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The Rise of Red Engineer and the Fall of Communism?

Introduction

In December 1991, shortly after the resignation of Mikhail Gorbachev, Soviet Union, the "big brother" of communist bloc during the Cold War, was disintegrated. During Gorbachev's reign, he and his reformist colleagues introduced a series of reform initiatives over fields like economics and politics, namely the programs like the *Perestroika* ("restructuring") and the *Glasnost* ("transparency"). Gorbachev intended to carry out a revolutionary transformation to both the state and the society. Particularly, at the point where state and society intersect, Gorbachev's vision was to reshuffle the fundamental power structure of this authoritarian regime, which was tightly connected to the Soviet communist party, to embrace more democratic elements, as appeared in the slogan of *Demokratizatsiya* ("democratization"). Many scholars, especially in and before early 1990s, had argued that Gorbachev's own inexperience in coping with the drastic outcome of democratization and decentralization had drained the fate of Soviet Union (Olcott 118)(Mcfaul 61). A similar case of communist authoritarian state for comparison at the time was China, where also experienced the substantial social change since late 1970s due the introduction of Deng Xiaoping's reform policy but the party-state structure reserved, to certain extent, almost intact after the unstable years. Susan Shirk argued that Deng's sensed the necessity to restrain political reform, particularly democratization at all levels

of the bureaucracy, while only proceed with economic reform, but Gorbachev was the

reversed, as a reason for the stability of Deng's regime institutionally (Shirk 4).

Undoubtedly, Deng Xiaoping underwent a completely different political career path as

Gorbachev and the most obvious difference is that Deng is almost 30 years older than

Gorbachev. By the time when Deng firstly became a member of the Politburo Standing

Committee (PSC) in 1956, the highest decision-making panel of Chinese Communist Party

and the de facto leadership of the state, Gorbachev was merely a fresh graduate with a law

degree.

Thus, this comparison would lead us to another question: was the fate of these two

communist regimes actually rely on the "experience" of their incumbent leaders?

Meanwhile, would it be accurate to presume that the policymaking and its consequence

happened in these two communist authoritarian states shall be attributed mainly to them?

Or, alternatively, what other variables we are missing that can be crucial to the

functionality authoritarian bureaucracy? Therefore, with this paper, I intend to explore an

institutional factor of these two party-states, their Politburos, other than their leaders

alone and specifically, I seek to discover how their Politburos' respective composition

might bear difference and thus resulted in distinctive outcome to the decision making in

the years of political turbulence.

In the next section, I will move on to articulate the argument over how membership

composition of the Politburo, especially the rise of technocratic elites, would influence the

pattern of decision-making. Afterwards, I will then briefly introduce my research strategy

and data collection, following with an analysis to the collected dataset as well as a final conclusion.

Argument and Literature Review: Technocratic Communism

In communist regimes, Politburo mostly refers to the highest assembly of the party with a status of "bureaucratic domination" that enables it to issue major policy decision to the party(Cohen 464). The members of the Politburo were usually also the head of influential party or state departments. Given the fact of the party-state nature in states like Soviet Union and China, the high-ranking party officials were mostly simultaneously the high-ranking state officials (Cohen 464-465). Therefore, policy decision makers in this institution were certainly responsible to the initiation of reform in the state.

However, what gave birth to reform impulse inside the communist authoritarian institution and what types of reform impulse, as discussed above, were generated under distinctive conditions is the question that shall be resolved below. My hypothesis is that when the proportion of educated technocratic elites serving in the communist bureaucracy increases, the inclination to political reform, particularly democratization of the communist authoritarian system, would also rise and eventually results in the actual practice of reform. To better understand my hypothesis and thus to proceed with my argument, I would firstly present a discussion to a core element in the hypothesis: technocrat.

The tradition of technocrat, or so called "red engineer", can be traced to Plato's vision of Philosopher Kings who were the most intelligent figures in the society that underwent strict education and eventually became the ruler of the community. In modern interpretation, technocracy is highly related to "technician" and thus technocracy per se indicates the stage when "oligarchy of technicians" controls the administrative, economic, and political arms of a given state (Centeno 309). A striking feature of these "technicians" is the sense of "administrative rationality" in against the conception of "irrationality" upon the authoritarian rule (Centeno 308). The underlying logic of the "administrative rationality", as illustrated by James Burnham, is that the technocratic ideology is essentially built on the "instrumental reason" that would terminate social conflict and thus promote civil society, which ultimately will encourage more democratic practices (14).

