are widely dispersed in armies, and such circumstances make the clear motivation for a dictator, especially an early stage of dictatorship whose power foundation is unstable (Geddes, Wright & Frantz, 2019). Thus, this purpose is more salient for unstable regimes with a high risk of coups, for instance, the early stage of the military regime or if the leader's power foundation is relatively weak.

The second purpose of purges is to make dictatorial rule easier and more manageable. This is not directly linked to the purpose of coup-proofing but is more associated with increasing the efficiency of dictatorial rule—that is, dictators can show off their political superiority and make their subordinates more obedient through the purge strategy. And it ultimately makes their rule easier by reducing the effort and cost of authoritarian governance. Therefore, this purpose is more common in stable regimes with a low risk of coups, such as North Korea.

1. Consolidated (or well-established) dictatorships refer to regimes that have survived for many decades despite intense external pressure, poor economic performance, and large-scale policy failures. Several of the longest-surviving authoritarian regimes of the last century, including those in Mexico (83 years), the USSR (74 years), China (71 years and counting), Vietnam (67 years and counting), Cuba (62 years and counting), and North Korea (72 years and counting), were born of violent revolution (Levitsky & Way, 2013).

2. Some may claim that there have been several coup attempts in North Korea so far. However, it is still controversial, and the only widely recognized coup plot is the August Faction Incident in the late 1950s. Other alleged coup attempts, such as the Frunze Military Academy Incident and the 6th Corps Incident, are known as political purges against dissidents, rather than actual coup plotters.

My argument is that elite purges are utilized differently in established versus unstable dictatorships. In an environment in which “survival” is threatened, the primary purpose of purge is to eliminate the most potent rivals, but in a system beyond survival, dictators take various factors (e.g., the relationship with the leader, the aftermath of purge, or the demonstration effect of purge) into account when they determine the purge target.

Admittedly, the two purposes of purges are not entirely exclusive. Even within a single dictatorship, the purposes can be utilized simultaneously or may vary over time. Nevertheless, the primary purpose of purges in the system facing the threat of survival would differ from that in the system that does not. Elite purges in consolidated dictatorships will be closely related to the latter purpose. When it is necessary for dictators to produce an atmosphere of terror and bolster their political superiority, they can utilize the purge strategy publicly. If coup-proofing is the most critical purpose of purges, the elites most threatening to dictators (e.g., elites from most competent and unified groups) will be the main target of purges. On the contrary, if there is another purpose of purges rather than just eliminating threats, other factors will influence the target determination.

This article investigates 367 North Korean elites’ personal backgrounds and their purge records to examine what factors determine the risk of being purged under an established dictatorship. Studies on elite purges in dictatorships so far have explained the logic of purge strategy through descriptive cases or centered on the threat of coups but failed to empirically analyze the pattern of purges in consolidated dictatorship and how it works under those conditions. Thus, based on the career-tracked original dataset at the individual level, this article contributes to the literature by testing an alternative theory for elite purges and identifying who is likely to be targeted. The finding of this research can answer why elite purges continue to occur even under stable dictatorships.

ELITE PURGE IN DICTATORSHIPS

Purges have typically been used by dictators attempting to consolidate their power. Purges, which indicate the removal of other elites through violence, represent both a way to permanently remove potential elite challengers and a way to create a fear to dissuade others from considering action against the dictator (Mahdavi & Ishiyama, 2020, p. 3). The imprisonment and execution of potential rivals within the elite group help to intensify an atmosphere of terror at large; also, the purge itself has an identity affecting the ruling bodies (Bove & Rivera, 2015; Brzezinski, 1958).

In personalist dictatorships, elite purges are more common. Purges are indicative of the power of the dictator to control the fate of their support group. Because personalist dictators do not need to compete with an institutionalized or organized elite group, they easily treat individual elites with brutality without facing resistance from the larger elite corps. Iraq under Saddam Hussein offers a good example of this. Hussein executed most members of his elite support group in 1979 and replaced them with new supporters. Individuals who disagree with personalist dictators often face a violent fate (Ezrow & Frantz, 2011).

Since there are no institutions in personalist dictatorships that could enforce any guidelines for elite promotion or demotions, personalist dictators are able to hire and fire elites as they choose. In the Philippines, for example, Ferdinand Marcos chose to only surround himself with those who posed no challenge to his rule. He was adroit at weaving together a broad political coalition that was loyal to him personally and used military repression and legal harassment against those who opposed him (Ezrow & Frantz, 2011, p. 117). However, elite repression can often be counterproductive and trigger protest (see Francisco, 1996; Lichbach & Gurr, 1981), or repressive actors can exploit their political position against the dictator in order to take power (Nepstad, 2013; Svolik, 2012). If elite repression is seen by other elites as unfair or even unpredictable, they are more likely to regard their safety at high risk and will be more inclined to support a plot against the dictator. Thus, elite repression is not entirely irrational but a risky choice to maintain power (Bove & Rivera, 2015).

Existing studies have mainly paid attention to the motivation for choosing a purging strategy: “coup-proofing.” However, the discussion on when purges occur is still controversial. Some scholars claim that dictators who face a high risk of coups are more likely to use a purging strategy to decrease the likelihood of coups (Biddle & Zirkle, 1996; Roessler, 2011). If dictators perceive a high level of threat, they find the coup-proofing strategy in the form of purges and political replacement (Belkin & Schofer, 2003; Finer, 1998; Horowitz, 1985).

Other scholars maintain a different story that a purging strategy is more likely to be used when the probability that elites can successfully remove the dictator via coup is temporarily low (e.g., Sudduth, 2017). When the elites’ capabilities to oust the dictator are low, elites tolerate a dictator’s purging behavior and wait until they recover their capabilities, rather than immediately attempt a coup that is likely to fail.

The two groups of scholars account for “when and why” purges occur, centering on the coup-proofing function. While these explanations may help explain the elite purges under unstable conditions (e.g., the early stage of coup regimes), they do not clearly explain why the elite purges are also common in consolidated dictatorial regimes with consistently low risk of coups. If there is another purpose of purge other than coup-proofing, we know little about how it works, especially how the purging target is determined.

