

Collaboration Leveraging on Military Industry Development in Defense Diplomacy Perspective (Case Study: Development of Turkish-Indonesian Medium Tanks)

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Abstract

The development of the military industry has a country's economic calculation and military strategy. If two or more countries cooperate in the development of the military industry, then these activities have direct and indirect implications in Defense Diplomacy. For NATO members like Turkey, they are bound by the Single Europe Act: consolidation and contraction of the defense industry. Likewise, the geographical region of Indonesia has "ASEAN Ways" as an ethical foundation in maintaining the same relations with ASEAN countries. However, Turkey, in collaboration with Indonesia can develop and produce a prototype Medium Tank that is in great demand from other countries so that it not only impacts on the economic benefits and military strategy itself but influences the strategies and attitudes of other countries. The study aims to explain the multi-effects of developing Medium Tank cooperation between Turkey and Indonesia. Through the case study approach method, it can be understood that collaboration between the development of military industry between countries can increase Defense Diplomacy as a national defense leveraging, namely, Confidence Building Measure (CBM) that affects the environment of direct and indirect strategies. Thus Defense Diplomacy not only builds relationships with opposing or future opponents but is also able to become a leveraging that makes state-of-the-art technology a game-changer.

Keywords: Medium Tank, Leverage Strategy, Defense Industry

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1. Introduction

The conception of military power takes into account the number of a country's resources and the level of its economic development (Beckley, 2010). However, according to the Indonesian Defense Minister Prabowo Subianto, the defense costs are not appropriate as a state expenditure, but as a long-term investment. Because demand based on the equilibrium of national income is indeed imperfect, military spending is an extraordinary category of public expenditure. The defense is generally considered in the economic literature as a function of state sovereignty par excellence (Herrera,2013). Thus, the issue of developing military technology is an integration of economic and military problems. Where cooperation in the development of military technology between the two countries has an economic effect besides increasing Confidence Building Measures (CBMs), both direct and indirect.

Gentle relations between countries focus on how CBMs relate to conventional military weapons to encourage weapon reduction in order to realize development through communication, regional approaches, and transparency (Brimley, S., Fitzgerald, B., & Sayler, K. (2013). The development of the military industry for developing countries is not linear between the costs and the products produced. It is different from developed countries that make the defense industry as a product of strategy because it has economic benefits that move revenue to countries. For this reason, exploiting multi-effect military technology development is expected to be able to make state-of-the-art technology a game-changer (Gerhart. 2001). CBMs, as part of Defense Diplomacy, can be a cornerstone of cooperation between countries in the development of military technology becomes important besides state branding and cultural relations (Gerhart,2001).

The threat and battlefield of each country are different; one of the defense strategies is to protect the movement of troops with armored weapons on military attack operation vehicles. To consolidate the threats and defenses of each country varies at a specific level of protection. NATO uses Stanag 4569, Protection Level for the Logistics and Light Occupants of Armored Vehicles. In this specification, light protection against global threats is desirable for the operational weapons of NATO forces. Threats are separated into five levels. Armored composites made from S-2 Glassâ fiber and phenolic resins have been tested against a range of threat levels that include this specification. At a low threat level, fiberglass composite armored security in overcoming threats; However, at a higher threat level, multi-component armored weapons made with enough materials are needed. The composition, construction, and ballistic performance of various composite systems used in this case the

testing needs to be understood the position of the development of the medium tank needs to be built because it involves the development strategy and the estimated market needs.

2. Methodology

The purpose of the study explains the multi-effect Medium Tank development cooperation between Turkey and Indonesia. Data and information via the internet and confirmation to related parties such as PT. Pindad and the Defense Industry Policy Committee/Komite Kebijakan Industri Pertahanan (KKIP) from the perspective of Indonesia can explain the collaboration of the development of military industry between countries can increase a country's Defense Diplomacy namely; Confidence Building Measure (CBM) and influence the environment directly and not directly. The technology development policy has been deemed successful by many, including the government, industry, users, and the community. Defense diplomacy in the development of military technology plays a role in the form of a series of interrelated actions between the interests of the parties of Indonesia and Turkey. Any element does not work alone because of the breadth and complexity of the problem of developing defense technology. Researchers studied in detail and in-depth through journals, news, and the web of the institution of actors both the Ministry of Defense of the Republic of Indonesia and Turkey.

