## The Political Economy of State Security: Why do some Militaries Become Involved in the Economy

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#### Abstract

Why does the military in some countries get involved in the economy by running economic enterprises and what leads governments to permit such involvement? Running household appliance factories, transportation agencies, banks, hotels, etc., are indeed unrelated to national security and are far removed from regular roles assigned to militaries. Such involvement has further implications for politics and the economy. I argue that the process of involvement of the military in the economy functions as a survival strategy for leaders and a profit-making scheme for the military. Using original cross-national data on the emergence of military involvement in the economy, this research demonstrates that militaries are more likely to get involved in the economy when the military's institutional interests are at risk and when the government has to rely on the military to maintain power. Leaders allow the military to benefit financially through economic activities in order to stay in power.

### Introduction

After defeating the Tamil Tiger guerrillas in May 2009, Sri Lankan president Mahinda Rajpakse's administration pursued the strategy of encouraging the armed forces to become
involved in large-scale commercial activities such as selling vegetables and religious bric-abrac, running travel agencies, hotels and highway restaurants and collecting refuse in the
capital of Colombo.<sup>1</sup> The Sri Lankan army has since then become involved in building
houses, stadiums, luxury resorts, and running ferry services and tours for whale-watchers.
Sri Lanka is not the only country where the military is involved in economic activities. There
are dozens of countries around the world whose militaries are active economic players and
are involved in numerous economic activities that are far removed from the realm of national security. The profits made from economic activities are spent at the will of the higher
echelons of the mentioned militaries with limited accountability to the government.

Military involvement in the economy is a surprisingly common phenomenon with significant consequences for both politics and the economy. Engagement of the military in the economy is an entrenchment into the civil sphere and taking control of a significant portion of a country's economic life by its military might result in indirect if not direct influence of the military on its politics, which is a civil realm. Military involvement in the economy provides the military with resources that are not part of the defense budget. In some countries the annual budget provided by the central authority constitutes only a portion of what the military in reality consumes (Brömmelhörster and Paes, 2003).

Military involvement in the economy has consequences for leader survival and state

<sup>&</sup>lt;sup>1</sup>Source:https://www.irishtimes.com/news/armies-that-create-their-own-lucrative-empires-1.610298

repression. The military might respond harshly if the government comes to threaten its economic interests and it might stay loyal only to the leaders that guarantee its economic interests. It would therefore repress the challengers of the status quo. Such influence can change the course of history in some countries. For example, the role of the military is known to be a major factor in the outcomes of the uprisings during Arab Spring (Albrecht and Ohl, 2016; Barany, 2011; Brooks, 2013, 2017; Croissant, Kuehn and Eschenauer, 2018; Lutterbeck, 2013; Nepstad, 2013; Pion-Berlin, Esparza and Grisham, 2014). Scholars have argued that the non-confrontational strategy of the Egyptian military during 2011 uprisings and their defense of protesters stemmed from their deep roots in the country's economy.<sup>2</sup> Venezuela today is a good example of how the civilian government controls the military and ensures its loyalty through providing it with access to the economy. President Maduro has so far survived the political crisis and efforts by the opposition-led National Assembly Juan Guaidó to unseat him. The Venezuelan security forces are the key player that could break open the impasse and their choice so far has been to remain loyal to Maduro. Maduro's strategy since coming to office has consisted of rewarding the military personnel with economic opportunities such as control of economic enterprises<sup>3</sup> which has so far been successful in quelling discontent among top military officers and buying off their loyalty to the degree that the military is now acting as a protective shield against the opposition.

Military involvement in the economy has implications for foreign policy. Some militaries

<sup>&</sup>lt;sup>2</sup>Robert Springborg, professor at the U.S. Naval Postgraduate School and expert on Egypt said in an interview with NPR that "The military (in Egypt) wants stability above all. It's not focused on war fighting; it's focused on consumption. Officers in the Egyptian military are making "billions and billions and billions" of dollars. These billions would be threatened if the protests devolved into full-on civil conflict. People in the middle of violent political chaos don't buy dishwashers." Source: https://www.npr.org/sections/money/2011/02/10/133501837/why-egypts-military-cares-about-home-appliances

 $<sup>^3</sup>$ Source:https://www.miamiherald.com/news/nation-world/world/americas/venezuela/article210233099.html

not only invest inside their home country, but also establish joint ventures with companies abroad, invest in the form of foreign direct investment in foreign countries, and take on contractor projects abroad (Cheung and Tai, 2001). Military's foreign economic activities might affect countries' relationship with their economic partners. The military-turned-economic-player might affect peace and conflict, military battlefield effectiveness or its willingness to fight wars in the first place. Finally, military involvement in the economy has implications for the economy. A military that enjoys favorable policies from the government such as receiving subsidies and tax exemption - and utilizes cheap labor by using soldiers in economic activities would threaten private sector through unequal competition (Mora and Wiktorowicz, 2003).

While existing works on civil-military relations have greatly enhanced our knowledge of
the scope of military's meddling in politics, which would amount to interference in civilian
sphere, the consequences of such involvements, and the efforts of governments in limiting
the intervention of the military in politics as the main mode of departure from the regular
role assigned to militaries, no systematic study has analyzed military economic activities
as yet another form of military entrenchment in the civil sphere. Economic activities are
indeed beyond the regular role of militaries and unrelated to national security and should be
considered as a diversion from the armed forces' main role. This paper breaks new ground
on this phenomenon, seeking to explain what appears to be a widespread phenomenon,
answering the question what brings the military to become an active economic player in
some countries? I argue that the process of involvement of the military in the economy
functions as a survival strategy for leaders and a profit-making business for the military.
Using original cross-national data on the emergence of military involvement in the economy,

I demonstrate that triggering causes such as end of war or post-coup environment, and structural causes such as higher institutional capacity of the military and regime's lack of power consolidation contribute to the emergence of military involvement in the economy. By allowing the military to get engaged in the economy, leaders reach three goals. First, they decrease coup threat by making a credible commitment to the military and tying the economic interests of the military up with the continuance of the status quo. Second, in more autocratic countries, not only do leaders decrease threats from the military, they can also rely on armed forces to suppress any opposition that challenges the regime as these forces, knowing their economic interests bound up with the survival of the regime, are motivated enough to crack down on dissidents. Third, they can use the military's manpower to build infrastructure and have a better command of the country by giving the military control over technological infrastructure.

The next section of the paper looks at the literature on military involvement in states' political and economic arenas. The ensuing section lays out the paper's theory by explaining different parts of the puzzle and proving an explanation for the causes of military involvement in the economy and proposing the hypotheses. In the research design section I lay out the variables outlined in the hypotheses, discuss the structure of the data, and elaborate on the analysis and results. In the last section, I conclude my remarks and propose ideas for future research.

## Existing research

Although the importance of the military to political economy of some countries is evident, we have limited knowledge of the processes through which militaries operate within the economic sphere. Classic scholars of civil-military relations were primarily concerned with providing theories of civil-military relations that respond to a growing need and call for theoretical and policy-oriented recommendations as to how civilian governments should form their relationship with their militaries and at the same time implement a successful national security policy (Desch, 1999; Feaver, 1999; Huntington, 1957; Janowitz, 1960). Classic scholars disagree over the extent and the scope civilians and the military jointly or autonomously implement military security policy but they all agree on a very important aspect of civil-military relations and that is "civilian control of the military". The modern military is supposed to be held politically neutral and is structured to follow orders from the civilian authority. Politics is practiced beyond the scope of military professionalism and the military must be held out of the civilian sphere (Feaver, 1999; Finer, 2002; Huntington, 1957; Janowitz, 1960; Welch, 1976).