I develop an argument that an essential purpose of purges of inner circle elites is not only to undermine elites’ capabilities to oust the leaders via coups but also to maximize the efficiency of the dictatorial rule. Since a leader’s rule can never be manageable if the elites’ obedience is not sincere or if they have antipathy toward the leader, leaders can control the elite group more easily and efficiently by showing off political superiority through elite purges. Thus, purges deter not only violent forms of resistance, such as coups, but also more passive forms of resistance, such as collective disobedience or noncooperation.

For this purpose, I assume that careful selection of purge targets is important. In the case of consolidated dictatorships, the purge target may be selected to maximize the demonstration effect to the elite group and minimize the adverse impact (not necessarily

coups, but low-intensity resistance, such as collective disobedience or noncooperation) caused by purges. When deciding the purge target, leaders are often concerned with how purges will influence their support among elites who had remained neutral (Easton & Siverson, 2018). Also, it is important to note that purging elites itself undermines the human resources available for the leaders and seriously damages the state's competitiveness in the long run. Given these adverse impacts, leaders will consider a number of factors when selecting the purge target to produce the most anticipated results.

To test this theoretical argument, I employ an empirical approach based on the individual-level North Korea elite data. As is well known, North Korea is a very stable personalist dictatorship that has been firmly maintained for 70 years since the establishment of its government in 1948. At the same time, the elite purge has been taking place throughout three generations of dictators. Thus, this research looks at how the North Korean elites' personal background influences the probability of being purged and their survival duration.

ELITE PURGE IN NORTH KOREA

In the early period, a critical feature of North Korean politics was the competition among rival political factions in the state and Communist Party leadership. Initially, the Korean communists had never been a monolithic entity, and in 1946, when the North Korean Workers' Party was officially established, there were four major rival factions within it. These factions were different in their background and experiences, and the composition of members was also quite distinct. The Domestic faction consisted of the former underground communists who had stayed in the Korean peninsula throughout the Japanese colonial period and initially had operated in the South but had to leave for the North in 1945–50. The Manchuria Guerrilla faction, including Kim Il-sung, comprised former partisan guerrillas who had fought against Japan in Manchuria and who in about 1940 had escaped to the USSR. The Yen-an faction consisted of the Korean left-wing intellectuals who had emigrated to China in the 1920s and 1930s and were closely related to the Chinese Communist Party. The Soviet faction comprised Soviet Koreans, mostly former school teachers and mid-level officials. They had been sent to Korea in 1945–48 by the Soviet government to work in the North Korean Workers' Party and government institutions and act as both advisors and supervisors.

Although Kim Il-sung's Guerrilla faction initially, in the late 1940s, was the weakest of all, he was the guerrillas' leader who Moscow chose to lead a new communist regime in North Korea. Thus, a group of former guerrillas was gradually emerging as a politically dominant group (Lankov, 2002; Wada, 2012). In 1957, North Korea entered a period of the "Great Purges" that targeted mainly prominent leaders and functionaries of the Workers' Party of Korea (WPK). Other rival factions were sequentially purged from the Communist Party on a charge of espionage by the United States and South Korea or "factionalism" over the period from 1956 to 1960. Kim Il-sung and his circle put the other factions' leaders on trial and then shot them, while most of their fellow activists

were purged from the party.³ North Korea's political system emerged from the purges a few years later as one of the most efficient Stalinist regimes and personalist dictatorships. Domestically a victorious leader, Kim Il-sung, and his close circle destroyed all actual and potential opponents to a new monolithic regime, and he finally became the undisputed supreme leadership of North Korea.

In 1976, in the process of political power succession to Kim Jong-il from Kim Il-sung, Kim Dong-kyu who was vice premier, Jang Jeong-hwan who was vice minister of the People's Armed Forces, and Yoo Jang-sik who was deputy director of the WPK were purged after publicly criticizing Kim Jong-il's policies. In 1992, a number of military officers, who studied in the Soviet Military Academy, were also purged by Kim Jong-il for allegedly having improper relations with the Soviet government, what was known as the "Frunze Military Academy Incident." After Kim Il-sung's death in 1994, Kim Jong-il widely used a purging strategy to evade his responsibility for policy failures. In the late 1990s, party officials and their families were executed or sent to political prison camps in an attempt to evade his responsibility for serious economic difficulties in the 1990s, also known as the "Great Famine." Also, in 2009, Park Nam-ki, a head of the Planning and Finance Department of WPK, was executed on a charge of failure of currency reform.

Kim Jong-un, who emerged as a supreme leader after the death of his father, Kim Jong-il, has also actively used the purge strategy for his power consolidation (Ishiyama, 2014). His uncle Jang Sung-taek, who was Kim Jong-un's political guardian; Ri Yong-ho, who was a former chief of the General Staff; and Kim Young-chun, who was minister of the People's Armed Forces were dismissed from their posts or executed. As the purge history of North Korea reveals, the purpose of purges may not always be to coup-proof the regime but to highlight the leader's political superiority or avoid responsibility for policy failures.

Based on these examples, I test a series of hypotheses about which conditions determine the purge target. In personalist dictatorships, the support groups typically comprise associates, friends, and family members of the dictator. The Philippines under Marcos provides a good example. Marcos's narrow base of support included former classmates and relatives because the primary quality needed to acquire a position was loyalty (Celoza, 1997). Similar to the Philippines' case, a number of relatives of the dictators in North Korea have held key posts in the party, the government, and the military, and they may have a relatively low risk of being purged. Besides, considering that the North Korean regime was founded by veterans of an earlier guerrilla struggle against Japanese colonial rule and consolidated amid the Korean War, the members of the Guerrilla faction led by

3. In September 1961, the 4th Workers' Party of Korea (WPK) Congress was held, when Kim Il-sung's dictatorial rule was completed. Of the eighty-five members of the Central Committee of the WPK, there were only one left in the Soviet faction and three left in the Yen-an faction. The number of the Manchuria partisan faction, led by Kim Il-sung, increased sharply to thirty, and the number of the Kapsan faction supporting Kim Il-sung also increased to five. In other words, a system that two factions centered on Kim Il-sung uniformly led the party, the government, and the military was created in the 4th WPK Congress. This process of acquiring power is common in many countries when a party-state system is created. In the Soviet Union, the 17th Party Congress in 1934 was the equivalent (Wada, 2012).