In other theoretical approaches to the democratization of political institution, the modernization theorists like Jorgen Moller once examined the pattern of the rise of modern nation state in Europe as the "western sequence", which emphasizes the rule of law and the political accountability as two mechanism that would ensure democratic state-building and such mechanism would be found in the functional parliament, or other similar institutions (111-12). The idea here is that political accountability, practiced by institution like parliament, would in favor the rule of law that follows the rational reasoning behind policy decision. Members of the parliament can raise opposition to ineffective policy decision and thus adjust, or offer suggestion, to the decision maker in order to pass more preferable codes to more people. In a (Max) Weberian account, it reflects the ideal model of legal domination that is ensured by "bureaucratic administration" based on qualities like

technical qualification on specialized duty, hierarchically organized structure, delimited

sphere of competence, and rules that can regulate the conduct of all officials (Titunik 150).

Thus, to rule in accordance with a given principle that is widely regarded as the foundation

of democratization and effective bureaucratic administration, which technocracy can

contribute to.

   In socialist redistributive economy, as examined by various scholars, the rise of

technocratic elites is also a natural pattern. According to Joel Andreas, Soviet model of

industrial planning is a reflection of Henri de Saint-Simon's vision of socialism that

gradually replaced the orthodox revolutionary Marxism-Leninism upheld in the beginning

of these communist regimes (1-2). In this system, class division exists with the rise of a new

group of elites who are characterized by their perceived obligation to economic planning

instead of the cult to the fruits of communist revolution. These elites, or the new

intelligentsia, emerged based on the education system established by the old revolutionary

elites in the communist states who seek to raise a group of ideologically loyal experts to

practice socialist programs. Subsequently, the junior technicians will enter the

administrative positions in either factories or bureaucracy and some of them might end up

participate in the highest branch of state bureaucracy. In order to sustain the centralized

industrial planning and redistributive system that replaced the decision of market,

communist system's legitimacy requires a virtue of "rational redistribution". As add on to

the idea of "administrative rationality", "rational distribution" reflects how technocratic

intellectuals behave ideally in the communist regimes as they took enormous obligation to

abundant aspects of the state, from economy to politics and to culture and thus require

sufficient technical knowledge for legitimating bureaucratic power (Konrad and Szelenyi 149). Therefore, the rise of technocratic elites is not only reasonable in terms of the pattern of upward mobility but also the logical prerequisite to the legitimacy of communist redistributive system.

Therefore, a causal relation here that can be concluded is that in the socialist system, the emergence of technicians as political elites, in theory, would be inevitable. By the time they enter the top-level of administration, they would exhibit a trajectory of rational rulership that recognize the rational administration through issuing suitable policy to the rise of civil society. Especially for the technocratic elites who didn't possess the traditional cult for past revolution, more radical policy might appear that in favor of democratization institutionally and structurally, even not intentional by themselves, that would ultimately generate the atmosphere of democratic practices in a top-down mode.

Hence, following the previous discussion, Gorbachev's "inexperience" might be the "fault" in not withholding the authority of the communist authoritarian regime but, in another sense, a reflection to the process of the rise of technocracy. On the other hand, Deng's regime that rejected to carry out similar political reform might indicate a different pattern of political elite composition. To test my hypothesis stated, I will then introduce the data of Politburo composition of Soviet Union and China to analyze the pattern of official election, or selection.

Data Collection and Discussion

Following the previous introduction to the function of Politburo in both Soviet Union and China, I then searched the biographical information of all members elected between 1950s-1980s (Soviet Union 1952-1986/China 1956-1987) and coded them with a focus on their academic experience. The data coded is derived from online databases which were formulated based on primary sources, mainly government documents (Know by Sight, "*Guide*") (People's Daily, "*Database*").

