SETA

AYŞE İ. A. ÖZER

THE RISE OF THE TURKISH DEFENSE INDUSTRY

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To my husband, Ahmet Özer,
who has supported me in every step of the way.

LIST OF ABBREVIATIONS

ASELSAN	Military Electronic Industries
BDP	Peace and Democracy Party
BİK	Press Release Institution
BMD	Ballistic Missile Defense
DAESH	al-Dawlah al-Islamiyah fi al-Iraq wa-al-Sham
FSA	Free Syrian Army
GPI	Global Peace Index
ISIS (ISIL)	Islamic State of Iraq and Syria (Levant)
İTO	Istanbul Chamber of Commerce
JSF	Joint Strike Fighter
KAP	Public Informing Platform
KRG	Kurdish Regional Government
NATO	North Atlantic Treaty Organization
PKK	Kurdistan Workers' Party
PYD	Democratic Union Party
SASAD	Defense and Aerospace Industry Manufacturers Association
SIPRI	Stockholm International Peace Research Institute
SSB (SSM)	Presidency of Defense Industries-PDI (Undersecretariat of Defense Industries before 2018)
TAF	Turkish Armed Forces
TEMSA	Thermomechanical Industry and Trade Inc
TİM	Turkish Exporters Assembly
TUBİTAK	Türkiye Bilimsel ve Teknolojik Araştırma Kurumu

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FOREWORD

The national defense industry is the most significant sector for a country's security. Turkey had always been a country that depended on procured arms of defense and took refuge under the security umbrella of its allies for protection. However, lack of self-reliance for a country's defense is a matter of sovereignty. All countries prefer the nationalization of their defense industry since it ends the dependency stemming from reliance on other countries and, therefore, sustains national sovereignty. Countries are aware of the dangers stemming from the dependence of their national defense on foreign states.

The case is no different for Turkey. Turkey has suffered from arms supply embargoes - the most known one being the arms embargo during the Cyprus intervention - which have made the country aware of the dangers of being overdependent on procured arms. Turkey tried to nationalize its defense after the crisis of 1974, but those attempts did not render Turkey great leverage. Moreover, at that time, Turkey did not have the financial resources and political will that was necessary for undertaking a project such as the nationalization of its armament strategy on a great scale. Turkey's recent clash of interests with Austria and Germany laid bare the fact that the nationalization of the defense industry continues to be a hot topic that deserves study. At the beginning of the 2000s, Turkey had the external surrounding conditions, internal motivation, and the financial resources necessary to start industrial self-reliance in defense.

This book explains the increase in the share of national production in Turkey's military capabilities after the invasion of Iraq in 2003. It analyzes in great detail the external environmental developments that followed the invasion pushing Turkey to be more determinant in the nationalization process. The lack of security commitments by Turkey's allies is another cause that triggered the current study of the nationalization of the arms strategy.

Ayşe İ. A. Özer provides an insight on the nationalization of the modern arms industry in Turkey with a detailed analysis of the literature and empirical evidence. The book shows how owning national arms of defense can provide strategic advantages to Turkey in terms of its relations with other countries and how it is expected to contribute to the Turkish economy in the long run.

Prof. Burhanettin Duran
SETA General Coordinator

INTRODUCTION

Dear Mr. Prime Minister,

I am gravely concerned by the information which I have had through Ambassador Hare from you and your Foreign Minister that the Turkish Government is contemplating a decision to intervene by military force to occupy a portion of Cyprus. I wish to emphasize, in the fullest friendship and frankness, that I do not consider that such a course of action by Turkey, fraught with such far reaching consequences, is consistent with the commitment of your government to consult fully in advance with the United States. Ambassador Hare has indicated that you postponed your decision for a few hours in order to obtain my views. I put to you personally whether you really believe that it is appropriate for your government, in effect, to present an ultimatum to an ally who has demonstrated such staunch support over the years as has the United States for Turkey. I must, therefore, first urge you to accept the responsibility for complete consultation with the United States before any such action is taken...

Furthermore, a military intervention in Cyprus by Turkey could lead to direct involvement by the Soviet Union. I hope you will understand that your NATO allies have not had a chance to consider whether they have an obligation to protect Turkey against the Soviet Union if Turkey takes a step which results in Soviet intervention without the full consent and understanding of its NATO allies...

I wish also, Mr. Prime Minister, to call your attention to the bilateral agreement between the United States and Turkey in the field of military assistance. Under Article IV of the agreement with Turkey of July 1947, your government is required to obtain United States consent for the use of military assistance for purposes other than those for which such assistance was furnished. Your government has on several occasions acknowledged to the United States that you fully understand this condition. I must tell you in all candor that the United States cannot agree to the use of any United States supplied military equipment for a Turkish intervention in Cyprus under present circumstances.

** This book is the revised version of my thesis which I have defended in Istanbul Sehir University in August 2017. Since then I kept doing research in the field and have updated the data for the preparation of the book.*

Moving to the practical results of the contemplated Turkish move, I feel obligated to call to your attention in the most friendly fashion the fact that such a Turkish move could lead to the slaughter of tens of thousands of Turkish Cypriots on the island of Cyprus. Such an action on your part would unleash the furies and there is no way by which military action on your part could be sufficiently effective to prevent wholesale destruction of many of those whom you are trying to protect. The presence of United Nations forces could not prevent such a catastrophe.

... As I said to your Foreign Minister in our conversation just a few weeks ago, we value very highly our relations with Turkey. We have considered you as a great ally with fundamental common interests... I must, therefore, inform you in the deepest friendship that unless I can have your assurance that you will not take such action without further and fullest consultation I cannot accept your injunction to Ambassador Hare of secrecy and must immediately ask for emergency meetings of the NATO Council and of the United Nations Security Council.

I wish it were possible for us to have a personal discussion of this situation. Unfortunately, because of the special circumstances of our present constitutional position, I am not able to leave the United States. If you could come here for a full discussion I would welcome it. I do feel that you and I carry a very heavy responsibility for the general peace and for the possibilities of a sane and peaceful resolution of the Cyprus problem. I ask you, therefore, to delay any decisions which you and your colleagues might have in mind until you and I have had the fullest and frankest consultation.

Sincerely.
LYNDON B. JOHNSON

On June 5, 1964, U.S. President Johnson's letter to Turkish Prime Minister Inonu strained the relations between the two countries. The letter marks a turning point in Turkey's foreign policy, its perception of security, and national defense. The crisis created

by the disagreement over how to deal with the island led to the unilateral intervention of Turkey in 1974 by sending land troops to Cyprus. As a result, the United States placed an embargo on Turkey. It led Turkey to search for ways to sustain self-sufficiency in the country's defense.

The above incident is clear proof that the defense industry of a country is the only sector that is closely related and directly linked to international relations: in the anarchical global system, it is a state's defensive power that determines its security and sovereignty. Moreover, such a power can be sustained by a self-reliant defense industry. Turkey had tried to nationalize its defense after the crisis of 1974; these early periods of nationalization have been studied in previous works. However, Turkey's efforts for nationalization after the 2000s have not been adequately covered in academic literature. Hence, the nationalization of the defense industry in Turkey in the 2000s is a subject that requires close study.

This book explains the increase in the share of national production in Turkey's military capabilities after the invasion of Iraq in 2003. The period I am going to concentrate on will start with the invasion of Iraq which was followed by the sequence of events that affected Turkey's national security. In that regard, my study will be filling a periodic void. Even though there were attempts to establish a national defense industry before 2003, recent efforts are different as nationalizing critical components are also the goal.

The power vacuum that occurred in Iraqi territory after the American invasion; the lack of a central government and the three-way division of Iraq; and the formation of the Kurdish Regional Government (KRG) in Northern Iraq - of which Turkey is suspicious because of its possible effect on the independence movement inside Turkey - are all of great concern to Turkey's security. The breakdown of relations with Israel is another critical juncture as it

prevented Turkey from using the surveillance technology provided by Israel. This case, in particular, sped up the production of Turkey's own unmanned aerial vehicles (UAVs).

Another turning point for Turkey was the Arab uprisings that turned into a civil war in the case of Syria. The fact that the regime in Syria was starting to threaten Turkey's interests and security pushed Turkey to change its policy towards Syria drastically. Moreover, the power vacuum in Syrian territory, in addition to the one in Iraq, brought DAESH into being, which constitutes both an internal and an external threat to Turkey. As there is a point of contention regarding how to fight DAESH among countries in the anti-DAESH coalition, Turkey, from time to time, acts unilaterally to fulfill its interests. The same applies to Turkey's struggle with the PKK as Turkey's allies in the West do not consider the PKK a terrorist organization. Hence, Turkey wants to follow its independent strategy against the PKK. Since the arms suppliers lay down conditions on the use of their weapons, Turkey seeks alternative ways. As a result of the arms race, terrorism, and sectarian conflict in the region, Turkey is committed to developing a national defense industry with a domestic technology which will enable it to act according to its interests.

SOME CAVEATS ON METHODOLOGY

My study relied on both Turkish and English resources. In the literature, I looked at the relationship between military defense expenditure and the country's growth, and its social implications. I studied the international arms dynamic and how it affects the foreign policy of states. I reviewed newspaper articles since they give updated information which is not covered yet in academic texts. The reports of the Presidency of Defense Industries (PDI) were particularly important as the latter is the most critical domestic institution putting defense projects out to tender. It provides firsthand

information in the field of defense industry. Reports by SASAD and TUBİTAK also highlight the investments and developments in the sector. The data of NATO, SIPRI, IHS Jane's, and AT Kearney have provided information both on a country basis and about the international arms market. These are all prominent institutions on both the local and global scale and they provided valuable and accurate information for this research. Moreover, I conducted personal interviews with professionals who are familiar with the practices and were able to shed light on areas that are not made public.

I used process tracing and looked at the critical junctures in Turkey's recent history profoundly affecting Turkey's security and propelling it to strengthen its national defense industry. I applied two theoretical approaches to this study. The domestic structure model and the action-reaction model are the two approaches explaining the nationalization in the defense sector which helped me understand the theory in general and helped me explain the Turkish case in particular. States are the unit of analysis as the decisions taken at the state level are the actual cause of the developments which inspired this research. I used both quantitative and qualitative resources. Quantitative indicators revealed the strength of the change and improvements in the defense industry through figures, charts, and tables. Qualitative indicators were helpful in understanding the importance of the change by examining selected cases.

OVERVIEW

At the beginning of the 2000s, Turkey had the external surrounding conditions, internal motivation, and the financial resources necessary to start industrial self-reliance in defense which is not without its challenges. Turkey's military spending was $17,685 billion in 2003 and $18,189 billion in 2017 which shows no dramatic change regarding expenditures (SIPRI, 2018).

Although the amount of spending remained nearly the same, domestic production was able to meet 25% of the TAF's needs in 2003 and reached up to 60% in 2016 (SSM Performance Programme, 2016, p. 4). Since there is no increase in the actual amount of spending the detail that draws attention is the reason behind the rise in the share of national production. In order to address this issue, the studies which will be discussed in the Chapter One analyze why countries nationalize their defense industry. The internal and external conditions that motivate states to become self-reliant in defense will be underlined in this section. I will review the studies of arms production, arms and defense industries, defense spending, and economic growth in this chapter in order to offer explanations that clarify Turkey's recent investments in the sector.

In Chapter Two, I will analyze how Turkey is influenced by the invasion of Iraq, regional sectarian conflicts, the Arab uprisings, relations with Israel, the Syrian civil war, the emergence of DAESH, and the re-emergence of the PKK. These are critical issues in Turkey's recent wave of nationalization because together they present a national security threat to Turkey. In this context, I will also look at how the diverging interests with its allies pushed Turkey to sustain its security. Choosing self-reliance over cooperation with partners is significant since it presents a deviation for Turkey from its old security approach.

In Chapter Three, I will concentrate on the domestic factors that led to the development of the national defense industry. I will predominantly examine the role of electoral politics and the way politicians use the matters of defense and security in their election campaigns. Hence, I will be making a textual analysis of party declarations. Spillovers of national defense industry will also be part of this chapter as its effects in other areas are going to influence the domestic structure of Turkey through increasing employment and

spreading technology to other fields which will boost overall development of the country.

Chapter Four will delve into the political economy of the defense industry in the world and Turkey respectively. Seeing that it benefits the economies of countries that produce and sell defense equipment more than any other sector, Turkey as a growing economy could not keep away from engaging in the process. This chapter will provide a detailed analysis of how the Turkish economy is influenced by national arms development. It will elucidate on the economic and strategic difference between procuring from foreign suppliers and producing the same array of arms domestically.

The Conclusion will provide an overall summary. Although the two models explain Turkey's nationalization to an extent, in some respects the case of Turkey runs counter to the arguments presented in the literature. After pointing those out, I will conclude by proposals for future studies which can shed further light on the changing security perceptions in the world and in Turkey.

CHAPTER I STUDIES ON THE NATIONALIZATION OF THE DEFENSE INDUSTRY

In international relations theory, states are generally taken to be the main actors; with no higher authority like a world government to regulate the relations among nation-states, that create anarchy in the system. The interaction among states in this anarchical environment is shaped by the power of each state. In order to protect their sovereignty, states turn to the use of force either themselves and via their allies, according to realists, or through other measures such as international law and institutions, according to liberals. From a realist perspective, when states do not dread retaliation, they cannot be deterred from attacking another country, and this deterrence is guaranteed by their military power. As Mearsheimer (2001, p. 33) suggests in the self-help system of international anarchy, it is up to individual states to maximize their power to defend themselves. Contrary to liberals' claim about cooperation, political history has proven that when it comes to national security, all kinds of cooperation can come to a halt. This is why Kolodziej (1990, p. 20) argues that history and past events should be the basis of security studies and the source of reference for actors' behavior.

When security is the main topic of discussion, we can look at the use of violent and non-violent means. Whereas violent means comprise military measures, non-violent means consist of diplomacy and other soft power measures (Kolodziej, 2005, p. 22). This book seeks to explore the recent trend of nationalization in Turkey's defense industry and, therefore, I will be dealing with security not in its diplomatic sense but in its military sense.

According to Paul R. Viotti (1994, p. 3), national defense must be studied by looking at the international context that affects a nation's security, its bureaucracy, agencies and decision-makers (Gray, 1971, p. 71; Buzan and Herring, 1998, p. 103). Kenneth Boutin (2009, p. 227), on the other hand, offers two models that explain the arms dynamic of a state, which he considers to be telling of its national defense strategy: the action-reaction model, and the domestic structure model. The action-reaction model claims that countries increase their military power either to improve security in the face of threats coming from rivals or to fulfill their interests that run counter to the interests of others (Buzan and Herring, 1998, p. 83).

In the international system, states are always on alert as to who poses a threat to their security, and the sense of threat sharpens the action-reaction model. Gray (1982, p. 164) approaches this sense of insecurity explicated by Buzan and Herring from a different perspective. He says that states might act upon the perceived threats emanating from others' behaviors, but these might also be misperceptions. For instance, Country A might increase its military power out of security concerns, not to threaten or attack Country B. But Country B will feel concerned about the militarization of Country A and start strengthening its military. This indicates a misperception on the side of Country B. However, this security dilemma is a reality of the international system. Moreover, it is actually what the action-reaction model is all about. The action of Country A is creating the reaction of Country B. Such a vicious circle is the driving force behind the military buildup of states and the worldwide arms race. To sum up, the action-reaction model prioritizes the international context which gives a state reason and motivation to increase its military power.

Nationalizing the defense industry is preferred by all countries since it ends the dependency stemming from reliance on other

countries and, therefore, sustains national sovereignty (Boutin, 2009, p. 227). As opposed to those in favor of increased militarization, others see the destabilizing effect of the proliferation of arms in the world and its negative sociopolitical implications at the domestic level. The destabilizing impact of arms buildup derives from the ultimate result of the arms race process. Boutin (2009, p. 230) remarks that the urge to catch up with the military capabilities of rivals encourages investment in national R&D. Ram (1993, p. 28), Viotti (1994, p. 4), and Buzan & Herring (1998, p. 48) also point out that when some countries build up military power, it induces others to participate in the arms race lest they become vulnerable in the face of the increasing armaments of others. This interaction which creates a worldwide effect is called "world military order." The adverse effects of the arms race can be seen both on the international and national levels. On the international level, it creates a constant fear of war, hurts the cooperation between states, decreases the budget for aid which can improve the conditions in LDCs, and influences foreign policy which is consequently shaped in a considerable amount by security concerns (Thee, 1981, pp. 52-53). As the UN Group of Consultant Experts, including S. A. Consalvi, H. de Haan, and D. Djokic, suggest "The creation of spheres of influence, local regional or global, and sometimes interference, direct or roundabout, in the domestic affairs of other states becomes a natural corollary of a worldwide arms race" (Thee, 1981, p. 45).

Whereas the action-reaction model is looking at the international context and external factors, the domestic structure model completes it by focusing on the internal and domestic dynamics that encourage states to promote the country's militarization. The latter explains the variables such as electoral factors, the military-industrial complex of a specific country, and the economic management of the government. Electoral politics is an essential compo-

nent of a country's domestic structure. It can encourage politicians to promise new investments and jobs in the defense industry which increase their appeal to the electorate (Buzan and Herring, 1998, p. 108).

Additionally, politicians, industry owners, and journalists might promote the ¨national preparedness syndrome¨ and use it as an electoral tool which Gray (1971, p. 75) calls the epidemiological argument. Similarly, Buzan and Herring (1998, p. 101) state that the threats stemming from the behavior of rivals might be useful for politicians' agenda of increasing the country's military power. These are important tools to forge a national unity which during the time of elections is very convenient for politicians: when politicians show that they are invested in the victory and glory of the country, they manage to draw people's attention. Politicians' claims in this regard do not have to be based on electoral calculations – they might stem from the military weakness that leaves the state vulnerable in case of crisis and conflict. This can be seen in cases of regional military conflicts that jeopardize Turkey's security such as the war in Syria and attacks by DAESH. Real problems stem from such threats in the region, and give Turkish political leaders a reason to increase the country's military power. It saves them from the trouble of making promises without solid ground. When a country is inferior in terms of its military capacity "no option is believed open other than to strain all resources to attain a better military balance" (Gray, 1971, p. 64). Even when there are no tangible threats to a country's security, Gray (1971, p. 41) argues that promises of military investment are still important for domestic politics since they create political tranquility through the honor of national glory.

Although military investments are an essential tool of electoral politics, they also have a considerable impact on the country's economy. They might have advantages or disadvantages - it

depends on the country in question. However, the explanations offered in previous studies can be helpful in understanding the conditions that are required for the positive or negative impacts of defense spending.

POLITICAL ECONOMY OF THE DEFENSE INDUSTRY

Military expenditure can have two opposite impacts – a positive or a negative - on a country's economy, depending on the context. Its effects are positive if the country has enough economic resources and it does not have to cut down on the financing of other public expenditures such as health, education, or transportation services that directly serve the public interests. In such a case, a country does not have to reduce the spending on socially constructive projects that improve the welfare in the short term. Moreover, it can reap the fruits of investing in the military industry in the long term as military projects require a long time to develop, while it does not have to give up on any of the benefits provided by investing in different sectors. However, research also shows that military expenditure might have a reverse effect on the economy (Lebovic and Ishaq, 1987; Karaosmanoglu & Kibaroglu, 2002; Dritsakis, 2004). This mainly applies to economically developing countries which have to procure their expansive defense of arms from the countries who produce them or who initiate the process of providing weapons for themselves. When they import, it creates a problem of balance of payment for the economy. When they want to produce nationally, they channel a significant amount of money into making weapons. This takes away from the resources for civilian use and does not serve economic growth or public benefit (Dritsakis, 2004, p. 251). This condition applies to countries which are short of budget and in need of constructive reforms.

There are four approaches regarding the relationship between military expenditure and the economy. The first is military Keynesianism which suggests that military spending stimulates the economy when the country itself produces the military material rather than spending the money on procuring from foreign suppliers (Dunne, 2011, p. 1). When the demand is insufficient, the state uses military expenditures as part of any other public spending which stimulates the economy and causes an increase in production (Buzan and Herring, 1998, p. 35; Dunne, 2011, p. 2; Duyar & Koçoğlu, 2014, p. 710). It also assumes that military spending enhances capacity utilization by increasing profits, investment, and growth (Baran and Sweezy, 1966). Ram mentions that defense programs can benefit the civilian economy through spillovers for other industrial sectors and improve the conditions of the overall economy (Ram, 1993, p. 28). Hence, benefits of increased military spending are not limited to a militarily stronger country. Commercial spin-offs contribute to the development of non-military industries and to the increase of employment opportunities (Viotti, 1994, p. 4). As a result, an increase in military spending brings about utilization of capital stock, higher investments, and employment especially in an environment where a country experiences economic stagnation. These are seen by Yıldırım et al. (2005, p. 284) as the stimulating effects of increased military expenditures. Moreover, it is also accepted that the developed countries which include military spending in public spending use it to strive against recession in a time of crisis ("World Military Spending — Global Issues," 2013).

The second is the neo-classical model which sees military expenditures as a public good. It suggests that the state is a rational actor deciding on military spending depending on its costs and benefits to national interests (Duyar & Koçoğlu, 2014, p. 710).

Biswas and Ram developed this model drawing on Feder's work on the impact of exports on growth (Biswas, 1992, p. 6). They suggest that military outlay has a positive effect on the economic growth of Less Developed Countries (LDCs) (Biswas, 1992, p. 10). In general, from the perspective of the neo-classical model, a country maximizes societal well-being through investing in security which is an essential component of welfare (Dunne et al., 2008, p. 294).

The Marxist approach is the third which views the matter from a different perspective. Some see military expenditures as a way of perpetuating capitalism whereas the military-industrial complex theory emphasizes that there is only a section of the capitalist class that benefits from the military expenditures at the expense of the rest (Coulomb & Bellais, 2008, pp. 355-358). Overall, it focuses on the class conflict perpetuated by the military-industrial complex. According to this argument, militarism or patriotism may be employed by the capitalist class or the state to reduce the militancy of the labor class but exacerbating the class conflict in the process (Cypher, 1987, p. 307). The Marxist model does not claim that military expenditures have pure positive or negative impacts. R. P. Smith (1976) and Ron Smith and Dan Smith (1983) stress the positive effects of military expenditures on "international accumulation and negative impacts on investment, R&D, and productivity" (in Riddell, 1986, p. 579).

The last model is the institutionalist one which emphasizes that there are firms, corporations, and individuals that benefit from military expenditures and they will form lobbies which might induce the government to make military expenditures even though it is not in the country's benefit (Karaosmanoglu & Kibaroglu, 2002, p. 711; Dunne, 2011, p. 3). The role played by the industry owners who have a stake in the promotion of military buildup is the essence of the military-industrial complex. Even when national security is

not at risk, members of this complex might encourage the state to invest in the field of defense for their economic gains by neglecting what might be for the benefit of the country. An economic analysis of Snyder's perspective corresponds to this institutionalist approach to military expenditure. As Snyder (1991) states in *Myths of Empire* such interest groups, formed by ruling classes and their elite ideologies, have the power to present what is at stake as a matter of national security even if it is in their personal, or group, favor. This is why P. W. Singer (2004, p. 170) calls them "profit-motivated agents." And in order to protect their pecuniary interests, they use their power to influence the "political and social conditions" and work with the society's fears by keeping them alive; this ultimately undermines the efforts for disarmament (Thee, 1981, pp. 51-52).

While analyzing the institutionalist model, Ram emphasizes another aspect of the military-industrial complex by pointing out that "upper-income classes may gain more from defense outlays than lower-income people. Such a pattern may make intra-country income distribution worse" (Ram, 1993, p. 28). Furthermore, it might pave the way for excessive militarization and promote military intervention in other countries (Ram, 1993, p. 27). So as to show how influential the military-industrial complex is in determining the foreign policy of the USA, Chomsky (2004, p. 82) refers to it as "the core of the modern economy and American foreign policy."

The introductory statements made about the four approaches to military expenditure and the economy can be further elaborated in terms of their impacts on a country's economy. In countries' defense apparatus, heavy arms are used less than small arms, but they are expensive to create.

Hence large items such as tanks and ships pose the question of economies of scale for producer countries even if the latter are not bound by budgetary restrictions.

In order to tackle this problem, producers intend to sell in order to lower the unit costs – this pushes them to look for export markets (Buzan & Herring, 1998, p. 35). Although this can be turned into financial capabilities for those who export their military products, it causes economic losses for countries that have to import such material or spend too much on the national development of these items. Positive effects can be assessed in two ways. Firstly, supplier countries extricate themselves from importing expensive weapons as they are produced domestically and, therefore, they save on foreign exchange. Secondly, they fix the problem of balance of payment and address the issue of economies of scale by selling their products.

The aforementioned two effects generate more positive externalities. The increased production to meet both the local and international demand for weapons, improves local employment levels which become the tool of electoral politics. However, the arms industry is also criticized for absorbing skilled labor which could be used for socially productive purposes. In other respects, the skilled personnel of the military such as pilots, technicians, and health professionals during their services and after retirement can be of service to civilians (Ram, 1993, p. 29). Furthermore, since these professionals receive general education, they increase the quality of society's human capital (Ram, 1993, p. 29). If we look at the issue from a different standpoint, it is possible to see the utility for society in general of trained military personnel. For instance, they can serve better during natural disasters with their ready equipment and soldiers since they are always on alert and constantly trained under harsh circumstances (Ram, 1993, p. 30; Archer & Annette, 2012, p. 30). On the other hand, technology produced in military research can be used in the civilian sectors as well. "Military innovations in air transportation, nuclear power generation, radar us-

age, space technology, and other areas have been adapted to civilian use and constitute an important spillover of defense expenditure" (Ram, 1993, p. 28).