However, militaries do not always follow the rules and stay in barracks. Staging a coup is the most common threat posed by the military to many governments. From 1950 to 2017, %48 of countries in the world have experienced at least one coup. During this period, 475 coups were attempted, of which 236 were successful<sup>4</sup>. Coups are a major cause of leaders' exit especially in non-democratic countries. Given the importance of coups as a main cause of leaders' exit and consequences of military involvement in politics for both domestic politics and international relations, scholars of civil-military relations have extensively studied different forms of military involvement in politics (Albright, 1980; Perlmutter, 1969; Pion-Berlin, 2009; White, 2017) and coups (Acemoglu, Ticchi and Vindigni, 2010; Belkin and Schofer, 2003; Bell, 2016; Bell and Sudduth, 2017; Böhmelt and Pilster, 2015; Casper,

<sup>&</sup>lt;sup>4</sup>Data is drawn from Powell and Thyne 2011

2017; Casper and Tyson, 2014; Collier and Hoeffler, 2005; Galetovic and Sanhueza, 2000; Gassebner, Gutmann and Voigt, 2016; Houle, 2016; Houle and Bodea, 2017; Kim, 2016; Londregan and Poole, 1990; McMahon and Slantchev, 2015; O'Kane, 1981; Powell, 2012; Roessler, 2011; Singh, 2014; Svolik, 2012, 2013; Thompson, 1973, 1975, 1976; Tusalem, 2010; Wig and Rød, 2016; ?) as a form of divergence from the military's expected role which requires disengagement from politics. Since coups are a major threat to leaders' survival, governments have managed to adopt strategies in order to ward off threats from their military. A great number of works in civil-military relations literature are devoted to studying leaders' strategy of coup-proofing (Albrecht, 2015; Ash, 2016; Bausch, 2018; Carey, Colaresi and Mitchell, 2015, 2016; De Bruin, 2018; Rabinowitz and Jargowsky, 2018; Sudduth, 2017), dispute involvement (Arbatli and Arbatli, 2016; Piplani and Talmadge, 2016), balancing military expenditure (Collier, Hoeffler et al., 2007a; Leon, 2014), and coming up with institutions and succession rules (Frantz and Stein, 2017; Frantz and Ezrow, 2011; Kohn, 1997) in dealing with threats from the military.

The civil-military relations literature has disproportionately focused on coups as observable outcomes in a government-military relationship where coups are considered failure events and lack of coups are simply regarded as periods between events or spells. If we consider civil-military relations as a bargaining interaction between the military and the government (Svolik, 2012), coups should be considered bargaining failures, however, there are several options governments and militaries pursue to avoid bargaining failure and make credible commitments to one another (Feaver, 1999). Military participation in the economy is one tool among others the government and the military adopt to avoid bargaining failure.

As mentioned, the research on the economic roles of the military is limited. Scholars to

some extent have studied the impact of military expenditure in view of economic development and power politics (Abell, 1994; Chowdhury, 1991; Heo and DeRouen Jr, 1998; Kentor and Kick, 2008; Looney and Frederiksen, 1986; Stroup and Heckelman, 2001; Weede, 1986) but there is limited work about the causes and consequences of the military's running such lucrative ventures that fall outside military domain. A small number of historical analyses of military participation in the economy and a few case studies have put valuable effort into examining this phenomenon but there exists no cross-national empirical examination of the topic. Historical and case study works on the military involvement in the economy are dedicated to qualitatively studying the business networks of military in relevant countries. The works include a few studies on the Pakistani military's economic empire (Ayesha, 2016; Siddiga, 2017), the Chinese military's entrepreneurial activities and its evolution (Cheung and Tai, 2001; Mulvenon, 2016), military business complexes in Latin America, Congo-Kinshasa, and Russia (Brömmelhörster and Paes, 2003), military economic activities in East and South East Asia (Chambers and Waitoolkiat, 2017), the Egyptian military's economic empire (Abul-Magd, 2017; Abul-Magd and Grawert, 2016; Marshall, 2015; Nassif, 2013; Springborg, 2017), and Syrian, Cuban, and Iranian military's economic enterprises (Alfoneh, 2013; Klepak, 2005; Mora and Wiktorowicz, 2003). Although all of the mentioned studies provide us with valuable information about the history and evolution of military economic enterprises, only a few have attempted to provide a theory of military economic involvement. Scholars have attempted to explain emergence of military involvement in the economy by focusing on factors such as economic difficulties that necessitated economic reform (Mora and Wiktorowicz, 2003), low state capacity, parochial military organization, and higher threat conditions (Mani, 2007), and military's priorities and coalitional opportunities (Mani, 2011b).

The mentioned studies are dedicated to explaining the phenomenon of military engagement in the economy from the perspectives of history and peculiarities of each case and can help us understand the process of military involvement in the economy in certain cases and can be considered as sources of data and inspiration for theory-building. However, we still lack a comprehensive and empirical study that examines the phenomenon of military involvement in the economy cross-nationally. There is a distinct set of countries where the military has become involved in the economy at some point in history and have slowly dominated parts of the economic arena without the governments trying to stop the involvement process or in many cases with their encouraging such an interference. In the absence of a systematic study of the process of military engagement in the economy, and with no cross-national and comprehensive data on such engagements, this paper tries to shed light on the reasons and the process of military intervention in the economic sector by providing a dataset on the emergence of military involvement in economy in relevant countries, and proposing a theoretical explanation for the military engagement in the economy, its perspective, leaders' goals in allowing such an involvement and the conditions under which military intervention in the economy can occur. In the next section I propose my theory of leaders granting the military access to profit-making ventures of the economy as a tool of survival.

## A theory of military involvement in the economy

In order to better analyze the mechanism through which the military gets involved in the economy, we need to understand the relationship between the military and the government as well as the underlying factors that affect their relationship. Transformation of mercenary militaries of the 18th century into modern professional ones changed the role and structure of

the militaries and necessitated the civilian control of the military, which is commonly known as the most important issue of civil-military relations. The modern military was established as an institution that carried the command of the civilian government and officership became a profession from which soldiers received employment and fix salary.

The modern professional military has three political advantages over civilian organizations: "a marked superiority in organization, a highly emotionalized symbolic status, and a monopoly of arms" (Finer, 2002, p. 6). Conventional wisdom suggests that governments should strengthen their armed forces for the safety of the state. However, civilian control of the military, especially a powerful one, is not simple. Military professionalism, especially the internally focused professionalism, can pose a great threat to civilian governments (Desch, 1999; Huntington, 1957; White, 2017). The division between civilian political institutions and the military institutions as well as the distribution and balance of power between them creates the fundamental tension of civil-military relations: the guardianship dilemma or the moral hazard problem (Acemoglu, Ticchi and Vindigni, 2010) according to which a powerful, organized, and expert military would hinder threats (both internal and external) to the state; but that being secured, the armed forces can pose a threat to the leadership given their capacity to project violence.

In more autocratic settings, other than facing coup threats, leaders face opposition from masses. When leaders face mass opposition, especially in the form of collective protests, riots, and demonstrations, the military is the only organization that can effectively defeat the challengers. Historically, governments have used the military as a sharp instrument to maintain office by employing the armed forces as part of a repressive apparatus (Krause and Jutersonke, 2005; Svolik, 2013; Wintrobe, 2000). So, leaders need to buy off and co-opt

the military in order to defeat threats from the population. The leader must first bring the military under their control and create incentives for the military so it fights dissidents on behalf of the leader.

What are the government's options to solve this dilemma and to bring the military under its institutional control? The literature on civil-military relations has understood governments' choices in their dealing with the military as either co-optation or repression. The common means of repression is coup-proofing (Ash, 2016; Carey, Colaresi and Mitchell, 2015, 2016; De Bruin, 2018; Rabinowitz and Jargowsky, 2018), even at the expense of military proficiency (Narang and Talmadge, 2017; Pilster and Böhmelt, 2011). Some scholars have argued that dispute involvement is a strategy whereby leaders weaken their military by getting rid of the disloyal members by sending them to the battlefield (Arbatli and Arbatli, 2016; Piplani and Talmadge, 2016). However, repression alone is risky and not an optimal strategy. Scholars have shown that repressive strategies such as coup-proofing lead the military to stage a coup before losing its ability to stand up to the government (Sudduth, 2017). The risk associated with pure repression brings leaders to adopt rewarding strategies in order to co-opt the military.

