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The Significance of States with the Largest Defense Allocations (*In Millions of US Dollars at Current Prices and Exchange Rates*) to Corruption Issues

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Abstract

The defense sector will always be vulnerable to corruption, due to risks from high levels of secrecy, complex technical procurement, and exploitation of the hierarchical nature of the military. This study aims to provide a description of the significance of the country's largest defense allocation (in millions of US$ at current prices and exchange rates) to corruption. The approach used in this research is descriptive quantitative. The data used uses the country's CPI (Corruption Perception Index) issued by TII and the country's defense allocation issued by SIPRI. Data analysis used the method of testing the hypothesis through the khai-square distribution. This study concludes that the number of countries with CPI below the average of the 50 countries with the largest defense allocation (in millions of US$ at current prices and exchange rates) is not constant and therefore the cause is a significant factor. meaning that it can be interpreted that countries with large defense allocations tend to have a CPI below the average.

Keywords: Defense allocation · CPI (Corruption Perception Index) · Corruption

BACKGROUND

In a space where the governments do not always act in the best interest of their citizens, corrupt politicians may spend more public resources on things that are easier to take large bribes and keep secret (Mauro, 1998). The defense sector cannot escape the corrupt culture practiced by many corrupt politicians in many countries.

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The defense sector will always be vulnerable to corruption, due to the risks of high levels of secrecy, complex technical procurement, and exploitation of the hierarchical nature of the military. In rich countries, corruption tends to be concentrated in defense procurement, while in poor countries, defense corruption tends to be ubiquitous: in asset sales, in secret budgets and budget fraud, in salary theft, in the unauthorized use of military intelligence, and so on. Most leaders lack the will to tackle corruption, either because they benefit from it, are complicit, fear its consequences, or feel powerless to influence it (Pyman, 2021).

Although corruption, i.e. 'the abuse of public power for private gain' is inherently unwelcome due to its detrimental impact on a country's development (Waluyo, 2014), it remains widespread and occurs in every country in the world, to varying degrees (Saifuddin, 2017). Despite the general negative impact of corruption, it is considered a major obstacle in reducing inequality, poverty and infant

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mortality in developing countries (Alptekin & Levine, 2012). However, corruption, like the poor, will probably always be with us. In many foreign transactions, what would normally be considered under-the-table payoffs are commonplace: from clever and sophisticated bribery schemes in the Middle East and Latin America, to virtual mafia-style shakedowns in Sub-Saharan Africa and Indonesia, the universal game of bribery in pursuit of profit continues.

Economists, development practitioners and policy makers are widely aware that corruption is a real and persistent problem in developing countries (Wattimena, 2016). However, a number of recent corruption scandals have shown that rich countries, traditionally thought to be corruption-free, are not. In Norway and Sweden (often considered the cleanest countries), for example, state-owned companies were found to be involved in accepting bribes. Similarly, in Germany, former Chancellor Helmut Kohl and his Christian Democratic party, the CDU, were found to be involved in malpractice and convicted of receiving illegal campaign funds. In fact, the major corruption scandals that have emerged recently have had a major impact on various countries around the world: United States, Japan, Italy, France, Germany, South Korea, Mexico, and Kenya (Dunne & Tian, 2013).

In recent years, international organizations such as the United Nations, World Bank, IMF, and OECD have made corruption a major focus of their agenda and have made important efforts to curb corruption in the world, especially in developing countries that are more vulnerable to corruption. Corrupt activities for democracies and their weak institutions. Understanding the significant impact corruption has on a country's development process has motivated researchers to investigate why corruption exists and what determines the high level of variation in corruption across countries.

Research on the determinants and impact of corruption has been growing rapidly (see e.g. Lambsdorff, 2006 for an excellent review of the relevant literature). Cross-country empirical studies on the causes of corruption have investigated various factors such as economic, cultural, political and institutional aspects (see e.g. Serra, 2006). In addition, Ades and Tella (1997), Bardhan (1997), Jain (2001), Lambsdorff (2006) and Seldadyo and Haan (2006) provide extensive literature reviews. Amid the proliferation of research on corruption, a consensus among academics and policy makers regarding some of the causes of corruption is slowly emerging. However, controversial results still abound as researchers adopt different measures of corruption, different sets of conditioning information, or, more importantly, different samples (see, for example, Ades & Di Tella, 1999; Treisman, 2000; Paldam, 2002; Serra, 2006).