Positive externalities of defense spending are not limited to these. When a state makes high levels of investment in its military, it also takes good care of what its human capital has tried so hard to build and, hence, it tries to facilitate the communication of military units through constructing "roads, bridges, communications networks, airports, waterworks, and townships" (Ram, 1993, p. 30). Even though some of these services are exclusive to military usage, civilians too have access to many of them.

A strengthened national defense forms a secure social setting and a credible economic environment (Ram, 1993, p. 30). As a result, the country is perceived to be a destination for investment through building trust towards the country's future. This attracts long-term investments of both foreigners and locals which improves economic growth. On the contrary, when a country is not seen as a safe haven for investments, it cannot draw money in; in this manner, security spillover is seen as a positive effect of military spending. Ram explains the economic importance of the sector with the following statement:

> If the defense sector is technologically more advanced than the rest of the economy, it could act as a "modern" sector that may facilitate overall growth. In particular, if input productivity is higher in defense than in the rest of the economy, expansion of defense outlays may improve growth rate ... since defense output is a part of the total product (GNP or GDP). An empirical assessment of the presence and the magnitude of such an effect, however, indicates a somewhat uncertain picture (Ram, 1993, p. 31).

Therefore, scholars studying the effects of defense spending on the economy work with case studies and measure its impacts on a country basis rather than reaching all-encompassing conclusions.

Even though the positive spillovers are widely discussed, negative spillovers are worthy of attention as well. Apart from the arguments presented by the military-industrial complex which focuses on specific group interests, defense spending can harm the overall well-being of society. When a country's defense spending is not proportional to the size of its economy, it will have a reverse effect. In case of developing or less developed countries, military expenditures are of secondary importance compared to more critical socioeconomic programs. If countries with limited economic resources choose to divert capital from other sectors to develop a national defense industry, it stirs up adverse socioeconomic outcomes. Instead what they can do is to use their limited resources for socially constructive ends (Thee, 1981, p. 44). By doing so, they will improve the welfare of society and the effects of this will be felt directly by the people.

Because of its desirable political reflections, which will be mentioned later in the chapter, even when importing arms is easy and affordable, authorities might pursue an ambitious agenda to develop a self-sufficient industrial base. (Boutin, 2009, p. 230). The defense spending of the Soviet Union was twice as large as that of the United States and its economy only half that of the U.S. – in the end, this contributed to the downfall of the Soviet Union (Kolodziej, 2005, p. 109). To depend merely on national resources increases the costs of production, prolongs the time to finish the product, and causes financial and technological compromises (Boutin, 2009, p. 236; Bitzinger, 2003, p. 74). However, in such a case, states neglect the economic costs and benefits and focus on the domestic and international political status brought forth by owning nationally developed arms.

Even though states are motivated by the specific political outcomes of nationalizing the defense industry, what they will have as

an end product is a "less-than-impressive weapon system" (Bitzinger, 2003, p. 74). For example, India wants to be a regional power and sees indigenous arms production capability as an essential component of achieving this goal. The U.S. arms embargo during the war with Pakistan is a reminder for India of the importance of self-reliance (Sanders, 1990, pp. 15-98). In order to sustain its sovereignty in 1984, India established an institution called the Aeronautical Development Agency to take care of light combat aircrafts – the Tejas program. The agency explains its intention with the following statement: "History has taught us that there is a compulsion to achieve self-reliance in design, development, and production of critical weapon systems to guard the sovereignty of our country" ("History | Tejas - India's Light Combat Aircraft," n.d.). Having started in 1984, the project is still not finalized and its fate is unknown. Even if it is finished, its costs to Indian economy will be enormous. Therefore, like in the case of India, states might choose developing national arms even when it is not economically advantageous.

TRANSNATIONALIZATION OF ARMS PRODUCTION

Although countries are aware of the economic costs nationalizing the defense industry brings with it, the world economic system does not give them enough reason to be connected to the transnational production of arms. The second-tier countries of the periphery are connected to the first-tier countries of the core which are the primary arms producers in the world. The reality of the transnationalization of defense technology since the mid-1980s brought into being this interwoven system of production. Even though many countries became part of this production chain, first-tier countries benefit from the process more, whereas the profit and acquisition of

second-tiers are only marginal. Hence the process of transnationalization is critical in terms of understanding the reasons that urged some countries to nationalize their defense production.

Towards the end of the Cold War, the two superpowers started to withdraw back into their borders. Their former satellites reacted by strengthening their military as a precaution towards future uncertainties and due to their lack of trust in the superpowers' commitment to intervene in case of a future conflict (Buzan & Segal, 1994, p. 9). So it was now up to them to provide their national security, and they initiated attempts to develop indigenous defense industries in order to decrease dependency (Buzan & Segal, 1994, pp. 8-9). The added complexity for these countries, which were formerly dependent in terms of security, is that although they want to be independent producers of arms of defense, they became connected to the major suppliers through the world economic system.

As demand for arms of defense started to decrease in producer countries with the de-escalation of conflict in the late 1980s, defense companies realized their excess production capacity and saw foreign markets as a substitute for national ones (Bitzinger, 1994, p. 173). Bitzinger emphasizes that in order to gain access to these international markets defense companies initiated co-production programs which brought with them activities ranging from technology transfer and export license to production license (Bitzinger, 1994, p. 170). Bitzinger claims that through globalization Western dominance in the arms market can be reduced but he does not explain how. Later in an article published in 2003, Bitzinger (2003, p.74) compares this globalized arms industry to the core-periphery model of the international economic structure and even though he does not explicitly argue that the core exploits the periphery through transnationalization, the article indicates the disadvantaged position of the latter in this relationship.

At the core, there are first-tier firms that produce high-tech items like ¨engines, sensors and electronics¨ which compose the most critical parts of the arms, while at the periphery are second-tier firms that produce low-tech items which might constitute a more significant portion of the arms but have low value (Bitzinger, 2003, p. 75). This transnationalization is said to reduce the technological gap between core and periphery by handing out some innovations to the second-tier firms. However, countries of the periphery experience problems in the technology transfer and in obtaining export and production licenses since producers do not want to give up the core technology and intellectual rights they have tried so hard to obtain. Handing out these critical components would mean the loss of comparative advantage. However, companies of the core through transnational production amortize costs, reduce risks of developing a product alone, increase efficiency and economies of scale, and enable penetration into new markets (Moravcsik, 1991, p. 35; Bitzinger, 2003, p. 68; Boutin, 2009, p. 233).

Even though in the meanwhile peripheries improve by focusing on national industrial capabilities, they opt for developing "low risk" arms and continue to rely on "foreign support for more advanced arms" (Boutin, 2009, p. 231) As argued by Kapstein, this process only delivers such outcomes for the first-tier countries and the benefit of the rest is only marginal or none. Kapstein (1991, p. 659) suggests that there are three options for arms production. The first option is available for countries that have technological and economic resources which will enable them to produce arms autonomously. They might spread production across countries and take advantage of the low labor costs elsewhere, but they have the capacity to pull it off on their own if they so desire. The second option is for countries that have financial resources but lack technology. In that case, they can engage in co-production and assemble for the major suppliers.

The third option is for countries that have neither financial nor technological capacity which leaves them no choice other than to import.

This interconnectedness makes it hard for second-tier producers as well as for first-tier producers to develop arms on their own. Although he mentions the benefits of globalization, Bitzinger (2003, p. 76) accepts that it makes second-tier countries vulnerable to both the political manipulation and economic realities of the global arms market. According to Boutin (2009, p. 234), such a pattern of industrialization - i.e. being a part of the worldwide production chain - is not compatible with the goal of national autonomy. Therefore, some second-tier producers insist on preserving self-sufficiency, and have managed to find a place in the market with commercial products like Brazil with regional jets and China with missiles; others engage in niche production as Israel with UAVs and reconnaissance (Bitzinger, 2003, pp. 64-68).

If countries cannot ensure self-reliance in the defense sector, it is better to be connected to the global chain of production than not being able to produce anything. However, as opposed to what Bitzinger suggests, multinational co-production does not circumvent Western hegemony. "Licensing production arrangements seldom transfer technology quickly and do not represent a short path from dependence to independence" (Buzan & Herring, 1998, p. 41). On the other hand, the assembly of imported components makes a country specialized in only a part of the production and does not deliver the overall technology. Although the picture appear bleak so doomy, it improves the local producers to an extent and meanwhile enhances their capacity to design.

USE OF ARMS AS A POLITICAL TOOL

Through the experiences at one point in their histories, non-supplier countries are aware of the dangers stemming from

the dependence of their national defense on foreign countries. After the Second World War, European countries were customers of American weapons. However, as soon as Europe got back on its feet, it started improving its capacity to manufacture the weapons it need (Kapstein, 1991, p. 660). Especially Britain and France followed independent strategies outside NATO; however, even they did not miss the chance of co-producing in order to reduce the risks and costs in certain fields (Kapstein, 1991, pp. 662-663). However, their multinational co-development activities were not at the level of compromising their strategic advantage. France, Germany, and Britain all refused to collaborate on the production of arms of which they have comparative advantages. France is opposed to collaboration on fighter jets whereas Germany and Britain protect their domestic battle tank producers through refusing to cooperate with foreign firms. Nevertheless, they are open to cooperation in areas where they have a weak export position (Moravcsik, 1991, pp. 37-38).Lack of industrial self-reliance means weapon flows will stop when the recipient country is going through a regional/national crisis and when the country in question is most vulnerable to internal/international threats (Bitzinger, 1995, p. 256; Boutin, 2009, p. 229). Turkey and Brazil are countries that suffered from arms supply embargoes during the Carter administration, and Taiwan and South Africa also went through an embargo period which encouraged all of these countries to build their national defense industries (Brauer, 1998, p. 5). When this relation between supplier and recipient countries is taken into account, supplier states have many leverages in their hands. They have the chance to choose the quality of weapons they are exporting and the freedom to decide to whom they export (Neuman, 1988, p. 1046). Furthermore, they can "exploit [the] political leverage they have with developing state customers" just like the embargo decision of the U.S. on the Is-

lamic Revolution in Iran which overthrew a regime friendly to the Americans (Boutin, 2009, p. 229). Therefore, apart from ensuring a state's security, having a strong defense industry can be used as a tool for countries to steer the outcome of conflicts in favor of their foreign policies.

As can be seen, the reason why countries prefer self-reliance or reduced reliance on procured arms of defense is that it strengthens national political independence (Bitzinger, 2003, p. 36). Moreover, once states get their hands on such power, they know that they too can be regional powers that are influential over other countries. Hence, producing an authentic arms technology indicates the state's political motive to exert influence (Kızmaz, Brozska & Lock, 1992, p. 145). William W. Keller (1995, p. 166) states that during the Bush administration arms transfer policy was seen as a tool of foreign policy "that could be selectively applied to accommodate geostrategic circumstances prevailing in the region to which the weapons or military technology were destined... It was driven by calculations of military balance, political cachet, and economic return." Hence, supplier countries' transfer of arms is not unconditional - it is a result of the specific political calculations of the supplier.

As power is an important asset of a country which can be measured by the military as well as by economic capabilities, it also offers prestigious status to the country that obtains it (Gilpin, 1983, p. 32). In other words, showing the country's power through its capabilities in military technology contributes to "its status as a great power" (Bitzinger, 2003, p. 98). During the Cold War, this was true of the two superpowers. They competed in military power and strengthened their client states by providing them with arms (Kolodziej, 2005, p. 102; Buzan & Herring, 1998, p. 33). Arms transfer, on the one hand, and military assistance, on the other, assures the creation

of client states which pursue policies in favor of their patron. Even today, powerful states do not have to fight wars on the ground as long as they arm and back up local groups or states which can turn the result of the war in their favor. E. H. Carr has said that prestige is "important because if your strength is recognized, you can generally achieve your aims without having to use it" (quoted in Gilpin, 1983, p. 31). Whereas first-tier countries enjoy the benefit of determining the outcomes of conflicts as they decide whom to give weapons to, second-tier countries, as the recipients of the arms, are the ones whose actions are decided. Therefore, self-reliance is important since it ensures that a country deals with threats without external involvement (Neuman, 1994, p. 104).

Although liberal economic rules apply to companies in the Western market, industrial self-reliance in defense is a priority that cannot be left to the hands of foreign companies. Hence, even in capitalist markets, the field of defense is exempt from the free market economy and closed to competition. Foreigners are discouraged from entering, and companies, in general, are owned or supported by the state. Since self-sufficiency in arms of defense is accepted as the most reliable way for providing national security, its importance far surpasses that of the free market (Bitzinger, 1994, p. 72). Moreover, since political authorities see the defense industry in terms of its contribution to national autonomy and political stature, competition and the free market are not options approved by politicians in this sector (Kapstein, 1991, p. 675; Boutin, 2009, p. 230). As a result, such possible contributions to country's autonomy and political stature push governments to put restrictions on foreign companies and support the local firms even when it is not economically viable (Boutin, 2009, p. 230).

Another way that first-tier countries approach transnationalization with suspicion is by discouraging second-tier countries from

the process which would take away from the freedom of movement of the former. In order to decrease the "political vulnerability to supplier pressure" some states opt for carrying out independent production as much as possible and in order to maintain their policy of neutrality, they chose self-sufficiency during the Cold War (Buzan and Herring, 1998, p. 45).

A restriction on the supply of arms, non-producer states argue, would force them to become second-class states, unable to match the military forces of producers, and relegated to the politically unacceptable category of those judged incapable of being allowed to manage their own affairs (Buzan & Herring, 1998, p. 36).

For the same reasons, Neuman points out that "imported equipment is always less secure than the domestically produced equivalent because a country's enemy may more easily gain access to it and thereby glean sensitive information" (Neuman, 1994, pp. 104-105). It makes any country question the viability of leaving its defense in the hands of another country.

TRADE-OFFS OF DEVELOPING A NATIONAL DEFENSE INDUSTRY

Although he was in favor of self-sufficiency in defense, Louis XIV's chief minister Jean-Baptiste Colbert admitted that spending on war undermines "the real source of power - economic activity" (Moravcsik, 1991, p. 26). Moravcsik (1991, p. 39) states that autarkic policies in the defense sector might cause economic disadvantages in the short run arising from not specializing in the development of a specific product and buying the rest from others who specialize in those particular items. This he refers to as the "autarky-efficiency dilemma." The latter is a huge difficulty for a country which wants to be independent in every sense - yet even producing every single defense weapon it needs cannot guarantee

this. A country's measures to ensure full self-reliance divides up the limited capital and quality personnel among different projects, which prevents reaching perfection in a single item that could give a comparative advantage to the country in the international market.

Even though Viotti (1994, p. 4) underlines the economic benefits of defense spending, he points out a trade-off by saying that those expenditures might be achieved at the expense of other public expenditures. Spending on new arms cuts back on the immediate needs of the population if a country has scarce economic resources and as a result, the country faces a trade-off between military and social spending (Ram, 1993, pp. 23-50; Buzan and Herring, 1998, p. 49). Furthermore, Gilpin (1981, pp. 168-169) mentions that the cost of protection is increasing since modern weapons are more complicated and expensive which in return forces states to invest more in their defense diminishing the resources they could use in other sectors. This is why sustaining a robust military puts a non-negligible financial burden on both the economies of developed and developing countries (Sivard, 1981, p. 35).

Neuman points out that scholars who stress the economic costs of military industry refer to the scarcity of inputs like capital stocks, technical skill, workforce, and the raw material that is being channeled into making weapons (Neuman, 1994, p. 102). When already limited resources are used for making or buying weapons, it cuts down on the financing of other public expenditures which would create better conditions for a society like improvements in health services. As the population of a country grows so does its need for health services which makes investments in health essential for the public's well-being. The same applies to other social expenditures like education, transportation, and housing. However, military threats are not directly proportional to the size of the population, so growing expenditure on the defense industry, unlike

other public expenditures, does not benefit society's welfare (Sivard, 1981, p. 36). For example, military R&D decreases the scope of R&D in the civilian sector which directly affects the development of a country. Employing skilled personnel in the defense industry creates a scarcity of highly qualified workforce for civilian sectors. It is notably worse for LDCs which have limited skilled staff (Thee, 1981, p. 46; Ram, 1993, p. 26). Regarding the problem, the International Peace Bureau remarks in its 2012 report that:

> [The issue] [i]s also about the channeling of so many of our finest scientific minds into careers that promote military, rather than civilian, solutions. Wouldn't we advance more rapidly in the global fight against HIV/AIDS, or in tackling water scarcity or climate change, if even a small portion of the military's immense store of brain power were made available for such programs? (Archer & Annette, 2012, p. 33)

The opponents of defense buildup point out the valuable human capital which could easily have been trained for and invested in civilian sectors and might make a better contribution to the nation as well as to humanity.

Other than stealing the skilled people from non-defensive sectors, the military industry also has an adverse effect on the environment because of "experimental explosions, toxic discharges, and use of a wide range of non-renewable resources" (Ram, 1993, p. 27). Just like other civilian sectors, environmental problems too need to be addressed through research (Thee, 1981, p. 46). Furthermore, the environment might have suffered less damage and destruction if it were not for nuclear or other military tests.

These are the reasons authors see the expenditure on the military industry as a drain on the economy of, especially, third-world countries (Gilpin, 1981, p. 169; Neuman, 1994, pp. 102-103). Allocation of resources to military use aggravates the economics of

developing nations more because those resources "could have been used for civilian purposes, either to accelerate growth and modernization in such fields as industry, agriculture, and transport or to raise the standard of living and improve the quality of life" (Thee, 1981, pp. 50-51).

While diversion of resources levels a burden on the country's socioeconomic development, it also creates a problem of balance of payment since these countries have to import expensive defense arms. Whereas suppliers draw the money into their economy as a result of the transaction, non-suppliers lose a big part of their already limited economic resources; on the international level, this widens the gap between developed and developing countries. On the other hand, even if they do not pay for the weapons and the weapons are being delivered as a part of foreign military aid, the country of destination still has to pay for the additional costs such as maintenance, spare parts, and, in time, for modernization (Thee, 1981, p. 50). Moreover, supplier countries amortize the costs of development in the long term since importing countries "subsidize military R&D in the arms-exporting countries" (Thee, 1981, p. 50). For example, Turkey agreed with Russia to buy S-400 missiles ("Türkiye Rusya'dan S-400 alıyor," 2017). But Russia is working on the next generation of missiles which is called S-500 (Sharkov, 2017). With the money Turkey gives Russia, the latter will already be developing the technology of the future. Soon after Turkey gets the S-400s, they will be outdated. This relation between supplier and buyer countries perpetuates the position of the arms exporters vis-à-vis other countries in the technological lead.

Whereas military spending deteriorates the situation in LDCs, it is not the same for arms producers. Hence, Buzan and Herring (1998, p. 107) claim that the strategy of taking the military way is applicable only for the arms producer countries:

> This technique is especially useful in a country like the United States, where Keynesian measures of economic stimulation might, in themselves, attract ideological opposition. It is easier to get tax-payers to consent to subsidies for high-technology industries if they are justified as necessary to the military security of the country... Military spending tends to be less controversial than welfare measures and other public works, and government is more in control of the variables that govern the need for military measures. The international system may oblige by providing threats that are real enough to be exaggerated if the need to do so for economic reasons arises.

However, this does not discourage non-producing countries from expanding their arms production capabilities because their dependence on foreign arms brings them back to the problem of its use as political leverage by the supplier country. Technology cannot always be bought as states regulate and sometimes can limit the transactions of their companies with foreign states due to political interests. The export license system protects the foreign policy interests of each country. It does so by preventing the undesirable political effects which can be generated by the sale of arms on purely economic concerns (Buzan & Herring, 1998, p. 47).

All in all, studies show that the domestic structure and action-reaction model explain the reasons for the development of the national defense industry. Whereas domestic structure sheds light on the motivations and rationalizations of the local actors such as politicians and the military-industrial complex, the action-reaction model looks at the macro level and clarifies the international factors that propel countries to strengthen their military buildup. Although there are certain effects of nationalizing the defense industry, analyzing countries by looking at the internal and external dynamics and their economic structure, which may or may not be strong enough to endure the costs of national defense projects, is necessary. Hence, in the rest of the current study, I will look into these variables and their effectiveness in the nationalization of the defense industry in Turkey.

CHAPTER II APPLICATION OF THE ACTION-REACTION MODEL

This chapter deals with the geographical factors that affect Turkey's security, and hence, Turkey's perceived need for more expenditure on arms and the nationalization of the arms industry. By analyzing the regional variables explained in the chapter, I intend to show that Turkey's attempts in military defense is in large part a response to the geopolitical dynamics of the region. Turkey tried to maintain relations on an economic level when it could, but when the recent conditions required it to move to a more security-based approach, it started prioritizing defense. In that respect, Turkey is not different from other countries in trying to maintain its security. What makes its initiatives different is its dedication in pursuing a policy of nationalization which is entirely congruent with the distrust Turkey developed as a result of its encounters with countries in its region that brought to the fore Turkey's conflicting interests with its allies. Lack of trust in partners or as Buzan and Segal (1994, p. 9) called it the "diminishing security commitments of superpowers" is not widely covered in the studies. Nor is it a part of the action-reaction model. However, the conflicting actions or inactions of allies create the reaction of the country in question to improve its defense. Hence it is an important variable that should be taken into account. Since the attitude of allies can influence the regional politics which may, as a result, bring on an interest dilemma, I will elaborate on them together.

Turkey's move from a relatively peaceful period which enabled cooperation with the region to a period in which the increased arms

race and threats affected its security more is a sign that its initiatives in the defense industry are reactive. In order to make this point clear and to demonstrate how the action-reaction model works, I will start by explaining how Turkey has acted historically in the presence and absence of threats. Then I will proceed with the regional arms race and states/terrorist groups that have pushed Turkey to activate a process of defense industrialization.

TURKEY IN THE REGIONAL CONJUNCTURE

A HISTORICAL OUTLOOK AT TURKEY'S SECURITY PERSPECTIVE

Turkey is located in a geography surrounded by countries it has had conflicts with in the past owing to its imperial history, which was followed by the nation-state building process. The ongoing years did not witness major disputes with neighbors as the newly founded republic was busy with its internal affairs such as the construction of national institutions and economy. This is also true of the other states that gained independence after the collapse of the Ottoman Empire. Turkey's first major decision to choose a side and take military action in a foreign land was not about a regional issue - it was the decision to join the Korean War. However, this decision was made with a political calculation: if Turkey was to join the NATO alliance and get under its security umbrella, it had to pay the price by fighting alongside the allies. Before joining the war, Turkey had applied and was rejected by NATO twice. Only after sending its soldiers to fight in the Korean War, was Turkey accepted to the organization in 1952 (Oran, 2013a, pp. 543-545).

Apart from Turkey's involvement in the Korean War, which was the result of a strategic calculation on the part of Turkey, the major problem that Turkey had to face afterward was the Cyprus issue. When the two communities on the island separated ways in 1963,

Cyprus became the main foreign policy issue for Turkey. The idea of intervention was halted because of the Johnson letter which owes its existence to the efforts of the Greek-American lobby that inspired the letter in favor of the Greeks[1] (Landau, 1974, pp. 51-52). In the letter, Turkey was harshly warned that it could not use the military equipment provided by the U.S. in case of intervention. In 1974, ten years after the letter, the Greek attacks on Turks living on the island culminated in Turkey's intervention as a guarantor power. As the interests of the USA were not congruent with those of Turkey, the two countries were on a collision course and the American Congress issued an arms embargo against Turkey as warned by the U.S. 10 years earlier. The embargo relied on the principles of the Truman doctrine and Public Law 75 which prevented any recipient country from using the delivered equipment other than for the stated purposes and warned that the assistance would be terminated if it was seen as unnecessary or undesirable.[2]

[1] Numerous cables, telephone calls, letters, and memos reached the White House during the first half of 1964; nearly all of them were designed to influence the presidential policy towards Cyprus. Much of the correspondence stressed the alleged discrimination or persecution of Greeks in Turkey. A White House Office ¨route slip¨ stated that as of June 26, 1964, 2,598 letters concerning this matter had been received at the White House! Thus, this lobbying-by-communication relied on the sheer amount of correspondence and intended to impress the White House with the ability of Greek-Americans to mobilize a grassroots campaign; the deluge of communications was one of the main reasons for the success. (Landau, 1974, p. 52)

[2] ¨payments when made shall be credited to such countries in accounts established for the purpose¨ (Section 2)

¨the government requesting such assistance shall agree (a) to permit free access of United States government officials for the purpose of observing whether such assistance is utilized effectively and in accordance with the undertakings of the recipient government¨ (Section 3)

¨The president is directed to withdraw any or all aid authorized herein under any of the following circumstances:

(2) if the security Council finds, or the General Assembly finds that action taken or assistance furnished by the United Nations makes the continuance of such assistance unnecessary or undesirable

(4) if the President finds that any of the assurances given pursuant to section 3 are not being carried out.¨ (Public Law 75, 1947)

The embargo decision hit Turkey hard. For very long, Turkey had seen the United States as its staunch ally. Having the political decision of intervention in mind on the one hand, and seeing the withdrawal of support from its major partner, on the other, Turkey was pushed into a corner. It was a reminder for Turkey that its security will not be protected if it does not its own means to do so and its allies are not motivated to help defend it. The U.S. had acted according to its national interests when it issued the Truman doctrine and also when then President Johnson wrote the famous letter which soured the relations between the two countries. Similarly, Turkey too wanted to follow its national interests by intervening. But for a country which depends on another state and arms provided by it for its security, it is not easy to do so. The problems it encountered with the U.S. after having taken the intervention decision, made Turkey think that buying from countries other than the U.S. is imperative. No state can be another's unchanging ally, so it did not take long for Turkey to realize how important it is to establish an independent military industry.