Kim Il-sung and their descendants may be less likely to be purged compared to other elites because they are considered the most loyal associates by the North Korean dictators.

The most durable party-based regimes are those that are organized based on nonmaterial sources of cohesion, such as ideology, ethnicity, or bonds of solidarity rooted in a shared experience of violent struggle (Hanson, 2010; Levitsky & Way, 2012; LeBas, 2011; Schurmann 1966; Slater 2010). As Levitsky & Way (2012) argued, the most salient nonmaterial source of loyalty is the bonds of solidarity that are formed during periods of violent conflict. Cadres who fought together in the bush or endured prison together, and/or have common friends or family members who died during the struggle are more likely to maintain long-term bonds of friendship, mutual trust, and loyalty. Violent conflict experience thus sharpens group boundaries by strengthening within-group ties and group identities (LeBas, 2011, pp. 51–53).

Given this point, blood ties with dictators or shared violent conflict experience with dictators may be associated with the elite's loyalty, and this may consequently affect the dictator's purge decision. I measure this mechanism through the "loyalty" hypotheses as below.

H1a: Elites who have blood ties with the dictators are less likely to be purged than other elites.

H1b: Elites who have included the Guerrilla faction or their descendants are less likely to be purged than other elites.

Membership in more disciplined and unified institutions enables elites to bargain with the dictator as a collective rather than as individuals who can easily be replaced by others (Geddes, 2003). Internally cohesive seizure groups can bargain as unitary actors over various issues, such as limitations on the dictator's personal discretion. They also face fewer collective action problems when it comes to handling the dictator's repression against the inner circle elite. Disciplined unity often develops in professionalized militaries and parties formed as "organizational weapons" because these institutions obviously connect individuals' future career success to obedience to superior officers or the party line (Geddes, Wright & Frantz, 2018, p. 77).

Thus, professionalized militaries and parties tend to be more disciplined and unified institutions. These institutions largely have greater bargaining power in that they are willing to fight collectively if the benefits of their members are infringed upon (Anugwom, 2001; Brownlee, 2008; Feaver, 1999; Reuter & Remington, 2009). The desire to maintain these benefits generates shared interests among elites (Frantz & Ezrow, 2011, p. 19). It can be argued that elites belonging to more disciplined and united institutions (such as the party and the military) are less likely to be purged than those belonging to less disciplined and united institutions. This may be the result of the dictator's strategic choice to minimize the collective backlash following the purge.⁴

4. A collective backlash of the elite group does not necessarily mean a coup attempt. This can be expressed as a low-level resistance, such as collective disobedience, noncooperation, sabotage, and so on. This could ultimately serve as an obstacle making the dictator's rule more difficult and inefficient.

In a similar vein, the collective identity of graduates from the same school may influence the dictator's decision on the purge target. Highly educated people are potential threats to autocratic leaders, so the leaders make sure to limit the public's educational opportunities. When the leadership relies on a small elite group, higher education is concentrated on the children of them. For instance, in the Soviet Union, children of Communist Party leaders had privileged access to the best universities regardless of their ability. The capable children of potentially dissident families were kept down by being excluded from broad access to the best schools (Bueno de Mesquita & Smith, 2012). Under these circumstances, higher education becomes a public good used by dictators for elite control, through which privileges are distributed and inherited.

In North Korea, the Kim Il-sung University and the Red Flag Mangyongdae Revolutionary School are considered the top educational institutions that train young elites with strong solidarity and pride.⁵ The same curriculums and shared educational experiences can help them promote the social network and a strong sense of solidarity. Assuming that they form a strong network with each other, this would also affect the dictator's determination of purge targets.

Next, some elites who have studied abroad may be considered a potential threat to the dictator. As Bueno de Mesquita and Smith (2012) claim, for maintaining dictatorial rule, the educational opportunity should not be so extensive as to equip ordinary people to question government authority. Studying abroad, however, is the best opportunity to offer such a wide range of educational experiences for the younger generation. Given the very closed nature of North Korea, it is very likely that elites who experienced the outside world may recognize the problems of their oppressive political system and be dissatisfied with autocratic rule. Furthermore, they can also be perceived to be linked with foreign powers. The Soviet Union tried to make North Korean military officers who studied at the Frunze Military Academy as the pro-Soviet group since the 1950s. After studying abroad, many of them took significant positions in the North Korean military and later were purged due to the Frunze Military Academy Incident in North Korea. I test the "solidarity and bargaining power" of the elite group with the following hypotheses.

H2: Elites from less unified institutions are more likely to be purged than elites from more unified institutions (the party, the military, or the government).

H3a: Elites who graduated from Kim Il-sung University are less likely to be purged than others.

5. Kim Il-sung University is the first university built in North Korea in 1946. The university is a higher education institution that trains North Korea's top elites, and in name and reality, the graduates of the university have occupied most key posts in the party, the government, and other organizations of North Korea. Red Flag Mangyongdae Revolutionary School is a secondary educational institution established in 1947. Originally, the school received children of deceased revolutionaries and educated them into fine revolutionaries after the independence of Korea. It is a special education institution with access only to the children of high-ranking officials' families in the Workers' Party of Korea, the Korean People's Army, and the government. Many graduates of the school have been positioned in the central party committee, the party politburo, and the military commission of the central committee of North Korea.

H3b: Elites who graduated from Red Flag Mangyongdae Revolutionary School are less likely to be purged than others.

H3c: Elites who have the experience of studying abroad are more likely to be purged than others.

The political distance between leader and elite may be another important factor in elite survival. In personalist dictatorships, a dictator typically controls the promotion and demotion of key positions within the party, the government, the military, and other state organizations and eliminates those who are disloyal to the leader. According to Milan Svoblik (2012), dictators use two different strategies: (a) shoring up support from elites by consolidating their power within the state (thereby coopting them); (b) ensuring that no one member of the elite can obtain sufficient power to overthrow the leader.