For the sample, I excluded the members who were the candidate members of Politburo as they were only the "consultative voice in the central policy-making" and had no decisive influence on decision making (Ciboski 174-175). Similarly, in the Politburo of China, three clusters of membership existed before early 2000s: Standing Committee members (PSC member), Committee members, candidate Committee members. China's Politburo followed trajectory of Soviet version that its members in the periphery didn't exert much influence on the Standing Committee, especially the norm of the Standing Committee in the post-Mao was to act upon consensus instead of majority rule (Shirk 15). Therefore, I also excluded the ordinary Committee membership and candidate membership in China's Politburo. In Table 1., the total number of counted elected members in both institutions and the "unique value", when repeated counting of reelected members were removed. I also include the number of election terms and the number of leaderships, e.g., Mao Zedong – Deng Xiaoping – Jiang Zemin, in both bureaus.

	Total Value	Unique Value	Terms	Leadership	Time Span
Soviet Union	153	71	8	6	1952-1986
China	49	28	6	3	1956-1989

Table 1. Politburo Membership Composition

In addition to the number of individuals, I've also cited the variables like year of birth, year of earning party membership, academic/work experience and military experience. As for academic/work experience, I specify four dummy variables in the dataset: *college* ("1" for had college experience; "0" for none), *stemstudy* ("1" for took STEM major in college; "0" for non-STEM major), *regdegree* ("1" for attained college degree through regular channel; "0" for none), and *stemexp* ("1" for had previous work experience in STEM-related industry; "0" for none). To clarify, presenting *regdegree* in the dataset is for the use to indicate individuals with no full and regular college experience. For instance, for individuals who left college before acquiring a degree due to reasons like financial difficulties or war, I count them separately compared to those who had successfully completed the entire span of college study.

Meanwhile, I also discount the military academy experience from *college* variable as it would indicate one's distinctive career path to the other civil servants and thus set up another set of dummy variables that include *military* ("1" for had military service; "0" for none) and *general* ("1" for held at least brigadier general rank, and equivalent rank or senior commander experience, in military; "0" for none). In many existing studies, military