Many studies consider 'political variables' (see, for example, Treisman, 2000; Serra, 2006) and the institutional structure of a country (see, for example, Herzfeld and Weiss, 2003; Damania et al., 2004) as important determinants of corruption: in particular, countries with political stability and strong institutions are less prone to corruption. In his research, d'Agostino (2012) explores other possible ways of explaining corruption to provide a deeper understanding of the incidence of corruption and its variation across countries. The motivation behind d'Agotino's research is to provide national governments and international bodies with more scientific and factual information on the causes of corruption so that the global curse of corruption can be tackled more effectively. The study identifies the role of military elites in politics as a major factor driving corruption. To the best of our knowledge, this is the first study to highlight such an important factor determining corruption (d'Agostino et al., 2012).

According to recent World Bank estimates, each year more than US$1 trillion is paid in bribes. The estimates also show that countries that control corruption, using anti-corruption measures, such as improvements in governance and the rule of law, can significantly increase their per capita income by 400 percent. Director of the Institute for Governance, Daniel Kaufmann, stated that the US$1 trillion figure calculated, using 2001-2002 economic data, is based on actual bribes paid in both developed and poor countries. This amount of bribery is enormous when compared to the size of the world economy at the time, which was just over US$30 trillion (this figure does not include theft of public assets or embezzlement of public funds). The Director stated that “It is important to emphasize that this is not just a developing country problem, fighting corruption is a global challenge.” Embezzlement of public funds is a very serious problem in many countries, but assessing the extent of embezzlement is global.

According to Transparency International estimates, for example, former Indonesian leader Suharto embezzled an estimated $15-35 billion from his country, while Abacha in Nigeria, Mobutu in Zaire and Ferdinand Marcos in the Philippines each may have embezzled up to $5 billion in public assets. It is noteworthy that all of these leaders, except Ferdinand Marcos, had military backgrounds which meant military involvement in

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politics resulted in corruption and bribery. The military is not elected by anyone and therefore, government intervention in a country's political process, even at a peripheral level, is harmful to the democratic process and accountability.

Some other important implications are as follows: the military may be involved in governance due to real or invented internal or external threats to national sovereignty. This situation implies a distortion of government policy as certain policy options need to be required and implemented to deal with this threat; for example, budget reallocation in favor of the military at the expense of other important budget allocations (SIPRI, 2014).

The threat of a military takeover could force an elected government to change its policies in line with the military's wishes or perhaps even replace it with another government that is more amenable to the military's wishes. If a military takeover, or threat of a takeover, demonstrates the inability of the current government to function effectively, then the economy would pose a high risk to foreign businesses and a full-scale military regime would pose the greatest risk. Although a military regime may temporarily provide stability and thus reduce the risk to businesses in the short term, in the long term the risk will inevitably increase for two main reasons: the system of government will become corrupt and, secondly, the continuation of the government may create armed opposition (International Country Risk Guide, 2008).

This research aims to provide a description of the significance of countries with the largest defense allocations (in millions of US$ at current prices and exchange rates) to corruption. The research question posed is whether countries with defense budget allocations tend to have a below-average CPI (Corruption Perception Index).

METHODS

The approach used in this research is descriptive quantitative. The data used used the country's CPI (Corruption Perception Index) issued by Transparency International (TI) and the national defense allocation issued by SIPRI. Data analysis uses the hypothesis testing method through the chi-square distribution (X2). This test is applied because the data used is discrete and categorical data. This hypothesis testing method is also a form of independence testing to determine whether or not there is a relationship between two variables. The two variables in question are variables that are considered independent variables and dependent variables (see Table 1).

In principle, the criteria for hypothesis testing are established by comparing the observed frequency (nij) with the expected frequency (eij). If the two frequencies are the same or the difference between them is very small, then the null hypothesis is accepted. Meanwhile, if the two frequencies display a striking difference in value, the null hypothesis is rejected. In a simpler sense, the null hypothesis is accepted if the khai-squared value of the calculation results is smaller than the khai-squared value in the table based on the level of significance (level of significance) and certain degrees of freedom (degree of freedom). The magnitude of the khai-squared value can be found by applying the formula:

$$x^2 = \sum_{I=i}^{k} \frac{(n_{ij} - e_{ij})^2}{e_{ij}}$$

X2 is the khai-squared value of the calculation results, *nij* is the frequency obtained from the observations in row *i* and column *j* (certain cells). While *eij* is the expected frequencies of row *i* and column *j*. However, we must first determine the value of the proportion of individuals who have "good" characteristics denoted as *P*. The value of the proportion of individuals who have "good" characteristics is sought by applying the formula:

$$P = \frac{n_{11} + n_{12} + n_{13} \ldots n_{ik}}{n}$$

P is the value of the proportion of individuals who have "good" characteristics, *n11* is the number of individuals who have "good" characteristics from sample group *1*, *n12* is the number of individuals who have "good" characteristics from sample group *2*, *n13* is the number of individuals who have "good" characteristics from sample group 3 and so on and n has the total number of samples. The acceptance or rejection of a null hypothesis can be known after a series of hypothesis testing procedures are carried out. In accordance with the formula that is made, some of the steps must be taken are:

a. Formulate the null hypothesis and alternative hypothesis. Symbolically, the null hypothesis and alternative hypothesis in this method are formulated as follows:
$H_0 : P_1 = P_2 = P_3 = P = \cdots P_k$
$H_1 : P_1 \neq P_2 \neq P_3 \neq P \neq \cdots P_k$
b. Determine a certain level of significance.The significance level is the limit of acceptable error. It needs to be determined considering that in

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research the possibility of error cannot be completely eliminated.

Table 1. Categorization of individual characteristics into sample groups.

Characteristics	Group Sample 1	Group Sample 2	Group Sample 3	Group Sample 3	Total
Number of individuals that are categorized as "good"	n_{11}	n_{12}	n_{13}	n_{1k}	n_1
Number of individuals that are not categorized as "good"	n_{21}	n_{22}	n_{23}	n_{2k}	n_2
Total	$n_{.1}$	$n_{.2}$	$n_{.3}$	$n_{.k}$	n

Table descriptions:

n_1 : Total number of individuals with "good" characteristics from the whole sample (row 1)
n_2 : Total number of individuals with "unfavorable" characteristics from the whole sample (row 2)
$n_{.1}$: Total number of individuals in sample group 1 (column 1)
$n_{.2}$: Total number of individuals in sample group 2 (column 2)
$n_{.3}$: Total number of individuals in sample group 3 (column 3)
$n_{.k}$: Total number of individuals in sample group k (column k)
n_{ij} : Number of frequencies obtained from observations (observed frequencies) in cells
i : Row
j : Column

Regarding the significance level used in the testing process, we can determine a certain value according to what is in the table of chi-square values. For example, we set it at 5% or 0.05. It is also possible, with certain considerations, to choose other significance levels, such as 1%, 2.50%, or 0.50%.

c. Formulating test criteria. The test criterion that applies in hypothesis testing through the chi-square distribution is that the null hypothesis is accepted if
$X^2 \leq X^2_{(\alpha;k-1)}$
While the null hypothesis is rejected if
$X^2 > X^2_{(\alpha;k-1)}$

d. Calculating the khai-squared value. The chi-square value is calculated by applying the formula as explained earlier. Next we must determine the value of the proportion of individuals who have "good" characteristics denoted as P. as for the magnitude of the proportion of individuals who have "good" characteristics is sought by applying the formula.

e. Formulate the final conclusion. The final conclusion is formulated after we know the magnitude of the kahi-squared value of the calculation results. The calculated value is then compared with the chi-square value in the table and aligned with the applicable testing criteria. Based on the comparison of the two chi-square values, we can determine whether a null hypothesis is accepted or rejected.

RESULTS AND DISCUSSION

Corruption is a symptom of deep institutional weakness and leads to inefficient economic, social and political outcomes. It reduces economic growth, discourages long-term foreign and domestic investment, increases inflation, depreciates national currencies, reduces spending on education and health, increases military spending, misallocates talent to profit-seeking activities, encourages underground enterprises, distorts markets and human resource allocation (Dunne & Tian, 2016). Corruption reduces resource endowments, increases income inequality and poverty, reduces tax revenues, increases child and infant mortality, distorts the fundamental role of government (in contract enforcement and property rights protection), and weakens the legitimacy of government and the market economy (Akcay, 2006).