It is interviewing experts in various fields of technology, law, business, and others. Researchers conducted interviews and discussions about problems and solutions in achieving the success of the medium tank development project. In conducting research that is being studied initially, it can be in the form of individuals, organizations, events, or actions, which exist in a certain time and place. Research focuses on the subject, in this case, Indonesia and Turkey, as a country, and its supporting companies, especially FNSS-Turki and PT Pindad-Indonesia.

3. Results

Modern Medium Weight Tank (MMWT) design and development project contract, called Kaplan MT (Turkey) or Tiger (Indonesia) by FNSS-Turki and PT Pindad-Indonesia, was signed in 2014. The development of Medium Tank with Indonesia consists of several different phases, including research and development of new technologies, final product development, production, service, and deactivation of platforms and systems. Companies consisting of the defense industry have a role to play in each step of this process. Traditionally focused on R&D and production. The experience of PT Pindad and FNSS has become a technical basis for completing collaborative collaboration in the development of military technology.

Medium tank with diesel engine, automatic transmission system (Matic) weights 30-40 tons. With a smaller size than the tank in general, medium tank 7 meters x 3.2 meters x 2.7 meters, it is capable of carrying three personnel, consisting of a rudder, gunman, command. Medium Tank has been introduced at the Indo Defense 2016 exhibition in Jakarta. This prototype has been certified and also participated in the Indonesian National Army Day parade on 5 October 2017 in Cilegon. This Classification of Medium Heavyweight Tanks has an armored platform that carries heavy weaponry with a flat, combined track, tracks, armor, and weaponry. If PT Pindad removes one of the three components, the vehicle will no longer be a tank. Non-track armored vehicles that carry heavy weaponry with flat trajectories, for example, are referred to as mobile gun systems (MGS).

The primary abilities expected are in accordance with the military trinity doctrine, where infantry, cavalry, and archers are intertwined both in attacking or defending. Medium Tank is certainly a sophisticated curved shot, right on target, and anti landmines. In battle, MMWT is suitable for protecting mobile infantry troops in open fields, swamp crossings, or mountains. The point is the concept of developing Medium Tank with consideration in various tactical and strategic interests in various conditions. Advanced electronic and suspension control systems placed behind the vehicle make MMWT more attractive. Electronic transmission produces a minimum ratio of 20hp / ton, which is used automatically. MMWT has six wheels with the suspension system.

Medium Tank shot capability is quite important in battle. Cracks are very important for tank guns because they do not have infantry. For this reason, the Medium Tank forces play a role in solving the concentration of opposing infantry troops, the range prepared for this medium tank on a flat road with two tanks up to 450 km. Besides that, the battery is prepared with a power control controlled by Silent Watch so that the battery lasts even when the engine is off. The comfort of the crew and gunners in the tank was designed with very heavy medallion. The commander's security is calculated so rigorously that the commander in the tank is protected so well.

Ammunition used by MMWT is quite large, such as Armor Piercing (AP) made from solid steel with high carbon and Explosive Filler (-HE), which increases the ability of weapons in the form of fire exploding after penetrating objects or targets that shoot. The MMWT can also be equipped with a secondary 7.62 mm MG weapon for short and medium-range self-defense. For this reason, MMWT has the role of being able to counter light and medium steel tanks. For this reason, this MMWT weapon is suitable as a support vehicle for combat, tank opponents, reconnaissance, or transportation besides ambush and counter operations against the main battle tank (www.defenceturkey.com).

With this capability, the success of Medium Tank development is significant for the internal military of both Indonesia and Turkey. Medium Tank for Indonesian military matches with the terrain that has a lot of swamps, beaches, and small roads, especially outside the island of Java. Likewise with Turkey, by considering; support the defense posture, support the country's borders, especially with Greece, and resolve armed conflicts in the middle east (Wiśniewski, 2015). The benefits outside the development of military technology are seen from the perspective of defense diplomacy having leveraging on issues of defense, economy, and relations between countries.

a. Advantages in Defense Perspective

The arms race is not linear with economic progress, but collaboration between countries to develop and possess sophisticated weapons increases the value of a country's competition and progress (Lie, 2017). Progress in the development of defense technology is not only seen from the economic and business benefits directly but the effect of the sustainability of the cooperation on other fields. The financing of the defense sector should have been a long-term investment, and cannot be seen from the expenditure and income of the annual state budget alone. The dilemma for military institutions is that the role of the military in supplying weapons has been largely replaced by civilians because it deals with issues of cooperation in peacetime under civilian control (Apgar, 2004). Whereas the problem of military needs for developing countries is much confidential nature, especially related to planning, personnel, weapons, and strategies that are owned. Maybe not so for developed countries, because everything is open except ownership of increasingly sophisticated technology, the arms business becomes important. The military technology market is associated with a rate of return on capital, imperfect competition, and externalities. There is no unconditional cooperation agreement because it is related to trade protection. Licensing and other types of arms trade in technology - measured by royalty income streams (Bernard n.y).