academy and military training experience had shown effect on individuals' ideology build-up. With US military as an example, those who had military service, especially those who were cadets in the military academy, turn out to be more ideologically conservative as perceived by themselves, whereas civilian sector is perceived as more ideologically liberal to them (Sondheimer et al. 132). For civil-military relation study in communist authoritarian regimes, scholars like Amos Perlmutter and William M. LeoGrande also stated that high-ranking military officers were mostly ideologically loyal to the party, especially in states upheld Marxism-Leninism and regardless of ruling individuals (788). Thus, in most cases, military service and commander experience's effect on elite's reform impulse can be opposite to non-military individuals. In other words, in the Politburo, more military officers elected may lead to a more conservative term of government.
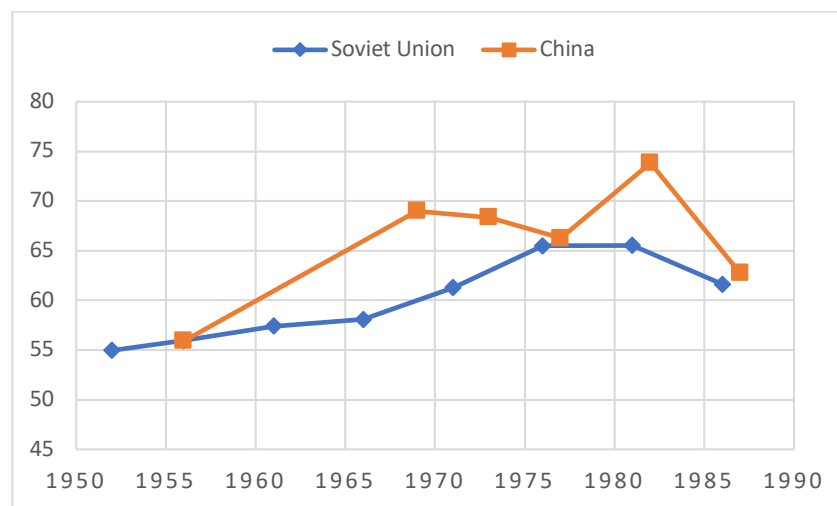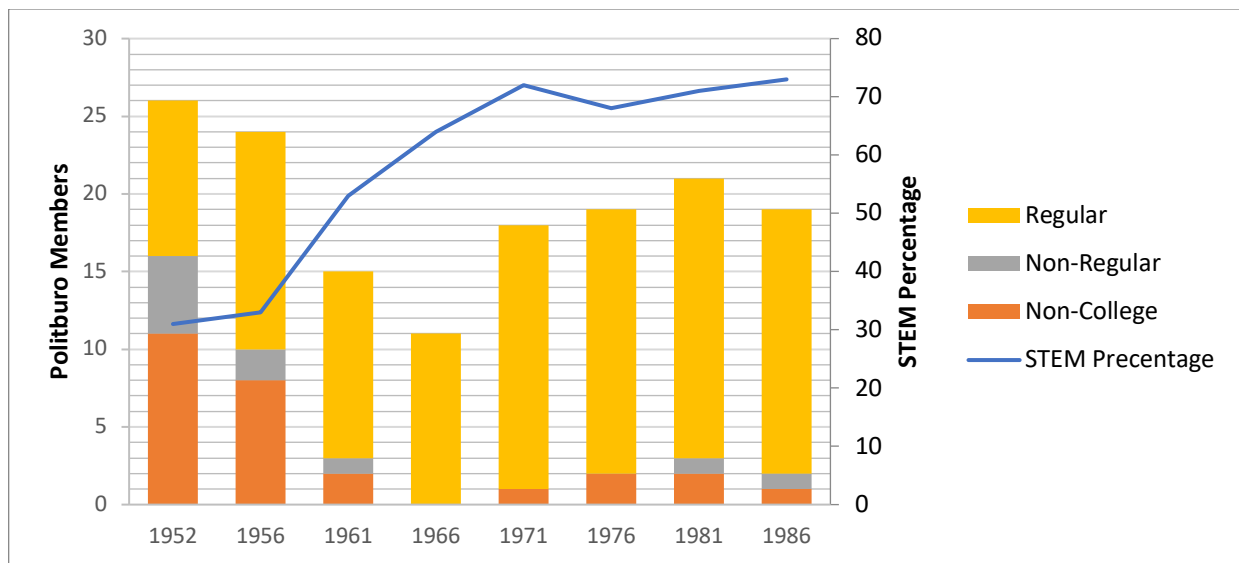

Figure 2. Mean Age of Politburo/PSC Members

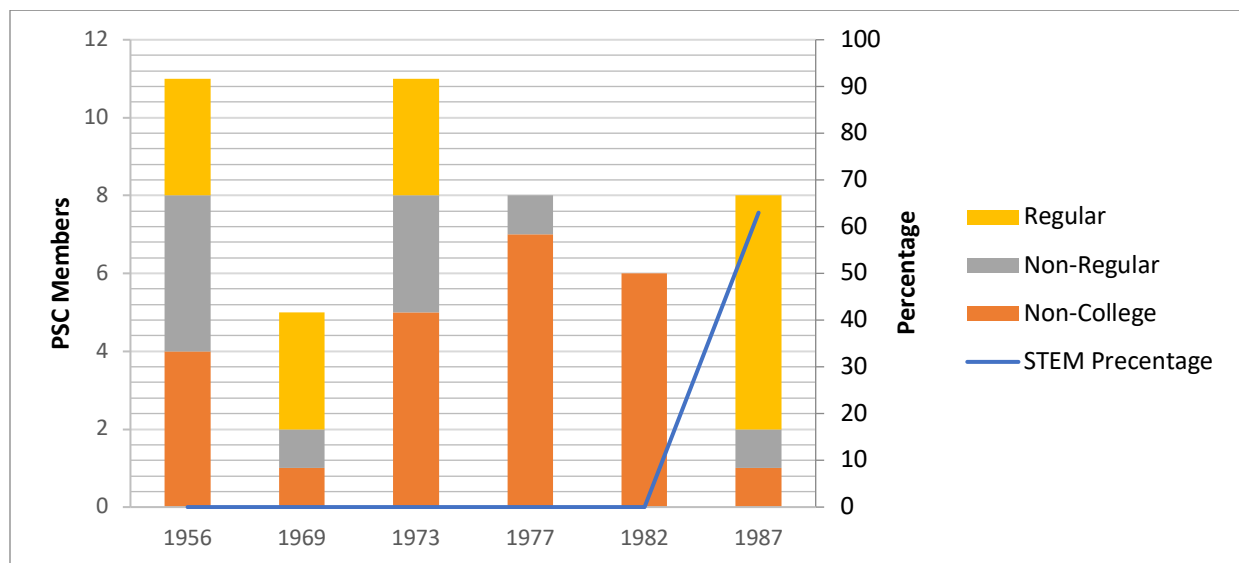**Figure 3. Politburo of Soviet Union's Membership Composition**