Rewarding takes different forms, the most well-known being increasing the military spending (Collier, Hoeffler et al., 2007a; Leon, 2014), promoting officers, granting protection of status and distributing private goods, establishing pension funds, providing cheap housing for the members of the armed forces, and attractive retirement plans. Monetary benefits and political concessions to the military are key to keeping the officer corps satisfied and any decreases in such benefits increase the military's discontent (Acemoglu, Ticchi and Vindigni, 2010). So, states can become more immune to military coups if their militaries are sufficiently

supplied with resources (Desch, 1999). For example, Collier and Hoefler find that when the risk of coup is high, in order to deter threats from the military, leaders respond by increasing the military spending (Collier, Hoeffler et al., 2007b) and Powell finds that as the expenditure per soldier increases the chance of coup decreases (Powell, 2012). In the case of Myanmar for example, Hlaing argues that the military has long refrained from encroaching upon the domain of government because the Tatmadaw (military) takes good care of its members and makes sure the personal interests of the officers are intertwined with the well-being of the military junta. Cheap housing projects, access to state-controlled resources, pensions for all in all positions, promotions, and investment in military-owned enterprises with 30% interest are among the main rewarding strategies that the Myanmar's military government pursued in order to content the members of the armed forces (Hlaing, 2009, p. 283-287).

From the military's perspective, rewarding strategies should serve the interest of the armed forces as long as the military institution is not threatened. It is to be noted that even though the military is materially capable of overthrowing the government, staging a coup is still both costly and risky because the military should contemplate whether it can first successfully overthrow the government, and then defeat the opposition within the state (McMahon and Slantchev, 2015). So, what determines whether the military would stage a coup is first, the balance of power between the military and the leader, and second, the resources and benefits the military will gain by staging a coup compared to those earned thanks to the status quo. Rational officers will not launch a coup if the resources they receive in the status quo outweighs the promise of future gains. For this reason, and because leaders need the military to suppress the opposition, they need to buy off the military and turn it into part of their constituency by allowing it to have a stake in the economy. Military

involvement in the economy is a strategy from a menu of possible options to ensure military loyalty.

Military involvement in the economy from leadership and armed forces' perspective: solving commitment problem

Leaders have a basket of policy options in dealing with their military. They can pursue different co-optative and repressive strategies in order to deal with threats from the military and co-opt the organization. As I mentioned, pure repressive strategies are risky and can force the military to stage a coup in order to remove the threat to its institution. Aside from threat of coup, leaders need to rely on the military to face internal and external threats. For this reason, leaders adopt some rewarding measures in order to buy off the loyalty of the military. One rewarding measure is increasing military expenditure. However, if we consider the military-government relationship as a bargaining interaction in which both the military and the government pursue maximization of their interests, the government needs to credibly commit to the military that it will cater to the military's economic interests in the future. One way the leader can credibly commit to the military is to allow the armed forces to become economic actors. Increasing military expenditure is a way to appease the military but the strategy only targets short term satisfaction and the shadow of future decrease in military spending will work as a deterrent. Allowing the military to benefit from economic activities is one form of rewarding strategies pursued by the leaders in order to co-opt the military backed by a credible commitment.

This mechanism has three advantages for leaders. First, they can bring under control those elements of the military that might pose a threat to the regime by tying their survival

to that of the regime. If the military extracts a surplus from the leader that is likely to be removed if the leader is not in power, it will have no incentive to stage a coup (Amegashie, 2015). Economic involvement increases the armed forces' economic and institutional interest in maintaining the status quo in the current regime and demotivates it from removing the leaders by staging a coup. For example, the Cuban military's involvement in economy has its roots in the Rectification Process that was announced by Castro in 1986. Economic restructuring was the central issue of this decree that obliged the Cuban government to concentrate the economic decision-making in the hands of the state and downsize the military budget and personnel in response to USSR's declining interest in Cuba and decrease in military assistance to the country. In response, Revolutionary Armed Forces (FAR) was encouraged to pursue profit-making strategies by engaging in economic activities in manufacturing and agriculture (Klepak, 2005, p. 78). In fact, in response to the economic crisis of the early 90s, Castro was able to buy off the armed forces that shaped the backbone of his regime by allowing them to run economic ventures. A similar process unraveled in China's Deng Xiapping in late 1070s when he paved the way for People's Liberation Army's (PLA) expansion of economic interests into new business domains (Mulvenon, 2016).

Second, the regime can rely on the military to counter opposition in times of need. A military whose economic interests are highly tied up with the continuance of the status quo would be willing to suppress any element that would put at risk these interests. In the case of China for example, the role of PLA in suppressing the June 1989 demonstrations in Tiananmen Square according to Mora and Wictorowitz "made the leadership realize that corruption in the military was a much smaller price to pay than a disloyal army unwilling to protect the regime" (Mora and Wiktorowicz, 2003, p. 94). Corruption within the PLA was

the result of the army's growing business-oriented pursuits.

Third, involvement of the military in the economy not only ties corporatist interests of the military to institutional interests of the state, it also increases the state's overall control of the country. The military with its organizational, structural, and technological advantages and its privileges such as cheap labor (conscription), subsidies, autonomy over budget, monopoly of strategic goods, and control over wide geographical landscapes is the most cohesive group in a country that can provide the government with resources to carry out its policies. These all help the military to win over the private sector and give the state the opportunity to have a stronger grip over its population. It gives the government the capacity to monitor opposition and block anti-regime activities by running telecommunication services and media. The military becoming a wealthy national economic complex then constitute the economic backbone of the state. For example, it is reported that by 1999, there were 514 radio and 6 television stations in Thailand of which 129 radio and 2 television stations were controlled by the army, 21 radio stations controlled by the navy, 36 radio stations controlled by the air force, and 17 radio stations controlled by the military supreme command. It is estimated that the military made an estimated 1 billion dollars profits annually from its media empire through licensing and air-time fees.<sup>5</sup>

Why would the military want to get involved in the economy? One might argue that the interest of the military lies in staying in the barracks and letting the civilian groups run the economy. In the case of economic involvement, however, I argue that the military could have a strong preference to engage in profit-making businesses for four main reasons.

 $<sup>^5</sup> source: \verb|https://www.thefreelibrary.com/Thai+military-controlled+media+business+scrutinized.-a054888651$ 

First, military involvement in the economy would bring extra resources and profits that are not part of the defense budget and can be distributed as per the wishes of the top echelons of the armed forces (Abul-Magd and Grawert, 2016). For example, the Central America's largest military-owned enterprises have grown in Honduras where only its *Instituto de Previsi'on Militar* and its conglomerates' assets were estimated at more than US \$400 million or approximately 10% of the country's GDP in 1998 (Brömmelhörster and Paes, 2003, p. 37). The same year, the budget for the entire Honduran military is reported at only US \$124 million.<sup>6</sup> Second, profiting from economic enterprises allows the military to evade civilian control since economic activities make the military fiscally autonomous. The military then does not depend on the government for its resources and livelihood.

Third, the issue of running corporations and businesses is not as controversial as direct control of the government to the public eye. So, the chance that officer corps's interests be challenged by the public is low because the profits made through military businesses are easy to hide from the public eye (Springborg, 2017). Finally, economic involvement of the military makes this organization politically powerful. Economic profit increases the armed forces' institutional interest in intervening in the policy-making processes and transforms the military into a rent-seeking machine by giving it power to lobby the government for subsidies and interventionist policies, manipulate currency in order to stay immune from market distortions, and seek patronage among other branches of the government (Mora and Wiktorowicz, 2003). This involvement paves the way for further entrenchment of the military into politics. For example, the founding of the pension funds that took place in most Central American countries during the last days of those countries' authoritarian regimes is

<sup>&</sup>lt;sup>6</sup>Data is drawn from Correlates of War Military Expenditure Dataset.

considered a way of assuring the officers' economic future before the civilian governments took power and even long after democratic transitions in Latin and Central America, the civilian regimes continued to exert caution when it comes to manifesting their supremacy over the military (Brömmelhörster and Paes, 2003, p. 44). Militaries continued to enjoy economic benefits even with their institutional organization having been redefined as in the case of El Salvador (Juhn, 2016). It is worth mentioning that indirect control of the government through lobbying and influencing leaders would serve the interests of the military better than direct control of the government. Manipulating the government from behind the scenes would serve the interests of the military better because overt military rule does not last long and this is why we observe that military dictatorships usually "fabricate some quasi-civilian facade of government behind which they retire" (Finer, 2002, p. 4). In sum, economic power increases the political power of the military which leads to higher capital for the military.

### When do we observe the emergence of military involvement in the economy?

Leaders pursue different co-optative and repressive strategies in order to deal with threats from the military. When do leaders choose rewarding the military through economic involvement as opposed to other strategies? The process of military involvement in the economy is influenced by some triggering causes as well as some structural causes. Below I explain these factors that affect the probability of leaders choosing this particular option.