Medium Tank is a necessity in the title of the tactical force of national defense, a running castle, and a safe troop house in addition to increasing the number of trained personnel and improving the strategies used (PT.Pindad,2018). This weapon is vital for land borders and coastal defense countries like Indonesia in general. Turkey has an interest in maintaining its strength as a member of NATO and dominance in the Middle East North Africa region (Middle East North Africa (MENA). Turkey is considered as a country that has calculated power at the global level both in terms of its political influence and economic potential. Over the past decade, Turkey has been catching up with decades of lagging international relations. Turkey's role is getting stronger in the face of the Middle East crisis. Turkish policy in supporting international security is very important, especially since Turki is in two regions of Asia and Europe (Urhan,2010).

Consideration of developing the military industry is most important to meet the needs of the military itself is more important in addition to the need for arms exports abroad. Political influence in military industry transactions is crucial because negotiations consider the changes in the strength of the environment of each country whether consumers buy or not. For that reason, an identical weapon with power. Familiar alias is an identical defense to the source of the weapon purchased. Indeed Turkey with Indonesia is not in one defense alliance but other considerations that make a bond in the cooperation. The other considerations in selecting partners are inseparable from Turkey's strategy. In choosing Indonesia based on realistic considerations that Indonesia has experience in making Tanks. The analyst's basis for Turkey's consideration of strategic policy is that it has a global impact. For this reason, the development of the Medium Tank military industry remains within the framework of Turkey's defense policy.

The role of the defense industry in defense and security policy basically plays three broad and mutually supportive roles: military, political, and economical. The role of the military is the reason for the entire defense industry base is the main driving force to get state policy support. At the most basic level is to equip the national armed forces with a system of weapons and military equipment that enables them to achieve tactical, operational, and strategic military objectives, whether in times of peace, conflict, or war (Wiśniewski,2015). The need for weapons depends on the escalation of threats and strategies in play. In principle, weapons sometimes have what the enemy needs to know and not. Not all weapons must be exhibited openly, let alone tactical in their use. However, once the war expert has become no secret, what kind of situation using what weapons.

Turkey's national politics and security have gone through a long history since the Ottoman rule of 1861. The military regime has been so entrenched that it has built a strategic cultural atmosphere of a specific Turkish country in Europe and Asia. Turkey is trying to combine Europe with Asia. 1923 The Republic of modern Turkey only retains part of the Ottoman Empire, thus initially leaving the question of identity, is it Europe or Asia? However, 1963 is included in the European Union. Dress like Europe but eat like Asia. Originally they came from Central Asia with a majority Muslim population. Europe prioritizes free education from elementary to tertiary institutions.

When compared with the development of the Turkish military industry with Indonesia, of course, unbalanced, Indonesia, in general, lags behind Turkey. There will not be many Turkish scientists who will learn

perhaps. However, by looking at Turkey's background, Indonesia needs each other with ties of similarity in cultural backgrounds. According to the Ambassador of Turkey to Indonesia H.E. Sander Gurbuz, Turkey's relations with Indonesia for a long time, during the 16th-century Ottoman raid helped Aceh by sending many warships in ousting the Portugians. Turkey was also the first country to recognize Indonesian independence. At present the Indonesian Togetherness of Turkey is more visible in International Interaction, having much togetherness in the United Nations and G-20, the Organization of Islamic Cooperation (OIC) then later 2013 members of MIKTA (Mexico, Indonesia, South Korea, Turkey, and Australia) (Jakarta Magazine, 2018). By using instruments of mutual security interests, Turkey and Indonesia are taking strategic steps to develop the economy and the military industry

2. Economic Benefits

Medium Tank's business strategy is aiming at the military needs of countries that have hilly terrain, swamps, forests, and beaches. The market potential of the Medium Tank business is very broad because a country that has a stretch of the desert has large tanks that also need to be equipped with these medium tanks. According to the type and capability of the weapon, the combination of protection, firepower, accuracy, and mobility. Indonesia is important in requiring Medium Tank. The development requires \$ 330 billion in funds with a composition of Turkish and Indonesian obligations of \$ 150 billion and Pindad alone \$ 30 billion.