Corruption is a deceptive word, which needs to be broken down into more detail. It is important to say in a discussion of defense corruption: "These are the specifics of defence corruption" with enough detail that you and they can recognize the problem and then discuss it together (Akcay, 2006). Efforts by Transparency International's defense and security program (TI-DS) have produced a well-developed list of 29 specific types of corruption in defense (Kollias & Paleologou, 2016). Various conversations with the MOD, military and defense

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think tanks resulted in 29 defined issues, and a categorization of those issues under 5 headings: political corruption issues, finance-related issues, personnel-related issues, procurement-related issues, and corruption problems encountered on operations. The figure below shows the 29 issues and the five categories

Picture 1. 29 Defense corruption risks.

29 DEFENCE CORRUPTION RISKS

POLITICAL		PERSONNEL		PROCUREMENT	
Defence and Security Policy	10	Leadership Behaviour	4	Technical Requirements / Specifications	7
Defence Budgets	7	Payroll, Promotions, Appointments, Rewards	5	Single Sourcing	2
Nexus of Defence & National Assets	1	Conscription	2	Agents / Brokers	1
Organised Crime	2	Salary Chain	2	Collusive Bidders	1
Control of Intelligence Services	2	Values & Standards	4	Financing Packages	1
Export Controls	1	Small Bribes	1	Offsets	3
FINANCE		**OPERATIONS**		Contract Award, Delivery	3
Asset Disposals	2	Disregard of Corruption in Country	2	Subcontractors	1
Secret Budgets	6	Corruption within Mission	1	Seller Influence	1
Military-owned businesses	2	Contracts	1		
Illegal Private Enterprises	1	Private Security Companies	1		

Each issue is expressed in a very abbreviated form (full definitions are available elsewhere) for very practical reasons: The issues find immediate popularity as core discussion tools among groups of military officers or MOD officials. The issues are presented as they are so that they reflect the normal 'range' of corruption issues that can be found in the national defense establishment. Some are like (corruption in) defense policy broadly, others are very specific, like (corruption in) financing packages supporting defense procurement. The typology table evolved and was refined during discussions in the first four or five countries, but was later stabilized and has been used in many countries as a basis for analyzing problems in the country.

In principle, based on the parameters measured, measurement methods can be categorized into two groups, namely input indicators and output indicators. Both approaches will provide different measurement results. The CPI issued by Transparency International (TI) is the most popular index on corruption and is most often used as a reference in various discussions on corruption. The CPI ranks and measures perceptions of the level of corruption involving public officials and politicians.

The Corruption Perceptions Index (CPI) is an index that ranks countries "by their perceived level of public sector corruption, as determined by expert judgments and opinion surveys." The CPI generally defines corruption as "the abuse of the trust of power for personal gain". The index is published annually by the non-governmental organization Transparency International since 1995.

The CPI 2021, published in January 2022, currently ranks 180 countries "on a scale from 100 (very clean) to 0 (very corrupt)" based on the situation between May 1, 2020 and April 30, 2021. Denmark, New Zealand, Finland, Singapore, and Sweden are considered the least corrupt countries in the world, consistently ranking high among international financial transparency, while the most corrupt are Syria, Somalia (both scoring 13), and South Sudan (11).

Picture 2. Corruption rate.

	ved as less corrupt					Perceived as more corrupt				
Scores	99–90	89–80	79–70	69–60	59–50	49–40	39–30	29–20	19–10	9–0

CPI scores range from zero (0) for a highly corrupt country to ten (10) for a very clean country. Throughout the history of the CPI, the lowest score was achieved by Bangladesh in 2001 with a score of 0.4; while the highest score of 10 was achieved by Finland in 2000 and Denmark in 1998 and 1999.

The following simplified defense allocation data and corruption perception index are used to conduct hypothesis testing through the chi-square distribution (X2).