## Triggering causes of the emergence of military participation in the economy: war and coups d'etat

When states undergo crises that lead them to reform the military or redefine its institution or budget, leaders choose to buy off the loyalty of their military through allowing it to become an economic player. What are such crises? Crises such as the end of inter and intra-state war and coup d'états are the most challenging instances where the military can pose a great threat to the leader if the leader does not protect the institutional interests of the military. Regarding war, the necessities of decision-making regarding the military in the post-conflict phase intensifies the classic moral hazard problem of civil-military relations by putting at risk the institutional interests of the military. The post-war period is usually followed by decrease in the military's institutional importance and military expenditure (Collier, 2006) and security sector reform (Glassmyer and Sambanis, 2008). International and civil wars cause infrastructural and economic damages. In order to rebuild the economy after the war, governments need to decrease the military spending. Furthermore, governments will bring down the size of the military and military spending after the war since the armed forces are less likely to be used and less money will be spent on military hardware and logistics. On the other hand, however, returning from war, the officer corps will demand benefits and prestige for its having fought a war for the state.

Regarding civil wars, such conflicts are accompanied by drastic decrease in military expenditures which could put at risk military's interests. In many cases, end of the civil war is accompanied by some form of security sector reform (SSR) programs in order to achieve a credible commitment mechanism between the government and rebels and reduce the probability of unilateral defection (Toft, 2009). Credible commitment problem between governments and rebels refers to the fact that if rebels demobilize and demilitarize as a result of a peace agreement, they will lose their bargaining power which might lead the government to renege on its promises. This motivates the rebels to continue fighting (Glassmyer and Sambanis, 2008; Walter, 1997). The security sector reform, however, leads to demilitarization

of the military, integration of former rebels into the military, realigning ranks and positions, increasing institutional transparency, monitoring the officer corps, reducing the number and size of the armed forces and decreasing military expenditures after the conflict (Brzoska, 2006; Call and Stanley, 2001; Hartzell and Hoddie, 2007, 2003; Mattes and Savun, 2009; O'Neill, 2005). This process can create incentives for the military to stage a coup before the reforms are implemented (White, 2020). In the second scenario, the end of the intra-state war is not only accompanied by the decrease in the military expenditure but it might also endanger the military institution through SSR programs.

End of war is sometimes accompanied by economic crisis. Economic crisis decreases the government's ability to continue funding the military at pre-crisis levels. In such instances, the leader has to resort to rewarding strategies in order to cater to the demands of the military. In these cases, participation in the economy will make up for reconfiguration of the security sector and the reform process which leads to decrease in military expenditure. The government responds to officer corps's demands and makes up for decrease in military spending by providing them with an opportunity to make extra profits through involvement in the economy, and giving them tax cuts and subsidies. Furthermore, governments can use military manpower to rebuild the country's infrastructure after the war by allowing the army to participate in the economy. So, the first hypothesis of this paper is:

H1: The probability that the military gets engaged in the economy increases in post inter/intra-state conflict phase.

Regarding coups, in countries where institutional frameworks do not exist or governments are too weak to bring the military under their control, the military poses a threat to the regime by staging coups or demanding benefits. Coups, especially successful ones, are the ultimate manifestation of military's exertion of power over the government. A coup is a signal of threat to the leadership that they are not immune from future military interventions. It is well established in civil-military relations literature that history of past coups increases chance of future coups (Belkin and Schofer, 2003; Galetovic and Sanhueza, 2000; Londregan and Poole, 1990). This impacts the leadership's decision-making as how to cope with the military and cater to its demands. Even though failed coups are still strong signals of military power, such events are usually accompanied by arrest and punishment of the plotters. Successful coups on the other hand, brings the government to a standstill in its dealing with the military whose incentives now are to monitor the politics and demand favorable policies with free will. The new government now has to pursue strategies in order to co-opt a military that has recently removed a predecessor. One means through which such leaders can lower the risk of future coups and co-opt the military is to reward the military by allowing its participation in the economy.

Do military regimes differ in their dealings with the military compared to civilian governments that come to power as a result of successful military coup? It is important to mention that successful coups do not necessarily result in military regimes. In fact, only about %36 of all successful coups from 1950 to 2010 have resulted in military regimes. The reason goes back to military professionalism, standards of modern militaries, and militaries' corporate interests that convince most militaries to return to barracks and hand the political power over to the civilians after having toppled the undesirable government (Finer, 2002;

<sup>&</sup>lt;sup>7</sup>Data on coups are drawn from Powell & Thyne and data on military regimes are drawn from Geddes, Wright, and Frantz.

Geddes, 1999; Perlmutter, 1969). Both military regimes and civilian governments that come to power as a result of successful military coup are constraint in their dealings with the military. Military regimes are significantly more likely to experience coups and rebellions (Bell, 2016; Frantz and Ezrow, 2011; Powell, 2012) and are the shortest lived type of regimes (Geddes, Frantz and Wright, 2014). Civilian governments that come to power as a result of a coup face similar constraints. Both the ruling junta and civilian leaders have to satisfy members of the military in order to reduce the chance of disobedience and rebellion and one way to do so is to co-opt the military through economic rewards. Thus, the second hypothesis of this research is:

H2: The probability that the military gets engaged in the economy increases in post successful coup phase.

# Structural causes of the emergence of military participation in the economy: leader reliance on the military and military institutional capacity

When it comes to sharing resources, leaders have incentives to share as little as possible in order to maximize their own benefits. However, the reality is that leaders have to share some resources in order to stay in power. To what extent they share resources depends on their monopoly with regard to political power. In fact, it is the extent to which leaders have monopoly over power and face constraints by other political actors such as the military that determines the level of repression and redistribution of wealth (Wintrobe, 2000, p. 4). When leaders have the greatest monopoly over power and are not constraint by other political actors, then we should observe less resources to be distributed. As leaders' relative

power compared to that of the military decreases, they should be sharing more resources in the form of private goods in order to stay in power. Furthermore, leaders require the military in order to deter challenges to their office. The higher the security concerns and domestic threats leaders face the more likely they share political power with the military (Svolik, 2013) as the military is the only organization that can deter organized and mass threats to the regime.

For above reasons, relative institutional capacity of the military compared to that of the government and government's reliance on the military for survival are structural factors that favor the military in the government-military bargaining relations. These factors limit leaders' options to deal with the military since the leader is in a disadvantaged position compared to the military. Regarding military's institutional capacity, if the military is more powerful than the government, leaders cannot implement repressive strategies to bring the military under their control and even if they did, they still need to satisfy some in order to maintain control. Furthermore, a disadvantaged leader cannot stop a powerful military organization that seeks economic resources in order to satisfy its members. The concept of regime reliance on the military is intertwined with the relative capacity of the military. Any leader's chief goal is to survive by neutralizing threats to itself. Threats stem from turbulent elite circles, opposition groups, the population, and the armed forces. Leaders should motivate their militaries to accept the current system and be willing to fight for it if they want to preserve the military's steady support and one way to do that is to reward the military with economic benefits.

Algeria and Egypt afford prime examples of this state of affairs. The Algerian army, formally established after the country's independence from France in 1962, is the outcome

of professionalized guerrilla groups (Army of National Liberation) that fought the war of independence and repressed other guerrilla groups that were causing trouble after the independence. This nascent army fought a short war with Morocco in 1963 and has long since been a decision making arm due to its institutional capacity that outweighs the weak Algerian government. Another example is Egypt. The Egyptian army was the founder of modern Egypt with its 1952 coup against the monarchy. Even though Egyptian leaders since Nasser and Sadat considered themselves as civilians, the army has been an important decision-maker in the Egyptian state apparatus. According to Maqd, short after the establishment of the Republic of Egypt and Naguib's resignation, at first Nasser sought to appoint qualified civilians to key government positions and invited educated economists to run the economy. Yet in order to remain in power he had to rely heavily on the army and especially his minister of war Amir whose growing power in the military worried him. Nasser gradually paved the way for the increasing role of the military in the economy (Abul-Magd, 2017, p. 65). Later on Amir pressured him to dismiss the civilian ministers and replace them with army generals. It turns out that leaders having to deal with a more powerful military ought to please the officer corps in order to stay in power.

