THE DEFENSE ECONOMICS APPROACH TO SYNCHRONIZING DEFENSE AND ECONOMIC DEVELOPMENT POLICIES IN INDONESIA

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Abstract

This study aims to explain the latest phenomenon that economy and defense must be mutually aligned so that people's welfare increases. The main priority is not only improving the economy but also in providing adequate security and defense so that economic actors can carry out their economic activities optimally. The method used in this study is a qualitative study, which has a focus on how to get data and literature that has deep meaning. From this method, we want to get a relationship between the defense and the economic sectors so that both areas must be equally seen as necessary in the ideals of improving social welfare, with the realization that the development of defense and economic programs must go hand in hand.

INTRODUCTION

The phenomenon of the monetary crisis that occurred in Southeast Asia did not cause a decrease in the defense budget but instead continued to increase. Theoretically, when the budget for the economy is improved, the defense budget is automatically not a top priority. This opposite situation shows that there is awareness among Indonesia's neighbors that defense has become very important when the monetary crisis hit. Without a strong defense, the country becomes weak; it can even bring the country into a state of crisis. Indonesia which has enormous natural resources must be able to keep it from all disturbances and threats. Negligence in safeguarding state assets will cause the utilization of natural resources to be not optimal; for example, there are many thefts everywhere, such as illegal logging, illegal fishing, smuggling, and so on.

Before Asia experienced a financial crisis in 1997-1998, military spending from Asian countries increased rapidly. After the crisis, since 2000 there has been a
downward trend in defense spending throughout the world. But the phenomenon that occurs in Asian countries, especially Southeast Asia, as a whole is the opposite. In absolute terms, the level of militarization of Southeast Asian countries is increasing, except for Indonesia which is still low. This must be watched out for and considered because it can be a potential threat due to unbalanced forces between countries. However, Southeast Asian countries can still work together and remind each other as friends, where the growth of budgets and defense programs should be aimed at maintaining national economic growth and peace in the region.

Graphically the trend of the defense budget in Indonesia and its neighboring countries can be seen in the Figure 1 and 2.

From the two tables above, it can be seen that in absolute terms the defense budget in the region has increased, especially in India which has risen sharply. This is similar to that described by Blackwill (Blackwill, 2003). This increase in the defense budget does not necessarily raise suspicion about the aggressiveness of a country. This can happen because they want to increase their defense in the face of threats along with the economic progress experienced.

From its proportion to GDP, the number of defense budgets in the region tends to decline. What seems dominant here is Singapore, where the military budget provides a substantial proportion compared to other countries. This can seem reasonable because the level of the economy is very good with a relatively high level of human welfare. Singapore budgeted military expenditure an average of 4.33% of its gross domestic income, more than double that of other countries in its strategic environment. Australia, India, Malaysia and Vietnam budget military spending in the range of 2% of their gross domestic income. While Indonesia and the Philippines are the smallest, which is around 1% of gross local income.

Figure 3 and 4 show the gross domestic product (GDP), and the number of the population between Asian countries in the period 2011-2015.
As we see the figures above, Indonesia has the highest national income and the largest population. So it's natural if Indonesia has a strong defense. Countries in strategic environments will see it as natural; Indonesia needs to maintain its wealth and population properly.

From the above data, the question is the benefits of defense in the era of peace where traditional warfare is almost non-existent, especially in Indonesia's strategic environment. For this reason, the writer wants to show that the defense of a country is still essential because the wealth of a country must be maintained with a strong defense. Therefore, which is the aspiration of the nation can occur. From this purpose, the hypothesis that there is a reciprocal relationship between defense and the economy, therefore both policies must be synchronized.

Thus, this study aims to explain the latest phenomenon that economy and defense must be mutually aligned so that people's welfare increases. The main priority is not only improving the economy, but also providing adequate security and defense that the economic actors can carry out their economic activities optimally, both in production and consumption activities. Both sectors, each other's defense and economy influence. Without proper security, of course, the economy also does not run well and is stable. Without a good economy, the fulfillment of defense financing needs cannot be increased. All this is a study of defense economics.

The results of the policymakers are in the field of national defense. Where in increasing the national economy, it is necessary to eliminate threats from both inside and outside, so that a sufficient defense budget policy is needed to eliminate the threat.