Table 2. Militer Expenditure (ME) (in millions of US$ at current prices and exchange rates) and Corruption Perception Index C(PI)

Number	States	ME	CPI	Discriptions of CPI

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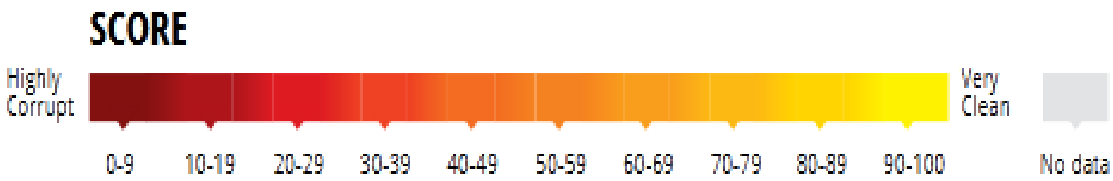
1	USA	731751.4	69	Above average
2	China	261081.9	41	Below average
3	India	71125.0	41	Below average
4	Russia	65102.6	28	Below average
5	Saudi Arabia	61866.7	53	Above average
6	France	50118.9	69	Above average
7	Germany	49276.8	80	Above average
8	UK	48650.4	77	Above average
9	Japan	47609.0	73	Above average
10	Korea, South	43890.9	59	Above average
11	Brazil	26945.9	35	Below average
12	Italy	26790.4	53	Above average
13	Australia	25912.4	77	Above average
14	Canada	22197.6	77	Above average
15	Israel	20464.9	60	Above average
16	Turkey	20447.7	39	Below average
17	Spain	17176.7	62	Above average
18	Iran	12623.2	26	Below average
19	Netherlands	12059.6	82	Above average
20	Poland	11902.5	58	Above average

Source: SIPRI and TII (*processed by researchers*)

Picture 3. Corruption Perception Index Scores



Description: Average score of Corruption Perception Index (CPI) 43/100.

Table 3. The grouping of countries with above and below average CPI of the 50 countries with the Largest defense allocation (*in millions of US$ at current prices and exchange rates*)

Characteristics	Africa	USA	Asia & Oceania	Europe	Middle East	Total
Below average	2	3	7	2	6	20
Above average	1	4	6	17	2	30
Total	3	7	13	19	8	50

In this study, the proportion of countries with below-average CPI of the 50 countries with the largest defense allocation is denoted by PDn. In essence, the null hypothesis states that the proportion of countries with below-average CPI of the 50 countries with the largest defense allocation (in millions of US$ at current prices and exchange rates) is constant and therefore the cause is a chance factor. While the alternative hypothesis essentially states that the proportion of the number of countries with CPI below the average of the 50 countries with the largest defense allocations (in millions of US$ at current prices and exchange rates) is not constant and therefore the cause is a significant factor. Thus,

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the null hypothesis and the alternative hypothesis are symbolically formulated as:

H_0 : $P_{D1} = P_{D2} = P_{D3} = P_{D4} = P_{D5}$
H_1 : $P_{D1} \neq P_{D2} \neq P_{D3} \neq P_{D4} \neq P_{D5}$

The significance level used in the testing process is set at 5% or 0.05. Based on the description of this case, the number of proportions is 5. Thus, the degree of freedom is 4 (5 - 1). If the significance level is 0.05 and the degree of freedom is 4, then the value of khai-squared in the table is 9.488. Thus, the testing criteria applied in this case is that the null hypothesis is accepted if $x^2 \leq 9{,}488$. Meanwhile, the null hypothesis is rejected if $x^2 > 9{,}488$. First, the khai-squared value is calculated by determining the proportion of the number of countries with below-average CPI to the total sample. The proportion value is:

$$\frac{(2+3+7+2+6)}{50} = 0{,}4$$

Next, we calculate the expected frequency value. The calculation of the expected frequency value applies to the number of individuals who have both “good” and “bad” traits. In accordance with the context of this case, the number of individuals who have “good” traits is the number of countries whose CPI is below average. While the number of individuals who have “bad” traits is the number of countries whose CPI is above average. Thus, the expected frequency value is calculated as follows:

e_{11} = 0,4 x 3 = 1.2	e_{21} = 3 – 1.2 = 1.8
e_{12} = 0,4 x 7 = 2.8	e_{22} = 7 - 2.8 = 4.2
e_{13} = 0,4 x 13 = 5.2	e_{23} = 13 – 5.2 = 7.8
e_{14} = 0,4 x 19 = 7.6	e_{24} = 19 – 7.6 = 11.4
e_{15} = 0,4 x 8 = 3.2	e_{25} = 8 x 3.2 = 4.8

After the calculation of the expected frequency value is completed, the value is then placed to the right of the actual number of countries with the largest defense budgets, whether the CPI is below average or above average. This step is necessary to facilitate the calculation of the chi-square value and also so that we can still remember the origin of the numbers listed in the calculation.