So, in cases where the military has consistently threatened the government through direct and indirect intervention and in cases where the government requires the military to stay in power, not only the government cannot pursue sheer repressive strategies, it also needs to satisfy the military in order to survive. It is important to mention that rewarding and repressive strategies are not mutually exclusive. Leaders can implement both rewarding and repressive strategies simultaneously. They can punish the opposition or suspected disloyal members while rewarding the loyal ones. Sheer repression is dangerous and does not guar-

antee that no one in the officer corps will plan to topple the leadership, and even if leaders get to purge every single opponent in the officer corps, they still need to replace them with new officers who must be pleased in exchange for their loyalty. For example, the Indonesian military's involvement in the economy started right after the 1965 coup and purges of a large number of army officers. Despite these purges, Suharto's regime encouraged the military to engage in economic activities in order to maintain its grip on power. Over the following years, the army generals went on to build an economic empire in collusion with top political leaders (Chambers and Waitoolkiat, 2017, 305-325). Thus, the third and fourth hypotheses of this research are:

H3: The probability that the military gets involved in the economy increases as relative institutional capacity of the military compared to that of the government increases.

&

H4: The probability that the military gets involved in the economy increases as government reliance on the military increases.

Does the presence of democracy matter when it comes to government-military bargaining and emergence of military involvement in the economy? Historically, governments have adopted different strategies to prevent any possibility of military intervention in political life and establish civilian control over the military. The ideal form of civilian control of the military observed in consolidated democracies for example, is achieved through building institutions that establish constraints on both the civilian governments and the military and constructing effective governance in which the military is under strict scrutiny of civilian leaders and perceives such checks and balances legitimate (Bruneau and Tollefson, 2009;

Burk, 2002). Not all democracies successfully subject their military to the legitimate rule of civilian control. Coups are still prevalent in countries with democratic governance and in fact, democratic governments are more constrained in repressing the military if government-military bargaining in the process of establishing civilian control fails. For example, even years after democratic transitions that swept Latin and Central America, the civilian governments continued to exert caution when it comes to manifesting their supremacy over the military (Brömmelhörster and Paes, 2003, p. 44). One way to appease the military and ensure that they will not threaten the democratic regime is to grant them economic benefits. Despite the redefining of its military institutional organization El Salvador is one such case. (Juhn, 2016). Even though more non-democracies experience coups and in the context of this research more non-democracies experience military involvement in the economy, democracies are not immune from military intervention in political and economic life if the fundamentals of civilian control are not established.

### Data and Methods

### Dependent variable: the emergence of military involvement in the economy

As no explicit data on the military involvement in the economy exists, I coded the variable, initiation year of military participation in the economy, for all countries whose population exceeds 500 thousand between 1950 to 2010.<sup>8</sup> The sample excludes countries that do not have military. I found 48 countries with military involvement in the economy during this period. I define military involvement in the economy as "any kind of profit-making economic activity by branches of the military or high-ranking military officials that use military resources in

<sup>&</sup>lt;sup>8</sup>This is the period for which most data is accessible.

running enterprises and profits made from such activities are not part of the defense budget and serve as an independent source of income for the military and its members." Examples of such economic activities are production of goods, banking, services, administration, insurances, education, etc,.

The military in this analysis includes armed forces and their affiliated organizations that are not considered civilian. As Ministry of Defense (MoD) is considered a civilian organization, industries held by MoDs are not included in this study unless there is evidence that links the military to the production or management of the enterprise and that the military receives monetary benefits through its involvement. This scenario holds true in countries where MoD and the military are practically the same organization. Regarding individuals within the military, I code economic activities of individual officers as military involvement in the economy only if the officers use the resources of the military to run the businesses otherwise it would be a private economic activity. Even though commercial activities of members of defense organizations are prohibited by law in many countries I do not code such activities of individual officers as military involvement in the economy. The reason being that there are still numerous countries that do not prohibit active duty members of defense organizations from engaging in commercial activities and economic activities of such members does not relate to the military as an institution. Furthermore, collecting data on private economic activities of individual officers is almost impossible since most of these activities are either clandestine or not covered by the media and monitoring organizations. So, any profit-making economic activity by any body of the military or military individuals as long as they use military's resources in running economic enterprises is considered military involvement in the economy.

In order to observe military involvement in the economy we should expect resources of
the military to be used in economic enterprises by the military branches or officials and such
activities generate profit for the military or individual officers. How the military chooses to
spend the profits, whether it is for the sole benefit of individual officers or future investments
does not limit the scope of my definition of military involvement in the economy. In other
words, an economic activity is considered military involvement in the economy as long as
the military officials make decisions about where and how the revenues are spent. It is
to be noted that the type of economic activity of the military is distinguished from the
typical developmental roles of the military that consist mainly in assisting central government
in building infrastructure, providing food to the poor, education, and disaster assistance.
Sometimes military manpower is utilized for such assistance and developmental purposes
since the military is one of the few sources of highly organized skill in the country. Such
activities are not profit-generating activities and therefore are not considered as military
economic activity.

Furthermore, I do not consider economic activities of some militaries with the purpose of basic self-sufficiently as economic involvement. By basic self-sufficiency, I mean any activity by the military to produce commodities in order to meet its own basic needs. For example, the Chinese military had for years been responsible for providing its members with some portion of their basic needs such as food, clothing, and essentials. The military had to get involved in activities such as farming and raising crops and other local activities to meet these needs (Mulvenon, 2016). However, their production was only for covering military consumption and not selling for the sake of profit. Such productive activities are considered "basic self-sufficiency" efforts for self-preservation since the production is consumed by the

military itself. These activities are not considered as military participation in the economy. Military participation in the economy is any activity that provides the military with additional sources of income rather than providing basic needs of the armed forces, and its profit is spent at the will of higher echelons of the organization. Military participation in the economy occurs when, for example, the military produces computers and sells them nationally or internationally, or if the armed forces runs banking systems, builds hotels, establishes credit unions, etc., for the sake of profit.

Holding shares of companies is one common type of economic activities of the military that is included in this study. Militaries often invest in or buy stocks/shares of economic enterprises in order to generate profit. Such investments are part of military economic activities. For example, military in Egypt owns 51 percent of a firm that has been developing a \$45 billion project to build a new capital city located east of Cairo. There is one type of military economic activity that is not included in this study and that is illegal economic activities by the military organization for the sake of making profits. There are cases in which the military as an organization is involved in smuggling drugs, arms, valuable resources like diamonds, golds, oil, etc. For example, Venezuela's military is known to facilitate smuggling of drugs to the United States in order to generate funds for the military and militaries in countries like Congo Kinshasa and Uganda (Brömmelhörster and Paes, 2003) profit enormously by smuggling goods and resources but such activities are not included in this study. The reason is that this study is concerned with institutional efforts of the military as an organization to run/manage economic enterprises within the country's established norms in

<sup>9</sup>https://www.reuters.com/investigates/special-report/egypt-economy-military/

<sup>10</sup>https://www.insightcrime.org/investigations/drug-trafficking-venezuelan-regime-cartel-of-the-sun/;https://www.occrp.org/en/daily/8102-report-in-venezuela-cartels-are-part-of-regime

order to generate funds for the military. It is also almost impossible to capture militaries' illegal businesses due to the nature of such activities and secrecy behind them.

Figure 1 is a visual representation of countries where militaries has been involved in the economy during the period of this study.