RESEARCH METHOD
The method used in this study is a qualitative study. The concept is to construct scattered data into a theme that is more meaningful and easier to understand. This method focuses on how to get data profoundly and meaningfully. The intended meaning is the value behind visible data, so that research does not focus on generalization but rather on purpose (Sugiyono, 2012).

From the question of whether the benefits of national defense in the era of peace (there is no war in the international strategic environment of a country), it is necessary to explain the phenomena that exist qualitatively based on the literature documents and the existing descriptive secondary data (Jonker J, Pennik B.J.W, 2011).

Thus this qualitative research is descriptive and explanatory. Namely, study that describes a complicated situation, and explains (clarity) about the relationship between events with specific meanings (Sutopo A.H, 2016). Smith (Smith, 2000) states, although many factors need to be described in this combination of economics and sophisticated defense, in accordance with economic theory that explains complex social systems, it is believed that there is a relationship between defense expenditure and growth, although there is a possibility of small influence negative in the long run. In explaining this qualitative study with a
strategy based on the framework of thinking as follows:

<table>
<thead>
<tr>
<th>Threats from the Strategic International Environment</th>
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<tbody>
<tr>
<td>Defense</td>
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<tr>
<td>Defense Budget</td>
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<tr>
<td>Economic Growth</td>
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<td>Economy</td>
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<tr>
<td>Social Warfare</td>
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</tbody>
</table>

Figure 5. The framework of thinking

Source: processed by Author, 2019

LITERATURE REVIEW

According to Adam Smith, the task of protecting the public needs to be carried out by the defense force which is the first obligation of the state, in addition to organizing the judiciary, and carrying out public works. Protection from the excellent government will play a role in harmonizing conflicts between private and social interests, prevention of exploitation by foreigners, and stimulating increased productive investment. This security is transformed into public goods that must be prepared by the state impersonally and cannot be private or allowed to be managed by the community itself, and is the right of every citizen to enjoy it.

Security and Defense

Everyone will not have a sense of security if they feel things that always threaten the peace and safety of his life. Likewise, a nation or state will feel insecure if the existence of his life is still in danger. The threat can come from outside or inside him. From the security epistemology comes the Latin terms "se" and "curious," which means free from danger or free from fear. Thus security can be formulated as a situation without the risk or a situation without threats.

Security is a classic function of the state in addition to the role of prosperity, where the ideal building of society is security. Avoiding people from threats that come from outside is the primary function of the state in understanding the classics. In traditional concepts, security is a condition where there is no physical (military) threat originating from outside, or is an atmosphere free from all forms of danger, anxiety, and fear. Anggoro (Anggoro, 2003) mentions three essential features of traditional understanding, namely: first, identification of "national" as "state"; second, threats are assumed from outside the country; third, the use of military force to deal with threats. Traditionally the main problem facing every country is to build strength to deter or defeat an attack.

Any variation in threats can be reduced or even eliminated through the development of a unique early warning mechanism. Therefore, the need to know threats and prevention is an equally important concept in security. In the idea of preventive defense, a defense strategy is needed that concentrates national security from a variety of potential threats no matter how small. If it is not managed correctly, the threat will be a danger that will threaten the existence and survival of a nation or country directly.

McGuire in Hartley & Sandler (Hartley & Sandler, 1995) limits the meaning of defense, namely "all aggressive and protective activities carried out by the government and nations to define, improve (to advance), and preserve (to preserve) their interests among nations - other nations. Of course, all aggressive and protective activities are carried out by the government and the society on behalf of the state. Thus the defense is first and foremost present because of the presence of the country. Without the presence of the state, there will be severe difficulties for the
nation to determine, advance, and preserve their respective national interests.

Economy and Defense
There are significant differences in concepts between defense and the economy. The main difference lies like the two concepts. Namely, the economy prioritizes "sovereignty lies in unlimited human needs," while the defense character is "sovereignty is in the hands of the state." This provides a consequence: "If it is agreed to eliminate economic activities, it means negating the nature of human beings, and if eliminating defense activities means denying the presence of the state." Therefore it is necessary to connect the two different characters so that they are closely related and complementary.