With the embargo, delivery of military equipment worth more than $200 million was cancelled (Durmaz, 2014, p. 23). When the political scene changed in the U.S. during the crisis with Ford becoming president, he followed the political decisions of Kissinger who did not see any good in the embargo since he believed it would only harm the relations with Turkey in the long run (Durmaz, 2014, p. 23). But the strength of the Greek-American lobby and the decisiveness of Congress prevented any attempt to lift the embargo - the only exception was the decision of the Congress to send F-4 aircraft material, payment of which had already been made (Binder in Durmaz, 2014, p. 23). As a reaction against the American decision, Turkey used the only card it had against the U.S. and retaliated by closing down the military installations

in its territory used by the U.S. For the U.S. it meant a loss of intelligence and leverages provided by having bases close to the Soviet Union.

Later, F104s were supplied from Italy and West Germany (Durmaz, 2014, p. 49) but procuring from different suppliers in order to decrease dependence on the U.S. could not be the solution as it can never be certain that the interests of Turkey and those of any supplier will not clash in a future conflict which would result in another embargo. Hence, new initiatives took place. In the following years of the embargo, Aselsan, Havelsan, TAI, Roketsan, Aspilsan, and Isbir were established in order to meet the demands of the Turkish Armed Forces which was proven to be lacking the necessary materials that could be used without having to answer to anyone during the four years of the embargo. Although these initial steps for making a modern and technological advanced defense industry were important, they were only the beginning. The investments made during the post-embargo period were not sufficient as Turkey adopted the foreign defense technologies instead of investing in the R&D itself (Durmaz, 2014, p. 57).

During the ´80s and ´90s, Turkey had to deal with its internal problems starting with the coup d'état. The country was ruled by a military regime which did not make any improvements towards developing a nationally self-sufficient defense industry. When the military regime left its place to a civilian government, it was again not easy to focus on a national defense strategy and strive for a self-reliant industry since the political instabilities, coalition regimes, and economic problems of the 1990s did not leave any room for bold initiatives by the state. In that respect, a stable political environment provided by a long-lasting, one-party government whose policies in the area of defense are going to be covered in the next chapter. The regional political atmosphere which was condu-

cive to nationalization efforts and complementary to this domestic political structure will be covered in the rest of this chapter.

CHANGING CONJUNCTURE BOOSTS ECONOMIC INTEGRATION WITH THE REGION

Looking at the historical process, Turkey has generally focused on internal politics and preferred to take a neutral stance on the regional issues or acted along with Western partners with whom it closely associated itself. From a Western security perspective, Turkey was seen as an important asset. Due to its geographical location and identity, Turkey was fit to be a buffer between the "chaotic" East and the West. While the West depended on Turkey for security, Turkey also depended on its Western allies against external threats. However, when Turkey used military means, it had to pay the price by being exposed to an arms embargo in the case of the Cyprus intervention which exposed to Turkey the danger of being reliant on procured arms for its defense. As a result, Turkey learned its lesson and understood that acting on its own in case of future conflicts would not be a feasible solution. In general, during the Cold War, Turkey mostly relied on NATO and on the U.S., whereas they saw Turkey as a shield that would protect them against the communist camp.

Until the 2000s, Turkey for the most part steered clear of the regional issues and centered its attention on its domestic problems. When it got involved in regional politics, it did not act unilaterally. Rather, it chose to act along with its allies which were either the U.S. and Europe, or the Soviet Union depending on the circumstances. While usually focusing on its relations with the West, Turkey turned its back to MENA, Turkey's own cultural heritage zone. For decades, it did not take advantage of the historical and cultural ties stemming from its imperial past with the countries in the region. The Turkish elite adopted a security-centered approach towards the region which

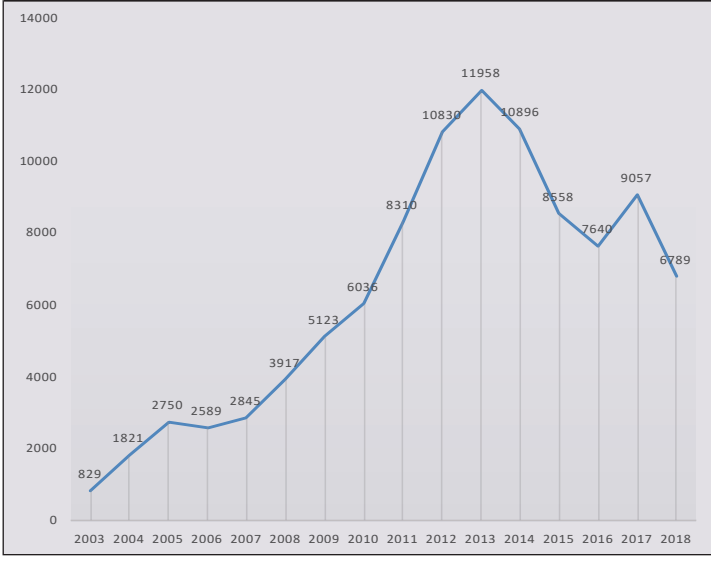
had only started to change in the 21st century with the changing domestic political scene (Kalın, 2012, p. 11). Turkey was also seen as a military ally by Europe and the U.S. but that the change in the circumstances propelled Turkey to reassert itself through its economic and political power (Kalın, 2012, p. 8).

The change of scene and perceptions in Turkey and the changing realities of the world encouraged and motivated Turkey to increase its cooperation with the countries in its region. Turkey decided to expand its zone of influence through economic integration which is its biggest asset in a geography that is willing to purchase its new line of products (Fidan, 2013, pp. 91-92). Turkey used its cultural and historical ties with the region to forge a foreign policy around economic connections. Although it formed economic relations with the countries in the Middle East, its connections were limited. However, as far as the Turkish economy was concerned, it was in the interest of statesmen to do their best to protect the bilateral trade relations.

The newly adopted trade-centered regional policies of Turkey would be damaged by any kind of geographical conflict. For this reason, the American invasion of Iraq in 2003 was worrisome from the Turkish perspective. Iraq had become a major destination of Turkish goods after the 2001 crisis which helped it to restore economic order, and an invasion would distort everything (Oran, 2013b, p. 403). Moreover, American occupation corresponded to the change of the political authority in Turkey which was willing to engage in its region through even more economic integration. Hence, Turkey did everything in its power to prevent an invasion which would shatter the regional balance, bring into existence a Kurdish state in Northern Iraq, and damage Turkey's economic relations (Oran, 2013b, p. 406). When Turkey's attempts were unsuccessful, it wanted to make sure that it was not going to be

pushed out of the Iraqi market during the reconstruction process. The Parliament did not approve the memorandum to send Turkish soldiers to fight in Iraq and open Turkish airspace and ports for coalition forces. But since Turkey was the most developed country with the largest economy among the neighbors of Iraq, it was the most reliable destination for the reconstruction of the country from the American perspective (Oran, 2013b, p. 408). Hence, the U.S. gave the green light to Turkey by including it in the process of reconstruction. As a result, Turkey's trade with Iraq improved.

FIGURE 2.1. TURKEY'S EXPORTS TO IRAQ (MILLION USD)*



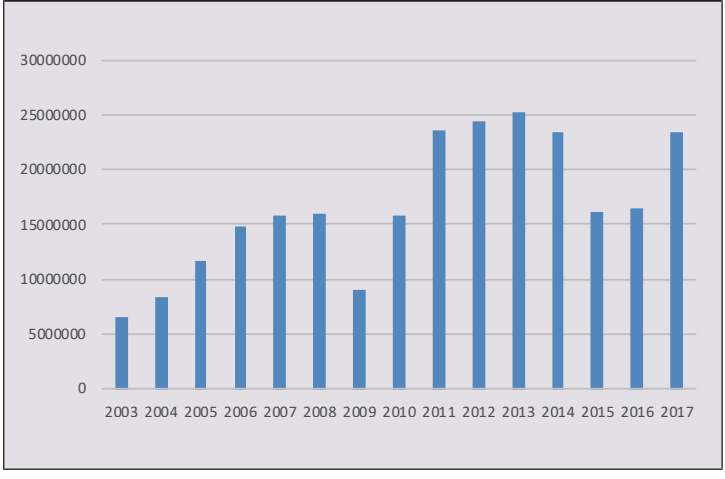
Source: Ministry of Trade, 2018[3]
* The figure of 2018 includes the volume between January-October 2018.

Turkey started establishing economic relations with not only Iraq but also other Middle Eastern and North African countries. This gave Turkey an opportunity to diversify its customer base which was predominantly composed of buyers from the West. After

[3] https://www.ticaret.gov.tr/yurtdisi-teskilati/orta-dogu-ve-korfez/irak/ulke-profili/turkiye-ile-

broadening its clientele by opening up to the East, Turkey wanted to profit from these transactions. In order to boost the economic activities with the countries in the region, it undertook a series of measures. Turkey initiated the process of eliminating the visa requirements, a step that could not be realized with European countries, and established preferential trade regimes along with free-trade zones.[4] These measures were to facilitate the flow of goods and eliminate trade barriers such as disruptive bureaucratic procedures. These markets are the main reason behind Turkey's smooth transition out of the 2009 recession thanks to which Turkey was not affected greatly by the crisis while the Western economies were harshly stricken (Fidan, 2013, p. 2). Hence, transactions with Middle Eastern countries are important for Turkey's economic revenues.

FIGURE 2.2. TURKEY'S EXPORTS TO MENA (THOUSAND USD)

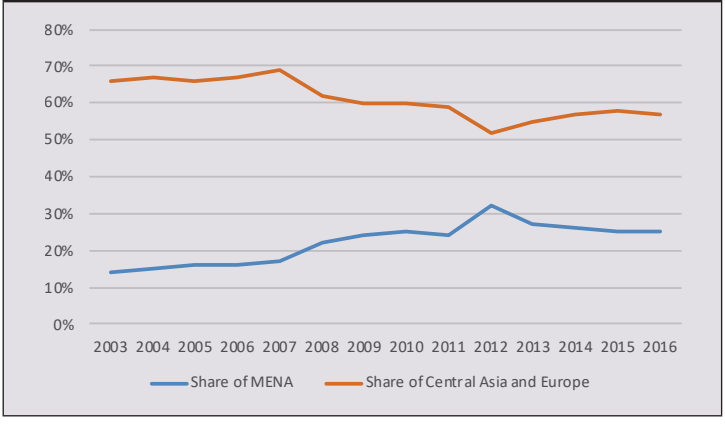


Source: World Bank, 2018

[4] Turkey was not benefiting enough from that bilateral relation because of the Customs Union which put Turkey in a disadvantaged position vis-à-vis the countries of the European Union. Although Turkey had signed free trade agreements with countries both in Europe and elsewhere in Latin America, Africa and Middle East, the ones with the European countries were cancelled due to their accession to the European Union. (Ministry of Economy, 2017)

Economic activities were not only promoted at the state level, but private enterprises too were encouraged to do business elsewhere - in the Middle East, Africa, and Asia. Official visits of the president, prime minister, trade minister were and are still being accompanied by businessmen from different sectors (Kalın, 2012, p. 18). This initiated the investment of Turkish businesspeople through winning the trust of foreign country officials and by opening up ways for them to do business abroad. Such attempts increased Turkey's volume of trade with these regions, contributing to Turkey's GDP and development, and, in return, making the economic connection with them even more indispensable.

FIGURE 2.3. SHARE OF MENA, AND EUROPE AND CENTRAL ASIA IN TURKEY'S EXPORTS



Source: World Bank, 2018[5]

Turkey's agenda, which prioritizes economic integration, is seen to be a win-win that empowers both parties involved. When Europe's role in Turkey's export market weakened, that of the Middle East gained strength. In 2000, Turkey's export to Middle Eastern countries was 2.5 billion dollars (Silkroad Development Agency,

[5] https://wits.worldbank.org/CountryProfile/en/Country/TUR/Year/2015/TradeFlow/EXPIMP

2011, p. 96). After eight years, in 2008, it grew tenfold and reached 25.4 billion dollars, and, in 2016, it became 31.3 billion dollars. When the overall share of the region is taken into account, there is no doubt that it has increased in terms of exports according to country groups.

Although MENA has always come second in Turkey's export list, its share increased considerably during the period when Turkey closely cooperated with the region. While a relatively peaceful and economically prosperous atmosphere for Turkey was observed on the regional level, on the internal level, the struggle which carried on from the 1980s was in a thawing period thanks to the peace process. Initiated in 2009, the peace process brought internal political stability to Turkey. The combination of internal and external tranquility created an environment which contributed a considerable amount to Turkey's economic developments.

Turkey's major concerns changed due to the shifting regional dynamics which obliged it to make security its major concern with regards to its relations with the countries in the region (Mercan, 2016, p. 101). Safety comes first and a country cannot have a functioning economy if it does not have a security apparatus that protects the market and the investors. Hence, Turkey's reaction to build a national defense industry is affected deeply by the regional arms race and Turkey's relations with different actors in the region – topics which will be covered in the remaining part of the chapter.

REGIONAL ARMS RACE

The question why Turkey is determined to build a deterrent and defensive power has several answers among which is the arms race in the region. Arms building in the region has a long history that dates back to the 1973 oil crisis, after which oil-rich Arab countries started spending their petrodollars on military buildup. Later, in

1979, when the Islamic Revolution changed the regime in Iran, a country strongly associated with Shiism, began to aspire to become a regional power. Against it, Saudi Arabia shined as the guardian of Holy lands but representing Sunni Islam. Although religious in essence, the rivalry between Iran and Saudi Arabia has turned into a geopolitical competition (Ighani, 2016, p. 1). Hence, the sectarian conflict became the issue around which the regional arms race evolved. Later on, another parameter added to the strengthening of the regional arms race: the Arab uprisings. I will be covering both of these factors in this section.

SECTARIAN CONFLICT

Apart from Iran and Saudi Arabia, Iraq, and Egypt were also centers of power in the region. Egypt had relatively prosperous times and was more influential especially during the 1960s and ´70s. After being pushed to the sidelines as a result of its deal with Israel in 1978, Egypt turned further into its internal affairs with the Arab uprisings and the regime changes and is now out of the game. Iraq, on the other hand, was a regional power during the rule of Saddam. With the American invasion in 2003, Iraq too was crossed out of the equation. Another local actor, Syria, is also confined to its domestic problems after the uprisings started which then evolved into a civil war in 2011. This is not to say that these countries do not partake in the regional arms race, but that Iran and Saudi Arabia are the spearheads of the race which revolves around sectarianism.

The elimination of a Sunni authority in Iraq after its occupation gave more maneuvering room to Iran due to a power vacuum which allows it can exert its influence over the Shia population of Iraq. On the other hand, the Alawi-dominated Assad regime that gained strength with the civil war, which closed the gap between

Iran and Hezbollah in Lebanon, formed a de facto Shia crescent. Such events fortified the Shia camp by bringing these countries closer. The ongoing struggle on Syrian territory gives strength to the sectarian conflict. Meanwhile, Saudi Arabia has the economically powerful sheikhdoms of the Gulf and its military arsenal; Saudi Arabia invests more of its GDP in its armed forces than any other country in the world.[6] Whenever there is a regional problem, Iran and Saudi Arabia always take opposite sides (Iran with the Shiites and Saudi Arabia with the Sunnis) as can be seen in the cases of Syria, Bahrain, and Yemen. Their support for proxy groups and their investment in these groups' eventual success necessitate even more arms.

Due to the international sanctions against Iran, compared to other countries in the region, its record of military expenditures is relatively low. But Russia steps in – as in in the case of the Assad regime needing help – and fills the void when Iran cannot. During the period from 2008 to 2012, Russia supplied 71% of Syria's weaponry whereas Iran provided 14% (Fleurant & Perlo-Freeman, 2013). According to SIPRI (SIPRI, 2018), in 2017, Iran's military spending was $14.5 billion whereas Saudi Arabia's was $69.4 billion. This enables Saudi Arabia to send arms to Syria, whereas Iran mostly sends its Revolutionary Guards Corps and less weaponry compared to the Saudis (Ighani, 2016, p. 4). This continuing rivalry increases the threat perceived by other countries in the geography, especially in the Gulf, and pulls them into the regional arms race (Fleurant & Perlo-Freeman, 2013, p. 8); "[despite low oil prices,] countries in the region continued to order more weapons in 2016, perceiving them as crucial tools for dealing with conflicts and regional tensions" ("Increase in Arms

[6] According to Trends in World Military Expenditure 2015 by SIPRI, as of 2015, Saudi Arabia spends 13.7% of its GDP on its military.

Transfers Driven by Demand in the Middle East and Asia, Says SIPRI," 2017).

ARAB UPRISINGS

The uprisings that started as a democratic revolutionary movement in the region soon turned into a power struggle in each state where the rulers saw the vulnerability of their regimes and started empowering themselves with security policies. This resulted in further investments in military power which had already been higher than in other regions.

TABLE 2.1. MILITARY EXPENDITURE BY COUNTRY IN THE MIDDLE EAST (MILLION USD)

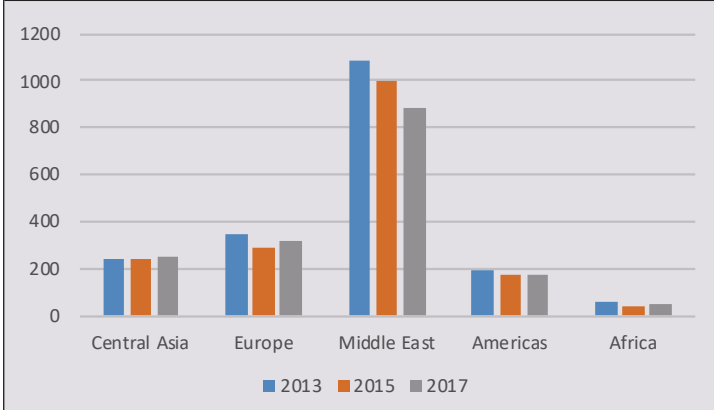
Country	2011	2017
Bahrain	1033	1396
Egypt	4464	2773
Iraq	4278	7416
Israel	16318	16489
Jordan	1594	1939
Kuwait	5393	6831
Lebanon	1626	2441
Oman	6667	8686
Saudi Arabia	48530	69413
Turkey	17304	18189
UAE	19181	-

Source: SIPRI 2018[7]

[7] Data for Syria, Qatar, and North Yemen is missing. And the 2017 expenditure of the UAE is unavailable.

When we look at the situation on a regional scale, the arms race in the Middle East is very telling both with its volume before and after the uprisings. SIPRI reports show that the Middle East comes second in the transfer of the global share of conventional arms with 17% after Asia and Oceania in the period of 2008-2012 (Fleurant & Perlo-Freeman, 2013). In 2011-2015, the Middle East was again the runner-up this time with 25% of worldwide arms transfer which shows the increase after the uprisings (Fleurant & Perlo-Freeman, 2016). Furthermore, the militarization of the Middle East is noticeable not because the rest of the world stopped investing in arms of defense, but relative to the population, military expenditures in the region are very high (Stork, 2016).

FIGURE 2.4. MILITARY EXPENDITURE PER CAPITA BY REGION (MILLION USD)



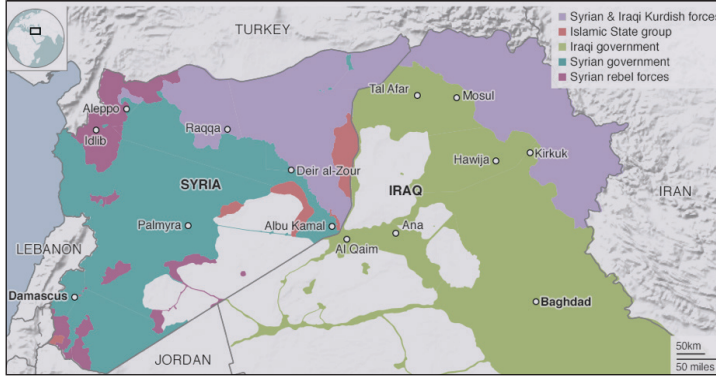
Source: SIPRI 2018

While countries started spending more on their military, some countries like Syria and Yemen drifted into civil wars. When the U.S. withdrew from Iraq, it left a weak state that was divided into three (Tziarras, 2015). The administrative problems encountered by

Iraq after its occupation, which continues to this day and has torn apart the country, is also seen in Syria where the central government is not the only authority. And when Syrian uprisings evolved into a civil war because the government did not want to step back, another power vacuum came into existence. Now, Syrian territory too is divided where Assad forces, Syrian Democratic Forces, and Free Syrian Army exist. Yemen is no different in terms of internal conflict. Since the start of the civil war in 2015, the country is divided between Houthi and pro-Saleh forces versus the Hadi government - creating another turmoil in the region ("Yemen Crisis," 2017)[8].

This disordered environment which created a power vacuum in the territory of Iraq and Syria brought into being a terrorist group called DAESH in 2014 which is settled in Iraqi - Syrian lands. In September 2018, the area controlled by DAESH was around 200 square km – it dropped from 91,531 square km in January 2015 ("Islamic State and the Crisis in Iraq and Syria in Maps," 2017 & Callimachi, 2018).

MAP 2.1. INFLUENCE ZONES OF INSURGENTS AND STATES ACROSS THE SOUTHERN BORDER OF TURKEY



Source: IHS Conflict Monitor (23 March, 2018)

[8] Although regionally presenting a security dilemma, Yemen is a case that is far from posing a direct threat to Turkey. As this chapter is about how Turkey reacted with its defense industry to the regional developments, my main focus will be on Iraq and Syria.

An anti-DAESH coalition force is fighting the group with land and aerial operations. Although DAESH has lost control of some of the major cities it used to command, it has a strong international appeal due to its use of modern-day technology. It manages to attract people not only from the region but also especially from Europe. Since it terrorized major European countries including Turkey, many states are involved in the coalition to fight it. DAESH presents a challenge not only for the countries in the region but also for countries in other parts of the world like the U.S. since it poses a threat to the U.S. interests in the region.

IN DEPTH ANALYSIS OF REGIONAL RIVALRIES

Yıldırım et al. (2005) argues that military expenditures depend on military spending of neighbors as well as on internal/external conflicts. While the major powers in the region are involved in an arms race, Turkey cannot be indifferent to it. Just like other countries, it is affected and threatened by the increased volume of arms that add to regional tensions which concern Turkey intimately as the war in Syria escalates. According to the SIPRI reports, arms transfer to Middle Eastern countries increased by 61% in 2006-2010 and 2011-2015. In the same period, the arms import of Iraq increased by 83%, whereas Egyptian arms imports grew by 37%, imports by UAE by 35%, and those of Saudi Arabia by 275% (SIPRI, 2015). For some countries in the region due to lack of transparency, the figures are not announced, but the overall picture shows an increase in the arms investment in the region.

One might wonder why Turkey did not adopt a security-loaded perspective towards the Middle East earlier as the arms race has been going on since the ´70s. Before Turkey was involved in this

decades-long arms race, it was engaged closely with the West and saw no point in turning its face to the East. In the 2000s, it had the conjunctural advantage of leading an economic integration with the region since at the time it did not perceive a significant threat directly targeting its security. Moreover, the extent of risk coming from the region before the accumulation of significant problems namely an unstable Iraq, the breakdown of relations with Israel, the Arab uprisings, the emergence of DAESH, and the Syrian civil war along with the rise of the PKK that damaged the trade-centered relations with the region was never this broad. Prior to the aforementioned developments, Turkey had restored ties with the Middle East after decades of distance. The degree of Turkey's previous connections with the region and geographical proximity to conflict-ridden war zones made it later inevitable for Turkey to put security high on the agenda. Before the start of the civil war, Turkey was discussing clearing landmines on the Syrian border - now with the threats emanating from the war, a wall along the border is under construction.

As a result of the conflicts in the region which started profoundly jeopardizing Turkey's security and the conflict of interest Turkey experienced with its allies, the development of a national defense industry became even more urgent. Ever since the U.S. invasion of Iraq, things have not settled down in the Middle East. The invasion of Iraq is a critical turning point because the instability of the regime in Iraq puts regional security at risk. First and foremost, it divided Iraq in three with the Kurdish regional government in the north, which Turkey viewed with suspicion because of its possible effect on the Kurdish independence movement inside Turkey. Secondly, the sectarian politics of the new formation was to create hostility which would shatter the security of both Iraq and the surrounding countries. Starting with the crisis

in Iraq, several other regional developments made Turkey question the security policies it has been pursuing which were highly dependent on foreign arms of defense. Although the 1974 crisis hit Turkey hard and pushed it to go national, in 2003, only a quarter of the necessary pieces of equipment for the Turkish Armed Forces could be met domestically. So it took another major blow on its security before Turkey realized it was high time it took its defense into its own hands.

The conjunctural change brought forth by the new threats directly targeting Turkey's security forced it to change its policies. But the process of nationalization did not happen overnight. Turkey proceeded step by step to develop its defense of arms, and with every crisis it met in the region, it has undertaken a solution to solve the problem. This increased the level of indigenousness in the defense industry gradually and made it reach 60% in 2016 from 25% in 2003 (SSM PR 2016, p. 4).