Figure 4. PSC of China's Membership Composition

According to the above figures, I consider the individuals who had regular college experience as the intellectual elites and those who held STEM-related degree would be further regarded as technocratic elites. The political affiliation of intellectual elites can be distinctive to technocratic elites, so I also map out the percentage of STEM degree holders separately. In addition, I also present the mean age comparison between China's PSC and Soviet Politburo membership to examine the potential divergence in Figure 2.

To briefly elaborate on Figure 2, adding the fact of leadership succession pattern, it shows that mobility was not high in the PSC of China, when compared to Soviet Union. For instance, between the first two year clusters counted in China's PSC, or the 1956 and 1969 terms specifically, the change in the numerical amount of year is roughly the same as the increase of mean age (from about 55.9 to 69). This period of the leadership of Mao and this Standing Committee collogues were mostly the individuals who also served in the previous term, like Lin Biao, Zhou Enlai, and Kang Sheng. In other words, they stayed in power for 13 years without additional major appointment in the bureau while three of them also stayed in power in the next term. However, in the meantime, there had been more reshuffle in Soviet Politburo. When Mao's era ended in late 1970s, it is obvious to find a downward pattern in mean age within China's PSC but followed another upward trend to an even higher level. This was because of Deng's succession with the promotion of other senior officers who also served in either PSC or as ordinary Politburo members, without younger generation that only emerge in late 1980s when Jiang Zemin and other new members took the office.

Moreover, regarding the education experience, we can also find that the amount of those who had acquired regular college experience by the year of each term began were much higher in Soviet Union than in China. Considering the proportion, we can also discover that after 1960s, the proportion of having college experience among the leaders of China was actually decreasing whereas it remained almost reaching 100% each term in Soviet Union. Not to mention there had been a steady growth of STEM degree holder appointment in Soviet Politburo. This would indicate that more technocratic elites emerged in Soviet Union, but it also shows that the rise of technocratic elites might not be the natural pattern in socialist states. To further explain, a potential factor behind this phenomenon is that Mao Zedong proceeded the idea of orthodox Marxism-Leninism in eradicating class boundary through incorporating intellectuals to working class (Andreas 4-5). In 1950s-early 70s, tremendous cases of mass movement that purged intellectuals severely, including technicians, took place in China. One profound case was the Cultural Revolution that strictly reject the promotion of intellectuals in any sectors. Thus, it was only after the inauguration of Jiang allowed the intellectuals and technocrats in particular to rise to the power, following the theoretical pattern of socialist style elite mobility.
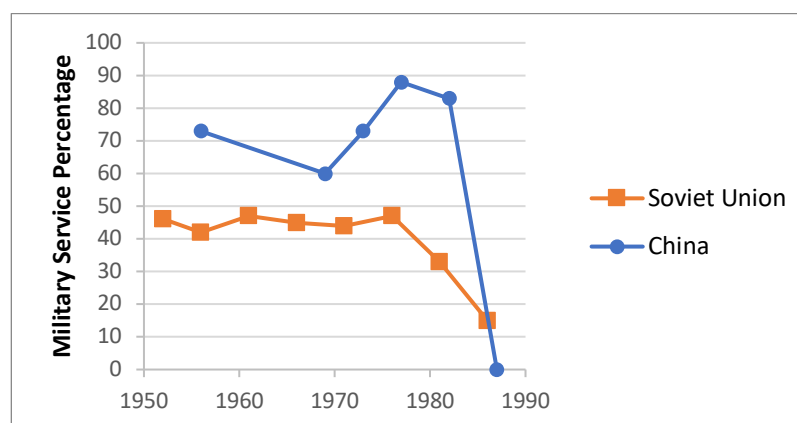
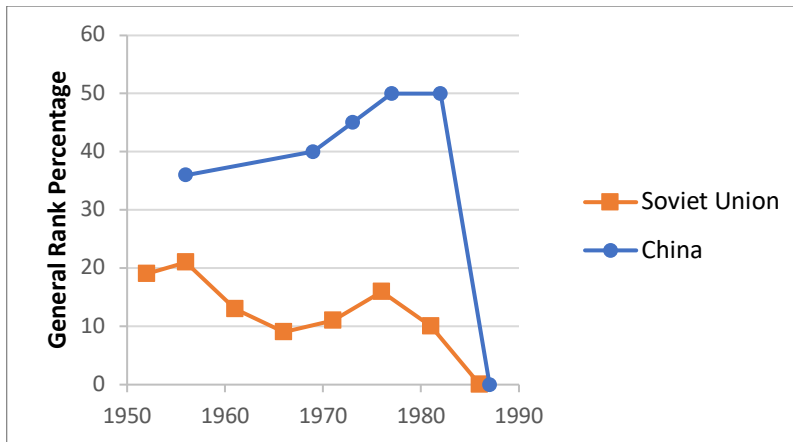**Figure 5. Military Service Experience Percentage Comparison**