Dictators can achieve the former by fostering a sense of permanence and security regarding the status of elites via cooptation (or promotion). In this way, each elite is assured a place within the ruling coalition. The process is “power-sharing,” whereby the dictator accommodates potential challengers by providing them with positions of authority in the regime. This also facilitates the monitoring of potential opponents (i.e., “keeping your enemies close”). Another way the authoritarian leader can utilize to control the elite is to engage in rotation and frequent shuffling. The “elite shuffle” involves moving the elite in and out of office to keep them from consolidating their power in a position that might allow them to become a potent rival to the leader. Creating uncertainty within the elite prevents potential rivals from establishing bases (Ishiyama & Kim, 2020, p. 162). For example, in the Central African Republic, Jean-Bédél Bokassa decided on numerous personnel changes in the military posts by himself (Tittley, 1997). He had total control over promotions and demotions in the army and used his power to weaken any potential threat from within the military.

Thus, it is necessary to investigate how the number of promotions and demotions affect elites’ risk of being purged. I assume that the elites who have been demoted many times are more likely to be excluded from permanent purge because they may have already lost influential positions in their original organizations or sufficient resources to resist the leader. Another possibility is that the elites who have been often promoted are less likely to be purged because their promotion record may demonstrate that the leader trusts them. Also, it is worth looking at the effects of being included in the highest-positioned power organization, such as the WPK Politburo, on the purge likelihood. The following hypotheses test the above mechanism regarding “political distance from the leader.”

H4a: The number of promotions is negatively associated with the risk of being purged.

H4b: The number of demotions is negatively associated with the risk of being purged.

H5: Elites who have the career of the WPK Politburo members are less likely to be purged than other elites.

RESEARCH DESIGN

The definition of the elite purge is not yet clear. Some scholars define the elite purge as the dictator's actions to dismiss, replace, or demote individuals from key positions in the regime (Sudduth, 2017). In this research, however, I apply a stricter definition, which is the permanent removal from the core elite group, which is basically comprised of alternate and full members of the WPK (Workers' Party of Korea) Central Committee.⁶ It is unclear whether a permanent removal is the result of any of them among natural death, retirement, execution, or imprisonment because accurate information on this was unavailable. Instead, if a certain elite in the core elite group did not appear in the North Korean media for more than five years, it was considered being purged.⁷

There are several reasons for the application of such a strict definition. The first reason is that, from an outside observer's viewpoint, it is very challenging to accurately observe personnel shifts taking place within a highly secret regime like North Korea. If unclear personnel shifts are comprehensively considered purges, serious bias in statistical inferences is likely to occur. The second reason is that methodologically I infer the probability of being purged via the hazard function. Because the hazard function is often employed to analyze the factors influencing individual survival time, the individual's entry and exit from the core elite group should be clear. For these reasons, I only regard a permanent removal from the core elite group as a purge.

Data

I created an original dataset of North Korean elites mainly using the 2019 *Collection of Major North Korea Elite Information*, which has been annually published by the Intelligence of Analysis Bureau in the Ministry of Unification of South Korea. I also used auxiliary information from *Rhodong sinmun* (Workers' Party of North Korea's official newspaper), South Korean media articles, the materials of the Korea Institute for National Unification (KINU), and other websites if the information in the 2019 *Collection of Major North Korea Elite Information* is unclear or does not exist. A total of 367 North Korean elites' personal backgrounds, careers, and purge records from 1948 to 2019 were compiled and used for analysis.⁸ The personal background variables contained

6. In this research, the core elite group refers to around 230 North Korean elites, who are included in alternate and full members of the WPK Central Committee, or equivalent to the positions in the government, the military, and other organizations. Such positions are detailed in Appendix 1.

7. To improve the validity of the analysis, I also ran survival models including only the purged elites under age 75 to exclude natural death. As seen in Appendix 3, the results were generally similar. This does not completely eliminate the possibility that elites may be removed due to other reasons than political purges, but this seems to largely support the result reported below.

8. Some may wonder if the number of elites of 367 is sufficient for the purpose of this research. This research relies on the 2019 *Collection of Major North Korea Elite Information* released by the Ministry of Unification of South Korea. The report included elites above the rank of deputy director of the party, above the level of vice minister of the government, above the level of lieutenant general of the North Korean People's Army, and above the level of chairman of major social organizations. However, some elites were not included due to lack of information, and some others were included if they failed to meet the criteria but performed important tasks. Also included were some deceased elites who are considered important figures in the field of North Korean politics. Thus, in general, this resource is useful for measuring the core elite group, which is the subject of this research.

each elite's birthplace, school, studying abroad experience, blood ties with the Kim family, and membership of the Guerrilla faction. The career variables covered the diplomatic career, the experience of being included in the Political Bureau of the Workers' Party of Korea (WPK), the origin from less united institutions, the number of promotions, and the number of demotions. Finally, the months of survival within the core elite group were coded.

In this research, I used the Cox proportional hazards model, which is a regression model commonly used in medical research for investigating the association between the survival time of the patient and one or more predictor variables. It allows us to examine how specified variables affect the rate of an event happening at a particular time. This rate is commonly referred to as the hazard rate. The Cox model is useful in dealing with right-censored data, so this is a proper modeling strategy because this original dataset contains a number of right-censored elites. The Cox proportional hazards model should retain the proportional hazards assumption that the magnitudes of the effects of covariates on the duration of a state remain proportional over the whole process. However, the covariate's effect may be weaker or stronger at the beginning of the state than it is later. In other words, we may expect the relative magnitude of an independent variable's influence to vary over time (Box-Steffensmeier & Zorn, 2003, p. 34). Considering this time-varying effect, I run both the proportional hazards model and the nonproportional hazards model. I expect that it would enhance the robustness of the result in this research.