In 2011, Turkey thought the Arab uprisings to be in its favor since in the beginning they signaled democratization; however, eventually, they added to its external threats. As the process continued, it created regimes in the Middle East that Turkey did not anticipate and bred a quasi-state formation that terrorizes a wider geography than its present location and specifically the countries in the region including Turkey. Firstly, the wave of democratization was supported, but when radical movements came to the forefront by exploiting the power vacuum, Turkey became concerned with security and stability (Börzel, Dandashly, & Risse, 2015, p. 137). Furthermore, having supported the revolutionary movements previously with enthusiasm did not help Turkey when most of the countries sided with the old regimes. In the beginning, Morsi and the Muslim Brotherhood were supported, but the military regime that toppled Morsi did not receive the same

support from Turkey. Similarly, in the Syrian case, Turkish foreign policymakers assumed that Assad would fall and Syria would go on with the Muslim Brothers, so invested in the opposition (Yakış, 2014).

The fact that the governments used the arms in the arsenal on their subjects was another unexpected development that created worldwide repercussions. It is vital in the sense that as state security forces versus civilian protestors turned the uprisings into a civil war, this greatly affected Turkey's security since the ongoing civil war creates chaos on its borders, causes the death of Turkish soldiers, empowers the sectarianism which is the bleeding wound of the region, and strengthens DAESH which poses a threat both for the area and for Turkey. As a result, Turkey became the unlucky neighbor of a country which is most negatively affected by the uprisings.

When the civil war broke out in Syria, Turkey suggested to the international community the importance of designating a buffer zone. The situation was not taken seriously and in the end, when the war got out of control, millions of displaced Syrians had to flee their homes to survive. Moreover, again Turkey was struck the hardest economically since it provides from its own national resources for millions of Syrians who arrived in the country. What makes it even more contradictory and problematic for a country is that the refugee card can be used as a way into other countries (Sude, 2016). The civil war in Syria does that for Turkey as refugee identity might be used as a mask by DAESH fighters to cross into Turkey.

DETERIORATING RELATIONS WITH ISRAEL

Historically speaking Turkey was the first Muslim country that recognized Israel in 1949, a year after it declared its independence. The two countries forged good relations in the beginning, and the Israeli prime minister even made a secret vis-

it to Turkey in 1958 when the two sides reached military and diplomatic agreements. (Özcan, 2008, p. 110) Notwithstanding, Turkish-Israeli relations have had their ups and downs throughout the years. Overall, in the years of the Cold War, the threat perception of the two countries differed which prevented them from being involved in a conflict. Israel was worried about Arabs, whereas Turkey felt threatened by the Soviet Union. Furthermore, Israel always received U.S. help and support, and Turkey was also the beneficiary of U.S. aid in those years. Moreover, in a geography full of dictatorial regimes, Israel and Turkey were the only democratic countries. Therefore, they cooperated as members of the same camp.

In the ´90s, we saw a rapprochement between the two countries. Military training, joint military operations, and arms sales between the two were ordinary scenes during those years. With the increasing attacks of the PKK in the 1990s, Turkey was in need of security which could be provided by Israel only because European countries did not sell arms to Turkey claiming that there were violations of human rights in the country. However, Israel preferred not to comment on it and focused on its share in the deal. With the intifadas in the 2000s, the tensions were high, and the distance between the two countries increased. But the ongoing years witnessed ameliorating relations, with Turkey being a trusted partner of both sides in the Israeli-Palestinian conflict. Thus, the economic and military alliances improved. In 2000, Israel was given the project to modernize American-made M-60 tanks which cost 687.5 million USD. (*Milliyet*, 2010) In 2010, during the delivery of the last modernized tank, former Minister of Defense Vecdi Gonul stated that from the Turkish side Aselsan, MKE, and the 1st and 2nd Base Maintenance Commands were also involved in the modernization process which enabled technology transfer through cooperation

with Israel that ultimately improved Turkey's defense industry capabilities (*Milliyet*, 2010).

Other than modernization projects, Turkey until recently had been Israel's primary customer of Herons, unmanned aerial vehicles. Herons are critical devices in terms of collecting intelligence for national security, but, for long, Turkey had looked to outside sources and depended on Israel in particular for its purchases. However, the relations between Israel and Turkey got worse due to several incidents which pushed Turkey to seek alternatives. The increased criticisms of Israeli attacks in Gaza of then Turkish Prime Minister Erdogan, the Davos crisis in January 2009, and the Mavi Marmara incident when Israeli soldiers killed 9 Turkish human rights activists was the last straw of the sequence of events that broke down the relations between the two countries. Earlier in 2005, when the Herons produced for Turkey could not pass the tests, Turkey had to rent another set of Herons from Israel which were to be used by Israeli pilots alone ("Milli İHA'ya giden yol," 2016). In 2009, Aerostar tactical UAVs were used until the delivery of Herons had to be returned because the volume of their noise was tipping off the targets and they were irritating and inconvenient for Turkey's purposes ("Israeli Manufacturers Turkish UAV Contract," 2011). When the Mavi Marmara crisis erupted, Israeli pilots, the only capable personnel to command the UAVs, left Turkey and the TAF could not use the Herons ("Israeli Manufacturers Turkish UAV Contract," 2011; "Milli İHA'ya giden yol," 2016). Moreover, three military exercises which were to be conducted with Israel were cancelled after the crisis and all the military agreements were suspended including closing Turkish airspace to the Israeli military (MFA, n.d.). In the following years, the relations got back on track, and Israel delivered Herons to Turkey. Yet, there were other problems with them such as an incapacity to reach great heights, unsatisfying duration of flight,

and even the absence of chips that are required to detect terrorists ("Milli İHA'ya giden yol," 2016). The absence of some critical subsystems was also approved at the time by Israeli defense officials as they said Israel would not permit its companies to give export license to Turkey for intelligence systems. Even though Israel was trying to improve relations with Ankara after the incident, Israeli authorities stated:

> The ministry was "responsible for every product that receives an export license" and that it could not currently permit the delivery of the intelligence-gathering systems to Turkey... [and such] decisions are made on a professional basis and in line with security and diplomatic considerations (Katz, 2011).

So, the Heron issue turned into another crisis as they could not be used effectively by Turkey. In this manner, the risks for national security of over-dependency came to the surface once again.

TURKEY'S ONGOING FIGHT AGAINST THE DAESH-PKK-PYD TRIANGLE

One result of the chaos at the border is related to the developments regarding the Kurds in Northern Syria which deteriorates the situation for Turkey. Kurds in Syria did not have legal status, but they started demanding recognition with the beginning of the civil war ("Syria Rejects Russian Proposal for Kurdish Federation," 2016). Within the hectic environment of the war, the PYD seized control of Northern Syria across the Turkish border (Yeşiltaş & Duran, 2018, p. 17) which is also close to the Kurdish Regional Government (KRG) of Iraq, and declared cantons. Turkey responded to this on the grounds that such an entity would whet the PKK's appetite which Turkey has been trying to extinguish for decades. Moreover, DAESH changed the balance of power in Syria by contributing to the advancement of Assad's forces and also to those

of the Kurdish movement in the region; the Kurdish movement receives support and high-tech weaponry from the West since they fight against the DAESH on the ground (Tziarras, 2015).

As expected, the cross-border changes had repercussions on Turkey's Kurdish issue. A peace process that had been going on between the Turkish government and the PKK was expected to put an end to the struggle within Turkey. Kurdish MPs were much more willing to integrate into Turkish politics through their activities in the parliament. And the PKK had for several years laid down arms. But when the parameters changed outside, shaping regional politics in a friendly manner to the Kurds who are in favor of political independence, they realized they had the edge over Turkey in the current scenario. The peace process did not weaken the PKK but strengthened it, and the changing regional balance showed that the PKK moves along the present opportunities (Yalçın, 2018, pp. 39-40). In the new context, they were likely to be more significant actors in regional politics. When the siege in Kobani resulted in favor of Kurds at the expense of DAESH, it strengthened the Kurds' control and power along the Turkish-Syrian border as well as boosting their confidence (Tziarras, 2015). In July 2015, peace was brought to an end, and the arms struggle restarted. Thus, the repercussions of the Syrian civil war on Turkey's long-lasting Kurdish issue were undesirable. The civil war played a part in the termination of the peace process with the Kurdish movement and instigated the start of military struggle all over again, marking it in this way a significant breakpoint for Turkey.

Another repercussion of the chaos stemming from the Syrian civil war was the formation of DAESH which threatens Turkey's security from both across the border and inside Turkey. DAESH is capable of spreading its ideas internationally through the use of the benefits of technology. By doing so, it has not only recruited people from Iraq, where it initially emerged, but foreign fighters from

Turkey and European countries have joined it as well. As Gambhir mentions (2016, p. 31) "ISIS infiltrates cities with terrorist attacks and recruitment networks in Iraq, Syria and regionally, setting conditions for future campaigns." Hence, it would not be an overstatement to suggest that the attacks carried out by DAESH in Turkey are facilitated by the existence of recruits from Turkey inside the organization. Hence, DAESH does not limit itself to a security threat targeting the southern borders of Turkey, but manages to become an internal security problem terrorizing cities and civilians in Turkey and creating a de facto security threat for Turkey more than for most of the other countries in the anti-DAESH coalition.

The emergence of DAESH and the rise of the PYD alongside the PKK is not a subjective threat perception by Turkey. The PYD receives support from the West and specifically from the U.S. which sees the PYD as a viable partner that can fight on the ground against DAESH (Özçelik, 2018, p. 118; Zanotti & Clayton, 2017, p. 2; Lemmon, 2017). Turkey's opposition to the PYD does not stem from its counterbalance against DAESH but its connection with the PKK. The PYD controls the northern part of Syria which is close to where the PKK is located inside Turkey. The U.S. arms the PYD with weapons that do not even exist in the inventory of the TAF. After providing the PYD with 200 IAG Guardian Armored Personnel Carriers, lately, on February 2017, the YPG was seen with Javelins, a shoulder-fired anti-armor system that rises 150 meters higher and hits the target where it is most vulnerable ("ABD'den YPG'ye FGM-148 Javelin anti tank füzesi," 2017). It is a high-tech weapon that is also known as an anti-tank weapon system which can fire three times in less than 90 seconds, and its level of precision is more than 90% in the first strike ("For Immediate Release," 2007). This is alarming for Turkey because the same weapons were found on two PKK terrorists captured

dead in 2012 in Şırnak; the U.S. authorities said that they might have fallen from a U.S. helicopter that was doing a check flight and found by the PKK ("ABD'den YPG'ye FGM-148 Javelin anti tank füzesi," 2017).

The termination of the peace process came with a great cost for Turkey. Having restarted in the middle of the summer of 2015, the arms struggle between Turkish security forces and the PKK intensified during the winter. From July 2015 to January 2019, 1,140 state security forces and 464 civilians were killed during clashes. Moreover, the fight was not restricted to the rural areas. Thirty seven percent of people were killed in urban areas while 63% in rural areas, putting the lives of ordinary citizens in danger as well. There were 464 civilian casualties since the beginning of 2015 to February 2019 ("Turkey's PKK Conflict: The Rising Toll," 2019). As well as showing the severity of the situation, it also forced Turkey into taking security measures.

It can be observed from the surrounding political environment that it became inevitable for Turkey to respond to the threats with its military. As a result of the external changes, Turkey currently neighbors many states which are experiencing internal fights and shelter terrorist groups; this further exacerbates Turkey's PKK problem. Meanwhile, Turkey is vulnerable to the shifts outside its borders which do not stay at bay but find a way into Turkey. As Volten (2016, p. 92) suggested, ¨Military power is a crucial tool in directly providing territorial integrity and security for Turkey's population.¨

All of these facts explain the increase in defense spending but what stands out in this increasing trend is that Turkey is channeling that spending into the development of a self-reliant defense industry. Why does Turkey not rely on NATO and the U.S. and the arms of defense that it can procure from the professional producers, but opts for developing its national defense industry? Apart from the

obvious answer that it is the necessity of being an independent nation-state, it is incumbent for Turkey because of its colliding interests with Europe and the U.S. The historical differences of interests were discussed previously in the book and showed the colliding interests between Turkey and its allies - the recent events do not prove otherwise. While the U.S. was supporting the anti-Assad forces at the start [namely the Free Syrian Army-(FSA)] just like Turkey, the U.S. later shifted its support to the YPG which Turkey closely associated with the separatist terrorist organization, the PKK.

Unlike Turkey which sees the PKK's agenda as terrorist, some European countries like Greece provided financial and logistical support to the PKK back in the 1990s (Yargıtay Kararları Dergisi, 2000, p. 146). Furthermore, as Martin underlines (2000, p. 87), Iraq and Syria also supported the organization for political purposes which worsened the situation from the perspective of Turkey when the PKK started taking advantage of the power vacuum in the Middle East. The internal and external threats were connected to Turkey. When the threat to its borders from outside actors intensified, the threats from inside found an environment to flourish. On the other hand, the heightened warfare in the region causes displacement of civilians which puts a burden on Turkey as there is no limit to the refugees Turkey accepts contrary to other European states which allow only a limited number into their countries. In the case of Turkey, DAESH fighters had the chance to sneak in as refugees who have committed terrorist acts on Turkish soil on several occasions.

NATO PATRIOTS

Developing its defense strategy and material is important for Turkey because its Western allies and NATO may fall short of protecting Turkey. The placement of NATO Patriot Missiles in Tur-

key's southeastern region can be such an example. The missiles were stationed as a protection against the attacks coming from Syria on February 2013 upon Turkey's request after the killing of Turkish citizens in a Syrian attack that took place in October 2012 (Goksedef, 2015). The Netherlands withdrew its missiles in January 2015, and Germany and the U.S. stated they would withdraw their batteries in spite of Russian violations of Turkish airspace which made Turkey question the dedication of NATO in defending its member when under attack from the outside (Emmott, Siebold, & Stewart, 2015). When the incursions happened, only Spanish batteries were in place, but they did not want to act alone against Russia.

After the Patriots were withdrawn, Turkey and the U.S. reached an agreement concerning the fight against DAESH. A point of contention arose with regards to the identity of the intended targets of the jets flying from Incirlik. Turkish and the U.S. authorities differed in that respect. Former Councilor of Ministry of Foreign Affairs Feridun Sinirlioğlu mentioned the regime, the PYD, and DAESH as targets whereas former Spokesman of the Department of State John Kirby said that the campaign was against DAESH alone (Goksedef, 2015). Although Turkey is coordinating with coalition powers in the fight against DAESH, it cannot talk its allies into a battle against the PKK, the PYD, and the Assad regime. This and the withdrawal of Patriots left Turkey on its own to defend itself against the encroachments coming from Syria (Atesoglu Guney, 2016, p. 66). It prompted Turkey to develop its national missile defense system according to former Defense Minister Ismet Yilmaz (Goksedef, 2015).

Various defense systems are being developed since 2005 by Roketsan and Aselsan which are actively used in operations by the TAF in current conflicts in the region. New systems and capabilities brought about by its new equipment enable Turkey to be actively involved in regional issues when its security is at stake. In 2003,

Turkey could not pass the proposal from its Parliament to let U.S. troops use Turkish bases. After a little longer than a decade, when Turkey became much more confident due to its self-reliance in the defense industry, Turkey entered into Syrian territory in 2015 in order to secure the Tomb of Suleyman Shah which was besieged and threatened to be destroyed by DAESH (BBC, "Why is Suleyman Shah's Tomb So Important?" 2015). As the site was accepted as Turkish territory, protecting it from any outside attack was seen to be Turkey's duty since the Syrian government had no control over its northern territory. It resulted in Turkish troops entering Syria, disassembling the historic tomb, and moving it to a secure site.

OPERATIONS AGAINST DAESH

After the small operation of Suleiman Shah, Turkey entered the Syrian borders with the much more significant military action known as Operation Euphrates Shield in August 2016. Turkey's intention with the operation was to secure the Azez-Jerablus line. (Acun, Bünyamin, & Salaymeh, 2016). The Special Forces of the TAF and the Turkish Air Forces supported the FSA in land and aerial operations with troops, tanks, and warplanes. Following the successful operation, the 100 km long line of Turkish-Syrian border has been secured, and the 2,000 square km area inside Syria is controlled, banishing DAESH from the territory neighboring Turkey and establishing a safe zone securing its borders (Osborne, 2017; Kasapoglu, 2017). It also prevented the PYD cantons from coming together, which is a great concern to Turkey for its possible effect on the strengthening of the PKK (Sönmez, 2017). With this operation, Turkey and opposition forces took control of Al-Bab, Jarablus, and Dabiq from DAESH in February 2017. During the operation, Turkey was not backed up by any other country. Regarding the issue, U.S. Colonel John Dorrian said on November 17 that Turkey's ac-

tions in Al-Bab were undertaken independently and the anti-DAESH coalition did not support the operation (Demirtaş, 2016).

The situation in Iraq presents another regional security concern for Turkey. After DAESH took control of Mosul in 2014, one of Iraq's major cities, and started operating from there, it further disjoined the already divided Iraq against which the central government could do nothing. On June 11, 2014, the Turkish Embassy was invaded by DAESH militants and the personnel was taken hostages for 101 days. When an operation was discussed to take Mosul back, Turkey insisted on being both on the table and on the ground even though the Iraqi government did not want Turkey to be involved ("The Battle for Mosul in Maps," 2017). The insistence of Turkey to be present in steps taken in Mosul is a result of its confidence in its ability to defend itself and its determination to be a country which has a say in the reshaping of the geography that affects its present and future. The conjunctural changes and its murky relations with long-term allies pushed Turkey to become self-sufficient and independent in foreign policy which have resulted in the aggressive moves taken by the country.

All in all, Turkey was deeply affected by the conjunctural changes in its region. The threat that started with the invasion of Iraq grew more serious with the PKK taking up arms. The democratic peace process to settle the Kurdish question put a hold on the use of weapons which was reversed with the Arab uprisings and the void created in Syria by the civil war. It, directly and indirectly, affected Turkey's national security. It had direct consequences since bombs were hitting Turkish cities along the border and endangering the lives of Turkish citizens. It indirectly left Turkey vulnerable firstly by opening up a space for the PKK that is connected to the PYD in the northern part of Syria and encouraging the former to take advantage of the chaos. Secondly, by facilitating the forma-

tion of DAESH that carried out attacks in Turkey and recruits people to fight.

While all of the anti-DAESH coalition countries are worried about DAESH alone, Turkey also feels insecure by the parameters formed by the PYD and PKK. Moreover, the successive crises of Davos, Mavi Marmara, and Heron with Israel cost Turkey a strategic partner for its military modernization and its defensive arms purchases. Turkey not only diverges with its long-term strategic partner, the U.S., in terms of whom to side with, in the Syrian civil war but also with its northern neighbor Russia and Iran who support the Assad regime. Israel no longer provides arms to Turkey unconditionally unlike in the 1990s. Even when it does so, there are problems with the procured arms which cannot be tackled by Turkey alone.

To conclude, this chapter discussed the conflicting interests of Turkey with its partners, and the heated and uncertain environment both inside and outside Turkey which pushed it to invest in its national defense industry. I first presented a historical outlook of Turkey's security perspective, then explained regional changes that have accelerated the arms race. I reviewed Turkey's relations with the countries in the Middle East and also in the West. Overall, I showed that the regional conjuncture and lack of trust in allies are essential components of the action-reaction model which convinced Turkey to develop a national defense industry. In the next chapter, I will deal with the domestic structure which is another motivation for a country to sustain its industrial self-reliance.

CHAPTER III APPLICATION OF THE DOMESTIC STRUCTURE MODEL

There are several ways by which the domestic structure figures in the development of a national defense industry since it can be used by politicians as a means of local politics. On the one hand, politicians promise new investments and jobs through pledging investment in defense which increases their appeal to the electorate. On the other hand, politicians know that acquiring their arms of defense from abroad enables them to use this as a tool of foreign policy against other countries either to deter aggressors or to attack in the name of the country's sovereignty. It means the boosting of national glory for the country and for its people, which can be used by policymakers to justify their investments in the country's defense. Both the country's glory and prestige abroad, and employment opportunities that are attained as a result of national defense buildup play a role in electoral politics.

Another way through which domestic structure affects national defense is explained by the Military Keynesian approach. According to this approach, the state increases military spending as it stimulates the economy. Apart from the promises made by political parties, the defense industry is inevitably a pioneer of creating jobs, especially for the qualified workforce. In addition to Military Keynesianism, the military-industrial complex is another critical variable that encourages investments in the country's defense. Industry owners in that respect are motivated by their material gains rather than sustaining the security of the state. In other words, it has more to do with the economy than with politics and security.

As can be seen, a country's internal motivation to invest in defense has twofold implications on the domestic level. It has sociopolitical consequences that indirectly affect society and economic implications that have direct consequences. Sociopolitical consequences will be mentioned in this chapter whereas the military-industrial complex along with the Military Keynesian approach with both the reasons that motivate the politicians and its reflections on the country's economy will be discussed in the next chapter where the political economy of the defense industry will be dealt with in detail.

MEANING OF THE DEFENSE INDUSTRY FOR POLITICS

The real strength of a country's military is not measured by the buying capacity of a state or the share of the military expenditure in the GDP. A state can procure defense equipment from heavy arms and land vehicles to electronic systems and missiles. But this does not free a country from the rules and regulations that apply to it and limit the areas of usage of those materials. Moreover, even though a state might not see any harm in procuring arms from foreign firms, modernization and maintenance issues force the buyer state to cooperate with the producer (Beckley, 2010, p. 55). This dependence makes any country seem weak and vulnerable before other states and in the eyes of its public. Such an image is unacceptable for politicians and might cost them their office as a result of the incapacity of sustaining security and even the honor of the country. Hence, industrial self-reliance in defense is a significant issue that politicians care about - if not in reality, at least, at a discursive level to an extent that will allow them to convince the public and carry them to office.

In the case of Turkey, as discussed, the concern for the issue depends on both security and prestige. Historically speaking the

idea of the military, war, defense/offense, and the army is highly revered among the Turkish public. In history classes, it is taught that Turkey's ancestors were warriors and conquerors who fought not just to protect themselves but also rushed to help those in need. An "army-nation" is a phrase that is used to describe Turks which means that every single member of the nation is considered to be a potential soldier in case of mobilization; this is a notion that makes people proud. Military service and soldiery were and still are held in high regard. Even today, the fact that Turkey has the second largest army in NATO is considered by the people to point to how big and strong a country Turkey is. Even when it is just in terms of the amount of military personnel, people are proud. Therefore, empowering the country with a growing defense industry that can manufacture its arms and meet the increasing needs of defense internally is something that caters to the nationalistic emotions of the electorate. The motivation to develop a national defense industry provided by regional threats was mentioned in the previous chapter; the electoral aspects will be dealt with next.

Since the first decade of the 2000s, Turkey's initiatives and enterprises in the defense sector have aimed to sustain self-sufficiency and for Turkey to be able to produce the critical technologies for the defense industry on its own. As mentioned in the previous chapter, there is a real threat stemming from the upheavals and terrorism in the region. As the geographical security threats force Turkey to prioritize its defense in general and the development of a national defense industry in particular, the latter became high on the politicians' agenda. This resulted in the increase in self-reliance in defense which is a useful election tool that boosts the country's prestige in the international arena and chalks up points for politicians. What makes investments and developments in the field of defense a critical policy tool and more important than any other

public investment is their multifaceted reflections that affect areas other than defense. First of all, they promise to increase employment which provides jobs for educated and qualified people. Secondly, they decrease a country's dependence on outside sources which makes a positive economic effect on the budget. Moreover, as they reduce the dependence of the nation for its protection, they are a sign of independence and sovereignty.

Last but not least, investments and developments in the field of defense gain the country prestige on international platforms by transforming the country into a deterrent power and putting it on equal footing with other renowned countries. All these benefits of a nationally self-sufficient defense industry motivate politicians to make such investments that bring them distinction when used as a tool in a loaded election campaign. However, pursuing such policies and arriving at successful results also take a determined political will which can be set out by strong government policies which are not disrupted by election results. So as to show the importance of continuing state policies, I will review the electoral politics pursued by Turkey's political parties.

ELECTORAL POLITICS

The domestic structure model is complementary to the action-reaction model, the model which argues that military buildup of nation-states motivates other countries to increase spending on defense which as a result leads to an international arms race. For the domestic structure model, it is of great importance to point out how political parties evaluate the situation they are in and how their perceptions and outlooks affect them during their time in office and in elections. Here, I will be looking at how major political parties in Turkey assess the defense industry and what solutions they come up with concerning national security and defense as part of their

party programs. I will be analyzing election declarations of the AK Party, CHP, MHP, and HDP, and how much coverage they gave to the topic. Since the invasion of Iraq precipitated the series of events that changed the dynamics in the region and helped Turkey shape the policy of nationalization, 2003 is going to be the starting point of my discussion. I will evaluate the motivations of parties before and after Iraq's invasion through their election declarations to see how they changed along with the changes in the region.

The statements and promises made in these documents can be realistic or unrealistic - this does not form part of the current discussion. Whether they are genuine or not, they were mentioned before elections by political parties. Hence, they deserve a thorough analysis. Promises about national defense and nationalization of defense make people feel more secure and think of their country more proudly as it is perceived as much less dependent on outside sources for its protection. It is an assurance of sovereignty which makes the politicians and their party more credible in the eyes of the people; credibility is tantamount for the electorate and affects whom they are going to vote for in the next elections.

RULING PARTY: AK PARTY

While the issue of defense was not specifically referred to in the election declaration of the AK Party in 2002, it was mentioned in part by saying that the extended volume of trade would enhance regional security (AK Party, 2002, p. 59). It was also stated in the declaration that rescuing Turkey from the sectoral dependence in export by diversifying its industrial base was important. Although it did not specifically mention the defense industry, ¨diversifying industrial base¨ might be taken to be alluding to Turkey's security and the necessity of defense policies. However, it also shows that the industrialization in defense was not part of the discussion prior

to the 2002 election. Due to the urgency of issues related to social welfare and economy, defense policies were unambiguously not high on the agenda.