Table 4. Expected and actual frequency values

Characteristics	Africa	USA	Asia & Oceania	Europe	Middle East	Total
Below average	2(1,2)	3(2,8)	7(5,2)	2(7,6)	6(3,2)	20
Above average	1(1,8)	4(4,2)	6(7,8)	17(11,4)	2(4,8)	30
Total	3	7	13	19	8	50

The khai-squared value of the calculation results in this case is calculated as follows:

$$\frac{(2-1{,}2)^2}{1{,}2} + \frac{(3-2{,}8)^2}{2{,}8} + \frac{(7-5{,}2)^2}{5{,}2} + \frac{(2-7{,}6)^2}{7{,}6} + \frac{(6-3{,}2)^2}{3{,}2} + \frac{(1-1{,}8)^2}{1{,}8} + \frac{(4-4{,}2)^2}{4{,}2} + \frac{(6-7{,}8)^2}{7{,}8} + \frac{(17-11{,}4)^2}{11{,}4} + \frac{(2-4{,}8)^2}{4{,}8} =$$

0,533333 + 0,014286 + 0,62307692 + 4,126316 + 2,45 + 0,355556 + 0,009524 + 0,41538462 + 2,750877 + 1,633333333 = 12,91169.

As is known from the calculations above, the calculated value of khai-squared is 12.91169. Meanwhile, the khai-squared value in the table for a significance level of 5% and a degree of freedom of 4 is 9.488. Since the calculated chi-square value is greater than the chi-square values in the table, the null hypothesis is rejected and the alternative hypothesis is accepted. Thus, the number of countries with below-average CPI out of the 50 countries with the largest defense allocations is not constant and therefore the cause is a significant factor, meaning that it can be interpreted that countries with large defense allocations tend to have below-average CPI.

Recent theoretical developments and case study evidence suggest a link between the military in politics and corruption. These theories are developed in studies related to defense economics. As an institution the military has many justifications for seeking a political role. Four important reasons are discussed below. First, the military wants to maintain an increasing share of the military in national resources. Case studies often note that one of the reasons for the military taking charge is the

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evident increase in military spending, such as salary increases, the ordering of new military hardware and new facilities provided to officers and their families. For example, military spending increased by an average of 22% per year in Ghana during the period 1966-69, following the military coup against the government (Lorusso & Pieroni, 2017). This was actually a reflection of the fact that prior to the coup, Nkrumah had put the army on an austerity budget.

The role of military spending is critical in shaping the relationship between the military, government and corruption as it is a factor that motivates high-ranking military officials to intervene in government to maintain or increase the military's share of national resources. Most often, military coups occur when democratic governments attempt to maintain a military austerity budget. Once military commanders hold positions in the government machinery, or in extreme cases when democratic governments are replaced by military regimes, increased military spending is inevitable. Of course the opportunity cost of increased military spending is seen in reduced public spending elsewhere in the economy (Kennedy et al., 2017), such as education, health and welfare subsidies, among others and this impacts on human capital formation (in terms of lower finances available for education and health), among others, and weakens the strength of anti-corruption measures.

Secondly, when the military has a larger share in a country's national resources then the procurement of military hardware and the arms trade are inevitable outcomes (Hadi et al., 2016). Both historical evidence and recent patterns show that military procurement is highly susceptible to corruption due to limited oversight, auditing, and massive payments. Another reason for corruption in military procurement cases is the lack of competition. For example, Wilson et al. (2006) provide evidence that governments offer 50 percent or more of their defense procurement requirements to a single supplier. Similarly, according to a survey by Control Risks (2006), one-third of international defense companies are aware that they have lost contracts in the past year due to corruption by competitors.

Military operations other than war (OMSP) is an extension of the warfare doctrine. Embodied in these principles is the predominance of political objectives at all levels of OMSP. In the literature on military operations there is a distinction between war and other operations. For example, Story and Gottlieb (1995) provide a working military operational framework in which they divide military operations into combat, noncombat and simultaneous operations. Combat operations include war, operations to restore order and retaliatory actions while noncombat operations include shows of force, maintenance of ceasefires, support and relief assistance. Some military operations can involve combat and non-combat at the same time and these operations are considered as simultaneous operations. Simultaneous operations are combating terrorism, exclusion zone operations, ensuring freedom of navigation, non-combatant evacuation operations and recovery operations.