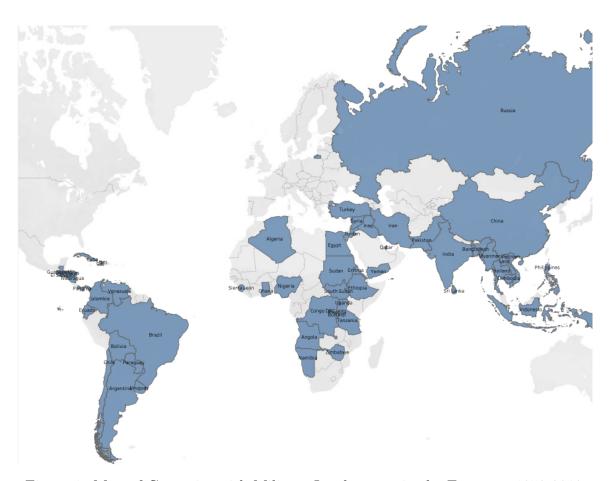


Figure 1: Map of Countries with Military Involvement in the Economy 1950-2010

Military business initiation is a dichotomous variable that takes the value of 1 the year the military "established, bought, received, or initiated managing" at least one economic business or industry in a given country, otherwise it is coded as 0. Since this study's aim is to explain why military in some countries initiates economic activities, the main dependent variable marks the year the military starts running an enterprise (first year of involvement) and the involvement years following the initiation will be dropped from the models. In fact, out of 48 countries with military involvement in the economy there are only three (Argentina, Paraguay, and Haiti) in which military involvement in the economy ends at some point, either through constitutional changes or dissolution of the military itself. This represents the fact that the significant impact of the military as an economic actor on political and economic life of countries might last for years. Such impacts might even continue for years after civilians successfully bring the military under their control given the complexities of political and economic processes today. Much of military involvement in politics discussed in the civil-military relations literature is episodic meaning that the involvement surges and diminishes over time. Military involvement in the economy however, is not episodic. In fact, involvement of the military in the economy tends to last long and it is extremely hard for governments to convince the military to pull out of the economy.

### Independent variables

Having identified country-years with military participation in the economy, I then create my principal independent variables. To test H1, I code the variable *Post-war Period* as 1 if an interstate or intrastate war has ended in the country within the last five years and 0 otherwise. Six years is an arbitrary decision that I believe is a strict enough time span for observing the involvement to happen. For robustness checks, I have tried the models using other periods (5-10) years and the results still hold significant. I will have separate models allowing time since coup and end of war to vary. I draw the data on inter and intra-state conflict from UCDP Conflict Termination Dataset (Kreutz, 2010). Armed conflict is defined

as "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a calendar-year" (Gleditsch et al., 2002). However, because this study is concerned with costly wars, I modify my sample to conflicts that result in at least 1000 battle deaths. The theory suggests that costs incurred by war leads both the military and the leader to choose the economic involvement option to make up for the post-conflict reconfigurations. Not all conflicts identified by UCDP data are costly for the leaders and the military so I restrict my sample to conflicts that reach 1000 battle death consulting the CumulativeIntensity variable in the UCDP data.<sup>11</sup>

One might argue that interstate and civil wars have different implications for civilmilitary relations and they should be treated separately in the analysis. In the context of
military involvement in the economy however, I believe both interstate and civil wars should
significantly impact the chance of military involvement in the economy due to post war
reconfiguration of the military but these reconfigurations might be more dramatic after civil
wars due to conditions civil wars end. Out of 48 countries with military involvement in the
economy, 19 cases of involvement emerged in the post intra-state war and 12 emerged as a
result of inter-state war (with six years as threshold). To address the concern that civil wars
might be the variable significantly drawing the results, I will include a model with inter and
intra-state conflict separated.

To test H2, I code the variable *Post-coup Period* as 1 if a country has experienced a successful coup in the last six years and 0 otherwise. For robustness checks, I have tried the models using other periods (5-8) years and the results still hold significant. I will have

<sup>&</sup>lt;sup>11</sup>Results still hold when I include all conflicts.

separate model allowing time since coup and end of war to vary. Data on coup events are drawn from Powell and Thyne (Powell and Thyne, 2011). Coups détats are defined as "overt attempts by the military or other elites within the state apparatus to unseat the sitting head of state using unconstitutional means. There is no minimal death threshold for defining a coup. A coup attempt is defined as successful if the coup perpetrators seize and hold power for at least seven days" (Powell and Thyne, 2011, p. 252).

To test H3, As my analysis necessitates a measure that can first, capture whether the military can exert power over the government by threatening to overthrow the government or successfully topple the government, and second, can provide us with a picture of the possibility of military intervention, I choose the number of coups the military has staged against the government in the past (since 1950 which is the beginning year of the analysis) to the year the military gets involved in the economy or is censored by reaching the end of the analysis' time span. Choosing the number of coups the military has staged in the past can represent institutional capacity of the military since it is a strong signal that the military has had the capacity and willingness to threaten the government by staging coups and can grasp an underlying possibility that future coups are likely since history of coups significantly affect future coups (Belkin and Schofer, 2003). Variable Coup History is the count number of coups I created using Powell and Thyne's dataset.

Finally, to test H4, I use "major support group" variable in V-Dem's data in order to capture government reliance on the military (Coppedge and Ziblatt, 2019). The data has a measure of "Which groups does the current political regime rely on in order to maintain power?". Variable "regime reliance on the military" is coded as 1 where V-Dem has coded the military as the major support group the regime relies on in order to maintain power. It

is coded as 0 otherwise.

### Control variables

I include a set of economic and political control variables that could significantly affect my dependent variable. The first control variable that should be included in the analysis is a measure of the extent to which the government has coup-proofed the military through repressive means. This could take a form of purges, number of security agencies monitoring and paramilitaries counterbalancing the military, etc. While there are available measures of these different forms of coup-proofing, none of the direct measures cover the global sample over the time span of this study. It is important that available measures cover the global sample from 1950-2010 as the dependent variable is a rare event and the model already drops 13 cases out of the analysis due to missing values among independent variables. For this reason, I use Banks data on the number of elite purges in a year to control for repressive behavior of the government (Banks, 2020). The data captures "any systematic elimination by jailing or execution of political opposition within the ranks of the regime or the opposition." I believe number of purges is an appropriate measure since it includes purges of military elites and has an advantage in that it captures threats the leader faces from both military and civilian elites. This will allow me to test whether purges of the elites, military or civilian, will affect leader's decision to either rely on the military due to high threats or repress the military due to monopoly over violence.

The second control variable is presence of military regime. It is important to include military regime to control for the possibility that military governments are the ones that significantly provide their militaries with resources. I use Geddes, Wright, and Frantz's

Authoritarian Regimes Data Set (Geddes, Wright and Frantz, 2014) that captures countries regime types globally. The variable "Military Regime" is coded 1 if there's a military regime (direct rule) in place and 0 otherwise. The third and fourth control variables are the country's "GDP per capita (log)" and "GDP growth". GDP per capita and GDP growth can be used as proxies for a country's level of development. It might be that more developed countries are less likely to experience military involvement in the economy because of the existence of powerful economic elites. Furthermore, it might be that lack of powerful economic sectors in less developed countries paves the way for the entrenchment of the military into the economy since there is no private sector to challenge the military. I use the data on GDP per capita from the expanded version of Gleditch data (Gleditsch, 2002).

The fifth, sixth, and seventh control variables are "military expenditure (log)", "percent change in military expenditure and "military personnel (log)". It might be that decreases in the military expenditure increases the chance that the military becomes involved in economic activities to make up for the loss. Controlling for change in military expenditure is to differentiate between normal changes in military expenditure that happen regularly and the major decrease in military budget in after-war period. Regarding military personnel, it could be that larger militaries are more likely to get involve in the economy to provide resources for their members and use the available manpower in the economic sectors under their control. I use the updated version of Correlates of War data on countries' national material capabilities which includes data on military expenditures and personnel gathered by David Singer (Singer, 1988).

The next control variable is the log of population. It could be that more populated countries have a higher probability of military involvement in the economy because military

would have access to a bigger market for its goods. I draw the data on population from Correlates of War Project (Singer, 1988). Finally, I use Polity IV project dataset (Marshall, Jaggers and Gurr, 2017) on the political regime characteristics to control for the level of democracy. It might be that norms of the democratic states prevent the military to act beyond its regular role as the defense arm of the state. Democratic states have more checks and balances so there might be more pressure on the armed forces in their influence on the economy. The variable "polity" is coded from -10 to 10 representing most autocratic to most democratic countries respectively.

### **Empirical Results**

Table 1 summarizes the empirical findings. The unit of analysis in the study is countryyear. There are total of 128 countries in the analysis from which 35 experience military
involvement in the economy. The analysis covers years between and including 1950 to 2010.

The first three models use logit regression along with clustered standard errors on country
to account for within country temporal correlations and unobserved heterogeneity (Beck,
Katz and Tucker, 1998). The first model presents the triggering causes, the second model
presents the structural causes, and third model presents all four main independent variables.