Its volume analyzes the economic challenges facing Turkey in its efforts to approve the European Union (EU). It focuses on the extent to which Turkey is ready to join the Single Market, complies with the EU's economic regulatory and directing body, The Acquis Communautaire, and fulfills Maastricht's criteria for fiscal, monetary and exchange rate policies. This body provides an assessment of Turkey for accession requirements. It briefly describes what Turkey needs to achieve in future economic policies to meet the requirements for accession, progress to date, and the possible consequences of applying all EU requirements. The most important benefit of EU accession for Turkey is legal certainty and reducing competition-related constraints by simultaneously increasing the flow of private investment (Hoekman, 2005.).

According to Indonesian Vice President Yusuf Kala Ministry of Defense, the Indonesian Government has held an Indo Defense 2018 exhibition and forum from 7 to 10 November 2018 at JIExpo Kemayoran, Jakarta. At this exhibition, it is held every two years to promote the successful development of defense technology. 2018 with the theme "Building a Global Defense Partnership to Secure the Future". The development of military technology in the context of defense diplomacy is a cooperation between governments in supporting mutual trust, where the leaders of each country and parliamentarians believe that building partnerships with foreign parties will enhance military capabilities directly or indirectly. In this exhibition, Indonesia also wants to be shown that one country depends on another country. For this reason, dealing with global security requires cooperation between countries. Indonesia is constitutionally strict in participating in supporting world peace

The purpose of the military industry was formed to meet the needs of Indonesia independently. The experience of Indonesia had been a good teacher in the 1990s. Indonesia was embargoed, Indonesia could not make optimal use of weapons purchased from western countries, could not buy even for repairs just cannot. Based on the notes that Indonesia made regulations on the Defense Industry, Indonesia could not buy without the process of trade returns, defense offset, transfer of technology, etc. However, that does not mean that independence means closing down. We need cooperation with other countries that support the domestic military industry. "Indo Defense 2018 Expo & Forum" is expected to spur to improve the progress and capability of the military industry. Indonesia hopes that the military industry will be able to help drive domestic economic growth. Moreover, Indonesia's experience during the embargo in 1990 shows how important the independence of military technology is in the future, and this follows the Vision of President Nawa Cita. Indonesia's ability to see its human and natural resources. Indonesia has great potential to develop the military industry. The development of military technology is a condition with the politics and interests of large countries so that Indonesia must have a specific strategy in transferring technology and developing more advanced techniques, the Pindad Memorandum of Understanding (MOU) was signed with Rohde Schwarz (Germany) (Wira Bulletin, 2018).

PT Pindad's Special Vehicle Development Manager, Windhu Paramarta, Pindad holds a development program for medium tanks, while Turkey appoints FNSS. The Turkish Ministry of Defense appointed FNSS as a competent company in handling the construction of the tank. Starting from this, Pindad and FNSS, who had never built a combat tank, began to build the tank following the technical specifications of the needs of the Indonesian military. Pindad had built Anoa tanks, while FNSS had built "fighting falcon infantry." In October 2018, the tank was tested and received a proper certificate from the Indonesian Army and the Ministry of Defense. Entering the production phase, first Pindad conducted a trial first with a "playblast test" to prove the ability of the tank twice. Tests conducted in Turkey, to see the engineering capabilities, whether it is in accordance with the ability to defend tanks against the threat of mines. "The standard used is the 45-69 standard related to ballistic and my defense standards," he said. In addition, a series of tests were carried out to see the extent of the human effect operating the tank (www.mfa.gov.tr). Furthermore, this military industry development

cooperation can be included in the context of the Indonesia-Turkey Comprehensive Economic Partnership Agreement (IT-CEPA).