In the presence of military operations (whether combat or non-combat operations), one immediate effect is an increase in the military budget (Pandia et al., 2022). Military officials find further flexibility in manipulating the military budget for personal gain. For example, according to Transparency International (2007) defense agencies (the Ministry and the Armed Forces) are “finding out from soldiers' payrolls (e.g. G. Various military operations increase military control over security positions. According to Transparency International (2007) defense officials extract money to bypass security and other check points. Military operations can be prone to corruption because monitoring of field commanders is not as robust as most evidence from African countries. In particular, when troops are deployed in large and complex terrains, checks on field commanders are limited. Fourth, military leaders often manipulate tenders for personal gain. Tenders for even routine items such as uniforms and food are often heavily manipulated and usually awarded to non-competitive companies to create payoffs for military officials. Finally, high-ranking military officials manipulate the military budget for personal and family reasons, such as salaries, medical support, education, foreign visits and so on.

After discussing these arguments, we can say that unjustified increases in military spending without strict monitoring and accountability leave a margin for kickbacks and corrupt activities. A large body of literature has developed that considers that corruption and other aspects of weak governance and institutions can have harmful economic effects. This has led to a general acceptance that corruption is an important impediment to economic growth, particularly in developing countries, (d'Agostino et al, 2016a; Gupta et al., 2000). This is an important concern as corruption in many countries appears to be systemic and frequent. It is also common to see allegations of corruption in the military sector. Unsurprisingly, it is generally accepted that limited competition, lack of transparency and secrecy

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surrounding military activities, leads to relatively high levels of informal contracting and makes it easier to engage in rent-seeking activities.

This provides fertile ground for the growth of corrupt practices that can lead to revenue streams that are independent of general oversight and can be particularly persistent in developing countries. It is also difficult to assess costs in this sector so the discretionary power of bureaucrats increases leading to higher levels of corruption in public offices (Gupta et al., 2000). Resources intended as government expenditure are extracted by individuals as rent, with more theft activity occurring the less likely it is to be caught and less can be recovered. The pressure to export weapons to sustain domestic producers may also lead to further dubious practices that could augment those operating in the domestic market (Freeman, 2017).

This corruption can thus have a negative economic impact through increased costs of military activities channeled through rent-seeking behavior in the military sector that crowds out productive investments in the private sector. While some literature has brought these concerns together, it remains somewhat limited (d'Agostino et al, 2016). It is also clear that some countries are caught in a vicious cycle of corruption and low growth and it is not always clear how to get out of it, or indeed to prevent other countries from getting into such situations. Cross-country studies do provide some understanding of workplace processes, but they still require further development.

This paper provides such developments. It takes an endogenous growth model framework (Barro1990) that is extended to allow for complementary effects between the private sector and government and the detrimental effects of corruption to enter the model, with government spending divided into military and non-military spending. It also builds on the literature that considers how corruption complements military spending (and vice versa) in limiting economic growth (Mauro1995, 1998; Aizenman2003) and is close to the spirit of Tanzi, (1998) and Gupta (2000) who argue that a productive public is productive, (1998) and Gupta (2000) who argue that the productive public is productive that the productive public is productive that the productive public is productive that investment is minimized in countries with widespread corruption that favors less transparent government spending, such as military spending (Gupta et al., 2000).

In particular, it develops the model outlined by Mauro (2004), which allows for government spending to be either stolen (corruption) or used productively. In this model the military sector is a source of bribery and corruption, but is considered, along with public investment, to provide a potentially productive input, although productivity differs between sectors. The implication of this model is that the defense sector is a persistent source of long-term corruption and can adversely affect the steady state of the economy. Possible inefficiencies inherent in corruption related to services provided by the public sector (bureaucracy and bureaucratic corruption) are also captured.

The results show that both military spending (as a share of total government spending) and corruption have significant negative long-run effects on output. Since the model also suggests that some equilibrium may exist, a comparison is made between the high and low corruption groups of countries and clear differences are indeed found. This has interesting policy implications, suggesting efforts are needed by the international community to encourage and coerce countries of high corruption and military expenditure, but countries of low corruption and military expenditure are likely to require less attention.