Keliat (Keliat, 2010) adds that link in several ways, namely:

a. The state is present to protect the interests of national economic actors. Economic activities will not run well if there is no guarantee of protection of ownership rights. Although war does not always occur, the possibility is still present in human life. In this case, war is one type of threat to ownership rights. The defense is an economical cost incurred to minimize future uncertainty.

b. The state needs economic resources to protect its territorial integrity. A country is called sovereign and modern if it occupies a geographical space with a clear boundary that separates itself from other parties. In areas within that boundary, the state has legal authority. But this authority is not something eternal; there is always a threat to that boundary.

c. Organizing the army as a profession related to violence is related to the economic surplus generated by the economic activities of the community. There is an argument that the military will only be well organized if the commercial activities of the population can produce a financial surplus. Soldiers are not "productive" humans and do not aim to deliver directly and act as rational economic actors. The available economic resources are a significant factor for the army to carry out its functions effectively. Here the consideration of opportunity costs began to occur as an economic logic whether it was necessary to maintain a permanently organized army.

Keliat also added, if defense and the economy were related, there were two different ways of looking at this concept, namely: the need to increase the defense budget as an economic problem; or the need for budget increases as a security problem. Based on the fact that human necessities are not limited but the resources to support these needs are limited, the defense economy is a study of the effects of scarcity of supplies on achieving defense objectives, both for protective (protection) and aggressive (assault) purposes.

Bakrie (Bakrie, 2009) mentions that there are two fundamental physical elements in building national strength, namely economic and military. Both see the weakness of the nation's economy as a form of defense in the broad sense and the limited ability of the military as a form of defense in the narrow sense. The defense and economy of a nation is a whole unit because it determines the strength of a nation.

A nation or country will feel insecure if the existence of his life is always in danger. The threat can come from outside or inside him. Defense and security is a classic function of the state in addition to the role of prosperity, where the building of an ideal society is one of which is security. Avoiding people from threats that come from outside is the primary function of the state in understanding the classics. In traditional concepts, security is a condition where there is no physical (military) threat originating from outside, or is an atmosphere free from all forms of danger, anxiety, and fear.

Any variation in threats can be reduced or even eliminated through the development of a unique early warning mechanism. Therefore, the need to know threats and prevention is an equally important concept in security. If it is not managed correctly,
the threat will be a danger that will threaten the existence and survival of a nation or country directly.

**Traditional Threats**

In the life of the state, various threats must be considered. Although relations between countries are now borderless, it is strictly necessary to safeguard the sovereignty of a country from traditional threats originating from other countries. Moreover, Indonesia has a strategic environment, where the land area is directly adjacent to Malaysia in Kalimantan and Papua New Guinea in Papua. Indonesia's sea area is bordered by 10 (ten) countries, namely Thailand, India, Malaysia, Singapore, Australia, Vietnam, Philippines, Papua New Guinea, Timor Leste and the Republic of Palau. The border areas of the Indonesian sea are generally in the outermost islands. These islands are the outermost points that affect the vast territory of Indonesia and potentially become territorial conflicts with neighboring countries.

Schelling is one of the earliest researchers who analyzed how a country deterrence the threat of the opponent's strength. Schelling (1960) in McGuire (McGuire, 1995) explains, "... it is essential to influence the choices of other parties to be taken ... by changing their expectations of how we behave. This involves a confrontation with him, where it is believed that our behavior determines his behavior." Before the development of game theory at all economic levels, economists had introduced a deterrent threat based on incentives that would be accepted in the future.

Initially, according to classical or traditional thinking, threats are always emphasized in "the state." The state becomes the target of risks so that state security becomes the initial thought in understanding security. More security functions are given to efforts to protect the country. This can be seen from the tasks of each security institution, namely the army, police, and intelligence that emphasizes state security. Thus, in the traditional sense, the definition of security is closely related to military power.

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This particular characteristic of traditional security is that the threat faced comes from outside the country with threatening actors is a country, so it requires heavy and modern weaponry to deal with it. This is what distinguishes it from non-traditional threats, where the enemy faced is not in the form of a state, but groups or people per person, the weaponry of opponents met tends to be simpler or asymmetrical. Thus the behavior to deal with this internal threat will be very different from external or traditional threats.