Approaching the election of 2007, the issues that agitated society and reflected on the politicians in Turkey also influenced the policies to be followed by the government. The fact that Iraq was invaded by the U.S. in 2003 and that the new federal system gave Kurds in Northern Iraq an autonomous government was a brand-new problem which was not alarming for Turkey in the days of Saddam Hussein (Mercan, 2016, p. 107). Now that the system had changed, Kurds became the advantageous party in the country, and their self-governing policies could stir up the PKK's aspiration for independence. On the other hand, there was not a stable central government in Iraq that could allow Turkey's operations, unlike in the time of Saddam Hussein. Having an alliance with the Americans, to whom the Kurds in Northern Iraq owe their independence, the Kurds there were closer to the Americans than to the Turks. The alleviation of Turkey's most pressing socioeconomic problems, brought to the surface these problems which gave concern to both politicians and the public. In 2007, the government was more assertive in its claims about the country's defense.

In order to make Turkey a global actor with determining power, the AK Party saw it imperative to combine the country's deterrent power with its soft power (AK Party, 2007, p. 232). Security in the region was maintained by communicating and solving the conflicts between different actors in the case of Palestine, Lebanon, Syria, and Iran, and was facilitated by shuttle diplomacy and mutual trust (AK Party, 2007, p. 235). The AK Party utilized its soft power both in the diplomatic and electoral arenas, and its defensive power in the fields of security and electoral politics. Prior to the 2007 elections, the government took new measures to modernize the Turkish

Armed Forces for the first time. The national corvette ship, tank, UAV, and attack helicopter projects were started which all catered to the protection of security through surveillance, and defensive and offensive policies. Whereas the ability of domestic sectors to meet the demand of the TAF was 25% in 2002, the 2007 election declaration draws attention to its increase to 36% in 2006 (AK Party, 2007, p. 250).

In the 2011 elections, as is reflected openly in their declarations, the parties attributed even more importance to the issue of national defense. The AK Party declared that the R&D employment in fields such as defense, health, and energy would be promoted (AK Party, 2011, p. 75). Whereas the defense requirements of the country were met from foreign resources until recently, the AK Party takes pride in the domestic industry's capacity to meet half of the TAF's needs (AK Party, 2011, p. 76). The AK Party states that the experience it has accumulated in the field of defense will be used in its next term in government to provide added value and increase the quality of the workforce (AK Party, 2011, p. 76). Moreover, this added value and workforce are said to be transferred into high-tech sectors such as transportation, health, and energy as well as into low-tech industries such as agriculture, textile, and tourism which will ensure Turkey's competitive edge in the world (AK Party, 2011, pp. 76-77). By saying that arms of defense produced locally do not only meet the domestic requirements but are also being exported and generating important economic value, the AK Party shows the electorate that its activities in the field of defense benefit the country's own security and its economy. The section on the defense industry, which is three and a half pages long, details what the AK Party has done so far, how this benefits the country economically and security-wise, and what will be accomplished in the forthcoming terms (AK Party, 2011, pp. 84-87).

The vision provided by the ongoing defense projects since the beginning of the 2000s impelled political parties in the 2015 elections to attribute greater importance to the subject. Having been the ruling party and having paid particular attention to the defense industry, the AK Party concentrated on the latter in its 2015 declaration (Mevlütoğlu, 2015). In the document, the rise of the defense industry exports was highlighted, and it was emphasized that Turkey became a part of the international market in the sector (AK Party, 2015, p. 201). The projects that are concluded and ongoing were listed in the document with a specific emphasis on ¨national¨ such as a national tank, national anti-tank, national missile, and national torpedo. Besides, the names given to such projects have national references several of which are Milgem, Hürkuş, Altay, Göktürk, and Türksat.[9] The language that is being used is significant as it influences the way people look at and evaluate the projects. In the declaration, it was also stated that the communication satellite project aimed to make Turkey one of the ten countries that can produce their own satellites (AK Party, 2015, p. 275). The part about defense is concluded by saying that all of these projects would ensure Turkey's security and increase Turkey's deterrent force (AK Party, 2015, p. 276).

2023 VISION

The 2023 Vision of the ruling AK Party government deserves attention because it is being used in every election campaign very effectively. In 2012, the government put forth and released its

[9] Milgem is short for Milli Gemi (National Ship); Hürkuş (Freebird) is named after Vecihi Hürkuş who is veteran pilot served in the World War I and Turkish Independence War and the first Turkish airplane manufacturer; Altay tank is named after Army General Fahrettin Altay who fought in the Turkish Independence War; Göktürk satellite is named after one of the Turkish States in history; and Türksat is short for Turkish Satellite.

2023 vision for Turkey, in which it was stated that so as to become a leading country in the region and the world, Turkey's military and defense must be deterrent and modern (2023 Vision, 2012, p. 70). It became more important than a regular election manifesto which completes its life after being used excessively for a couple of months prior to elections. The part about defense in the document states,

> The defense industry has improved during our government. From a country that could not produce even its infantry rifle, Turkey became a country that will start producing its national tank. We have prepared all of the infrastructures to manufacture a modern national tank which we called Altay. We have begun the test flights of Anka unmanned aerial vehicle that flies at 10 thousand meters altitude and stays in the air for 24 hours. During our government, in the procurement of weapons, equipment and ammunition the share of national production and technology increased almost to 50%. Now, we export weapons. As a part of the 2023 vision, we aim to have a Turkey designing and producing all of its military defense needs (2023 Vision, 2012, p. 70).

This document gained more significance than periodic election campaigns with the future it envisions for Turkey. Its commitments extend its appeal. It underlines the improvements in the defense industry, emphasizes the economic gains and independence brought about by industrial self-reliance. Since 2012, the points declared in the 2023 Vision have been intensely used especially by President Erdogan and prime ministers during their speeches, public gatherings, and meetings rallying people around an aim which has been equated with national glory and honor as it envisions and promises a strong Turkey in terms of economy and security. Overall, the document plays a significant role for the government in its electoral politics.

OPPOSITION PARTIES

CHP

The largest opposition party, the CHP, gave more coverage to the issue of defense in 2002 which is the first election in which the AK Party participated. The party stated that full support will be given to high-tech sectors such as information technology, biotechnology, and the defense industry to make them the driving force of the economy (CHP, 2002, p. 34). In order to promote the export of products of such sectors, the CHP declared that it will provide an environment for the establishment of silicon valleys in Anatolia where infrastructure and human resources are available which was an answer to the chronic problem of unemployment pointed out in the manifesto (CHP, 2002, pp. 24-34). Moreover, the CHP declared its intention to further meet national defense needs by means of national industry, thus showing the electorate that the party is working for national glory and independence.

In 2007, by stressing how badly the country was managed for the last five years, the CHP drew attention to poverty, unemployment, and the country's internal/external debts (CHP, 2007, pp. 24-30). Moreover, the CHP stated that the national unity was under threat and terrorism, one of the primary reasons, would be actively fought once the CHP came to power (CHP, 2007, pp. 1,2,8). The proposed solution was outward national industrialization which will decrease unemployment (CHP, 2007, p. 30).

In the face of increasing threats coming from across its southeastern borders, in 2015, the CHP introduced its standpoint about defense by stating that the border security would be re-established and that the hardware and capabilities of security forces would be ameliorated (CHP, 2015, p. 164). In order to combat terrorism, the CHP suggested making more bilateral agreements with countries

in the region (CHP, 2015, p. 205). However, there were no specific project proposals in its declaration. In terms of the country's defense, cooperation with international institutions like the UN and NATO was brought to the forefront (CHP, 2015, p. 203).

MHP

In its 2002 declaration, the MHP mentions the defense industry by saying that investments will be encouraged and supported in technology-intensive sectors (MHP, 2002, pp. 50-51). Acquisition policy in national defense will depend on R&D which will be used to enhance the country's competence in technology and innovation (MHP, 2002, p. 107). Lastly, the MHP mentions the importance of defense maintenance which it finds vital in terms of the security of the country and counterterrorism (MHP, 2002, p. 122).

Similar to the aim of the AK Party, in 2007, the MHP underlined that the TAF should be raised to the level of the most advanced armies in the world (MHP, 2007, p. 24). In the declaration, it was stated that Turkey's location, and historical and cultural heritage make it responsible for contributing to peace through a strong defense system. Additionally, the MHP pointed out that since it was also in favor of decreasing dependence on the outside, the indigenous defense industry will be encouraged (MHP, 2007, p. 25). Emphasizing the country's sovereignty and national independence through an indigenous defense industry is particularly crucial for the MHP as it puts a premium on nationalism in its discourse. Furthermore, the MHP declared its intention to prioritize defense project investments under the heading "Public Investment Policies" as they are seen as a lever for the economy which will improve society's welfare (MHP, 2007, p. 79).

Different than its previous election messages, in 2011, the MHP stated that in the field of defense and security a nation-

al satellite would be produced; national software systems would be developed and implemented; and Turkey's defense industry would be producing technology instead of transferring it (MHP, 2011, pp. 96-181). With its capacity to develop technology, Turkey would then export what it has produced (MHP, 2011, pp. 96-182).

On top of what it suggested in previous declarations, in 2015, the MHP claimed it would start new modernization programs in order to increase the deterrence of the TAF and make it one of the strongest armies in the world (MHP, 2015, p. 245). It also promised to increase the employment of professional personnel in the TAF who are specialized in the use of high-tech. The MHP stated that it would establish an independent, indigenous arms industry and give an economic incentive to domestic investors who want to produce military supplies and weapons (MHP, 2015, p. 246). In order to support the development of the domestic defense industry, the declaration underlined that the needs of defense would be met primarily by the national procurement system (MHP, 2015, p. 247). The MHP gave the signals of establishing an aerospace institution and ¨Cyber War and Electronic Security Command¨ that would work to prevent asymmetrical threats to the country's security (MHP, 2015, p. 247).

HDP

The HDP, on the other hand, in its various party forms, did not give the same attention to the issue of national security unlike the ruling party and the other opposition parties. In 2011, the BDP[10] declared its aim to end compulsory military service and accord a

[10] BDP was the former Kurdish Political Party before HDP was established. On 28 April 2014, the entire parliamentary caucus of BDP joined HDP.

right to conscientious objection (Gedik, 2012). In 2015, it mentioned the issue of security only marginally by declaring that defense/security expenditures would be reduced and become open to public inspection and that discretionary funds would be abolished (HDP, 2015, p. 30).

In this section, I analyzed the evaluation of national security and defense industry by Turkey's main political parties. The election declarations of all parties showed that the AK Party as the ruling party that holds all the aces for 15 years is more ideologically invested in the issue of security and defense. Moreover, the AK Party, as the governing party, has a chance to prove its dedication through realizing projects which is not an option for the rest. On the other hand, the MHP is more concerned with the ideological value of nationalization whereas the CHP focuses on the bad influence on the country's security of the policies pursued by the government and the regional political changes. As opposed to all the other parties, the HDP appears to be against any militarization with its agenda of revoking compulsory military service.

In the next section, I will discuss how the domestic structure is influenced by defense spending. Since it is not only the military power of the country that is influenced by the defense investments, it is important to pay attention to the various positive and negative externalities which affect the public perception of the government's performance. Ram (1993, p. 28) and Viotti (1994, p. 4) suggested commercial spin-offs benefit other sectors and improve the conditions for their workers as well. Although the results of these improvements are known as positive externalities, which can be used as a policy tool by politicians in their campaigns and speeches, negative ones can be kept in the dark which makes examining them particularly noteworthy.

EXTERNALITIES OF THE NATIONAL DEFENSE INDUSTRY

POSITIVE EXTERNALITIES

The competence of the Turkish defense industry in the international market is closely associated with its R&D investments which bring about its authenticity. From 2006 to 2011, the ratio of the defense industry's needs that were met domestically increased from 36.7% to 54%, and 60% in 2016 (SSM Performance Programme, 2013; TOBB Sector Report, 2012; SSM PP 2016, p. 4). Other than its effects on the country's security as a direct consequence of the process, there are indirect consequences that generate greater results for the country.

Apart from increasing the volume of the defense industry, the investment in the domestic arms industry also increases the defense-related manufacturing industries. Moreover, the high-tech involved in the making of defense industry products will further enhance technological advancement and will boost product development. By doing so, the investments firstly augments the use of existing capacity, and then it improves the ability by incorporating new techniques developed by industries in the process. Furthermore, it will increase employment which in great proportion takes in the qualified workforce. In 2006, the workforce employed in the defense sector excluding TAF personnel was 30,808 all of whom were skilled (TOBB, 2007, p. 7). In 2012, this number increased to 33,491 (Sasad, 2013, p. 10). When it came to 2015, engineers comprised 34% of the total amount in the sector which means that design and development are intense and expertise is highly required (Sasad PR, 2015, p. 12).

Another indirect contribution is seen in the use of the same technology in different fields. For example, Aselsan is a company established to meet the demands of the Turkish Armed Forces,

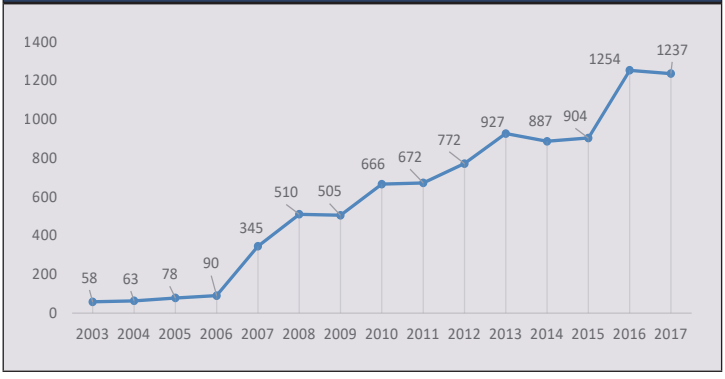
and it works explicitly on technological products and invests in R&D. It now uses the knowledge and experience it has accumulated over decades working for military innovations. In 2015, Aselsan set up another institute called "UGES" operating under its roof which utilizes Aselsan's expertise and technology in the fields of transportation, security, energy, and automatization. In cooperation with TEMSA, it produces electric buses for instance. Aselsan Electric Vehicle System's Manager Murat Topçu underlines the importance of such technology by referring to the ripple effects of military technology:

> The control systems of the bus are the ones developed by us for military vehicles. We carried these units to civilian use... Electric motor, control unit, engine fead and other necessary inverters of the bus are produced nationally by Aselsan which can be used in various vehicles from naval platforms and rail systems to wheeled vehicles ("Aselsan-Temsa elektrikli otobüs geliştirdi," 2017).

Furthermore, Aselsan uses the technology at its disposal to decrease the external dependence in the healthcare field. It is developing an MR system in cooperation with Bilkent University which is expected to make the imaging process five times faster, decrease the time span a patient spends in the scanner, and increase the number of patients a scanner can take in the same time interval. By doing so, Aselsan's UGES intends to obtain intellectual property rights in medical imaging devices ("Aselsan sağlık sektörüne öncülük edecek," 2015). Such a ripple effect is caused by increased R&D spending which is prioritized by the company. Then Minister of National Defense Fikri Işık referred to the defense industry as the sector that had made the most investment in R&D and technology. (Annual Activity Report, 2016, p .8) Successively in 2015, 2016, and 2017, Aselsan became the first in the list of AR-GE 250, a study that reveals the top R&D investors in Turkey (AR-GE 250

Veri Bankası, 2017; "Beklenen araştırma tamamlandı," 2016). According to the same research, in 2014, its investment was ₺807 million and rose to ₺1.67 million in 2017.

FIGURE 3.1. R&D SPENDING IN DEFENSE INDUSTRY (MILLION USD)



Source: SASAD and SSM's reports from 2003 to 2018[11]

Apart from in-country production, its expertise made Aselsan a member of the team that will enhance the NATO Ballistic Missile Defense (BMD) Program which will be headed by Leidos, USA. Other than Turkey, the countries involved in the project are Canada, France, Germany, The Netherlands, United Kingdom, and the United States, all countries with high technological capabilities ("Aselsan Joins BMD Team," 2015). Such collaboration in the field of a modern defense program will strengthen Turkey's skills that will then contribute to developments in related technologies. All of these indicate how military technologies can benefit a country's other sectors and upgrade its companies in the international arena.

Other than the application of military technology to different fields, new military equipment can also be used for civilian purposes. Defense arms are no more composed of weapons to kill or inflict damage like those of the 20th century. There are very com-

[11] Data for some years has been retrieved from SASAD and missing data has been completed from SSM's reports.

plex, high-tech products like UAVs which can be armed and unarmed, and are used to eliminate targets or to surveil and discover. One of Turkey's three UAVs is Vestel's Karayel which is being used to surveil pipelines, frontiers, and immigrant groups, and also as a fire extinguisher.[12]

All of these are results of the positive spillovers that are generated by the development of technologies following investments in the national defense industry. However, there are also downsides of funneling a large amount of money into the defense sector which are known as negative externalities.

NEGATIVE EXTERNALITIES

Although Turkey is a developing country which does not suffer from a scarcity of resources, unlike LDCs, the criticisms about downsides to defense expenditure are still drawing attention to negative spillovers. The basic argument starts with the idea that if there is not a large amount of spending in the country's defense, there can be more investment in education, housing, transportation, and all the other sectors that affect the well-being of society more directly. That is why Arnold Wolfers (1952, p. 487) remarks that increased armaments even though they lead to more security, may cause opposition for decreasing social benefits. The trade-off brought about by security spending versus expenditure on other social benefits becomes the focal point of opposition to the former. In the case of Turkey, however, there has been no striking increase in military spending since 2003 (See Figure 4.4). Conversely, military expenditure in 2015 was lower than that of 2003. While military expenditure stays nearly the same, Turkey's GDP is increasing. Since the share of the military expenditures within its GDP is de-

[12] Personal communication with Vestel's Marketing Manager Aytül Erkan at CNR EXPO in Defense Industry Fair, November 12, 2016.

clining, there is no apparent negative influence on Turkey's budget for benefiting other social sectors.

However, it can be argued that more money could be allocated to socially constructive projects by cutting down on the budget of military projects. The budgets of various ministries reveal the priority given to different sectors in 2016.

TABLE 3.1. BUDGETS OF MINISTRIES IN 2019 (BILLION TRY)	
National Defense	46
Health	48
Family, Labor and Social Policies	103
National Education	113
Treasury and Finance	419

Source: SBB 2019

The budget of the Ministry of National Defense is the fifth highest budget among the ministries but it is lower than those of four other ministries. However, Turkey's defense spending is not limited by the budget of the Ministry. The Presidency of Defense Industries is an autonomous institution with its own budget. It is handling the Defense Industry Support Fund (SSDF). In 2017, ₺15,646 billion was spent from the fund (Sayıştay Denetim Raporu, p. 21). Moreover, there is the discretionary fund at the disposal of the president which he can give to any institution he sees fit. Its very existence is being questioned as there is no transparency about where it is channeled. It might contribute to non-defensive purposes, but there is a reason for the discretionary fund to be kept secret whereas there is no need for socially constructive projects to be paid privately from the fund. Hence, it is generally assumed that the fund in great amount is comprised of

highly confidential payments that concern security, defense, and the interests of the country.

The lack of available quality personnel in other sectors is another critique of employment in the defense industry. In order to see the distribution of employment across sectors in Turkey looking at workers in each sector can prove useful. In order to see the distribution of employment across sectors in Turkey looking at workers in each sector can prove useful. There are 1,143 thousand teachers in the employment of the Ministry of National Education; 44,740 people working in the defense industry; and 355,200 soldiers in Turkey (MEB, 2018, p. 11; SASAD, 2017, p. 12; Hürriyet, 2018). In the defense industry in 2017, 13,703 were engineers (SASAD, 2017, p. 15). The hiring of engineers in the sector is said to increase employment, on the one hand, but, on the other, it is only a limited number of the same workforce. Furthermore, the employment of people in military-related sectors is criticized for preventing the highly qualified workforce from engaging in non-military projects that can benefit society through contributing towards making everyday lives more comfortable. But whether 13,703 engineers in defense create a scarcity of workforce for civilian sectors is disputable.

Overall, this chapter analyzed the domestic structure in the formation of the national defense industry. In that vein, it discussed how politicians read the country's necessities and present them to the electorate in such a way as to outpoint other political parties and win elections. It then elaborated on the positive externalities the industry brings with it. However, its effects are not limited to the benefits it provides and, therefore, the possible negative externalities were also discussed. Following the analysis mentioned above, the next chapter is going to expound on the economy of the defense industry.

CHAPTER IV THE POLITICAL ECONOMY OF THE MILITARY DEFENSE INDUSTRY

Defense expenditures of countries worldwide started to show a decreasing trend with the end of the Cold War. It did not take longer than a decade for the arms race to begin with the start of the global war on terrorism, the invasion of Iraq, and many other regional conflicts as discussed in Chapter Two. Increased military expenditures certainly have social, political, and humanitarian aspects but they also have economic implications. The military industry means huge economic revenues for countries that sell their arms abroad and enormous economic costs for those who procure such arms from outside due to their lack of industrial self-reliance. The five countries that have major shares in the international arms transfer - namely the USA, Russia, China, France, and Germany - are responsible for 74% of the volume (Fleurant & Perlo-Freeman, 2016, p. 2). And since arms of defense are state-of-the-art technology products, highly invested in terms of time, research and development, and human capacity, they are hard to create and, hence, expensive. Once they are obtained through export license, the country of final destination is not free to use them in any way they want but are bounded by international agreements. Therefore, being the creator and sole owner of these high-tech arms is highly profitable for a country in the sense that it will boost technological advancement which will in return contribute to the defense industry as well as to other industries that benefit from technological advancements. Overall, these make a country competitive in the international market and increase the volume of its economy. In

this chapter, I will first look at the military expenditures in the world and their implications on economies. Then, I will analyze how Turkey moved from an import-dependent military industry to a much more self-reliant country in terms of defense, and look into its effects on Turkey's economy in order to reveal the economic rationality behind Turkey's arms development

EFFECT OF ARMS INDUSTRY ON ECONOMY

As discussed in academic studies there can be two outcomes generated by defense spending. These are positive and negative impacts of military expenditures on a country's economy. What are the implications of national military buildup on the economy of Turkey? Turkey is the 18th largest economy in the world. Even though until 2010 its military expenditure per GDP was above the NATO standards which is 2%, it had been procuring its main military inventories. Starting with the 2000s, with the initiatives taken by the state, the PDI started financing and coordinating the projects for the development of arms for the use of the Turkish Armed Forces (TAF). Private entrepreneurs and businesses are the recipients of the projects given to them by the state institution. Hence, they are not actors that can promote military projects for their own economic benefits. Studies by Dritsakis (2004), and Kalyoncu & Yücel (2006) show that economic growth induces defense spending, whereas studies by Sezgin (2001), Karagol & Palaz (2004), and Chia-l Pan et al. (2015) indicate defense spending increases economic growth in the case of Turkey. In other words, defense spending and economic growth are proven to be complementary to each another for Turkey.

Previous chapters showed that what makes economies of developing countries vulnerable is their import-oriented defense expenditures rather than other public expenditures such as education, trans-

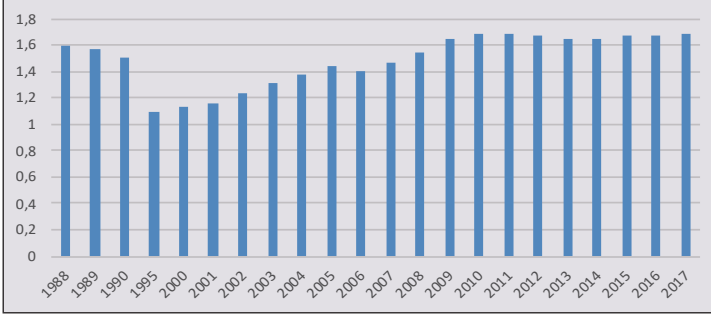
portation, and health services (Canbay, n.d., p.4; Chan, 1985, p. 34). This creates a balance of payments problem as the price of defense goods per kilogram is much higher compared to the price of other manufactured goods, and agricultural products. Foreign dependency of such kind damages a country's economy by creating a trade deficit as well as leaving its national security at risk since it is dependent on arms production (Davutoğlu, 2010, p. 39). This can only be circumvented through exporting more high-added value goods, like in the case of the military's state-of-the-art technology products, which can be attained through ensuring self-reliance in the defense industry.

As the domestic production of arms of defense decreases the balance of payments by reducing imports, the market of arms of defense is also a way for increasing exports which contribute towards balancing the payments. Demand for arms of defense in the international market is very high and it is a very lucrative business because of the state-of-the-art technology it involves. In other words, what makes the arms industry products economically valuable is their high added value. So exporting the domestically produced arms of defense also has a positive impact on the balance of payments (Canbay, n.d, p. 5). The price of defense industry exports is $26-30 per kilogram as R&D and high-tech are intensely involved in the sectoral products ("Savunma ihracat taarruzunda", 2015). This gives an advantage to the countries which export them. Even in the high-tech electronics that use R&D and latest innovations, the highest unit price of export is $7.39 for Turkey (Özdemir, 2015). In 2015, while the kilogram price of exports for Germany was $3.68, $3.86 for Japan, and $2.7 for South Korea which are countries that intensely use high technology, it was only $1.4 for Turkey (TİM, 2017). A way to increase the average value of Turkish products on the international market is by having a share in a sector technologically superior and economically valuable like the military defense industry.