Model 4 uses Generalized Estimating Equation (GEE) regression to test for non-temporal
correlations between observations within countries (Zorn, 2001). Model 5 splits the post-war
period into two variables, post inter-state conflict and post civil wars. Model 6 controls for
temporal dependency and account for whether not being involved in the economy over the
years affects involvement in a given year (Box-Steffensmeier, Box-Steffensmeier and Jones,
2004). Model 7 and 8 present the logit regression using time since coup and war and their

splines in a cox proportional hazard setting in order to capture a more parsimonious effect of time dependency and possible different shapes of the baseline hazard.

In all models, the dependent variable captures the emergence of military involvement in the economy and subsequent years in which the military is involved in the economy are dropped since this paper's main goal is to explain why militaries initiate economic activities. The process through which militaries get involved in the economy might be different than the ones through which they maintain and often expand economic power. There are some outliers in the military expenditure and GDP per capita (Kuwait in 1970) data that have skewed the distribution of change in military expenditure and GDP per capita. I run the model excluding the outlier to make sure the coefficients of the control variables are not significantly affected by them and the results still hold.

The coefficients are reported in logistic likelihood. Model 3 presents the main test of four hypotheses. Post-coup, post-war, numbers of coups, and regime reliance on the military significantly increase the likelihood of military economic involvement initiation at  $\mathfrak{p} < .01$  level. These results are in expected direction and remain significant across all six models. Regression results are fairly similar between model 3 and 4 suggesting that there are no systematic within country correlations among observations. Model 4 suggests that years of no-involvement has no significant effect on involvement in a given year. In fact, it is hard to justify why no-involvement would increase hazard of involvement.

 Table 1: Determinants of Military Involvement in the Economy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Successful Coup/6 Years	2.016***		1.490***	1.487***	1.496***	1.799***		
Saccessial coap, o rouls	(0.364)		(0.456)	(0.458)	(0.496)	(0.480)		
End of War/6 Years	2.167***		2.341***	2.361***	(0.200)	2.359***		
	(0.307)		(0.364)	(0.364)		(0.350)		
Regime Reliance on the Military	,	1.941***	1.931***	1.928***	2.314***	1.935***		
		(0.513)	(0.478)	(0.478)	(0.572)	(0.521)		
Coup History		0.194***	0.173***	0.173***	0.161***	0.115**		
		(0.045)	(0.041)	(0.041)	(0.043)	(0.050)		
Controls								
Purges	0.238	0.358***	0.449***	0.453***	0.422***	0.527***	0.242**	0.260**
	(0.141)	(0.106)	(0.114)	(0.113)	(0.122)	(0.111)	(0.120)	(0.111)
Military Regime	0.344	0.851	0.780	0.781	0.694	0.562	0.390	1.322**
	(0.543)	(0.566)	(0.548)	(0.549)	(0.575)	(0.649)	(0.505)	(0.567)
GDP per Capita (log)	-0.511	-0.529	-0.328	-0.328	-0.357	-0.063	-0.797***	-0.665**
	(0.306)	(0.357)	(0.323)	(0.323)	(0.339)	(0.381)	(0.306)	(0.310)
GDP Growth	0.483	-0.230	0.048	0.022	0.229	-0.026	0.679	0.193
	(2.281)	(3.169)	(2.670)	(2.684)	(2.809)	(2.514)	(2.805)	(2.309)
Military Expenditure (log)	0.265	0.097	0.289	0.285	0.315	-0.065	0.140	0.211
	(0.192)	(0.233)	(0.234)	(0.236)	(0.251)	(0.300)	(0.214)	(0.194)

Table 1 – continued

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Change in Military Expenditure	-0.009	-0.008	-0.0132	-0.013	-0.012	-0.011	-0.007	-0.007
	(0.006)	(0.008)	(0.007)	(0.007)	(0.008)	(0.007)	(0.007)	(0.006)
Military Personnel (log)	0.073	0.321	0.091	0.090	0.091	0.259	0.275	0.125
	(0.177)	(0.172)	(0.205)	(0.205)	(0.206)	(0.240)	(0.161)	(0.156)
Polity	0.004	0.046	0.064	0.064	0.071	0.035	-0.009	-0.004
	(0.032)	(0.034)	(0.040)	(0.040)	(0.040)	(0.048)	(0.029)	(0.030)
Population (log)	-0.005	0.072	0.135	0.133	0.063	0.300	-0.0346	-0.114
	(0.262)	(0.291)	(0.268)	(0.270)	(0.284)	(0.307)	(0.243)	(0.220
No-involve Years						0.007		
						(0.156)		
No-involve Years Squared						0.002		
						(0.00480)		
No-involve Years Cubed						-2.68e-05		
						(4.55e-05)		
End of Interstate War/6 Years					1.668**			
					(0.718)			
End of Civil War/6 Years					1.819***			
					(0.428)			
Years since Successful Coup							-0.227***	
							(0.068)	
Years since Successful Coup Squared	d						0.007**	

Table 1 – continued

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
							(0.002)	
Years since Successful Coup Cubed							-6.48e-05	
							(3.55e-05)	
Years since End of War								-0.208**
							(0.015)	(0.089)
Years since End of War Squared								0.006
								0.004)
Years since End of War Cubed								-5.47e-05
								(5.98e-05)
Constant	-5.419**	-5.435	-10.20***	-10.16***	-9.712***	-11.59***	0.291	-0.079
	(2.675)	(2.795)	(2.632)	(2.647)	(2.897)	(3.516)	(2.342)	(2.255)
Observations	4,826	4,393	4,393	4,393	4,393	4,393	4,826	4,826
Log Likelihood	-182.661	-171.394	-147.888		-150.706	-143.335	-206.222	-203.384
Wald chi2	128.23***	85.86***	120.41***	121.60***	106.19***	141.02***	76.11***	71.30***

Robust standard errors in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, two tailed tests.

What is noteworthy in the analysis is that purges significantly increase the likelihood of emergence of military involvement in the economy in all models except model 1. This is an interesting finding suggesting that leaders who face domestic threats and are able to ward off those threats through the use of repression are in fact vulnerable and are inclined to co-opt the military through granting it economic benefits in order to face future challenges. Furthermore, repressive strategies against some elites should be ensued by rewarding strategies in favor of others if the leaders seeks to maintain power. Model 5 shows that inter-state and intra-state conflicts separately increase the likelihood of military involvement in the economy at conventional levels, consistent with the proposed theory that both civil and interstate wars increase the likelihood of the emergence of military involvement in the economy. None of the control variables in the main model significantly affect involvement initiation. This might tell an interesting fact about the diversity of countries in which military involvement in economy occurs.

Figure 2 presents the average marginal effects (AME) plot of the main model. Post-coup and post-war period are among the most critical phases for civil-military relations during which government-military bargaining process can produce consequencial outcomes such as the emergence of military economic activities. The government would make a credible commitment to the military that it will protect military's institutional interests in return for the armed forces' loyalty. Regime reliance on the military to maintain power significantly increase the chance of military involvement in the economy. Involvement of the military in return for military's support. Number of coups a country has experienced in the past significantly increase chance of military involvement in the economy. More coups are signals of military

threat and its capacity and willingness to project power and overthrow the government. In order to avoid future coups, leaders buy off the military by giving it stakes in the national economy.

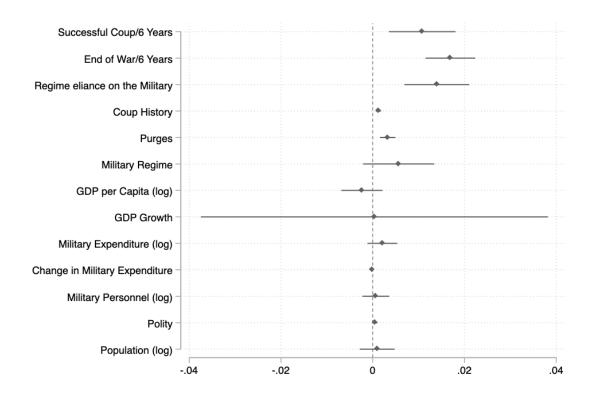


Figure 2: Average Marginal Effects Plot of the Main Model (Model 3)

AMEs only produce a single estimate of the marginal effect for each variable. Figure 3 presents the average adjusted predictions (AAP) plot of military business initiation given main independent variables. The probability of military involvement in the economy in both post-coup and post-war phase is significantly higher than the baseline, which is no post war and coup. The probability of military business initiation is significantly higher when the government relies on the military in order to maintain power. Finally, as the number of coups a country has experienced increases, the probability that it experiences military

involvement in the economy increases significantly.