Need to reflect on the ambitions of Napoleon Bonaparte who wanted to become the ruler of Europe in his time. Since the Napoleonic era, every country began to multiply the number of its troops to always be vigilant in balancing their enemies on the battlefield with a more innovative defense strategy (Syamtidar, 2011).

Since European sailors sailed the ocean at the end of the 15th century to conquer the world, historiography and international politics were accustomed to a specific pattern, namely military, economic and technological power which was translated as a means of influencing and conquering other nations, in dominating and form a global scale emporium. The same pattern applies in the 20th century, after the outbreak of two world wars, the United States and the Soviet Union replaced the position of major European countries on the global stage. The Cold War and the period of US domination after 1998/1990 also followed this pattern (Purwanto, 2011).
After the end of the Cold War (the early 90s), there was a change in international politics dynamically accompanied by an increase in the process of globalization and the rapid development of information technology. In the early days of the Cold War, global-scale political and military rivalries between the western bloc and the eastern bloc had faded. Countries in the world in international politics focus more on improving socio-economic welfare, rather than focusing on increasing military power to maintain the existence of their respective countries.

**Threats in the Modern Era**

In this modern era, world insecurity that occurs generally comes from non-mile, try threats. Non-military threats are all internal security threats originating from the fields of politics, ideology, information, socio-cultural, economic, financial, which at any time can attack and paralyze the activities of a country, making the country weak (Hutabarat, 2018).

There is consistent backflow in international relations carried out by countries in the world. "Conventional" or "traditional" aspects of international relations again occupy a reasonably central position to prevent the threat of war and aim to foster confidence in international politics (Muhaimin, 2008).

There are new dominant trends in international relations practices that affect a country's defense, namely (Muhaimin, 2008):

1. International politics is more colored by a variety of contemporary global issues, for example, in matters of investment, environment, human rights, labor / international migration and socio-economic problems and welfare of human life.

2. There is a globalization process and a situation of interdependence, where changes that occur in a country will have an impact on other countries, even though both countries are geographically far apart. Thus decision making by a state becomes increasingly complicated because it has to take into account its impacts on relations between various domestic and international elements.

3. In international politics, not only countries play an important role but also non-state parties. As a result, state entities become vulnerable to foreign infiltration, which endangers national defense. In this context, the achievement of national interests besides being carried out by strengthening the country's defense capabilities is also achieved by effective use of diplomacy from the government and non-state elements. Behind the strength of this diplomacy requires the reliability of his country's defense.

4. The boundaries of domestic and international problems are blurred because of the increasingly open state structure in international relations. Thus the existence of the state becomes vulnerable to foreign infiltration. The implications have increasingly blurred the boundaries between conflicts between countries with intra-state conflicts.

In more recent developments, the spectrum of "threats to" is extended to reach, but not limited to, human security, both as individuals and as groups/collectivists. The expansion of this concept is evident from a formula from the United Nations which requires the concept of "security against" be changed from "emphasis on national security" towards a greater emphasis on "people security." His achievement also experienced a shift in pressure, from security achieved through "armament" towards security which was realized through "human development"; from the emphasis on "territorial" security towards "employment, food, and environmental security"(Susetyo, 2008).

**DISCUSSION**

A country aims to maximize the welfare of its people. With the existence of economic growth, social welfare is expected to continue to increase. To provide social welfare, development must lead to how to
create a sense of security and comfort among individuals and groups in carrying out their activities.

**Indonesian Defense Situation in its Strategic Environment**

To see the level of militarization of countries in Southeast Asia indexed by looking at the strength of the economy and population can be seen in the following figure:

*Figure 6. Military Expenditure Index (Period of 2011-2015)*  
*Source:* Bonn International Center for Conversion (BICC), (Bonn International Center for Conversion, 2015).