MILITARY EXPENDITURES IN THE WORLD AND IN THE REGION

Defense expenditures in the world had shown a decreasing trend towards and after the end of the Cold War and with the absence of perception of threat with the collapse of the Soviet Union the arms race between communist and capitalist camps came to an end. Although the decrease in military expenditures continued for about a decade, it has been rising incrementally ever since the increase in the expenditures of the USA was triggered in the 2000s with the perception of a new threat which culminated in the invasion of Iraq (SSM Performance Programme, 2016, p. 17) (See Figure 4.1).

FIGURE 4.1. WORLD MILITARY SPENDING (BILLION USD)



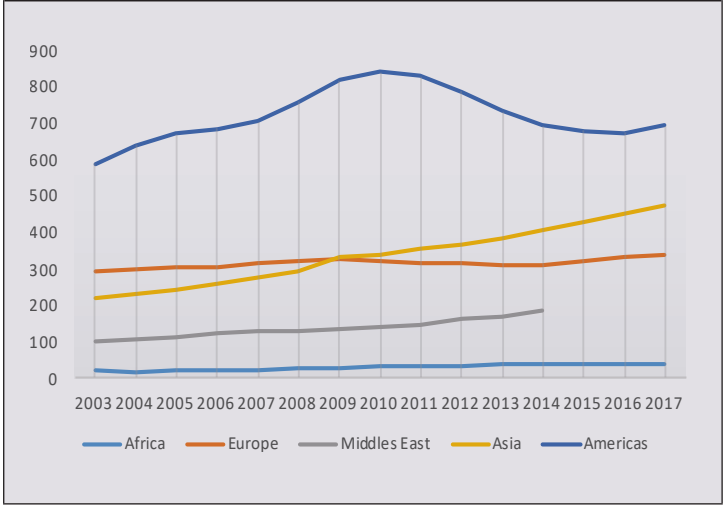
Source: Statista 2019[13]

From 2003 to 2018 world military spending has risen about 35% from $1.3 trillion to $1.7 trillion. Although there is an increase overall in real terms, regionally there are differences. Asia, Central and Eastern Europe, and the Middle East show increasing trends. The fear emanating from the Russian invasion of Ukraine boosted the military spending of neighboring countries in Europe (Fleurant & Perlo-Freeman, 2016, p. 3). In Asia, conflicts with China made

[13] https://www.statista.com/statistics/264434/trend-of-global-military-spending/

an impact on military spending of countries such as Indonesia, the Philippines, and Vietnam (Fleurant & Perlo-Freeman, 2016, p. 3). Japan continues to receive weapons it ordered due to the threats perceived both from China and North Korea. India and Pakistan are in the list of top 10 arms importers in 2013-17 due to the long-standing conflict between them (Fleurant & Perlo-Freeman, 2018, p. 9). The Middle East is no different in following the trend. But it should be noted that there are countries for which figures are unavailable. However, there are internal and regional conflicts pushing military measures to take the front seat for the Middle East as well.

FIGURE 4.2. MILITARY SPENDING ACROSS REGIONS (BILLION USD)



Source: SIPRI Data 2018

Iraq's spending from 2003 to 2017 increased by 21% and reached $7.4 billion. Saudi Arabia's spending was $69.4 billion in 2017, the military burden (10%) of which is higher than any other country on a global scale. However, the extreme rise in its military burden is not caused by a GDP decline. On the contrary, while Saudi Arabia's GDP increased by 219% between 2003 and

2017 from $215 billion to $686 billion (World Bank), its military expenditure increased by 170%. Similarly, in Turkey from 2003 to 2017 there is a rise in the GDP. However, as there is no dramatic change in the military spending of Turkey what we see is a decline in its share of military burden. From 2014 to 2015, the active armed conflicts in the world increased from 41 to 50 because of the increasing influence of DAESH (SIPRI Year Book, 2016). Unquestionably this affects the regional arms race.

TABLE 4.1. SHARE OF THE MILITARY EXPENDITURE IN GDP (%)

Country	2017	2003
USA	3.1	3.6
Saudi Arabia	10.3	8.7
China	1.9	2.1
Russia	4.3	3.9
U.K.	1.8	2.3
Turkey	2.2	3.3
MENA	5.15	5.6
World Total	2.2	2.26

Source: SIPRI 2018

On the other hand, according to the Global Peace Index (GPI), peacefulness declined since 2008 which is measured by ¨the number of refugees and displaced people; the impact of terrorism; and the number of internal and external conflicts, and the associated number of battle-related deaths¨ (SIPRI Year Book, 2016). Because of civil unrest and terrorism, MENA became the world's least peaceful region, and Syria the least peaceful country followed by Iraq in 2015 (Global Peace Index, 2018, p. 15). This affects

the investment made by nation states worldwide in armaments especially in regions where there are active conflicts. The result is the overall increase in world military spending.

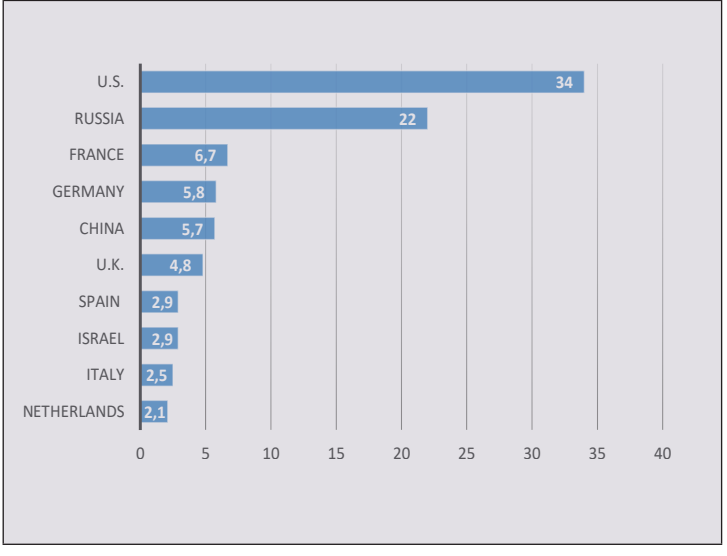
Many countries in the Middle East react to threats in the region by increasing their military power in real terms which is revealed in the change of the military burden of the region. Meanwhile, Turkey keeps the level of military expenditures the same while strengthening its national production capacity. By doing so, on the one hand, it manages to meet the country's security needs domestically. On the other hand, it does not cut back on other social spending that is necessary to improve society's welfare.

ECONOMY OF THE MILITARY INDUSTRY IN THE WORLD

Low peace indicators and high levels of conflict may allude to increased arms purchases of the states involved or somehow affected by the conflict. This is one side of the coin. The other side includes the money being paid to the industries which produce the transferred arms and contribute to the country's economy. Hence, the world's biggest military spenders do not produce arms simply for their own consumption but they have a huge share in the international arms transfer through which they generate a considerable amount of revenue. ¨From 1998 to 2001, the USA, the U.K., and France earned more income from arms sales to developing countries than they gave in aid¨ (Control Arms Campaign, 2003, cited by Anup Shah in ¨Arms Trade Is Big Business¨, 2013). The same is true for the USA in 2010s. The USA is surely leading the way in terms of the aid it gives to developing countries since 1970, but it is also the lead in arms agreements made with the same group of countries. The USA made arms agreements

with developing countries worth $36.1 billion in 2014, while it gave aid worth $27.5 billion (Theohary, 2016; OECD, 2016). In the same year, France made agreements with developing nations worth $5.7 billion, whereas it donated $6.5 billion (Theohary, 2016; OECD, 2016). The U.K., on the other hand, in 2012 gave $8.6 billion in aid and conducted $5.7 billion worth of trade in arms agreements. The U.S. record might be the very reason why in 1976 Jimmy Carter, in the presidential campaign, stated, "We cannot have it both ways. We can't be both the world's leading champion of peace and the world's leading supplier of arms" (Hillier & Wood, 2003, p. 60).

FIGURE 4.3. TOP 10 COUNTRIES' SHARE OF INTERNATIONAL ARMS EXPORTS (2013-2017) (%)



Source: SIPRI Trends in International Arms Transfer, 2018, p. 2

Selling and even developing arms of defense generate huge sums of money. Respected and prominent countries of the sector do not even have to bear all the economic costs of the production since there

are standing customers waiting to be a part of the production process. The development of the new generation Joint Strike Fighter (JSF) F-35 Lightning II by the U.S. can be an example. The USA is the owner of the project, which it started with the U.K. Later on, seven other countries joined the project. The economies and technologies of all included parties are going to benefit from the process apart from that of the USA. Turkey is among the other eight states in the consortium and the total expected economic benefits for the Turkish industry is $12 billion in prospect ("Turkey F-35," n.d.). Italian companies benefited $29 million from engine manufacturing for the program – a sum expected to reach $15 billion - whereas $11 billion is expected in Canadian industrial opportunities ("Global Participation," n.d.). These are the contributions to the economies of the participant countries, and its impact on the economy of the U.S. is indisputably greater as it will have at its disposal the software and codes of the planes which are the most critical parts. With including partners in such a project, the U.S. reduces its own development costs, finds international financing, decreases its own responsibilities, and also finds a ready market to sell the fighters when the tests are done.

The above is just a recent example of economic benefits provided by being an arms producer. It is only one of the projects of such kind with great returns notwithstanding the great deal of investments being made and the risks. The USA is the world's biggest military spender with $609 billion and 3.1% share of its GDP. It is the first country with 34% share in international arms exports and it has been so for the last ten years (Wezeman et al., 2018, p. 2). Furthermore, in 2015 alone, it exported $16.9 billion worth of arms, comprising 10% of its total exports. Russia comes second in the list of international arms transfer again for eight consecutive years with 22% share in international arms exports, while 6.8% of its exports are weapons ["Trade Map - List of Ex-

porters for the Selected Product (Arms and Ammunition; Parts and Accessories Thereof & All Products)," n.d.].

The military industry of a country contributes substantially to its economy and employment. An AT Kearney conference presentation made in April 2015 emphasized the connection between national economic objectives and national defense objectives.[14] When capabilities are improved for national defense, it becomes an input for industry prioritization which directly affects national economic objectives (Willen, 2015, p. 24). In return, when industries expand in a country, it is possible to find national solutions rather than outsourcing. These all improve the career opportunities in a country, boosting its economy.

The military industry is a huge sector and the largest economies of world have a considerable share in global arms transfer. A critical market for the arms exporters is the developing nations which are defined by the report (2016) prepared by the Congressional Research Service as ¨all countries except the United States, Russia, European nations, Canada, Japan, Australia, and New Zealand.¨ Since many of the countries which are regarded as developing nations cannot meet their armed forces' weapon needs nationally, they have to import them from the nations that do. In 2015, the USA was behind 41% of all arms agreements made with the developing nations, while Russia's share was 17% and China's 9%. The share of the major Western European countries occupied 27% of arms transfer agreements, whereas the rest of the world stood at 6% (Theohary, 2016). In 2015, 81.7% of all arms transfer agreements were concluded with developing nations. Between 2012 and 2015, this figure was 80.92%, and between 2008 and 2011, it was 80.39%[15] (Theohary, 2016, p. 1).

[14] Willen, B. (2015, April). Defense Industry Performance, Trends and Future Expectations. ATKearney Conference Presentation, SASAD.

[15] These agreements only contain state to state transactions not the agreements made with subnational groups.

From an economical perspective, selling major weapons is not the only source of revenue for the arms suppliers. After procuring arms, client states also need spare parts, upgrades, and support services for the further functioning of the equipment. This dependency - or the requirements of the existing weapon systems - ensures continuity of annual contracts and incomes for the supplier states (Theohary, 2016, p.7). To illustrate the significance of this relationship, one can think of the military aid of and arms purchases from the USA and the Soviet Union during the years of the Cold War. After the Cold War former clients of these states had to pay them for the maintenance and spare parts. Turkey, for example, had American-made M-60 tanks in its inventories and made payments to the U.S. for any kind of technical support in the ensuing years. Later on, it had to pay $687.5 million for the modernization of the tanks by Israel ("M60 tanklarının modernize projesi tamamlandı," 2010). By doing so, not only the USA and Russia but all the other arms suppliers protect their market share.

Although Russia has its own client base, the U.S. and other suppliers are ahead of Russia in military R&D programs which makes them more advantageous in the international defense industry thanks to their more complicated and advanced systems of weaponry (Theohary, 2016, p. 8). According to AT Kearney, what makes the defense industry a promising market for the future is the developments in technological capabilities within the sector (Willen, 2015). Hence, R&D plays a significant part in the future of the defense sector affecting the value of the industrial products as well as the economic revenues it will generate.

MILITARY SPENDING OF TURKEY

Turkey did not jump on the industrial bandwagon early on. For a long time, it was an agricultural country. Although there were

initiatives in industrial projects, it was never in the same league with the industrialized nations of the world. Despite the fact that in time industrial production proceeded apace and Turkey became recognized as a leading and growing power in ready-made clothing, textiles, and the automotive industry, it did not reach the same level in technology-intensive fields such as electronics and defense industry materials, which offer a high-profit return to the economy. Although Turkey's military expenditures have not been increasing every year and they have experienced their highs and lows, Turkey is known as the second largest military power in NATO. The difference in trend between the beginning of the 2000s and today, stems not from the volume of the spending but from how military spending is being allocated which is currently towards national sources.

The increase in the number of unstable regimes neighboring Turkey and the realization it cannot depend on the help of its allies along with the opportunities provided by economic capabilities and political willingness, saw Turkey start to take steps in the direction of industrial self-reliance. In the beginning, it did not want to depend on any one nation for its security, and, therefore, Turkish companies initiated co-production with experienced foreign companies that would provide technology transfer (Zanotti, 2011, p. 28). Turkey conducted joint military exercises with non-NATO countries in order to decrease dependence on one camp (Zanotti & Clayton, 2017, p. 13). It made deals with non-U.S. suppliers which would render Turkey flexibility in agreements, and hence advance its self-reliance in the defense industry.

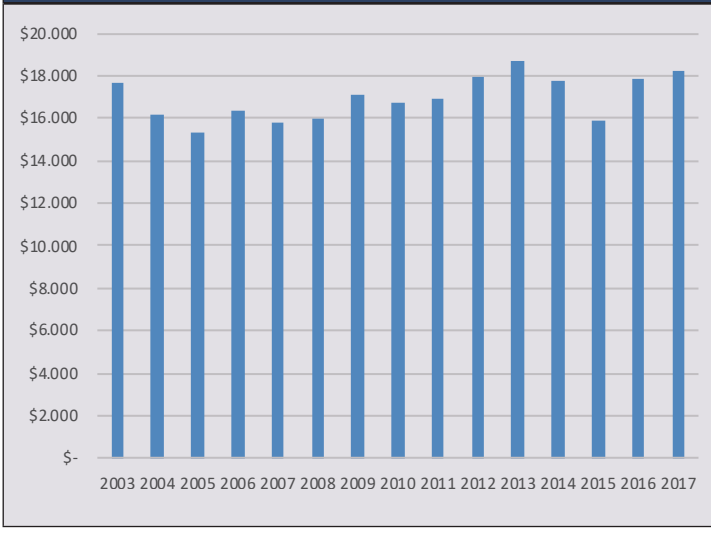
What happened when Turkey started producing its own arms of defense was beyond meeting the domestic demands. For instance, Turkey formerly depended on Germany and Israel for the modernization of its tanks, while later in time the

Turkish Aerospace Industries reached the level of being able to upgrade F-16s for Jordan (Enginsoy, 2011). Moreover, like any other exporter of arms of defense, Turkey started exporting the materials it produced. In 2010, Jane's World Defence Industry wrote that Turkish defense industry exports consisted of eight different platforms:

> Among these are missiles, rocket launchers, radios, tracked and wheeled vehicles, electronic systems, pilot simulators and coastguard crafts. The electronic systems and pilot simulators alone represent ¨big ticket¨ items that can generate the necessary income for Turkey's indigenous industries to develop not only the production base but also the Research and Development (R&D) institutions necessary for large-scale expansion (In Zanotti, 2011, p. 45).

Back in 2010, the PDI pointed out The Netherlands, Pakistan, the United Arab Emirates, South Korea, Algeria and Bahrain as customers of Turkey's defense material (Zanotti, 2011, p .45; "Turkey - Defence Industry," Jane's World Defence Industry, 2010). In 2016, however, Turkey's customer base had extended. Even Aselsan alone is registered as exporting its products, including defense industry material, to 63 countries. Turkey's exported defense products in 2016 comprised ¨aircrafts, helicopter parts, engines, armored land vehicles, speedboats, missiles, rockets, launching platforms, command and control systems, light weapons, electronic systems such as transmitter, simulator, sensor and military software¨ (Aliş, 2016). The demand for Turkey's defense industry material is the result of its investments to create a national industry, and year by year the product range is increasing. While analyzing Turkey's military spending, the increasing indigenousness that plays a big part in its economic transformation should be taken into account.

FIGURE 4.4. TURKEY'S MILITARY SPENDING (BILLION USD)



Source: SIPRI 2018

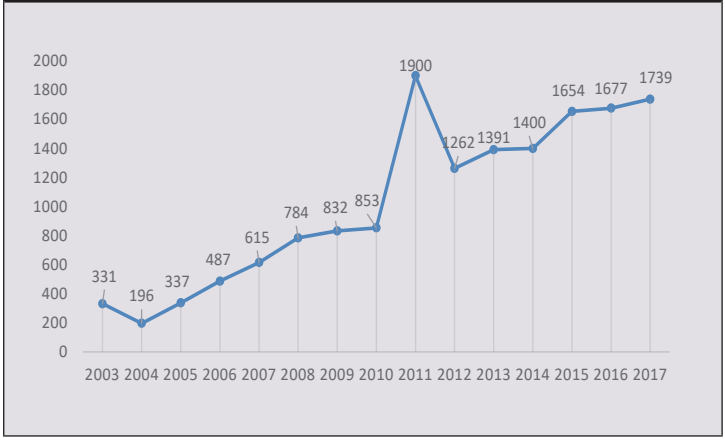
ECONOMY OF THE MILITARY INDUSTRY IN TURKEY

In the 2000s, Turkey started playing a small role in the field of defense industry. It became an exporter of arms but with a small share compared to the export of other sectors. Turkey had been importing most of the arms of defense used by the TAF, but gradually the national defense industry is meeting more and more of the demands of the military. While the industry becomes more competent in supplying domestic needs, Turkey takes part in the international market of arms of defense. For the first time in January 2012, the defense industry made its way into Turkey's export sector list with the percentage of 0.17 (TIM Report 2012, p. 114). Before that, the defense industry was not even on the list that comprised Turkey's export sectors since it did not have any share or its share was negligible. According to 2016 data, the defense industry accounts for 1.2% of all exports. But in 2018, the exports of the defense industry

reached $2,035 which corresponds to a 17.1% increase in the defense industry exports (Timreport, 2019, p. 31).

The general performance of Turkey's national defense industry has improved with the investments in the sector. For the first time in 2011, it made it to the list of the Top 15 in defense industry expenditures (TOBB Defense Industry Sector Report, 2012, p .25). While Turkey's export of defense industry products was $331 million in 2003, it increased to $1,654 million in 2015 which means there was 400% growth in defense exports in 10 years (Sasad Performance Report, 2015). On the other hand, imports in defense industry decreased from $1,351 million to $1,067 million between 2014 and 2015 which shows 21% decline (Sasad, PR 2015). These are significant amounts of reduction and growth in the sense that they indicate Turkey is much less reliant on the outside for its defense. In 2017 alone, exports of defense and aerospace increased by 3.56% reaching $1.739 billion.

FIGURE 4.5. TURKEY'S EXPORTS IN DEFENSE (MILLION USD)

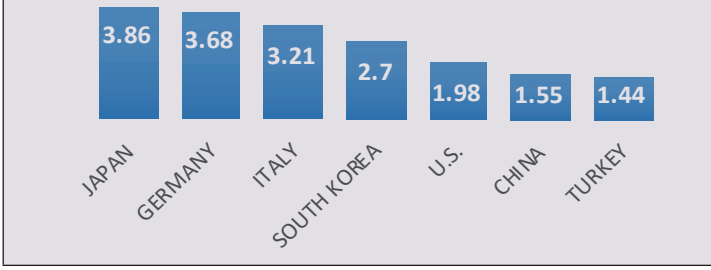


Source: SASAD and SSM

Global trade works in favor of countries that transform their production structure in a way to export goods with high added

value. The share of high-tech export within the manufacturing industry for Turkey is 2.2% - lower than any other country in the same league. According to the World Bank, the ratio for Brazil is 12.3%, 25.8% for China, 26.8% for South Korea, and 14.7% for Mexico. Eşiyok states that the problem stems from taking the easy way out and producing what is cheap since the ´80s rather than what is valuable (Eşiyok, 2017). Hence, what can contribute greatly to Turkey's economy is the export of products with state-of-the-art technology. It is a solution to the balance of payments problem Turkey has always struggled with.

FIGURE 4.6. PRICE PER KILOGRAM IN EXPORT (2015) (USD)

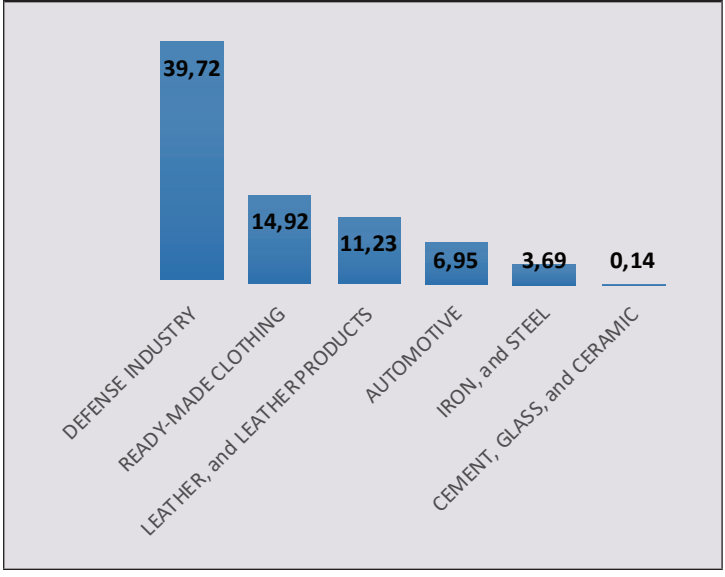


Source: TİM 2017

The increase in Turkey's exports of arms of defense is critical for the economy as the value of sectoral products per kilogram is higher than any other sector (See Figure 4.7.). The state-of-the-art technology augments the price of the defense industry products which can reach up to $30 on average. Additionally, when it comes to projects as big as tanks and corvette ships, the kilogram price of export changes between $5,000 and 10,000[16] (Özdemir, 2015). This makes these projects more critical for Turkey's economy as the average value of Turkish products will increase. When compared to other countries Turkey's kilogram price of exports is very low (See Figure 4.6.).

[16] The Chairman of the Board of Directors of SSI (Defence and Aerospace Industry Exporters' Association) Latif Aral Aliş cited in *Hürriyet* newspaper.

FIGURE 4.7. PRICES PER KILOGRAM IN TURKEY'S MAIN EXPORT ITEMS IN 2017 (USD)



Source: TİM 2018

In the long run, when Turkey produces its own arms, it is more profitable than procuring as they are so expensive. Not only is the excess amount of money that was being paid to foreign countries' firms kept inside the country by doing so, but the national industry also reaches a level to compete with foreign producers of arms. It is important to produce and be present in the market that will deliver economic benefits to the country, and since the sectoral products are expensive, it is also critical to offer a competitive price. According to Defense Outlook 2017 which was a survey conducted with defense and aerospace companies' executives, ensuring the affordability of their products is among the top-five concerns of companies (Dowdy & Oakes, 2015). In order to highlight the difference between buying and making, I will look at the exported versus nationally produced unmanned aerial vehicles (UAVs).

The UAVs known as Herons, which became a point of conflict between Turkey and Israel, had been procured from Israel and used by the TAF. Ten Herons costed Turkey $250 million (Şimşek, 2016). Similarly, abroad off-the-shelf procurement of 1 system and 3 air vehicles from Aeronautics[17] was worth $15.5 million (SSM 2013, p. 103). Bayraktar TB2 is a domestically developed UAV with its critical subsystems including software and hardware, and 12 of them cost $47 million including the costs for design and prototype (Şimşek, 2016). That means that with the money paid for one Heron, Turkey can actually produce more than 6 UAVs. Bayraktar is the first UAV that entered into the inventory of the TAF. Since its manufacture, armed and non-armed UAVs are being used by the TAF to detect and remove threats.[18] Ninety-three percent of Bayraktar UAV is national and 7% is composed of non-critical commercial goods which are easily procured. ("Milli İHA'ya giden yol", 2016) Therefore, the Bayraktar UAV is also the first exported UAV ("BAYKAR – İnsansız Hava Aracı Sistemleri," n.d.). By producing this new system of weapons, Turkey is keeping its financial resources inside the country and by selling them abroad for a competitive price in the international market it can have an edge over other producers.

PROBLEMS ASSOCIATED WITH A NON-NATIONAL DEFENSE INDUSTRY

The level of indigenousness of a product has an important contribution to a country's economy. However, when it does not belong solely to one country, problems occur. If an export license of a

[17] An Israeli company of defense working on systems for intelligence, surveillance, and reconnaissance.