Variables

The dependent variable of this research is the total monthly duration of each elite's survival. I count the total months of each elite from the entry to the exit. The elite entry includes the core group of around 230 elites, which covers alternate members and full members of the WPK Central Committee.⁹ I categorize them into Level 2 group or above (see Appendix 1). The elite exit refers to permanent removal from a group of Level 2 or above (i.e., the core elite group). The time period for analysis is from January 1948 to April 2019, and the average duration of survival is 198.9 months. The minimum survival duration is 3 months and the maximum is 706 months (see Appendix 2 for the descriptive statistics).

Blood ties with three dictators is one of the major independent variables. Given the nature of the personalist dictatorship of North Korea, where all power is highly concentrated in the top leader, whether or not an elite is connected to the dictator would affect elites' survival and purge. If an elite has a blood relationship with the three dictators (Kim Il-sung, Kim Jong-il, and Kim Jong-un), the elite is given "1," otherwise "0." In a similar vein, the Guerrilla faction variable, whether an elite participated in anti-Japanese guerrilla activities with Kim Il-sung or whether an elite is a descendant of such elites, is included as

9. This study defines the full members and alternate members of the Central Committee of the Workers' Party of Korea as an inner elite group. The 7th WPK Congress was held in May 2016; it was the first party Congress in 36 years since the 6th Congress in 1980. At this Congress, 129 full members and 106 alternate members of the WPK Central Committee were newly elected.

an independent variable. The Guerrilla faction indicates the political faction formed during the process of the establishment of North Korea and the subsequent power struggle after that. They were an armed group that fought against Japan in Manchuria and on the border with China during the Japanese colonial time. After the establishment of North Korea, they formed a political faction centered on Kim Il-sung within the Workers' Party of Korea and finally became the strongest political faction in the party. I code "1" if an elite was in the Guerrilla faction or their offspring and otherwise "0."

Elite origins from less united institutions are also added as a major independent variable. This is a measure of whether an elite built his major careers in less united institutions. Less united institutions refer to political, social, and religious organizations other than the party, the government, and the military. Although Article 67 of the Socialist Constitution of North Korea stipulates that "the state guarantees the conditions for free activities of democratic parties and social organizations." In reality, however, political groups and social organizations are guided and controlled by the Workers' Party of Korea. These organizations, as extra-governmental bodies, play a role as "faithful supporters" to help the party's policies, although they do not substantially affect the party's decision-making process. Such institutions cover labor organizations, other political parties, diplomatic organizations, social organizations, religious organizations, academic organizations, and sports organizations. If an elite built his/her major careers in less united institutions, the elite is given "1," otherwise "0" is given.¹⁰

Also, since I assume that elites' educational background is closely associated with their purging risk, the Kim Il-sung University variable and the Red Flag Mangyongdae Revolutionary school variable are coded, respectively. The experience of study abroad is also included in the model as a dummy variable.

Other major independent variables are the number of promotions and the number of demotions the individual elite experienced in the past. I coded both as continuous variables and put them into the model. In order to decide whether a particular personnel change is a promotion or a demotion, I construct the rubric of North Korean elite positions as Appendix 1. Due to North Korea's nature of adopting a party-state system, the key elites of the government, the military, and the party are typically included in the members of the WPK Central Committee. In 2016, the 7th Congress of the Workers' Party of Korea was held in 36 years and elected 127 full members and 106 alternate members of the Central Committee. I classify the entire elite positions from Level 1 (approximately 700 elites, who are below the alternate members of the WPK Central Committee) to Level 5 (approximately 20 including the members of the WPK Political Bureau, the ministers of major ministries, the army generals or above in the military). Promotion means a move to a higher position from a lower position, and demotion is the opposite.

10. More specifically, less united institutions include the Chosun Agricultural-Labor Alliance, the Chosun Buddhist Federation, the Chosun Asia-Pacific Peace Committee, the North Korean Red Cross Committee, the Democratic Front for the Reunification of the Fatherland, the Association of Korean Scientists, the Korean Olympic Committee, and so on.

Lastly, I add the Politburo variable into the model. The Political Bureau of the Workers' Party of Korea (WPK) is the highest party organ in North Korea. The WPK Political Bureau consists of 33 members, including 5 members of the Standing Committee with Kim Jong-un, 15 full members, and 11 alternate members. They are tasked with making major in-party decisions for most of the time when no WPK Convention or Plenary Meeting of the Central Committee of the WPK is held. Considering that from 1948 to 1961, an average of 2.4 meetings per year was held and the meetings were not held between 1993 to 2010, the Political Bureau is, in fact, the highest decision-making body to guide the major policies of the ruling WPK and overall state affairs of North Korea. I code the Politburo variable as to whether or not an elite has the experience of a full member or an alternate member of the Political Bureau of WPK. The underlying idea of adding this variable is that the closest elites of a dictator may have more or less purging risk than other elites. I control a series of variables related to personal background. They include gender, the region of origin, and the diplomat career. These variables are set as control variables because they may affect elite purging risk but are not relevant to the hypotheses that this research seeks to examine.

RESULTS

I ran both the Cox proportional hazards model and the nonproportional hazards model to verify the effect of the variables on the elites' risk of being purged. Table 1 provides residual-based diagnostics for the possibility of nonproportionality among covariates. The

TABLE 1. Residual-Based Diagnostics for Hazards Proportionality

Variables	rho	Chi ²	p value
Gender	0.04	0.31	0.57
Pyongyang	-0.22	11.78	0.00
Mangyongdae school	0.10	2.22	0.14
Kim Il-sung University	-0.05	0.50	0.48
Studying abroad	-0.05	0.47	0.49
Blood ties	0.16	4.84	0.03
Guerrilla faction	0.02	0.05	0.83
Diplomat career	0.11	2.79	0.10
Politburo	-0.08	1.33	0.25
Less unified institutions	-0.20	8.61	0.00
Demotion	-0.09	1.91	0.17
Promotion	0.39	30.96	0.00
Global test		73.54	0.00

global test suggests strong evidence that there is nonproportionality in the model. Covariate-specific tests show that four variables demonstrate the potential violation of the proportional hazards (PH) assumption. Specifically, a series of variables, such as Pyongyang, blood ties with dictators, origin from less unified institutions, and promotion, appears to be nonproportional at approximately the .05 level. So, I ran the nonproportional model with four interaction terms of time (the square root of time) and the variables.