*Figure 7. Index of Military Personnel (Period of 2011-2015)*  
*Source:* BICC, 2019

Figure 8. Heavy Weapons Index (Period of 2011-2015)  
*Source:* BICC, 2015

From the three figures above, Indonesia can be seen through the military expenditure index, military personnel, and heavy weapons. Indonesia has a low index, despite having a high national income and population compared to countries in Southeast Asia. From the table, Singapore provides the three highest indices even though it is a small country. However, this has not provided a picture of instability in the region, because it is realized that Singapore must indeed be prepared with a strong defense, because it is surrounded by large countries. Brunei and Vietnam are also described in high indices outside Indonesia. Data from the military countries in Southeast Asia are still in a stable condition, except for Laos, which is still low. While the heavy weapons index provides a more varied picture, where Indonesia, the Philippines, and Myanmar are still small, while Singapore, Brunei, and Vietnam show very high heavy weaponry. For the number of military personnel, countries of Singapore, Vietnam, Thailand, and Laos have an index above Indonesia. (Kennedy, 2014)

All of this data shows the level of militarization of a country. Through another index, namely the Global Military Index (Global Military Index, Grebe, 2011), which can be seen in the Figure 9.
Indonesia still has militarization levels below the average of countries in Southeast Asia along with Malaysia, the Philippines, and Myanmar. While Singapore, Vietnam, and Brunei provide a high level of militarization. Thailand, Myanmar, and Cambodia have militarization rates in the average range.

Increased military spending in the Asian region, especially Southeast Asia, can increase regional security escalation. However, the increase was due to several countries still being plagued by various security issues.

Rising military levels in Indonesia's strategic environment indeed led to an increase in traditional threats for Indonesia. At least this phenomenon must be addressed so that economic actors are not disturbed in carrying out their activities.

Choose Guns or Butter?
There has been a long-standing argument about the defense of forces around the world, whether it must be increased or reduced. Some opinions develop in achieving the goals of a country, namely by prioritizing "butter" or social welfare and economic strength, or more concerned with guns or security and defense forces. Many argue that the world will "occur" in the whole world "butter" first rather than "guns."

From graph 9, Indonesia still has a lower defense index than the surrounding environment. So, we cannot choose "guns or butter," but both must be able to go hand in hand. This phenomenon has been carried out by many countries in the world, especially in developed countries. But the budget for defense is not only for the development of troops and improvement systems, but must also provide a multiplier effect to the national economy. Increasing arms must be safeguarding the country's wealth, and its increase must be the country's economic capacity. Thus competition in weaponry in the strategic areas can be avoided, and world peace can be maintained. (Kennedy, 2012)

Every country wants peace. Each state will translate order with different forms and levels. A rich country must have different perspectives from developing countries. Even though what is happening now, when a state has reached an advanced economy, they are translating peace with a higher defense force. Economic power must be escorted by defense forces, according to his motivation. So it is economic power that remains the motive of the armed forces.

Although various parties continue to have economic power prioritized over defense forces, seeing the current phenomenon seems to be shifting slightly. The strength of the Asian economy, especially Southeast Asia, is still active and continues to grow up, although various criteria have differed from the European and American continental countries.

They realize that the resources they have must be maintained. Also, ambitions have emerged as the strongest in the region and influential in international relations. This has been felt since 2004 in the environment in Indonesia to increase its militarization to support their nation's ideals. Although the conditions are so far, there have not been significant friction between countries. Although cases often have border areas, it is not yet categorized as aggression. Wars and
arms can be said not to occur between states. There is also no nuclear weapons development and other mass destruction in the region.

**Importance of the Defense Economy**

The government will be able to carry out its duties only if the country is safe. For this reason, the government must realize national security. National security is defined as a condition or condition of a widespread nature and describes the liberation of the state, society, and citizens from all forms of threats and actions, whether influenced by external or internal factors. National security can also be interpreted as the need to maintain and maintain the existence of the state through economic, military and political power and the development of diplomacy (Sekretariat Jenderal Dewan Ketahanan Nasional, 2010).

Protection of all nations and all of Indonesia's bloodshed is defined as the protection of security for all citizens of the country and territory of Indonesia and all the resources in it. In this context, "security" is seen as a product, so real security is "owned" by citizens. In other words, security is a public good that must be enjoyed by all citizens. For this reason, the state must transform security aspirations from the community into a product called "security."

Defense duties are the first obligation of the state, in addition to holding a judiciary, and carrying out public works. This type of "national defense" item is needed by the community, but no one is willing to produce it, or it may be generated by the private sector but in limited quantities. Such goods are called public goods.

Public goods, such as national defense, highways, public works, etc., in the provision, all or part of the assets are carried out by the government. In the case of private products, these goods can be produced by private companies, but can also be produced by state companies, such as trains, flight services, and others. Public goods can also be provided by private companies or state companies. For example, state highway financing is done through the state budget, but the road can be done by the private sector or the government itself.

