

# Force Posturing and the Contemporary Security Environment: Options for Industrially Dependent Countries

AIR COMMODORE NASIM ABBAS KHAN, PAKISTAN AIR FORCE

Traditionally, nation-states have relied on armed forces for securing their survival and interests. Their force postures were designed for specific security environments precipitated mainly by conventional military threats from adversaries. However, the prevailing volatile international security environment fueled by technology, globalization, and the concomitant novel spectrum of threats has exacerbated the force posturing challenges for nation-states across the globe. They now have to configure their force postures to match a wide spectrum of conventional and nonconventional threats emanating from both state and non-state actors. Today's force postures are not only technology intensive, they are also exorbitantly expensive requiring a sound economic base and a cutting-edge industrial capability. While economically strong countries with a robust industrial base find it comparatively easier to develop force postures best suited for their peculiar security environments and national aspirations; developing nations with meager economic resources and limited industrial base are facing unprecedented challenges in developing and sustaining requisite force postures necessitating innovative and ingenious force posturing solutions to make up for their inherent limitations.

This article discusses the anatomy of a country's force posture and its major determinants as major drivers of the military buildup and force posturing of a nation. It then scans force postures of few powerful nations in the backdrop of prevailing security environment to draw some relevant conclusions before proposing possible options for the developing countries to address their force posturing challenges.

## Defining Force Posture

Before the advent of nuclear weapons and nuclear strategy, the term *strategic posture* was associated with the means and methods by which nations pursue their national interests, principally military forces and the way they are organized and employed.<sup>1</sup> However, after World War II, the term *strategic posture* came to

be almost singularly associated with nuclear weapons,<sup>2</sup> while force posture became the overarching concept encompassing all military capabilities and their disposition.

*Force posture*, according to the Department of Defense, is the overall military disposition, strength, and condition of readiness of a military.<sup>3</sup> Obviously, this definition has a militaristic focus compared to a much broader understanding of force posture by Elaine Bunn, former US deputy assistant secretary of defense for nuclear and missile defense and an eminent defense expert. She considers force posture to consist of current force capabilities, military actions and decisions taken, and the infrastructure.<sup>4</sup> Where force capabilities are the number, training, quality, disposition, and posture of the force, military actions and decisions are the actions taken during an active conflict or exercises, and infrastructure includes science and technological base that feeds research, development, testing, and engineering. She also considers civil-military personnel, industrial base, economic wherewithal, and the declaratory policy of a nation vital for a force posture.<sup>5</sup> We can, therefore, understand force posture as a comprehensive capability brought about by a number of factors including technology, industrial base, national resources, military strength and readiness and national resolve aimed at achieving its intended objectives during war and in peace.

As far as terms like *industrially dependent* and *independent countries* are concerned, they are relative in today's globalized world where everyone is dependent on someone in one way or the other. For instance, the world's most developed nations like the US, Germany, France, United Kingdom, and so forth, despite having unparalleled technological and industrial capability, do not produce everything they need for obvious economic reasons. However, they can be considered adequately self-sufficient and independent as far as their defense needs are concerned. Therefore, for the purpose of this military oriented article, countries reliant on others for their major defense needs can be assumed as industrially dependent.