Table 2 presents a hazard ratio of two models, which indicates above 1 is positively associated with the probability of being purged and thus is negatively associated with the length of survival. Conversely, if a hazard ratio is less than 1, it means the variable is negatively associated with the probability of being purged and positively related to the

TABLE 2. Cox Hazard Regression – Purges of North Korean Elites

	Hazard Ratio with Standard Error	
	Cox model (proportional)	Cox model with time interactions (nonproportional)
Gender	0.739 (0.239)	0.764 (0.254)
Pyongyang	0.855 (0.295)	25.750 ^{***} (24.220)
Mangyongdae school	0.395 ^{**} (0.119)	0.400 ^{**} (0.122)
Kim Il-sung University	0.995 (0.191)	1.133 (0.218)
Studying abroad	3.895 ^{***} (1.052)	4.514 ^{***} (1.123)
Blood ties with dictators	0.193 [*] (0.125)	0.361 (1.218)
Guerrilla faction	0.758 (0.227)	0.917 (0.292)
Diplomat career	0.873 (0.237)	1.005 (0.275)
WPK Politburo	1.320 (0.305)	1.000 (0.237)
Less united institutions	1.666 [*] (0.425)	19.640 ^{***} (12.570)
Demotion	0.810 ^{***} (0.050)	0.851 [*] (0.055)

(continued)

TABLE 2. Cox Hazard Regression – Purges of North Korean Elites (*continued*)

	Hazard Ratio with Standard Error	
	Cox model (proportional)	Cox model with time interactions (nonproportional)
Promotion	0.847^{***} (0.015)	1.345^{***} (0.087)
Pyongyang × sqrttime		0.776 ^{***} (0.057)
Blood ties with dictators × sqrttime		1.031 (0.153)
Less united inst. × sqrttime		0.829 ^{***} (0.040)
Promotion × sqrttime		0.978 ^{***} (0.003)
Observations	367	367

Note: Exponentiated coefficients; standard errors in parentheses.

^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$

length of survival. In the nonproportional hazards model, I used interaction terms multiplied by the square root of time for each independent variable, which is identified by the PH testing in Table 1.

In terms of Hypothesis 1a, blood ties with the three dictators have a very negative association with the purge risk, and it is statistically significant in the proportional model. When it comes to blood ties with Kim Il-sung, Kim Jong-il, and Kim Jong-un, the elites are around 80% less likely to be purged than otherwise. However, this effect disappears when the time interaction term is added into the nonproportional model. The inconsistency of this effect across the models indicates that Hypothesis 1a is not strongly supported by the result.

This may suggest that blood ties with dictators can serve as a double-edged sword regarding the risk of being purged. Family members can be the most reliable and loyal allies for dictators at the same time being the closest and most threatening enemy to them. The current leader of North Korea, Kim Jong-un, best illustrates the ambivalent nature of blood ties. Kim Jong-un's younger sister, Kim Yeo-jung, has been supporting his rule as a close aide, but his older brother, Kim Jong-nam, was assassinated in Malaysia with a VX nerve agent because the older brother was perceived as a political rival threatening his legitimacy. This reveals that blood ties are not always a risk-reducing factor.¹¹

11. The null finding that blood ties do not matter for purges might be the result of two competing effects canceling each other out: Kim Il-sung and Kim Jong-il were much less likely to purge their family while Kim Jong-un seems to have been targeting his blood relatives much more. Considering some studies show that the elite volatility

Similarly, the Guerrilla faction variable, which measures whether an elite joined the Guerrilla faction with Kim Il-sung or is a descendant of such elites, does not affect the purge probability. The effect is statistically insignificant across the two models, which increases confidence in rejecting Hypothesis 1b. This may indicate that revolutionary legacies are not permanent. As Levitsky and Way (2013) argued, although some elements of the revolutionary legacy, such as an institutionalized ruling party and a strong and loyal coercive apparatus, may be quite enduring, others degrade over time, particularly with the passing of the revolutionary generation. Likewise, the effect of the Guerrilla activity with the first leadership, Kim Il-sung, may erode with generational turnover.

Next, elites who built their careers in less united institutions are more likely to be purged than other elites from more united institutions, such as the party, the military, or the government. The effect is consistent across the two models and, in particular, very strong in the nonproportional model. This result strongly suggests that whether elites share membership in a unifying institution, like a military or party, is important when a dictator seeks the purge target. Such membership affects whether elites bargain with the dictator individually or collectively (Ezrow & Frantz, 2011, p. 85). However, in personalist dictatorships where power is highly concentrated in a dictator, elites' collective action may not necessarily be expressed as violent resistance or expulsion of a dictator, as in a military regime, but in the form of passive resistance, such as collective disobedience or sabotage.

Elites' educational background also seems to have an interesting effect on the likelihood of being purged. While the Kim Il-sung University variable is not significant across the two models, the Red Flag Mangyongdae Revolutionary School variable strongly affects the purge probability. In other words, those who graduated from the Red Flag Mangyongdae Revolutionary School are less likely to be purged by 60% compared to other elites. This suggests that educational institutions, especially institutions providing long-term education services (e.g., the Red Flag Mangyongdae Revolutionary School), serve as centers of solidarity for graduates. It may affect the dictator's choice of purge target.

Particularly, the studying abroad variable is positive and strongly significant in both models. It seems that the experience of studying abroad significantly increases the purge risk more than four times. It makes sense that the groups studied abroad are likely to be pro-foreign powers, so they may eventually be a purging target to deter foreign intervention. As seen in the massive purge event known as the Frunze Military Academy Incident during Kim Jong-il's rule, such elites can be considered potential threats to the dictators.¹² Thus, Hypotheses 3b and 3c are supported by the result.

I predicted from Hypotheses 4a and 4b that the total number of promotions and demotions may influence the purge risk. The result shows that as one unit increased in

in the Kim Jong-un era is much greater than that of other leaders (Ishiyama & Kim, 2020), future studies will require further discussion of the leadership variables and other structural/environmental variables affecting the purge risk.