The defense has a significant role in the economy, especially in the face of threats. The current threat is always associated with military power in proportion to the economy of a country. The level of militarization that is too high and disproportionate to its economic capacity is perceived as a threat to the surrounding states. On the contrary, strength in the economic field with healthy competition is expected as a national power. Who has defense along with a strong economy can control international relations in its strategic environment.

Defense interacts with the economy through the function of protecting the country from threats. Although it seems that the defense budget does not directly affect the economy, there is a critical impact which is creating security. With security, the economy can work optimally. Conversely, the economy also affects defense through the amount of defense budget provided by the government.

Theoretically, the defense budget will increase economic growth, even though there is the possibility of the opportunity cost effect due to the selection of policies with other welfare budgets and the possibility of crowding out effects or investment competition against defense investment. But with the interaction between defense and threat budgets, economic actors feel safe. So that the defense budget is not expected to pressure the economy, the economy can also increase defense in line with the growth of national income which has an impact on improving the defense budget. Thus the economy and defense provide mutual relations and simultaneously influence each other.

Defense costs are still very much needed as an essential activity to protect enormous
resources in Indonesia, where they are always faced with the interests and uncertainties of border countries (strategic environment). Attention to economic aspects becomes very important so that it makes it a separate study. This interest continues in the development of the economy in applying economic methods into defense matters. The budget for national defense is one of the essential government policies. The existence of defense expenditure must be by the magnitude of the threat so that it will increase economic growth. On the other hand, the presence of threats without any defense expenditure or defense spending without threats will reduce economic growth.

Although the relationship between government expenditure on defense and the economy has been studied with a variety of economic models, the results are still not definitively determined theoretically, whether military expenditure supports or suppresses economic growth.

The science of studying this is defense economics. Seeing its scope, the area of defense economics experiences contact with various sub-disciplinary variations, especially economics, including the most important is the public economy. The approach used besides that is the fields of microeconomics and macroeconomics. Other areas of science that can be applied are labor economics, regional economics, and international economics. So that in the process of defense economic analysis, it must tailor various types of economic methods theoretically and empirically to look at defense issues and policies. (Hartley & Sandler, 1995)

Relevant defense issues in the defense economy include the effects of defense spending on economic growth and development, the impact of industrial policies on the defense sector and vice versa, the implications of human resource conversion, studies of conflict and destruction, policy implications of regional allocation with or without weapons, analysis of alliances, impacts and contract design in procurement efficiency, studies of arms and stability competitions, and analysis of arms trade rules.

**Defense Relations to the Economy**

In the relationship between defense and economy, it is necessary to explain the transformation that occurred. The channel that can be used by the government to influence the economy, especially economic growth is through fiscal policy. The state can play a role through direct investment funding through the provision of public services efficiently to encourage economic activities and stimulate long-term investment. Defense expenditure, one of the government’s policies, is expected to have a positive effect on the economy. Brasoveanu (Brasoveanu, 2010) in Kennedy (Kennedy, 2017) describes the form of channels or channels in the economy that are affected by defense spending. These channels include:

a. Research and development in the defense sector. Research and development in the defense sector can have a positive influence through externalities in the economic sector from the private sector. Military research and defense spending can stimulate innovations in the field of technology. In developing countries, defense can help in the formation of socio-economic structures that support growth by engaging in research and development, the provision of trained personnel, training and education, and infrastructure development needed for economic development.

b. Security. Defense expenditure can drive the economy because it provides security to maintain stability in the business environment and maintain comfortable conditions to attract foreign investors. The existence of security also maintains respect for property rights and market dynamics to encourage growth in the current global system. Realizing that defense spending increases security, the defense will stimulate growth.
c. Demand. The positive influence of defense spending can occur through an increase in aggregate demand (Keynesian effect). Increased demand plays an important role in increasing the utilization of idle capital, reducing unemployment, and increasing profits to encourage higher investment, all of which lead to economic growth. Defense expenditure is also recognized as a fiscal policy tool to increase demand stimulation or reduce demand barriers. This effect depends on the multiplier effect, if it is assumed that there is no reciprocal relationship between increasing taxes and financing for government spending, and there is no effect of crowding out due to this expenditure.