CONCLUSION

The study concludes that the number of countries with below average CPI of the 50 countries with the largest defense allocations (in millions of US$ at current prices and exchange rates) is not constant and therefore the cause is a significant factor, meaning that countries with large defense allocations tend to have below average CPI. Limited competition, lack of transparency and secrecy surrounding military activities, leads to relatively high levels of informal contracting and makes it easier to engage in rent-seeking activities. This provides a fertile ground for the growth of corrupt practices that can lead to revenue streams that are not subject to public scrutiny and can be particularly persistent in developing countries.

REFERENCES

Akcay, S. (2006). Corruption and Human Development. *Cato Journal, 26*(1), 29-48.

Alptekin, A. and Levine, P. (2012). Military expenditure and economic growth: A meta-analysis. *European Journal of Political Economy, 28*(4), 636–650.

d'Agostino, G., Dunne, J.P. and Pieroni, L. (2012). Corruption, Military Spending and Growth". *Defence and Peace Economics, 23*(2), 591-604.

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d'Agostino, G., Dunne, J.P. and Pieroni, L. (2016a). Corruption and growth in Africa. *European Journal of Political Economy, 43*(C) 71-88.

d'Agostino, G., Dunne, J.P. and Pieroni, L. (2016b). Government spending, corruption and economic growth. *World Development, 84*(C), 190-205.

Dunne, J.P. and Tian, N. (2013). Military expenditure and economic growth: A survey. *Economics of Peace and Security Journal, Economists for Peace and Security, 8*(1) 5-11.

Dunne, JP and Tian, N. (2016). Military expenditure and economic growth 1960-2014. *Economics of Peace and Security Journal, 11*(2), 50-56.

Gupta, S., de Mello, L., & Sharan, R. (2000). Corruption and Military Spending. IMF Working Paper.

Hadi, A., Sumari, A.D.W., & Djapri, S. (2016). Bauran Kebijakan Fiskal-Moneter dan Dampaknya Bagi Anggaran Pertahanan. *Jurnal Pertahanan, 6*(3), 145-170.

Kennedy, P.S.J., Tobing, S.J.L., & Lumbantoruan, R. (2017). Manajemen Anggaran Pertahanan Nasional. Prosiding Seminar Nasional Ekonomi dan Bisnis (SNEBIS) 2017 Fakultas Ekonomi Universitas Krisnadwipayana, 1(1), 6-14.

Kollias, C. and Paleologou, S.M. (2016). Investment, growth, and defense expenditure in the EU15: Revisiting the nexus using SIPRI's new consistent dataset. *Economics of Peace and Security Journal, 11*(2), 28-37.

Lorusso, M. and Pieroni, L. (2017). The effects of military and non-military government expenditures on private consumption. *Journal of Peace Research, 54*(3), 442-456.

Muchlis, A. (2016). Penegakan Hukum Terhadap Tindak Pidana Korupsi dengan Kerugian Negara yang Kecil dalam Mewujudkan Keadilan. *Jurnal Fiat Justisia, 10*(2), 221-241.

Mauro, P. (1998). Corruption and the Composition of Government Expenditure. *Journal of Public Economics, 69*(1), 263-279.

Pandia, K.V., Sutrasna, Y., & Navalino, D.A. (2022). Pengaruh APBN, Produk Domestik Bruto dan Pertumbuhan Ekonomi Terhadap Anggaran Pertahanan T.A 2010-2020. *JIP Jurnal Inovasi Penelitian, 2*(8), 2769-2782.

Perlo-Freeman, S. (2017) SIPRI's New long dataset on military expenditure: The successes and methodological pitfalls. Defence and Peace Economics, this issue.

Pyman, M. (2021). Curbing Corruption in Defence & Military: Sector Reform Experience and Strategies. https://curbingcorruption.com/sector/defence-and-military/

Saifuddin, B. (2017). Dampak dan Upaya Pemberantasan Tindak Pidana Korupsi Di Indonesia. *Jurnal Warta, 52*(1), 1-15.

SIPRI (Stockholm International Peace Research Institute). (2014). SIPRI Yearbook: World Armament and Disarmament, Oxford: Oxford University Press.

Waluyo, B. (2014). Optimalisasi Pemberantasan Korupsi di Indonesia. *Jurnal Yuridis, 1*(2), 169-182.

Wattimena, H. (2016). Perkembangan Tindak Pidana Korupsi Masa Kini dan Pengembalian Kerugian Keuangan Negara. *Jurnal Tahkim, 12*(2), 68-88.