12. A group of military officers of the Korean People's Army that had been trained at Moscow's Frunze Military Academy and established strong links with Russia were arrested in 1994 on suspicion of plotting a coup. However, many North Korean experts believe that this was Kim Jong-il's political terror to eliminate military opponents during the power transition to Kim Jong-il from his father, Kim Il-sung.

demotion, the risk of being purged decreased by about 15–20%. Although the magnitude of the effects in the two models is slightly different, both models confirm that a similar direction exists. However, the effect of promotion is a little complicated. As one unit increases in promotion, the risk of purge decreases by about 15% in the proportional model, but this effect reverses in the nonproportional model. It can be said that while

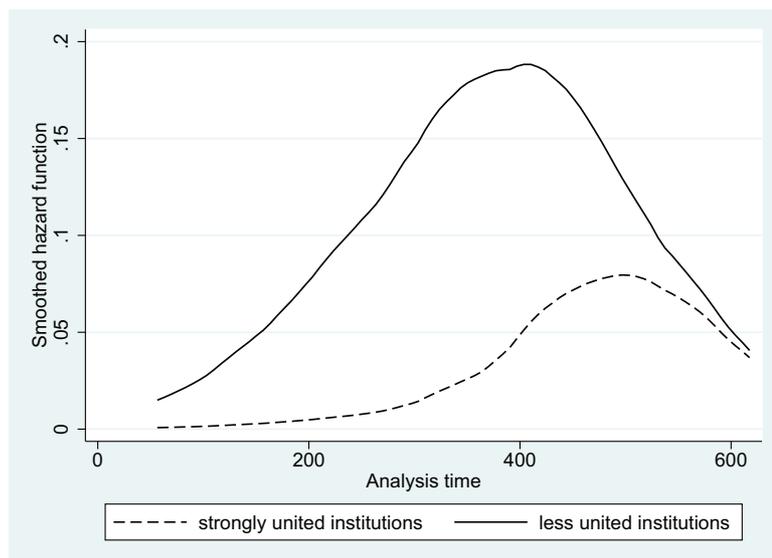


FIGURE 1. Hazard function plot for less united institutions variable.

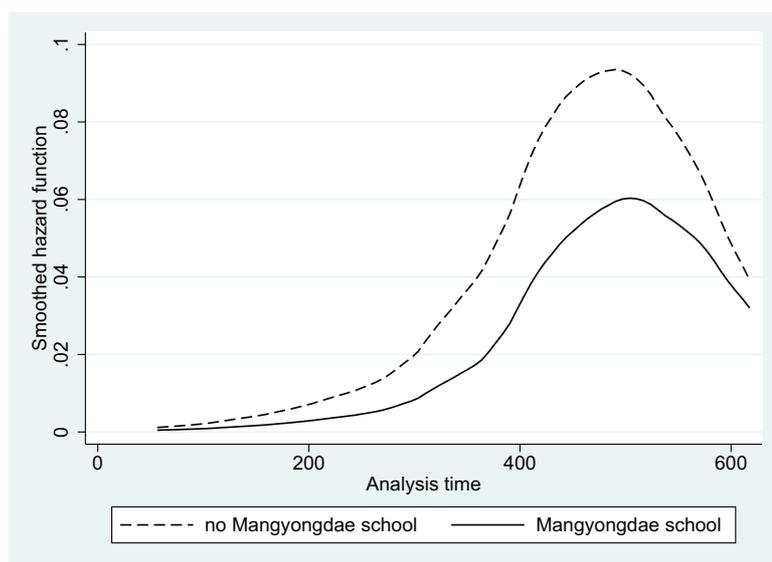


FIGURE 2. Hazard function plot for Mangyongdae school variable.

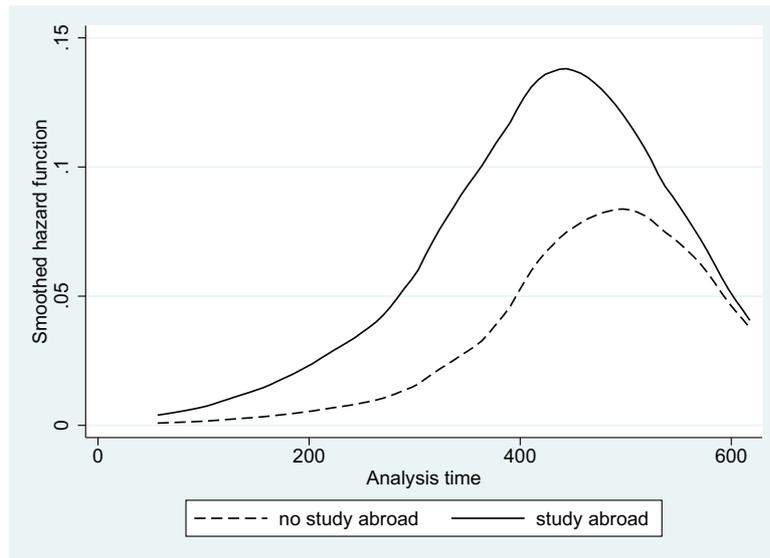


FIGURE 3. Hazard function plot for study abroad variable.

Hypothesis 4b is supported, Hypothesis 4a is not. Lastly, the variable of WPK Politburo is not significant across both models, so it is difficult to say that this supports Hypothesis 5. Figures 1, 2, and 3 present the overview of hazard function plots for three independent variables relative to Hypotheses H2, H3b, and H3c.

DISCUSSION AND CONCLUSION

Leaders can employ purges to gain a political benefit, not simply to remove the coup risk. The two purposes of purging the elite—eliminating coup threats and showing off political superiority—may not always be mutually exclusive. Even within one political system, the purpose of elite purge can vary over time depending on conditions, such as leadership transition, social instability, or economic crisis. That being said, under more stable circumstances, showing off political superiority via purges can be a priority goal for dictators rather than eliminating coup threats since it makes their dictatorial rule more efficient and more manageable.