d. Labor. Defense expenditures can increase the expertise of some populations through training and education for military members. To provide a stimulating effect on growth if it can move the economy towards full employment, the formation of human resources, maintaining stability, and providing infrastructure.

e. Investigation. Capital expenditures can provide productive uses, such as uses for the private sector from transportation networks that were originally built for military purposes. Investment in the defense sector drives positive externalities to the private sector, such as the construction of public infrastructure, spillovers from technology, and the formation of human resources.

f. Crowding out effect. Military spending can have a detrimental effect on economic growth by crowding out with the private sector. Large defense expenditures form a distortion in the allocation of resources and the separation of resources from productive activities because of the accumulation of weapons and increased military power. Military expenditure can be detrimental because it has an impact on investment, savings, human resources, and infrastructure programs. The expansion and form of crowding out of increasing defense spending will depend on its usefulness and how it is financed.


g. Opportunity cost. To explain the negative relationship between military spending and growth, the economy focuses on the opportunity cost of defense spending. Military spending can hinder economic development by reducing savings and allocating resources that are not in a place away from more productive use from the public sector or the private sector. In the same context, research, and development in the defense sector can separate research and development from the private sector. Government expenditure for national defense has the potential for opportunity costs because it allows to lower the economy's output and slow down the GDP growth rate.

h. Increased taxation. The limited budget of the government to increase defense spending can be financed by cutting other public expenses, increasing taxes, increasing loans, or increasing the amount of money in circulation. Various ways of financing to increase defense spending will provide a further effect, which can hit the economy back. Defense expenditure, if financed by income from productive production factors, will have a positive influence on economic growth. Conversely, if financed by income from the non-productive sector, it can only have a positive or negative influence on economic growth, depending on the level of defense expenditure.

i. The efficiency of resource allocation. If the military expenditure is not managed through a market mechanism, it will tend to cause distortions in relative prices. Implementation of policies to support military programs can interfere with resource allocation and economic growth.

j. Increased political power from the military. Defense expenditures may not originate from the need for security, but because of rent-seeking from a complex military industry, so that it can increase military weapons and posture which
exceeds the portion and can cause an arms race or war. Many of these effects occur all at once, depending on the level of use and the externalities of defense spending and effectiveness in overcoming threats.

Through specific channels, defense spending affects economic growth can be seen from two sides, namely the supply side and demand side.

Through a supply-side approach, the channel that can explain the effect of military spending on economic output is through the availability of factors of production, both labor, capital (both physical and human resources), and technology that jointly influences the potential economic output.

This theory assumes that real output per capita and growth of capital stock will be at a constant level within a specified period even though there are short-term fluctuations. It is also assumed that the increase in labor and capital at a steady level will also increase the aggregate output at a constant level (Solow, 1970). Then changes of the aggregate production can be explained through differences in capital and labor.

One approach commonly used in research regarding the relationship between defense expenditure and economic growth from the supply side is the neoclassical production function approach. That is by reviewing the description of the supply side through aggregate output changes.

West & Thompson (West, Robert & Thompson, 1990) states, due to the presence of defense expenditures, emerging effects in the economy have an impact on the supply side's aggressive output, which can be explained through the following neoclassical theory:

- If there is a resource-allocation effect that causes the investment to crowd out, there will be a decrease in aggregate output growth. The neoclassical model explains that growth rates are a function of capital growth and continue with a decrease in the aggregate output growth rate.
- The emergence of the resource-mobilization impact will have an effect on decreasing savings from households. By the neoclassical model, of course, the decline in savings will reduce the movement of growth rates.
- If there is a spin-off effect on other sectors of technology improvement, then according to the neoclassical model, technological developments that occur will lead to higher economic growth.
- The occurrence of the aggregate demand effect with the multiplier effect in the economy cannot be explained in neoclassical theory. In this model, it is not possible because economic resources are assumed to be full employment.
- If a debt accumulation effect occurs, high-tech products or services purchased with foreign debt without transferring technology will lower technology growth. In the neoclassical model, this low growth is due to limited access to international technology.