Figure 6. General Rank Percentage Comparison

Finally, while reading the above two figures, we can then be aware of another phenomenon that China's PSC contained more military officers and thus there had been far more intersection between political administration and military department. One example is that Deng Xiaoping was also a senior commander during the wartime, as well as his close ally Ye Jianying and Li Xianian who became the PSC member in 1970s. Nevertheless, in Soviet side, although its leader, Leonid Brezhnev also held military rank as general, but he had no equivalent experience in battlefield command or military department as all other Soviet generals or Deng. Subsequently, Brezhnev's three successors, including Gorbachev then had no senior military officer experience and the proportion of military leaders in the Politburo also dropped significantly, indicating the diminishing militarist conservative members in the decision-making branch of the state politics

Recalling the argument on the cult of revolution, a further analysis to the effect to military experience in the early years of China is that its leaders, who took power through military achievement in the civil war, recognize their charismatic legitimacy based on radical orthodox Marxism to eradicate class boundary that was the major social issue in pre-civil war era and thus the "founding fathers" of China's communist authoritarian system endorsed a mechanism of "national campaign" to reform the entire society(Feng 73-74). "national campaign" referred to the mass movement induced by the government across the state. Typical examples took place in China between 1950s-80s were the Culture Revolution, as mentioned before, and the Great Leap Forward, where rational administration were yet appeared, and early stage of irrational planning even denied the upward mobility and necessity of technocratic elites. As a result, the China's PSC structure that was in favor of charismatic generals failed to introduce technocratic administration by the time. The "natural pattern" then only managed to be facilitated by the generation of Jiang in the late 1980s, the time when Soviet Union had already experienced long history of technocratic rulership.

Conclusion

In theory, socialist redistributive economy requires a substantial number of elites to monitor the industrial and economic planning in different sectors. This task allows the rise of elites to influential position in both factories and even the government where supervised the whole picture of planned economy. As a result, with the increasing influx of political

elites who held technician experiences before, a cluster of technocratic elites would emerge and promote the democratizing political reform in the state. Although Soviet Union witnessed such pattern as more reformist technicians accumulated sufficient resources through becoming the popular targeted community of bureaucratic appointment and thus to mobilize such reform by late 1980s, China failed to follow the same trajectory due to Mao's strict policy in purging the intellectuals. This would explain why when the turbulence within communist bloc emerged across the globe, China bear little influence in the political institution while states like Soviet Union took dramatic reform. The pattern of Soviet Union Politburo composition can also inform us that the increasing proportion of technocratic elites inside the institution would not lead to sudden reform but would require a span of time, which might be the process to endorse "administrative rationality" and thus "democratic practices". Therefore, the downfall of Soviet Union might not be the "inexperience" of Gorbachev himself, but indeed a reflection of the process of eventual democratization through the rise of "red engineer".

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