## Determinants of Force Posture

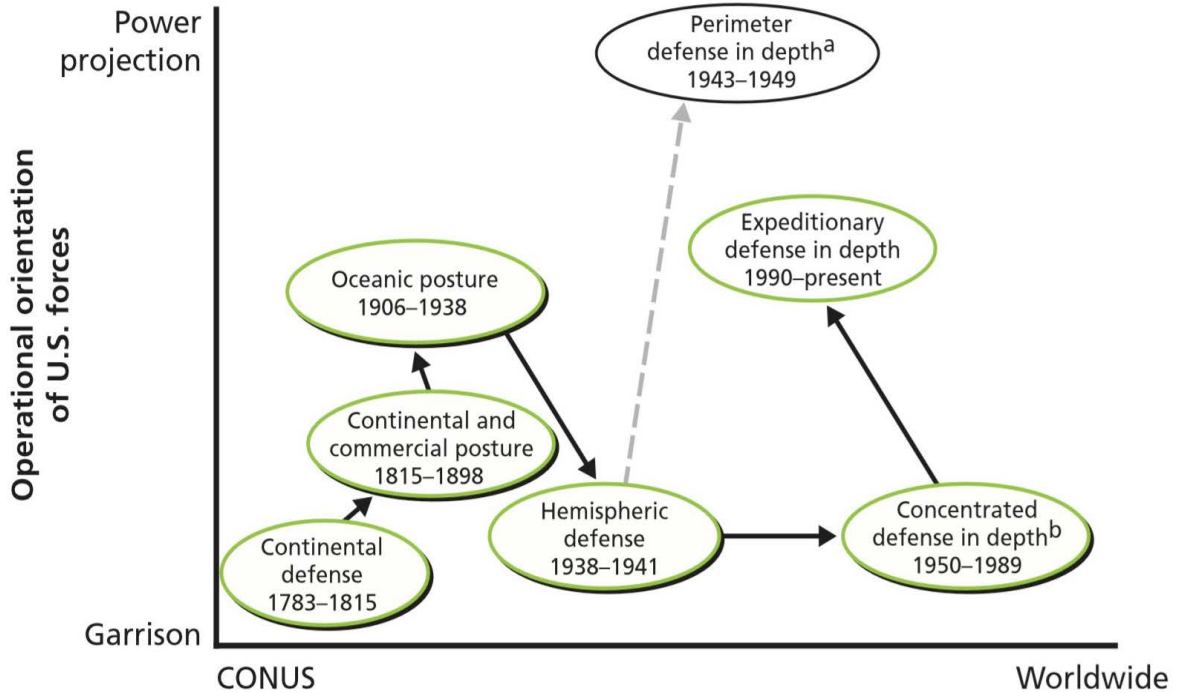
States need force posture for a variety of reasons. For a hegemon, a large and strong military is the primary tool of safeguarding its widespread interests, maintaining its power position and of preventing anyone from eroding its sphere of influence. For others, it may be aimed at ensuring their survival, protecting their interests and deterring any potential adversaries from aggression. The international

system is characterized as anarchic with no central authority,<sup>6</sup> where the core interest of any state is survival besides other interests.<sup>7</sup> It is a world where the strong do what they can, and the weak suffer what they must,<sup>8</sup> where weakness invites aggression.<sup>9</sup> Therefore, every state calculates and analyzes the threats to its survival and interests and accordingly develops the required force postures best suited to realize its national aspirations. Since every state has its own peculiar and ever evolving security environment and set of interests and aspirations, no single force posture can be the ultimate solution for everyone. By and large, following important determinants shape the force postures of states.

### **Ideology, Purpose, and Aspirations**

A nation's ideology plays a key role in defining the grand strategy and force posture of a state. Ideology can be good or bad, it can be political (communism, democracy, and so forth), religious (Islamic State of Iraq and Syria, Hindutva, and so forth) or nationalist (Nazi, Rashtriya Swayamsevak Sangh, and so forth), while some theorists argue that all ideology is, by its nature, political.<sup>10</sup> Most of the political and social scientists define *ideology* in terms of beliefs, attitudes and values.<sup>11</sup> According to Anthony Downs, ideology is a verbal image of the good society and of the chief means of constructing such a society.<sup>12</sup> Therefore, ideology is the very platform supporting the entire edifice of a nation. It is from ideology that a nation draws her "raison d'être" and purpose that, in turn, gives birth to her aspirations at the national and international level. The larger the scope of these aspirations or universal the ideology, the stronger the force posture required. American founding fathers considered life, liberty, and pursuit of happiness as the core values for their political ideology, and after securing their freedom, embarked upon realizing the true potential of this ideology and went on to becoming the sole superpower of the world. Despite the differences between the proponents of a "crusader state" and the "city on the hill" approaches, American political idealism of spreading democratic values around the globe has been at the center of its force posturing debates.<sup>13</sup> A study by the RAND Corporation of the American force postures since 1783 indicates how the United States has grown from a relatively weak and insular regional power that was primarily concerned with territorial defense into the preeminent global power. According to this study, America has had seven distinct and identifiable force postures since 1783 (fig. 1),<sup>14</sup> highlighting the changing scope of her evolving power in pursuit of her aspirations and ideology.