The influence of the defense budget can also have an impact on economic growth through the demand side through the level and composition of expenditure. What happens here is a multiplier effect that increases demand (Keynesian multiplier effect). This increase will increase utility and reduce unemployment. According to Benoit (Benoit, 1973, Benoit, 1978), expenditures for the military can have a positive influence on economic growth. He explained, this effect originated from the Keynesian model based on a multiplier effect for underutilized countries.

West & Thompson (West, Robert & Thompson, 1990) also states that due to the existence of defense expenditure, effects arise in the economy that has an impact on aggregate output from the demand side, which can be explained through the Keynesian theory approach, namely:
If a resource-allocation effect appears (resource-allocation effect) will cause the investment to be crowd-out. The Keynesian model explains that growth slowed in subsequent years. For example, if the agricultural sector slows down behind the industrial sector because military spending suppresses investment in agriculture, the growth rate will also slow down.

- The emergence of resource-mobilization effects will have an impact on the decrease in savings from the household. According to the Keynesian model, the low rate of savings ratio is the cause of the small movement in the growth rate.
- If there is a positive spin-off from military spending, according to the Keynesian model, there will be an increase in growth.
- The Aggregate demand effect that arises, of course, can be explained by the Keynesian model based on a multiplier mechanism. This multiplier effect is static, but it can have dynamic forces in the long run.
- If a debt accumulation effect occurs, it will reduce capital growth. In the Keynesian model, this effect resulted in the reduction of resources for exchange with foreign countries.

Hartley (Hartley, 2005) identified the positive influence of defense spending. In periods where unemployment is high, defense spending can have a stimulating effect. Defense provides direct benefits from technology and its impact on other sectors, where spin-offs are used by the civil area which can increase growth. In developing countries, defense spending can increase growth if some parts of expenditure are used to provide social infrastructure. Defense expenditure protects citizens, where internal and external security will increase exchange in the market. In developing countries, defense spending helps build and support human resources.

CONCLUSIONS AND SUGGESTIONS
Development must lead to how to create a sense of security and comfort among individuals and groups carrying out their activities. To develop a sense of security needs to eliminate the threats facing a country. There is an opinion which is "butter" (welfare) first rather than "guns" (defense).

With the realization that the development of defense, security, economic, and welfare programs must go hand in hand, the role of defense economics is increasing. It is realized that defense and the economy provide a relationship of mutual influence is a necessity.

In the relationship between defense and the economy, which must be done so that defense and economic policies can be synchronous and mutually supportive, policies need to be carried out as follows:
1. The government needs to increase the national economy by encouraging an increase in domestic production because there is a relationship between the economy and the defense budget. A growing and advanced national economy will increase the ability to pay taxes for every citizen as an obligation. Thus an adequate defense budget is expected to be in line with the increase in the State Development and Expenditure Budget to GDP.
2. The need to make a defense force development plan through an adequate budget so that it can create a strong defense capability. Budget programs must be carried out as effectively and efficiently as possible so that funds provided for national defense which are generally limited can obtain maximum benefits. This is an absolute requirement for the smooth implementation of economic activities with fair competition both at home and abroad.
3. The limited budget of the government must be addressed with a balanced arrangement between the needs of the defense budget and the ability to provide other budgets in supporting the national
economy. Thus the management of the defense budget must be based on the priority scale, the continuity of allocations between budget periods, effectiveness and efficiency, and transparency in the use of the budget.

4. To improve the use of the defense budget more effectively and efficiently, the government must work hard to remove obstacles from oneself, for example by eliminating distortions and wastage in the use of state finances, such as in the purchase of defense equipment.

5. Realistically the barriers to supporting state financial funding for defense are due to constraints on the lack of a defense budget. Therefore, a policy breakthrough must be made to get out of this budget trap. Alternative financing sources must also be sought, for example through surplus local government contributions, soft loans, and purchases of domestic defense equipment.

Strengthening the military as the main component of defense includes measures to mobilize, expand, or expand military power, and increase responsiveness. The development of defense forces is always faced with problems of limited resources, including public funding sources. Therefore the existence of defense forces continuously adjusts to changes and is faced with a choice of other domestic policy priorities. The vital capital in developing all of them is the defense budget so that it needs to be in sync with national economic policies as well.

This study still needs to be improved, because it needs to develop more profound defense economic research, especially in quantitative analysis, such as how to fulfill the need to strengthen the national defense posture so that it can have a positive effect on the economy.

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