3. Culture and Defense Alliances

If alienation becomes a condition of cooperation, Indonesia cannot cooperate with any country because Indonesia embraces "free and active." Indonesia was born as a non-aligned country. In international relations, the ethics of alliances and partners are highly respected in cooperation. Several times the development of weapons also failed with alliance partners. However, the implications of the success of Turkey-Indonesia cooperation have a positive impact on other countries. Starting with the agreement between Indonesia and Turkey for the division of the Medium Tank market area, where Indonesia is the Southeast Asian region and Turkey for the European and Middle Eastern markets, showing the Alliance does not hamper relations between countries. Top of the Agreement between the Ministry of Trade of the Republic of Indonesia and the Prime Minister for Foreign Trade (UFT) of the Republic of Turkey to establish a Joint Study Group (JSG), which is tasked with reporting the initial conditions of Turkey-Indonesia trade and economic relations, exploring realistic opportunities for expanding relationships and recommending ways to turn opportunities into reality for mutual benefit. In fulfilling its responsibilities, JSG has agreed to hold three joint meetings: two Turkish meetings and one in Jakarta. A group of people on both sides prepared the material for the meeting. Recommendations are based on group work (thejakartapost.com/news/2018).

Confidence Building Measures (CBMs) are directly seen in the form of buying and selling Medium Tank components with partner countries owned by Turkey. PT Pindad can order several strategic components upon recommendation from Turkey. Then CBMs do not directly affect cooperation with each of the friendly countries. Culturally the relations between Indonesia and Turkey have evolved over the centuries in the two countries, also producing different features. Apart from the similarities rooted in shared Islamic religion between the majority of people in both countries. Turkey is in the process of accessing the European Union as a country located in both Asia and Europe. Indonesia is one of the leading players in the development of the East Asian community. However, it is still attracted to Europe for historical reasons and to West Asia by religious means. In other words, the basic natural and cultural gifts of Indonesia and Turkey provide rich material for useful relationships.

On the other hand, Indonesia's potential for Turkey is the fourth most populous country in the world, with a population of 265 million by 2018, projected to increase steadily. Turkey, on its side, is home to 73.72 million people. The comprehensive Indonesia-Turkey trade and economic partnership (Indonesia-Turki CETP) has the potential to be relevant to the lives of more than 300 million people, representing a sizeable number. Both Turkey and Indonesia have made progress in macroeconomic stabilization. Inflation has been controlled in both countries, and the commitment to wise monetary policy has been strengthened in a credible way.

Collaboration between the two countries involved in the defense industry of each state also requires cooperation in the maintenance and repair of tactical radio vehicles. PT did this with the CMI Defense industry (CMID) to enhance Pindad's ability as a partner in the manufacture of tower weapon systems. The effort is by conducting expert training and increasing local content suppliers from Indonesia so that Pindad becomes a supply to advance Indonesia's export potential.

On another occasion, Indonesia had relations with Italy. Secretary-General of the Indonesian Ministry of Defense Marsdya TNI Hadiyan Sumintaatmadja in opening the second Indonesia-Italy Joint Defense Cooperation Committee (JDCC) in 2018 explained that Indonesia-Italy has a term of reference for joint defense cooperation signed on October 13, 2016. The forum was very important and provided many advantages to enhance defense cooperation. The Italian delegation also visited PT. Pindad and PT. Len in Bandung. The visit of the Italian delegation led by Lieutenant General Nicolo Falsaperna as Secretary-General of the Defense of the Republic of Italy gained a clear view of the part of the defense industry. As a major country in Europe and NATO, Italy has a great opportunity to become a good traditional Indonesian partner in defense cooperation, education, and defense training. A total of 57 Indonesian military personnel have completed education and training in Italy until 2018. Some valuable cooperation opportunities can be recorded and carried out by the Ministry so that Indonesia can maximize and implement the plan in a concrete manner.

Then at almost the same time as the cooperation between Indonesia and Turkey took place, it turned out that Singapore bought Leopard-Germany. This means there is a reaction to balance what is owned by Indonesia by a close neighboring country. Data released by the German Ministry for Economic and Energy Affairs explains that Singapore received 18 Leopard 2 battle tanks in 2017 to add seven tanks that were exported in 2016. Thus Singapore had 170 leopards in 2017. Manufacturers of Krauss-Maffei Wegmann, according to some Leopard 2A7 media for Singapore and Qatar, specifically made. Germany previously said it had exported 161 Leopard 2 tanks to Singapore between 2007 and 2012 in its report to the UN Conventional Weapons Database. Singapore announced the receipt of 156 Leopard 2A4s during the same period. The 2017 shipment was part of conventional \$ 93 million weapons exported to Singapore from Germany in that year, including recovery vehicles, spare parts for tanks, various military vehicles, training, and refueling aircraft in flight, and light weapons.