[18] On September 8, 2016, in Cukurca, 29 terrorists detected by a Bayraktar armed UAV were eliminated. (Sputnik, 2016).

product does not belong to one country, it encounters problems in distribution. For instance, even though Turkey is producing SOM missiles, it cannot sell them to Azerbaijan since their power pack is being procured by France and France forbids Turkey from selling them to third countries ("Altay tankı 2018'de TSK'da...," 2015). Related to this problem, former Minister of Defense Yılmaz said, ¨95% of the system belongs to you but 5%. Because of that 5%, you cannot sell 95%. Hence, achieving the production of 100% is our goal¨. The same problem applies to Turkey's other arms of defense. For instance, as a national power pack is not developed yet for Altay Tank it cannot be sold to third countries. The 2008 EU Common Position on military equipment and technology is binding for all member countries which provide Turkey, among other clients, the critical parts that are being used in the national defense industry products. Article 5 of the act adopted under the EU Treaty states,

> Export licenses shall be granted only on the basis of reliable prior knowledge of end use in the country of final destination. This will generally require a thoroughly checked end-user certificate or appropriate documentation and/or some form of official authorization issued by the country of final destination. When assessing applications for licenses to export military technology or equipment for the purposes of production in third countries, Member States shall in particular take account of the potential use of the finished product in the country of production and of the risk that the finished product might be diverted or exported to an undesirable end user ("Acts Adopted under the EU Treaty," 2008).

This article is critical in terms of understanding the importance of indigenous production. The possible areas of usage by the country of destination is a matter of concern for the EU countries. Also, the danger of the end product being used by a country which is

deemed to be undesirable is a valid reason for an export license to be refused. Moreover, the word "undesirable" is open to interpretation and any end user can be defined as undesirable when the interests of one or more member countries are at stake.

According to Article 1 Criterion 4 of the same act: "Member States shall deny an export license if there is a clear risk that the intended recipient would use the military technology or equipment to be exported aggressively against another country or to assert by force a territorial claim." If Turkey is threatened by another country can Turkey's military response be taken as an aggressive act? Again, Criterion 7 of the same article states, "Existence of a risk that the military technology or equipment will be diverted within the buyer country or re-exported under undesirable conditions" is a reason for denying an export license in which case undesirable conditions is very open to interpretation.

When all of these are taken into consideration, the importance of total ownership of defense arms is obvious. Only after that, a country can export and enjoy the full economic benefits of its own production. Even though the case of the Bayraktar UAV is promising, the situation is not always favorable. Turkey is importing power packs in all main sectors. According to the 2013 Sasad Performance Report, a large segment of imports consists of those critical components (Sasad PR, 2013, p. 24) which means that Turkey is still dependent when it comes to critical parts like power packs. This makes Turkey vulnerable to the fluctuations in relations with supplier countries. For example, a local company Tümosan that had undertaken the project to develop a power pack for the nationally produced Altay tank encountered problems with its technical support provider which was the Austrian firm AVL. In the beginning, AVL was chosen among many other suppliers as it was the only one that guaranteed the provision of an export license for the power

pack to be developed which would not create any problems in domestic and abroad uses, and in its sale. Within three months, AVL declared that it cannot deliver the promised document although all the diplomatic channels with Austria had been explored. In its declaration to the Public Informing Platform (KAP), Tümosan (2017, p. 1) stated,

> The technologies related to the power pack of the main battle tank are perceived to be an important component of national power, and for this reason in order to prevent Turkey from obtaining such technology especially the countries that have it and control the market are observed to have negative attitudes.

As a result of this, some of the foreign subsystem producers that manufacture critical parts cannot make contracts with Turkey that would deliver the critical technologies. Even if they do so, the agreements can be revoked because of the attitudes of the foreign governments that either completely prevent a contract or prevent one that is required by Turkey in order to be able to have full control over the product when it comes to using it or being able to sell it. In this case, technology transfer is prevented because of the imposed sanctions. With the problems of technology transfer, Tümosan cancelled the contract to develop a power pack for Altay Main Battle Tank ("Turkey's Altay MBT Project Hit by Engine Technology Transfer Issues | IHS Jane's 360," 2017). The main problem encountered with the Austrian firm was not a commercial disagreement but a political one caused by the Austrian Parliament's decision taken on November 2016 to ban the export of military equipment and material to Turkey. The Austrian Parliament based its decision of an arms embargo on the operations against the opposition, the suspension of civil servants, and the death of civilians in military operations ("Türkiye Avusturya'dan hangi silahları alıyor?" 2016). All of the reasons presented interfere with Turkey's

domestic affairs and the death of civilians in military operations specifically refers to the killing of PKK members. Hence, Austria's political stance and approach to Turkey's terrorism problem influences Austrian company's decision to sell arms to Turkey.

Apart from Austria's decision, the German Ministry of Economy rejected arms export applications 11 times within four months ("Türkiye'ye tank savunma sistemi satmak isteyen Alman şirkete izin verilmedi," March 2017). According to Germany's decision, Rheinmetall cannot sell defense systems for tanks which were damaged during the fight with DAESH that costed Turkey 10 Leopard Tanks. Rheinmetall CEO reportedly said, "The German Government still does not approve some of our export contracts" ("Almanya'dan Türkiye'ye bir yasak daha," 2017). German officials defend their position regarding the embargo with reference to concerns about human rights. A ministry official stated that ever since the coup attempt, there has been a concern on the side of Germany that Turkey can use the arms it bought from Germany "for internal repression of the Kurdish conflict" ("Germany Denied Several Arms Shipments to Turkey in Past Months – Reports," 2017)" Germany's and Austria's decision is based on the same reasons which show that political reasoning can be used by foreign governments to refuse the export of military supplies. Furthermore, both countries are Turkey's partners in NATO, one of the major principles of which is collective defense stating that an attack against one ally is considered as an attack against all allies. By stipulating this in Article 5, NATO guarantees protection to its member states in case of an attack. However, from the perspective of Turkey, the recent embargoes are reasons to be hesitant about the help of its allies.

Briefly, when a country is dependent on the outside in terms of its defense, it renounces its power and capacity to act independently according to its national interests. Such a dependence also limits

the ability of that country to fully benefit from what is at its disposal. Hence, it is of utmost importance for any country, including Turkey, to develop a self-reliant defense industry in order to be able to practice its free will.

THE IMPORTANCE OF THE POLITICAL ECONOMY OF THE DEFENSE INDUSTRY

Development of a national defense industry is not an end itself - it reduces a country's trade deficit by decreasing imports and increasing exports; it increases R&D which ensures product development and technological advancements; its innovations spread into other fields and lead new inventions which will increase capacity utilization; and as it increases investments, it also creates new business opportunities all of which come back as economic profits to the country.

In this chapter, I discussed the political economy of the defense industry. I firstly analyzed the early studies about the effect of the arms industry on the economy. Secondly, I looked closely at the economy of the arms industry in the world, in the region, and in Turkey respectively. I concluded by discussing the problems associated with a non-national defense industry.

The domestic structure that explains the political will of politicians, the economy of the defense industry which provides the economic rationale, and the regional geopolitics which explained the conjunctural changes and lack of trust in allies are necessary conditions for developing a self-reliant defense industry.

CONCLUSION

The benefits of having a national defense industry are numerous as has been outlined throughout the book. Countries, in general, aspire to be independent in defense for the concerns discussed in the preceding chapters. States like Turkey, South Africa, Taiwan, Brazil, India, and China have all experienced the consequences of over-dependence on foreign countries in national defense especially in times when they needed the exported military supplies to overcome internal or external threats. In such cases, dependent countries become vulnerable and open to the dangers of political manipulation. Moreover, they become incapable of steering the results of events as they do not possess the necessary resources. Turkey is among the countries that have learned the indispensability of industrial self-reliance the hard way.

The literature on the defense industry supported the thesis that the domestic structure model and the action-reaction model explain the urge to nationalize the defense industry. However, the repudiation of the security commitments by allies was not a part of either model but contributes a lot to our understanding of nationalization efforts. Hence, it was added here to the action-reaction model to comprehend the process better. Then, I applied these models to the Turkish case. Together these models demonstrated the internal and external dynamics that promote the process which I expatiated on three separate chapters. The domestic structure of the country is important since a stable government can create an environment that is conducive to undertaking long-term military

projects. Turkey's current government, which has been elected consecutively since 2002, is essential in that respect in the sense that the defense industry projects that were initiated by the ruling party were not disrupted by another political party, enabling the projects to continue without a hitch.

The world military order that drives countries to maintain their security in the face of increasing threats perpetuates the worldwide arms race and creates a vicious circle impossible to break. This is another variable affecting Turkey's military buildup. I argued that the rising militarization of its neighbors is alarming more for Turkey than for Turkey's allies in the West. Recent conjunctural changes have affected Turkey's security along with its diplomatic and economic relations with the countries in its region.

Furthermore, as the international security moves from conventional to modern and technological defense material, problems concerning the security of a country need to be taken care of more quickly and delicately. The problem is not always the interruption in the delivery of modern technology by the arms supplier. When foreign technology is used, it can be blocked by whoever has designed the software. Moreover, in the age of information technology where everything has become accessible, keeping the sensitive critical information concerning national security a secret is even harder and when the technology is designed by another country, it is even impossible. For these reasons, it is of vital importance for Turkey to develop its critical military technology to deal with internal and external security threats. As I have shown, the interest dilemma Turkey experiences with arms providers even when they are considered to be allies can be terminated. And more arms embargoes are yet to come as long as Turkey seeks its interests.

In that regard, supporting research and development activities is highly crucial for Turkey's purposes. Technology is becoming the

most critical and indispensable component of the defense industry. Hence, the collaboration between universities and industries, and the allocation of more resources for technology development both by state and private institutions are crucial to success in a world where even the most recent technologies are updated, renewed, and replaced by a newer ones.

Moreover, owning national arms of defense provides strategic advantages to countries in terms of international relations and politics. I have shown through reviewing parties' election declarations that Turkey with its agenda of becoming a regional and world power seeks the prestige that is brought by having a strong military. Furthermore, having the state-of-the-art technology at its disposal will give Turkey the freedom to choose who to sell to and where to send its military technology. Seeing its allies act in a way that can run counter to and harm Turkey's interests encourages and forces Turkey to develop a domestic defense industry. By doing so, Turkey can determine the outcome of the conflicts in favor of its foreign policy which is an excellent leverage for Turkey.

The political economy of the defense industry, which has implications on both the domestic and international levels, highlights the economic costs and benefits generated by the defense industry - a compelling scenario for Turkey. In the last chapter, I outlined the magnitude of the worldwide and national economies generated by the arms industries. As a country which spends a lot on defense purchases, Turkey sees industrial self-reliance in a sector with such high-added value as a way of decreasing imports and increasing exports. This, in return, is expected to maintain the balance of payment which is a critical problem for Turkey. In addition, I have made note of the costs of production and procurement which make domestic production a logical and profitable option for Turkey.

On the other hand, even though the economies of developing countries suffer from expensive military projects as they divert resources from other sectors, this is not a problem experienced by Turkey. Developing nations have to cut back on the country's social spending to channel large amounts of money into producing arms. As a result, they experience an opportunity cost between making arms and enhancing the welfare of society. By contrast, Turkey does not take away from the budgets of socially constructive sectors. Turkey's GDP increases and the share of military expenditures within it has decreased from 2.6% in 2009 to 1.68% in 2016. (NATO, 2018). This shows that Turkey has kept its military spending stable while setting aside more capital for social projects. By carefully examining the years between 2003 to 2018, I have concluded that the downside of diversion of resources is not valid for Turkey.

Furthermore, I have concluded that what makes the military spending of 2019 different than that of 2003 is not the volume of expenditures but the increasing capacity of the local defense industry to meet the requirements of the TAF. In 2002, the local arms production was able to meet 20% of the domestic demand, while it reached 60% in 2015. This not only frees Turkey from international regulations that limit the use of procured arms but, since the affordability of products is among the five top concerns in the defense sector, it also gives Turkey a comparative advantage in the international market as it produces with lower costs.

Although I started this book with the advantages of the national defense industry in mind, my research has shown that there are problems that come along with the nationalization process. Emerging producers encounter obstacles with the existing powers that may refuse to grant production and export licenses and intelligence-gathering systems due to security and diplomatic concerns. When countries try to produce the same technology

from scratch, they have to invest a lot of time, human capital, and money. While emerging producers are busy with catching up with the existing technology, its owners move a step further, invalidating the previous technology that newcomers has struggled to obtain on their own. This is also a matter of concern for Turkey, however, if it does not start production at a particular stage, the technological gap between Turkey and other leading producers is doomed to increase.

As a country that is in the process of nationalizing its defense industry, Turkey is pursuing ambitious projects ranging from the production of a warplane and a main battle tank to a battleship and unmanned aerial vehicles. Even though this is more suitable for sovereignty and national security, trying to nationally produce every single item in a country's defense industry is not cost-effective. Dividing up all its human capital and budget among different projects prevents a country from specializing and excelling in one product. Turkey currently faces this autarky-efficiency dilemma. If it can focus its energy, time, and capital on one specific item and win recognition for it, then it can actually gain a competitive position in the international market. Having a distinguished product at its disposal gives Turkey leverages which it can use to bargain with other arms suppliers who have superior technology in others fields.

This book provided insight on the nationalization of the modern arms industry. The recent arms embargoes on Turkey by Germany and Austria show the importance of the study of the nationalization of the defense industry. Hence, future research can be conducted on the problems likely to arise from such a process and how to tackle such problems without causing further harm to bilateral relations while maintaining the continuance of industrial production. The change in Turkey's security perception is another

topic to be studied. Other countries that have gone through the nationalization process can be compared to the Turkish experience. The reasons for the success or failure of other countries can set an example for Turkey and help it learn from others' mistakes. Furthermore, modern defense systems can be studied such as cyber and nuclear technologies, satellite and communication systems, and intelligence technologies and alternative unmanned defense vehicles which seem to be the direction of the natural evolution of national and international security.

BIBLIOGRAPHY

2019 Yılı Merkezi Yönetim Bütçe Kurulu İcmali (I) Sayılı Cetvel - Genel Bütçeli İdareler (EKONOMİK SINIFLANDIRMA). (2019). TC Cumhurbaşkanlığı Strateji ve Bütçe Başkanlığı. Retrieved February 5, 2019, from http://www.sbb.gov.tr/wp-content/uploads/2019/01/3-a1-2019-2021-D%C3%96NEM%C4%B0-GENEL-B%C3%9CT%C3%87E-EKONOM%C4%B0K.pdf

ABD'den YPG'ye FGM-148 Javelin anti tank füzesi. [FGM-148 Javelin Anti-Tank Missile from the USA to the YPG]. (February 8, 2017). Retrieved February 15, 2017, from http://www.cnnturk.com/video/dunya/abdden-ypgye-fgm-148-javelin-anti-tank-fuzesi

Acun, C., Bünyamin, K., & Salaymeh, B. (2016, Ağustos). 5 Soru: Fırat Kalkanı Operasyonu | Yorum | SETA. Retrieved February 1, 2019, from https://www.setav.org/5-soru-firat-kalkani-operasyonu/

AK Party. (2002). 2002 Seçim Beyannamesi.

AK Party. (2007). 2007 Genel Seçimleri Seçim Beyannamesi. Tanıtım ve Medya Başkanlığı.

AK Party. (2011). 2011 Genel Seçimleri Seçim Beyannamesi. Tanıtım ve Medya Başkanlığı.

AK Party. (2012, September 30). Ak Parti 2023 Siyasi Vizyonu. Retrieved from http://www.akparti.org.tr/site/akparti/2023-siyasi-vizyon

AK Party. (2015). 1 kasım 2015 Genel Seçimleri Seçim Beyannamesi.

AK Party. (2016, Ocak). Akparti Tüzük-Program (Kalkınma ve Demokratikleşme Programı).

America's Arms Exports Dominate Despite Global Competition. (2016, December 27). Retrieved March 12, 2017, from https://www.usnews.com/news/articles/2016-12-27/americas-arms-exports-dominate-despite-global-competition

Archer, C., & Annette, W. (2012, November). OPPORTUNITY COSTS: Military Spending and the UN's Development Agenda. International Peace Bureau.

AR-GE 250 Veri Bankası. (2017). Retrieved 20 October, 2018, from http://www.turkishtimedergi.com/wp-content/uploads/2017/11/AR-GE-250-_-2016.pdf

ASELSAN joins BMD team. (2015, April 30). Retrieved February 21, 2017, from http://www.euro-sd.com/esd/archive/news-detail-view/artikel/aselsan-joins-bmd-team/

ASELSAN sağlık sektörüne öncülük edecek. (2015, November 25). Retrieved from http://savunmaveteknoloji.com/aselsan-saglik-sektorune-onculuk-edecek/

ASELSAN Sağlık Teknolojileri Çalıştayı | Haberler | Basın Odası | ASELSAN. (2015, December 17). Retrieved February 23, 2017, from http://www.aselsan.com.tr/tr-tr/basin-odasi/haberler/Sayfalar/SaglikTeknolojileriCalistayi20151217.aspx

ASELSAN-TEMSA elektrikli otobüs geliştirdi. (2017, March 16). Retrieved March 23, 2017, from http://www.sabah.com.tr/ekonomi/2017/03/16/aselsan-temsa-elektrikli-otobus-gelistirdi

Atesoglu Guney, N. (2016). Türkiye'nin Suriye'den Kaynaklanan Güvenlik Sorunları ve NATO'nun Rolü. Içinde *Küresel ve Bölgesel Aktörlerin Suriye Stratejileri* (1. bs, ss. 60-81). SETA.

Baugh, W. H. (1980). Deceptive Basing Modes for Strategic Missiles: An Exercise in the Politics of an Ambiguous Nuclear Balance. *The Western Political Quarterly*, 33(2), 247–259. https://doi.org/10.2307/447297

BAYKAR – İnsansız Hava Aracı Sistemleri. (n.d.). Retrieved from http://baykarmakina.com/

Beckley, M. (2010). Economic Development and Military Effectiveness. *The Journal of Strategic Studies*, 33(1), 43–79.

Beklenen Araştırma Tamamlandı: En Çok Ar-Ge Harcaması Yapan 250 Şirket. (2016). Turkishtime. Retrieved from http://www.turkishtimedergi.com/arastirma/beklenen-arastirma-tamamlandi-ar-ge-250/

Biswas, B. (1992). Defense Spending and Economic Growth in Developing Countries. *Economic Research Institute Study Papers*, (Paper 18).

Bitzinger, R. A. (1994). The Globalization of the Arms Industry: The Next Proliferation Challenge. *International Security*, (2), 170.

Bitzinger, R. A. (2003). Towards a Brave New Arms Industry. *Adelphi Paper*, 43(356), 63–79.

Boutin, J. D. (2009). Emerging Defense Industries: Prospects and Implications. The Modern Defense Industry: Political, Economic, and Technological Issues, 227–240.

Börzel, Dandashly, A., & Risse, T. (2015). The EU, External Actors and the Arabellions: Much Ado about (Almost) Nothing. *Journal of European Integration*, 37(1), 135–153. https://doi.org/10.1080/07036337.2014.975993

Brauer, J. (1998). "The Arms Industry in Developing Nations: History and Post-Cold War Assessment." In *Arming the South* (pp. 1–18). Springer. Retrieved from http://link.springer.com/chapter/10.1057/9780230501256_6

Buzan, B., & Herring, E. (1998). *The Arms Dynamic in World Politics*. Lynne Rienner Publishers.

Buzan, B., & Segal, G. (1994). Rethinking East Asian Security. *Survival*, 36(2), 3–21.

Callimachi, R. (2018, Kasım 1). Fight to Retake Last ISIS Territory Begins. *The New York Times*. January 3, 2019, from https://www.nytimes.com/2018/09/11/world/middleeast/isis-syria.html

Canbay, Ş. (n.d.). Savunma Harcamalarının Ekonomik Etkileri, 19.

Chivvis, C. S., & Fishman, B. (2017). Regional Foreign Policy Dynamics and Their Implications for the Mediterranean Region (No. PE-223-RC). RAND Corporation. Retrieved from http://www.rand.org/pubs/perspectives/PE223.html

Chomsky, N. (2004). War Crimes and Imperial Fantasies. *International Socialist Review*, (37). Retrieved from http://www.isreview.org/issues/37/chomsky.shtml

CHP. (2002). CHP Seçim Bildirgesi 2002. Retrieved May 30, 2017, from https://www.tbmm.gov.tr/eyayin/GAZETELER/WEB/KUTUPHANEDE%20BULUNAN%20DIJITAL%20KAYNAKLAR/KITAPLAR/SIYASI%20PARTI%20YAYINLARI/200304232%20CHP%20SECIM%20BILDIRGESI%202002/200304232%20CHP%20SECIM%20BILDIRGESI%202002.pdf

CHP. (2007). Cumhuriyet Halk Partisi Pusula '07.

CHP. (2015). 1 Kasım Chp. Retrieved May 30, 2017, from https://www.chp.org.tr/Public/0/Folder/52608.pdf

CNN.com - Turkey rejects U.S. troop proposal - March 1, 2003. (2003, March 2). Retrieved April 6, 2017, from http://edition.cnn.com/2003/WORLD/meast/03/01/sprj.irq.main/

Coulomb, F., & Bellais, R. (2008). The Marxist Analysis of War and Military Expenditures, Between Certainty and Uncertainty. *Defence and Peace Economics*, 19(5), 351–359. https://doi.org/10.1080/10242690802354345

Cumhuriyet. (2016, November 2). TSK personel sayısını açıkladı. Retrieved June 5, 2017, from http://www.cumhuriyet.com.tr/haber/turkiye/625117/TSK_personel_sayisini_acikladi.html

Cypher, J. M. (1987). Military Production and Capital Accumulation: A Comment. *Journal of Post Keynesian Economics*, 10(2), 304–309.

Data for all countries 1988–2015. (2016). SIPRI. Retrieved from https://www.sipri.org/databases/milex

Davutoğlu, A. (2010). Stratejik Derinlik: Türkiye'nin Uluslararası Konumu. Küre Yayınları.

Defence Expenditures of NATO Countries. (2016, July 4). Retrieved January 7, 2017, from http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2016_07/20160704_160704-pr2016-116.pdf

Demirtaş, S. (2016, November). Turkey's Al-Bab Operation Is at Stake. Retrieved December 22, 2016, from http://www.hurriyetdailynews.com/Default.aspx?pageID=449&nID=106312&NewsCatID=429

Dowdy, J., & Oakes, E. (2015, April). Defense Outlook 2017: A Global Survey of Defense-Industry Executives | McKinsey & Company. Retrieved March 27, 2017, from http://www.mckinsey.com/industries/aerospace-and-defense/our-insights/defense-outlook-2017-a-global-survey-of-defense-industry-executives

Dritsakis, N. (2004). Defense Spending and Economic Growth: An Empirical Investigation for Greece and Turkey. *Journal of Policy Modeling*, 26, 249–264.

Dunne, J. P., Perlo-Freeman, S., & Smith, R. P. (2008). The Demand for Military Expenditures in Developing Countries: Hostility versus Capability. *Defence and Peace Economics*, 19(4), 293–302. https://doi.org/10.1080/10242690802166566

Dunne, J. P. (2011). Military Keynesianism: An Assessment. In *Peace Economics and Peace Science*.

Durmaz, M. (2014, September). THE U.S. Arms Embargo of 1975–1978 and Its Effects on the Development of the Turkish Defense Industry. Naval Postgraduate School, Monterey, California: Naval Postgraduate School. Retrieved from http://hdl.handle.net/10945/43905

Duyar, M., & Koçoğlu, M. (2014). Askeri Harcamalarının Ekonomik Büyüme Üzerine Etkisi: Sahra Altı Afrika Örneği. *The Journal of International Social Research*, 7(33), 702–722.

Emmott, R., Siebold, S., & Stewart, P. (2015, October 8). Turkey Urges NATO to Keep up Its Patriot Defenses. Reuters. Retrieved from http://www.reuters.com/article/us-mideast-crisis-syria-nato-idUSKCN0S20HJ20151008

Enginsoy, Ü. (2011, March 6). Turkish Defense Exports to Mideast Unaffected by Revolts – TR Defence. Retrieved March 21, 2017, from http://www.trdefence.com/turkish-defense-exports-to-mideast-unaffected-by-revolts/

Esnek, F. (2016, October 7). Hangi bakanlık ve kuruma ne kadar ödenek ayrıldı? TAM LiSTE. Retrieved June 6, 2017, from http://www.bik.gov.tr/hangi-bakanlik-ve-kuruma-ne-kadar-odenek-ayrildi-tam-liste/

Eşiyok, B. A. (2017, January 27). Yüksek Teknoloji İhracatı Birim Fiatı. Herkese Bilim Teknoloji. Retrieved from http://www.tim.org.tr/tr/inpressdt-12044c67-438e-47b2-bdb1-a639e3da7990.html

Fleurant, A., Perlo-Freeman, S., Wezeman, D. P., & T Wezeman, S. (2016). Trends in International Arms Transfer 2015.

For Immediate Release. (2007, March 27). Retrieved February 16, 2017, from http://web.archive.org/web/20070327103457/http://www.missilesandfirecontrol.com/our_news/pressreleases/02pressrelease/072402_JAVELIN.htm

Germany Denied Several Arms Shipments to Turkey in Past Months – reports. (2017, March 22). Retrieved March 28, 2017, from https://www.rt.com/news/381753-germany-turkey-arms-sales/

Gilpin, R. (1981). *War and Change in World Politics*. Cambridge; New York: Cambridge University Press.