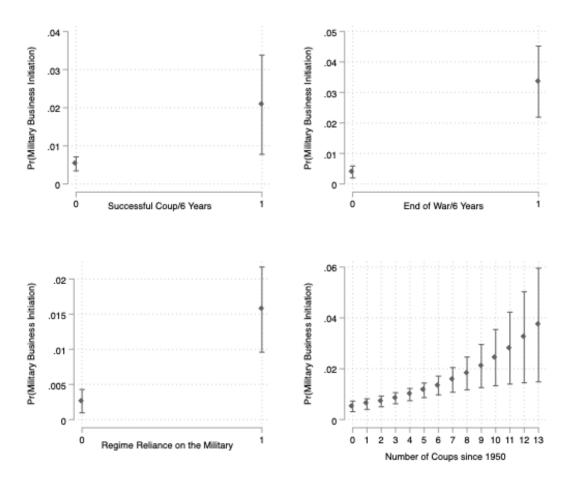


Figure 3: Probability of Military Business Initiation Given Main Independent Variables (Model 3)

Finally, figure 4 presents an out of sample graph of the predicted hazard of military involvement in the economy for each variable that captures time since end of war and time since successful coup in a cox proportional hazard setting. Instead of drawing on whether the country has experienced coup or war in the last six years, here I allow the time since end of war and coup to vary. The results show that the hazard of military involvement in the economy is the highest in about the first ten years following the end of war and coup and it

decreases over time, supporting hypotheses 1 and 2.

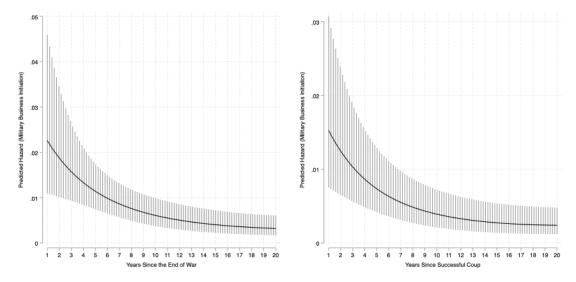


Figure 4: Predicted Hazard of Military Business Initiation Given End of War and Successful Coup

## Conclusions

Political science scholars consider the military budget as the primary source of military's economic capital. However, some militaries gain economic benefits beyond the defense budget. They do so by establishing economic enterprises that are usually in the domain of civilian groups. This paper tries to shed light on the issue of profit-generating ventures of the military and proposes a theory of military intervention in the economy. It argues that military intervention in the economy is a result of coalition building processes by leaders. The government increases the economic and political power of the military by allowing it to run profit-making businesses in order to buy their loyalty. Using original data on the military participation in economy, this paper finds that post-war and post-coup configurations within the military and the relationship between the military and the leadership leads both sides to intervene in

the economy and allow such an involvement respectively. Gathering a more comprehensive dataset on the actual size of the militaries' profit-making activities is necessary for future research on the topic. Given the difficulties, a closer look at the role of military in the economy, a whole new window of its impacts on the market and the society will be open. The idea proposed here is to understand what leads to the emergence of military involvement in the economy and why do governments allow such an involvement. The consequences of such an involvement could constitute the subject of further studies. Questions like, does military involvement in the economy influence foreign policy decision-making regarding peace and conflict? Does it affect economic growth? Does it affect state repression? This paper calls for more attention by the political science scholars to the understudied yet important topic with a whole set of unanswered questions.

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#### Appendix A

### Coding Procedure

Military involvement in the economy in this study is defined as "any kind of profit-making economic activity by branches of the military or high-ranking military officials that use military resources in running their enterprises and profits made from such activities are not part of the defense budget and serve as an independent source of income." The purpose of this paper is to identify triggering and structural causes of military economic activity *initiation*. So, the data collected in this study capture the year in which the military became involved in the economy in a given country. Future research should look more into the factors that help militaries to maintain and often expand their economic involvement. In order to capture initiation date, I first identified countries that have experienced military involvement in the economy from 1950 to 2010. Second, I identified the initiation date of military involvement in the economy in countries I found evidence for military's economic participation. In doing so, I consulted an extensive number of primary and secondary sources that I will explain in detail below.

#### First stage: verifying presence of military economic activities

In order to find evidence for the presence of military involvement in the economy in a given country, I went through an extensive study of the military in every country coded in Correlates of War Data with an existing military. I did so by reviewing academic research on civil-military relations in the country, historical researches, case studies, research organizations, and news agencies that covered the country of interest. The sources used to identify the presence of military involvement in the economy depended greatly on the available information on specific cases but there are three main pathways through which I identified my

#### cases:

- 1. Historical case studies: I was able to verify the presence of military involvement in the economy for a large number of cases by refering to historical case studies. For example, Chambers and Waitoolkiat (2017), Brömmelhörster and Paes (2003), Mani (2007), Mani (2011a), Abul-Magd (2017), Mora and Wiktorowicz (2003), and other case study researches provide general and detailed information on the economic activities of militaries under the study.
- 2. Governmental and non-governmental organizations, policy institutes, research organizations, and think tanks. The following organizations were consulted extensively in identifying the cases:
- -Transparency International: Transparency International is one of the main sources used in determining military involvement in the economy. The organization has released country reports called Government Defense Anti-corruption Index that "assesses the existence, effectiveness and enforcement of institutional and informal controls to manage the risk of corruption in defence and security institutions" for almost all countries in the world. They have gathered information on whether national defence and security institutions have beneficial ownership of commercial businesses and transparency issues associated with economic activities of the militaries.
- -Geneva Centre for Security Sector Governance
- -Business Anti-corruption Portal (GAN)
- -Carnegie Institute
- -bertelsmann-stiftung
- -ResearchWorks Archives at the University of Washington

3. News agencies: I consulted reliable news agencies such as nytimes, the guardian, reuters, npr, bloomberg, official news agencies of a specific country or region (like allafrica.com or iranwire.com). In the case of news-feeds, I made sure the information is valid by finding other sources and other reliable news-agencies covering the news. It is important to note that economic activities of militaries are usually so extensive that leaves the researcher no doubt about presence of such activities.

Second stage: finding the first military economic enterprise and the date of establishment

Each case in the dataset required a specific process of determining the first military economic enterprise and its establishment date. This stage was the most challenging coding process. After finding evidence of the existence of military involvement in the economy, I had to identify the first enterprise under the military's control and the date it was established or find the date the military initiated an economic activity. In doing so I was able to confirm the date through the followings:

- -For some countries, I was able to capture the exact initiation date from sources mentioned above (mainly the historical books). For some cases, I was able to capture the name of the first military enterprise and subsequently I needed to go through extra research in order to identify the date the enterprise was established.
- -For the majority of cases, I was able to track the first enterprise through the above-mentioned sources and had to find the year it was established. Fortunately, many of these enterprises have official websites. I was able to find the date of establishment for some cases by referring to the "about" page. There are still some cases that there's no mention of the establishment

date in the official website so I had to refer to the secondary sources such as news agencies to confirm the date. For a few cases, I had to interview a specialist originated in that country to confirm the date.

I found total of 48 countries with military participation in economy between 1950 to 2010.

# Appendix B

Summary statistics of the variables in the main model (model 3):

Table 2: Summary Statistics

Variable	Obs	Mean	SD	Min	Max
Military Business	4393	0.007	0.088	0	1
Post-coup	4393	0.104	0.305	0	1
Post-War	4393	0.097	0.296	0	1
Regime Reliance on the Military	4393	0.416	0.402	0	1
Coup Numbers	4393	1.218	2.275	0	13
Purges	4393	0.129	0.554	0	13
Military Regime	4393	0.047	0.212	0	1
GDP per Capita (log)	4393	8.386	1.253	5.314	11.739
GDP Growth	4393	0.024	0.070	-0.438	0.849
Military Expenditure (log)	4393	12.588	2.403	6.214	20.357
Change in Military Expenditure	4393	12.436	39.914	-96.833	570.588
Military Personnel (log)	4393	3.719	1.579	0	8.366
Democracy 4393	0.419	7.632	-10	10	
Population (log)	4393	9.109	1.186	6.222	13.174