From the description above, it can be seen that the success of the collaboration between countries in the development of the military industry is related to the interests of the country's military strategy, business strategy, economic benefits in cultural background. If this cooperation consistently impacts defense diplomacy, namely Confidence Building Measures (CBMs) both directly and indirectly.

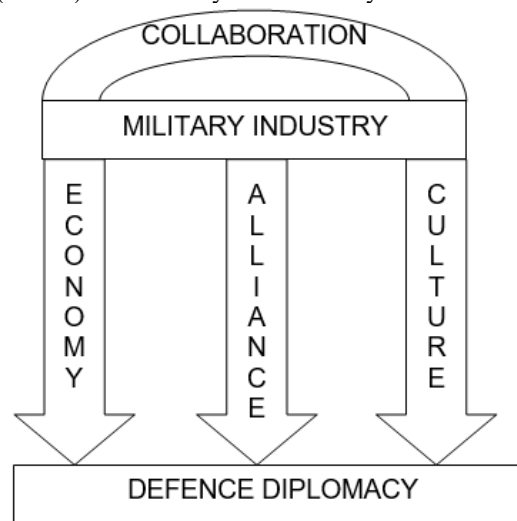


Figure: Implications of leveraging collaboration in the development of the military industry in the perspective of Defense Diplomacy

4. Discussion

The Defense Industry Strategy (DIS) as a basis for national security policy is urgently needed. Industry knowledge, technology, and capabilities are evaluated based on national security interests (Gulube,2017). Non-material resources in technological innovation are crucial, because technology is basically intellectual creativity, for that openness in development for all academics needs to be greatest. The military industry is not only in the military, but academically it is always evaluated and developed continuously. For this reason, democracies have military policy issues under civil government. Because democracy, Western culture, high levels of human capital, and friendly civil-military relations increase military effectiveness (Schot, 2018). It would indeed be difficult for countries that were so long under the military regime because academic traditions have not yet formed. The first step that has been taken is the formation of research and development institutions, the second is building a national innovation system for the creation of knowledge and commercialization, and the third is paying attention to the development of the environment to guarantee the continued development of the technology.

Indonesian Military Industry Development Strategy based on Law no. 16 of 2012 concerning the Defense Industry, Defense Industry. It was explained that the national industry consisting of state-owned enterprises and private-owned enterprises either individually or in groups determined by the government to partially or wholly produce defense equipment. Turkey has guidelines for the development of the military industry, including the Turkey Research and Development Policy Handbook. Both Turkey and Indonesia have a background in military leadership, so the importance of the policy of military technology is something that is shared.

In principle, the evolution of policy can take three forms: adding new goals and instruments, adding new reasons and objectives without changing instruments, and adding instruments without changing reasons (conversion) (Schot, *ibid*). In the development of Medium Tank technology, both Indonesia and Turkey have almost no regulatory or political constraints. Domestic commitments in each country support the realization of the Medium Tank as a military need, of course, market development by looking at economic calculations is undeniable, but at least to meet domestic needs is a realistic minimum target to be achieved.

However, it should be noted that the reaction of neighboring countries, whether Singapore bought Leopard from Germany in the context of blocking the development of Indonesia. Maybe Singapore does not intend to compensate for that, because the island nation has been equipped with a very high-security system. Alternatively, indeed, Singapore is promoting Leopard so that ASEAN countries can purchase it. Indonesia has shown its passion for having a Leopard since 2011, in 2013 Leopard was featured in TNI Anniversary, and 2016 Leopard also took part in TNI Training in Natuna. Thus Indonesia develops Medium Tank, not in a contextual context but builds collaboration.

The significant impact of cooperation with Turkey is also seen by Italian hospitality in continuing to work with Indonesia. Turkey and Italy as part of the NATO alliance, seemingly familiar with accepting Indonesia. Further implications in global trade will be that many partnerships developed as Indonesia with Turkey have signed an Indonesia-Turkey Comprehensive Economic Partnership Agreement (IT-CEPA) MoU. This means

that military cooperation has an impact on building Confidence Building Measures (CBMs). The multi-effects of the development of military technology had a profound influence on the work of other fields, even breaking through the boundaries of the defense alliance. Indonesia can work with NATO countries and vice versa.