This article shows that purges continue to occur in a well-established dictatorship and that various factors determine the elites' purge risk. In particular, the solidarity of institutions to which individual elites belong seems to have a strong effect on the elites' risk of being purged. In personalist dictatorships, the target of purge may be focused on elites who have a larger demonstration effect but have a smaller political burden for dictators. For example, elites from less potent and less united organizations could be more easily targeted than those in the military or the party, which are more potent and unified organizations. Since targeting elites from more unified institutions may bring about a backlash after the purge, dictators may select the purge target from the less unified but more symbolic group. The empirical result of this research provides evidence of it.

The probability of being purged also appears to be closely related to other individual factors, such as elites' educational backgrounds and career paths. Given the nature of the personalist dictatorship of North Korea, it is interesting that blood ties with the dictators and the Guerrilla faction background are not consistently significant in both models. Rather, whether elites graduated from specific schools or whether they have the experience of studying abroad better explains the likelihood of being purged. This suggests that educational background plays an important role in building human networks and solidarity with members, which potentially affects the dictator's perception and the decision to purge targets. It is also noteworthy that personal experiences facilitating foreign meddling also influence the determination of purge target.

Contrary to common belief, frequent demotions and punishments reduce the probability of being purged. Given the fact that demotion itself can already serve as punishment and weaken elites' position within their institution, this result makes sense that the elites, who are demoted many times, are excluded from the purge target.

This study reveals who is likely to be the purge target in a well-established personalist dictatorship based on an original elite dataset. In practice, however, the dictator's choice of purge strategy and its target can be influenced by a variety of additional factors, including leadership, elites, and structural variables. For example, not all dictators deal with elites in the same way. The dictator's personal attributes or former experiences may also play an important role in their choice of purge strategy and elites' political survival. Further studies will be necessary to shed light on how other factors, such as the dictator's personal attributes or the structural factors surrounding the dictator and elites, determine the choice of purge strategy. ■

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Corresponding author email: taekbinkim@my.unt.edu

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APPENDIX 1. The Rubric of North Korean Elites

	Party	Government	Military	Other
Level 1 (about 700 elites)	Below the level of deputy director of WPK Department	Below the level of Vice Minister, deputy of SPA (Supreme People's Assembly)	Major General	Chairman of Religion Committee, Chairman of Society Committee, Chairman of Committees toward South Korea
Level 2 (about 230 elites)	Alternate member of WPK Central Committee, member of WPK Central Auditing Commission	Chairman of Municipal & Provincial People's Committees, Vice Minister of Cabinet	Lieutenant General	Chairman of Academic and Sports Committees, Chairman of Labor Groups
Level 3 (about 130 elites)	Full member of WPK Central Committee, deputy director of WPK, member of WPK Control Commission	Minister of Cabinet, Chief of Central Court, Chief of Central Public Prosecutors' Office	Colonel General, Commander of Army Corps Army General	
Level 4 (about 50 elites)	Alternate member of WPK Central Political Bureau, Chairman of Municipal & Provincial WPK Committees,			

(continued)

APPENDIX 1. The Rubric of North Korean Elites (*continued*)

	Party	Government	Military	Other
	Chairman of WPK			
	Central Control			
	Commission, Director of WPK Department			
Level 5 (approximately 20 elites)	Full member of WPK Central Political Bureau, Vice Chairman of WPK Central Committee, member of WPK Central Military Commission, Director of Major WPK Departments (Organization & Guidance Department, Propaganda & Agitation Department, Cadres Department, Light Industry Department, Economy Department, International Department, Machine-Building Industry Department, United Front Department)	Prime Minister of Cabinet, Vice Prime Minister of Cabinet, Vice Chairman of State Affairs Commission, member of State Affairs Commission, Minister of People's Armed Forces, Minister of People's Security, minister of State Security, Minister of Foreign Ministry, Chairman and Vice Chairman of State Physical Culture and Sports Guidance Commission	Army General, Vice Marshal, Marshal	

Source: Author compilation.

APPENDIX 2. Descriptive Statistics

	count	mean	sd	max	min
Survival time (month)	367	198.894	159.031	706	3
Gender	367	.052	.222	1	0
Pyongyang	367	.071	.257	1	0
Mangyongdae school	367	.087	.283	1	0
Kim Il-sung University	367	.169	.375	1	0

(*continued*)

APPENDIX 2. Descriptive Statistics (<i>continued</i>)					
	count	mean	sd	max	min
Studying abroad	367	.134	.341	1	0
Blood ties	367	.014	.116	1	0
Guerrilla faction	367	.057	.233	1	0
Diplomat career	367	.079	.270	1	0
WPK Politburo	367	.207	.406	1	0
Less united institutions	367	.106	.309	1	0
Demotion	367	.981	1.352	8	0
Promotion	367	8.880	7.575	40	0
<i>N</i>	367				

APPENDIX 3. Survival Analysis for Purged Elites under Age 75		
	Cox model	Cox model with time interactions
Gender	0.608 (0.291)	0.496 (0.266)
Pyongyang	1.973 (0.844)	1.361 (0.613)
Mangyongdae school	0.148*** (0.073)	0.148*** (0.077)
Kim Il-sung University	0.476* (0.138)	0.601 (0.181)
Studying abroad	2.133 (0.936)	3.401** (1.342)
Blood ties with dictators	0.023** (0.028)	0.030** (0.038)
Guerrilla faction	0.839 (0.474)	1.220 (0.713)
Diplomat career	0.764 (0.269)	0.737 (0.268)
WPK Politburo	2.274* (0.759)	1.737 (0.585)

(continued)

APPENDIX 3. Survival Analysis for Purged Elites under Age 75 (*continued*)

	Cox model	Cox model with time interactions
Less united institutions	4.329^{***} (1.631)	2.800^{**} (1.076)
Demotion	0.849 (0.075)	0.957 (0.092)
Promotion	0.818^{***} (0.025)	1.366^{**} (0.154)
Promotion × sqrrtime		0.970 ^{***} (0.007)
N	173	173

Note: Exponentiated coefficients; Standard errors in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$