Gilpin, R. (1983). *War and Change in World Politics*. Cambridge University Press. Retrieved from http://books.google.com/books?hl=en&lr=&id=2iKL7zr3kl0C&oi=fnd&pg=PR9&dq=%22and+many+others+in+the+political,+economic,+and%22+%22events+has+revealed+underlying+shifts+in+military%22+%22Scholars,+journalists,+and+others+turn+to+history+for%22+%22in+producing+change+in+international+systems%3F%22+&ots=W1Y1Id1WWs&sig=vnMHVHMQACHhR9729FtmvnSuqH8

Goksedef, E. (2015, August 17). Patriot kararı ne anlama geliyor? [What Does the Patriot Decision Mean?]. Retrieved April 6, 2017, from http://www.aljazeera.com.tr/al-jazeera-ozel/patriot-karari-ne-anlama-geliyor

Gray, C. S. (1971). The Arms Race Phenomenon. *World Politics*, 24(1), 39–79. https://doi.org/10.2307/2009706

Gray, C. S. (1982). *Strategic Studies and Public Policy: The American Experience*. Lexington, KY: University Press of Kentucky.

Güntay Şimşek - İlk milli İHA, kaç paraya mal oldu? - Bloomberg HT. (2016, September 21). Retrieved February 20, 2017, from http://www.bloomberght.com/ht-yazarlar/guntay-simsek/1920144-ilk-milli-iha-kac-paraya-mal-oldu

Haber7. (2017, February 8). ABD, FGM-148 Javelin'i YPG'ye verdi. [The USA Gave FGM-148 Javelin to the YPG]. Retrieved February 15, 2017, from http://www.haber7.com/ortadogu/haber/2254475-abd-fgm-148-javelini-ypgye-verdi

HDP. (2015). 2015 HDP Seçim Bildirgesi Tam Metin.pdf. Retrieved May 30, 2017, from http://www.hdp.org.tr/images/UserFiles/Documents/Editor/HDP%20Se%C3%A7im%20Bildirgesi%20Tam%20Metin.pdf

Hillier, D., & Wood, B. (2003). Shattered Lives: The Case for Tough International Arms Control. Amnesty International and Oxfam International.

History | Tejas - India's Light Combat Aircraft. (n.d.). Retrieved May 11, 2017, from http://www.tejas.gov.in/history.html

Humud, C. E., Blanchard, C. M., & Nikitin, M. B. D. (2017). Armed Conflict in Syria: Overview and U.S. Response (No. RL33487). Congressional Research Service.

Ighani, H. (2016). Workshop Report CPA Saudi-Iran Rivalry. Council on Foreign Relations.

Increase in Arms Transfers Driven by Demand in the Middle East and Asia, says SIPRI | SIPRI. (2017, February 20). Retrieved April 4, 2017, from https://www.sipri.org/media/press-release/2017/increase-arms-transfers-driven-demand-middle-east-and-asia-says-sipri

Institute for Economics and Peace. (2018). *Global Peace Index 2018: Measuring Peace in a Complex World*. Retrieved January 6, 2019, from http://visionofhumanity.org/app/uploads/2018/06/Global-Peace-Index-2018-2.pdf

Islamic State and the Crisis in Iraq and Syria in Maps. (2017, January 20). BBC News. Retrieved from http://www.bbc.com/news/world-middle-east-27838034

Israeli Manufacturers Turkish UAV Contract. (2011, December 22). Retrieved April 11, 2017, from http://www.defenseindustrydaily.com/israeli-manufacturers-win-150m-turkish-uav-contract-updated-0389/

JAVELIN: Lockheed Martin - Missiles and Fire Control. (2008, January 20). Retrieved February 15, 2017, from https://web.archive.org/web/20080120110001/http://www.missilesandfirecontrol.com/our_products/antiarmor/JAVELIN/product-JAVELIN.shtml#

Kapstein, E. B. (1991). International Collaboration in Armaments Production: A Second-Best Solution. *Political Science Quarterly*, 106(4), 657. https://doi.org/10.2307/2151798

Karaosmanoğlu, A. L., & Kibaroğlu, M. (2003). *Post-Cold War Defense Reform: Lessons Learned in Europe and the United States*. East West Institute, Brassey's, New York.

Kasapoglu, C. (2017, February 3). Operation Euphrates Shield: Progress and Scope. Retrieved August 4, 2017, from http://www.aljazeera.com/indepth/opinion/2017/02/operation-euphrates-shield-progress-scope-170201133525121.html

Katz, Y. (2011, December 22). Ministry Kills Deal to Sell Intel System to Turkey. *The Jerusalem Post*. Retrieved May 17, 2017, from http://www.jpost.com/Defense/Ministry-kills-deal-to-sell-intel-system-to-Turkey

Keller, W. W. (1995). Arm in Arm: The Political Economy of the Global Arms Trade. Basic Books.

Kızmaz, E. (2007). Turkish Defense Industry and Undersecretariat for Defense Industries. Bilkent University. Retrieved from http://repository.bilkent.edu.tr/handle/11693/14607

Kolodziej, E. A. (2005). Security and International Relations. Cambridge; New York: Cambridge University Press.

Lemmon, G. T. (2017, March 19). Three Lingering Questions for Trump's New Plan to Fight ISIS. Retrieved April 10, 2017, from http://www.defenseone.com/ideas/2017/03/three-lingering-questions-trumps-new-plan-fight-isis/136287/

Martin, L. (2000). Turkey's National Security in the Middle East. *Turkish Studies*, 1(1), 83–106. https://doi.org/10.1080/14683840008721222

Mearsheimer, J. J. (2001). The Tragedy of Great Power Politics (Updated Edition). W. W. Norton & Company.

MEB. (2016, January). 2016 Performance Program. MEB. Retrieved from http://sgb.meb.gov.tr/meb_iys_dosyalar/2016_04/28051255_2016_performans_programi.pdf

Mercan, S. (2016). "Perceptions of Security in Turkish Foreign Policy towards the Middle East in the 21st Century." In *Turkey's Foreign Policy and Security Perspectives in the 21st Century: Prospects and Challenges*. Universal-Publishers.

Mevlütoğlu, A. (2015, May 25). Siyasi Partilerin 2015 Genel Seçim Beyannamelerinde Savunma Sanayii. Retrieved June 1, 2017, from http://www.siyahgribeyaz.com/2015/05/siyasi-partilerin-2015-genel-secim.html

Mevlütoglu, A. (2016). Türkiye'nin Savunma Reformu Tespit ve Öneriler. SETAV. Retrieved from http://file.setav.org/Files/Pdf/20160901200637_turkiyenin-savunma-reformu-pdf.pdf

MFA. (n.d.). Türkiye - İsrail Siyasi İlişkileri. Retrieved April 11, 2017, from http://www.mfa.gov.tr/turkiye-israil-siyasi-iliskileri.tr.mfa

MHP. (2002). Milliyetçi Hareket Partisi seçim beyannamesi, 3 Kasım 2002: Türkiye'nin onurlu geleceği. Milliyetçi Hareket Partisi. Retrieved December 3, 2016, from http://212.174.157.46:8080/xmlui/bitstream/handle/11543/938/200300790.pdf?sequence=1

MHP. (2007). Milliyetçi Hareket Partisi seçim beyannamesi, 22 Temmuz 2007: milli duruş ve kararlılık belgesi. Milliyetçi Hareket Partisi. Retrieved December 3, 2016, from http://212.174.157.46:8080/xmlui/bitstream/handle/11543/919/200902631_2007.pdf?sequence=1

MHP. (2011). MHP_2011_SecimBeyannamesi.pdf. Retrieved May 30, 2017, from http://www.mhp.org.tr/usr_img/_mhp2007/kitaplar/MHP_2011_SecimBeyannamesi.pdf

MHP. (2015a). 1 Kasim 2015 Seçim beyannamesi. Retrieved December 3, 2016, from http://www.mhp.org.tr/usr_img/mhpweb/1kasimsecimleri/beyanname_1kasim2015.pdf

MHP. (2015b). 7 Haziran 2015 Seçim Beyannamesi. Retrieved December 3, 2016, from http://www.mhp.org.tr/usr_img/mhpweb/MHP_Secim_Beyannamesi_2015_tam.pdf

Milli Eğitim İstatistikleri Örgün Eğitim. (2017, 2018). TC MEB. Retrieved January 9, 2019, from http://sgb.meb.gov.tr/meb_iys_dosyalar/2018_09/06123056_meb_istatistikleri_orgun_egitim_2017_2018.pdf

Milli İHA'ya giden yol. [The Road to National UAV]. (2016, October 26). [Text]. Retrieved February 16, 2017, from http://www.yenisafak.com/ar/teknoloji/milli-ihaya-giden-yol-2554181

Milliyet. (2010, April 7). M 60 tanklarının modernize projesi tamamlandı. Retrieved February 16, 2017, from http://www.milliyet.com.tr/m-60-tanklarinin-modernize-projesi-tamamlandi-ekonomi-1221976/

Munich Security Report 2017. (2017) (p. 89).

Ministry of Trade. (2018). Retrieved October 22, 2018, from https://eb.ticaret.gov.tr/portal/faces/home/disIliskiler/ulkeler/ulke-detay/Irak/html-viewer-ulkeler?contentId=UCM%23dDocName%3AEK-160185&contentTitle=T%C3%BCrkiye%20ile%20Ticaret&_afrLoop=3751198664940089&_afrWindowMode=0&_afrWindowId=pppfayag5&_adf.ctrl-state=i0lihg7nv_351#!%40%40%3F_afrWindowId%3Dpppfayag5%26_afrLoop%3D3751198664940089%26contentId%3DUCM%2523dDocName%253AEK-160185%26contentTitle%3DT%25C3%25BCrkiye%2Bile%2BTicaret%26_afrWindowMode%3D0%26_adf.ctrl-state%3Di0lihg7nv_355

Moravcsik, A. (1991). Arms and Autarky in Modern European History. *Daedalus*, 120(4), 23–45.

Murray, D. J., & Viotti, P. R. (1994). The Defense Policies of Nations: A Comparative Study. JHU Press.

Neuman, S. G. (1988). Arms, Aid and the Superpowers. *Foreign Affairs*, 66(5), 1044–1066. https://doi.org/10.2307/20043577

Neuman, S. G. (1994). Arms Transfers, Military Assistance, and Defense Industries: Socioeconomic Burden or Opportunity? *The Annals of the American Academy of Political and Social Science*, 535(1), 91–109.

OECD. (2016). Development Aid at a Glance (Statistics by Region).

Oran, B. (2013a). *Türk Dış Politikası* [Turkish Foreign Policy]. (2nd ed., Vol. I). İletişim.

Oran, B. (2013b). *Türk Dış Politikası* [Turkish Foreign Policy]. (2nd ed., Vol. III). İletişim.

Orhun, A. (2015, August 5). Savunma ihracat taarruzunda. Retrieved February 21, 2017, from http://www.itohaber.com/haber/guncel/201715/savunma_ihracat_taarruzunda.html

Osborne, S. (2017, March 29). Turkey Ends "Euphrates Shield" Military Operation in Syria, PM says. Retrieved 11 May, 2017, from http://www.independent.co.uk/news/world/middle-east/turkey-syria-ends-euphrates-shield-military-operation-binali-yildirim-jarablus-isis-islamic-state-a7657156.html

Özcan, M. (2008). *Harmonizing Foreign Policy: Turkey, the EU and the Middle East*. Ashgate Publishing, Ltd.

Özçelik, N. (2018). Türkiye'de Terör Tehdidi ve Terörle Mücadele. Içinde *Strateji araştırmaları serisi (4) Terörün kökenleri ve terörle mücadele stratejisi* (C. 1, ss. 115-125). Ankara: Seta.

Özdemir, S. (2015, March 19). 1 kg'lık ihracat nasıl 4 dolar olur. Retrieved February 27, 2017, from http://www.hurriyet.com.tr/1-kglik-ihracat-nasil-4-dolar-olur-28487485

Pan, C., Chang, T., & Wolde-Rufael, Y. (2015). Military Spending and Economic Growth in the Middle East Countries: Bootstrap Panel Causality Test. *Defence and Peace Economics*, 25(4), 443–456.

Policytensor. (2013, February 25). Theory of Hegemonic War. Retrieved May 3, 2017, from https://policytensor.com/2013/02/25/theory-of-hegemonic-war/

Ram, R. (1993). *Defense Spending and Economic Growth*. (J. E. Payne & A. P. Sahu, Eds.). Boulder: Westview Press Inc.

Reese, A. (2013). Sectarian and Regional Conflict in the Middle East. *Middle East Security Report*, 13, 10–12.

Riddell, T. (1986). Marxism and Military Spending. *Journal of Post Keynesian Economics*, 8(4), 574–580.

Sanders, R. (1990). Sanders Arms Industries New Suppliers. *The DISAM Journal*, 97–108.

Sasad. (2013a). Sasad-Performans-Raporu-2013.pdf (Performance Report) (p. 41).

Sasad. (2013b). Sektor-Performans-Raporu-2012 (Sector Report) (p. 11).

Sasad. (2015). Savunma ve Havacılık Sanayii Performas Raporu (Performance Report) (p. 18). Ankara.

Sasad. (2017). Savunma ve Havacılık Sanayii Performas Raporu (Performance Report) (p. 13). Ankara.

Shah, A. (2013). The Arms Trade Is Big Business — Global Issues. Retrieved March 7, 2017, from http://www.globalissues.org/article/74/the-arms-trade-is-big-business

Shah, A. (2013, June 30). World Military Spending — Global Issues. Retrieved March 6, 2017, from http://www.globalissues.org/article/75/world-military-spending

Sharkov, D. (2017, April 25). Russia Eyes the Far Reaches of Atmosphere with New S-500 Air Defense Missile System. Retrieved August 4, 2017, from http://www.newsweek.com/russia-tests-its-next-generation-anti-aircraft-s-500-missile-589614

SIPRI. (2016). SIPRI-NATO-milex-data-1949-2015.xlsx. Retrieved March 12, 2017, from https://www.sipri.org/databases/milex

Singer, P. W. (2003). *Corporate Warriors: The Rise of the Privatized Military Industry.* Cornell University Press.

Sivard, R. L. (1981). Socio-Political Indicators. In Thee, Marek (ed.), Armaments, Arms Control, and Disarmament: A UNESCO Reader for Disarmament Education (pp. 35-39). Paris: UNESCO Press.

Snyder, Jack. (1991) *Myths of Empire: Domestic Politics and International Ambition*. Ithaca & London: Cornell University Press.

Son dakika: Almanya'dan Türkiye'ye bir yasak daha. (2017, March 23). Retrieved March 28, 2017, from http://www.cnnturk.com/dunya/son-dakika-almanyadan-turkiyeye-bir-yasak-daha

Sönmez, G. (2017, February 24). Turkey's Euphrates Shield Operation: Al-Bab and Beyond. Retrieved March 8, 2017, from https://jamestown.org/program/turkeys-euphrates-shield-operation-al-bab-beyond/

Sputnik. (2016, September 8). Genelkurmay: Çukurca'da etkisiz hale getirilen PKK'lı sayısı 186'ya ulaştı. Retrieved March 23, 2017, from https://tr.sputniknews.com/turkiye/201609081024773953-cukurca-pkk-genelkurmay/

SSM. (2013a). 2013 Ssm YiliPerformansPrograms.pdf (p. 68).

SSM. (2013b). Savunma Sanayi Müsteşarlığı 2013 Faliyet Raporu (Activity Report) (p. 123).

SSM. (2015). Savunma Sanayii Müsteşarlığı Faaliyet Raporu 2015 (Activity Report) (p. 58).

SSM. (2016). Yıllık Faaliyet Raporu 2016 (Activity Report) (p. 57).

Statista. (2017, June). Trend of Global Military Spending 2000-2015 | Statistic. Retrieved August 4, 2017, from https://www.statista.com/statistics/264434/trend-of-global-military-spending/

Stork, J. (2016). Arms Industries of the Middle East | Middle East Research and Information Project. Retrieved February 15, 2017, from http://www.merip.org/mer/mer144/arms-industries-middle-east

Strack, C. (2015). Islamic State Territory Shrinks by 9.4% in First Six Months of 2015 | IHS Jane's 360. Retrieved February 15, 2017, from http://www.janes.com/article/53239/islamic-state-territory-shrinks-by-9-4-in-first-six-months-of-2015#.VbeipB_weRs.twitter

Sude, B. (2016, Haziran 24). Author of Pre-9/11 Memo Bush Ignored Talks Orlando—and Fighting Terror | Observer. Retrieved 7 March 2018, from https://observer.com/2016/06/author-of-pre-911-memo-bush-ignored-talks-orlando-and-the-fight-against-terror/

Syria Rejects Russian Proposal for Kurdish Federation. (2016, October 24). Retrieved February 10, 2017, from http://www.al-monitor.com/pulse/originals/2016/10/turkey-russia-mediates-between-kurds-and-assad.html

TC Sayıştay Başkanlığı. (2018). SAVUNMA SANAYİİ MÜSTEŞARLIĞI *2017 Yılı Sayıştay Denetim Raporu* (ss. 1-57). Retrieved January 18, 2019 https://www.sayistay.gov.tr/tr/Upload/62643830/files/raporlar/kid/2017/%C3%96zelB%C3%BCt%C3%A7eli_%C4%B0darelerB/SAVUNMA%20SANAY%C4%B0%C4%B0%20M%C3%9CSTE%C5%9EARLI%C4%9EI.pdf

The battle for Mosul in Maps. (2017, March 31). *The Guardian*. Retrieved April 16, 2017, from https://www.theguardian.com/world/2016/nov/04/battle-for-mosul-maps-visual-guide-fighting-iraq-isis

Thee, M. (Ed.). (1981). Armaments, Arms Control, and Disarmament: A UNESCO Reader for Disarmament Education. Paris: UNESCO Press.

Theohary, C. (2016). Conventional Arms Transfers to Developing Nations, 2008-2015 (Congressional Research Service Report).

TIMReport168.pdf. (t.y.). Retrieved February 5, 2019 from http://www.tim.org.tr/files/downloads/Timreport/TIMReport168.pdf

TİM - Dış ticarette fiyat avantajı yakaladık! (t.y.). Retrieved February 2, 2019, from http://www.tim.org.tr/tr/ayin-uzmani-dis-ticarette-fiyat-avantaji-yakaladik.html

TOBB. (2008). Türk Savunma Sanayii Sektör Raporu (No. 2008/69) (pp. 1–88). Ankara: TOBB. Retrieved January 2, 2017, from https://www.tobb.org.tr/Documents/yayinlar/Savunma.pdf

TOBB. (2012). Türkiye Savunma Sanayi Meclisi Sektör Raporu (Sector Report) (p. 68). Ankara.

Trade Map - List of Exporters for the Selected Product (All products). (n.d.-a). Retrieved April 16, 2017, from http://www.trademap.org/tradestat/Country_SelProduct_TS.aspx?nvpm=1|||||TOTAL|||2|1|1|2|2|1|2|1|

Trade Map - List of Exporters for the Selected Product (All products). (n.d.-b). Retrieved from http://www.trademap.org/tradestat/Country_SelProduct_TS.aspx?nvpm=1|||||TOTAL|||2|1|1|2|2|1|2|1|

Trade Map - List of Exporters for the Selected Product (Arms and Ammunition; Parts and Accessories Thereof). (n.d.). Retrieved April 16, 2017, from http://www.trademap.org/tradestat/Country_SelProduct_TS.aspx?nvpm=1|||||93|||2|1|1|2|2|1|2|4|1

Turkey Enters Syria to Remove Precious Suleyman Shah Tomb. (2015, February 22). BBC News. Retrieved from http://www.bbc.com/news/world-middle-east-31572257

Turkey | Product | Exports | to Europe & Central Asia 2015 | WITS | Data. (2017). [worldbank.org]. Retrieved August 4, 2017, from http://wits.worldbank.org/CountryProfile/en/Country/TUR/Year/2015/TradeFlow/Export/Partner/ECS/Product/all-groups

Turkey F-35. (2015, January 7). Retrieved March 7, 2017, from https://www.f35.com/global/participation/turkey

Turkey's Altay MBT Project Hit by Engine Technology Transfer Issues | IHS Jane's 360. (2017, January 20). Retrieved March 3, 2017, from http://www.janes.com/article/67104/turkey-s-altay-mbt-project-hit-by-engine-technology-transfer-issuesT

Turkey's PKK Conflict: The Rising Toll. (2017). Retrieved April 6, 2017, from http://www.crisisgroup.be/interactives/turkey/#methodology

Tümosan Motor ve Traktör Sanayi A.Ş. Özel Durum Açıklaması (Genel). (2017, February 16). Kamu Aydınlatma Platformu.

Türkiye Avusturya'dan hangi silahları alıyor? | Gündem Haberleri. (2016, November 5). Retrieved March 28, 2017, from http://www.haberturk.com/gundem/haber/1328698-turkiye-avusturyadan-hangi-silahlari-aliyor

Türkiye Rusya'dan S-400 alıyor. (2017, July 13). Retrieved August 4, 2017, from http://www.ntv.com.tr/galeri/turkiye/turkiye-rusyadan-s-400-aliyor,sYNQd330Q0GartLeXpTdvQ

Türkiye Ticaret, S., Deniz Ticaret Odaları ve Ticaret Borsaları Birliği. (2012). Türkiye savunma sanayi meclisi sektör raporu 2011. Ankara: TOBB.

Türkiye'ye tank savunma sistemi satmak isteyen Alman şirkete izin verilmedi. (2017, March 23). BBC Türkçe. Retrieved from http://www.bbc.com/turkce/haberler-dunya-39370421

United Nation Group of Consultant Experts. (1981). Economic and Social Consequences of the Arms Race. In Thee, Marek (ed.), Armaments, Arms Control, and Disarmament: A UNESCO Reader for Disarmament Education (pp. 40-57). Paris: UNESCO Press.

Ülkelerin asker sayıları! Bakın Türkiye'de kaç asker var. (2018, December 5). Retrieved 06 February 2019, http://www.hurriyet.com.tr/galeri-ulkelerin-asker-sayilari-bakin-turkiyede-kac-asker-var-41041376

Visualizations Related to Current and Past ISIS Territory Status in Iraq and Syria. (n.d.). Retrieved from https://www.graphiq.com/vlp/9Lz4Hdog9wx?utm_source=viz&utm_medium=viz.referral&utm_campaign=viz.ref&utm_viz_id=9Lz4Hdog9wx&utm_cat=Bubblemap%2FPathmap&utm_click_loc=body&utm_pubreferrer=www.independent.co.uk%2Fnews%2Fworld%2Fmiddle-east%2Fturkey-syria-ends-euphrates-shield-military-operation-binali-yildirim-jarablus-isis-islamic-state-a7657156.html

Volten, P. (2016). Hard Power versus Soft Power or a Balance between the Two? *All Azimuth: A Journal of Foreign Policy and Peace*, 5(2). https://doi.org/10.20991/aajfpp.51751

Why is Suleyman Shah's Tomb So Important? (2015, February 22). BBC News. Retrieved from http://www.bbc.com/news/world-middle-east-31574209

World Bank. (2018). Retrieved 22 October, 2018, from https://wits.worldbank.org/CountryProfile/en/Country/TUR/Year/2015/TradeFlow/EXPIMP

Wezeman, P. D., Fleurant, A., Kuimova, A., Tian, N., & Wezeman, S. T. (t.y.). Trends in international arms transfers, 2017, 12.

Willen, B. (2015, April). Defense Industry Performance, Trends and Future Expectations. ATKearney Conference Presentation, SASAD.

Wolfers, A. (1952). "National Security" as an Ambiguous Symbol. *Political Science Quarterly*, 67(4), 481–502.

Yalçın, H. B. (2018). Terörle Mücadeleye Stratejik Yaklaşım. In Strateji araştırmaları serisi (4) *Terörün kökenleri ve terörle mücadele stratejisi* (C. 1, ss. 19-52). Ankara: SETA.

Yargıtay Başkanlığı. (2000, January). T.C. Yargıtay Başkanlığı, 26(1), 1–172.

Yemen Crisis: Who Is Fighting Whom? (2017, March 28). BBC News. Retrieved April 15, 2017, from http://www.bbc.com/news/world-middle-east-29319423

Yeşiltaş, M., & Duran, B. (2018). *Ortadoğu'da Devlet Dışı Silahlı Aktörler* (1). Ankara: SETA.

Yildirim, J., Sezgin, S., & Öcal, N. (2005). Military Expenditure and Economic Growth in Middle Eastern Countries: A Dynamic Panel Data Analysis. *Defence and Peace Economics*, 16(4), 283–295. https://doi.org/10.1080/10242690500114751

Zanotti, J. (2011). Turkey-U.S. Defense Cooperation: Prospects and Challenges (Report for Congress No. R41761). Congressional Research Service.

Zanotti, J., & Clayton, T. (2017). Turkey: Background and U.S. Relations in Brief (Report for Congress No. R44000). Congressional Research Service.

Ziylan, A. (2001). Türkiye'de Savunma Sanayii Tarihçesi. *Ulusal Strateji Dergisi*, 7.

This book elaborates on the nationalization of the Turkish defense industry since the invasion of Iraq in 2003. The objective of the book is to understand the recent increasing trend of nationalization of the defense industry in Turkey. The book begins by analyzing the regional conjuncture and the lack of trust in allies in order to show how these influence Turkey's investments in the sector. Then, it moves on to explain the country's domestic structure which enables and inspires its politicians to attribute greater importance to industrial self-reliance in defense. Lastly, it focuses on the political economy of the defense industry and the considerable amount of revenue the sector generates at the global level and for Turkey. The book concludes that focusing on developing modern technology and on the production of specific arms of defense is beneficial for Turkey's future and position in the international market.

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