It seems that Turkey and Indonesia have made progress in macroeconomic stabilization. Agreement between the Ministry of Trade of the Republic of Indonesia and the Undersecretariat of Indonesia from the Prime Minister for Foreign Trade (UFT) of the Republic of Turkey to establish a Joint Study Group (JSG) to study Turkish-Indonesian economic and trade relations. The group is expected to be able to take advantage of realistic opportunities to expand relationships and recommend ways to turn opportunities into mutually beneficial realities (<http://ditjenppi.kemendag.go.id>). Indonesia and Turkey officially started the first round of their CEPA negotiations in early 2018. For Indonesia, bilateral trade with Turkey is very important, given its strategic geopolitical position. This can help the country expand its market access to European and Middle Eastern countries. Seriousness in increasing current trade of \$ 1.8 billion to \$ 10 billion was seen at a meeting between Turkish President Recep Tayyip Erdogan and President Joko Widodo on the sidelines of the G20 Summit in Japan in June 2019. Erdogan is expected to visit Indonesia in the first quarter of 2020 to sign a trade agreement called the Comprehensive Economic Partnership Agreement (CEPA) (www.aa.com.tr/en/asia-pacific/turkey-indonesia).

5. Conclusions

Collaboration on the development of the military industry in addition to being beneficial by each country to strengthen the defense system and the country's defense strategy is also seen from the perspective of defense diplomacy opening up economic potential, strengthening cultural relations and Confidence Building Measures (CBMs). The multi-effects of the benefits of Medium-tech development cooperation for Turkey to build tank market segmentation, thereby increasing defense industry development achievements on the international stage in the field of technology development. The strong determination of Turkey succeeded in cooperation with Indonesia, namely adding opportunities in market developers in the European and Middle Eastern Region. In the defense perspective, Turkey is able to convince the market of the success of the medium tank. For Indonesia, in addition to increasing international prestige, it is also increasing the ability of Human Resources and increasing market development opportunities in the ASEAN Region.

The effect of cooperation is the leverage outside the planned leverage strategy in the field of defense. The benefit of the cooperation between the two parties is to increase CBM between countries cross-border, where neighboring Turkey, such as Italy, adds closer to Indonesia. Vice versa, where Turkey with ASEAN countries such as Malaysia, Vietnam became closer. This means that confidence-building measures emerge and strengthen relations between countries. It does not close also does not directly affect Singapore to strengthen its weapons with almost the same class, namely buying Leopard from Germany. Even so, from the perspective of defense, diplomacy studies are considered something inevitable so that the development of the military industry is proven to be a game-changer.

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Reference

- Beckley, Michael. "Economic Development and Military Effectiveness." *Journal of Strategic Studies*, vol. 33, no. 1, 2010, pp. 43–79, doi:10.1080/01402391003603581.
- Herrera, R., & Gentilucci, E. (2013). Military spending, technical progress, and economic growth: a critical overview on mainstream defense economics. *Journal of Innovation Economics*, 12(2), 13. <https://doi.org/10.3917/jie.012.0013>
- Herrera, R., & Gentilucci, E. (2013). Military spending, technical progress, and economic growth: a critical overview on mainstream defense economics. *Journal of Innovation Economics*, 12(2), 13. <https://doi.org/10.3917/jie.012.0013>
- Brimley, S., Fitzgerald, B., & Saylor, K. (2013). Game Changers: Disruptive Technology and U . S . Defense Strategy. *DefenceWeb*, (October). Retrieved from <http://www.defenceweb.co.za>
- Gerhart, G. M., & Cohen, H. J. (2001). Intervening in Africa: Superpower Peacemaking in a Troubled Continent. *Foreign Affairs*, 80(5), 175. <https://doi.org/10.2307/20050310>
www.defenceturkey.com
- Wiśniewski, R. (2015). Military-Industrial aspects of Turkish defence policy. *Rocznik Integracji Europejskiej*, (9), 215. <https://doi.org/10.14746/rie.2015.9.14>
- Liu, S. X., & de Bont, C. (2017). Barriers to Strategic Design: A Perspective from China. *She Ji*, 3(2), 133–145. <https://doi.org/10.1016/j.sheji.2017.09.003>
- Apgar IV, M., & Keane, J. M. (2004). New business with the new military. *Harvard Business Review*, 82(9).