## Ideal Type Defense Postures, 1783–Present



**Figure 1. Operational orientation of US forces**

All these force postures are indicative of an evolving grand strategy in relation to the growth in nation’s power, influence, and interests. Similarly, religious and nationalist ideologies have also played dominant roles in defining the force postures of various empires and states in history. In the contemporary world, the rising Hindutva in India with aspirations of reliving the supposedly lost golden civilization and her concomitant aggressive force posturing are indicative of the staunch linkage between ideology and force posturing.<sup>15</sup> In short, force postures are designed to serve a state’s grand strategy that feeds on the very ideology upon which that state exists.

### National Interests and Objectives

National interests and objectives are more explicit manifestations of national aspirations and are vital determinants of any force posture. Besides the core interest of survival, there are other economic, commercial, and political interests and objectives of states that need to be furthered, protected, and secured.<sup>16</sup> The larger

the scope and scale of the interests and objectives, the stronger the force posture required to secure them. In other words, interests and objectives are the ends being pursued while force posture is one of the means to reach them. However, states and their leaders need to find a balance between these ends vs means. As a general rule, you keep your objectives within the reach of your means while simultaneously working to improve your means that can then allow expanding the scope of interests and objectives. An earlier example of the US adequately indicates the intricate relationship between national interests and objectives and the force posture. Since force posture is predominantly a relative term, its two main dimensions are structural capabilities and the policy intent. Given the relative difficulty of assessing intentions (precise interests and objectives), a careful analysis of a nation's force posture tells us a lot about her aspirations and the scope of her interests. In the contemporary world, the strength of the force postures maintained by the leading nations inform us about the scope of their interests and objectives. Likewise, rising powers (India, Brazil, and so forth) and their concomitant force posturing point toward their larger aspirations.

### **Security Environment**

Since survival is one of the core interests of every state, security environment becomes another important determinant of the force posture. The larger the perceived or actual threats to the survival of a state and her interests, the stronger the force posture required to mitigate them. Moreover, regions with historical unresolved issues and ambitious regional powers as is the case in south Asia (India),<sup>17</sup> have a greater potential for arms race and stronger force posture requirements notwithstanding their economic limitations. Great-power competition and alliances also affect the international and regional security environment exacerbating the security issues of local players. Similarly, the volatile security environment of the Middle East and other regions of the world make it obligatory for countries with greater stakes and larger threats to have stronger force postures. Countries also make their own assessment of the prevailing security environment around them and about the intentions of their adversaries to constantly evaluate the scope of present and future threats to define requisite force posture solutions. In such volatile regions, despite their limited economic capabilities, states are pushed to have strong force postures even at the cost of their national prosperity.

### **Economy, Technology, and Industrial Capacity**

Economy, technology, and industrial capacity greatly contribute toward facilitating development and maintenance of stronger force postures. Stronger economies

generally need and can have stronger force postures with better chances of success on the battlefield. A study conducted by Michael Beckley for the University of Columbia suggests that during hundreds of battles between 1898–1987, the more economically developed side consistently outfought the poorer side on a soldier-for-soldier basis.<sup>18</sup> The study concludes that the conventional military dominance of Western democracies stems from superior economic development, not societal pathologies or political institutions.<sup>19</sup> In particular, economically developed states are more capable of generating highly skilled military units and producing, maintaining, and modernizing sophisticated military equipment.<sup>20</sup> Part of this advantage stems from a greater surplus of wealth, which allows developed states to sustain large military investments without undermining long-term economic growth. But economically developed states also derive military benefits from their technological infrastructures, efficient production capacities, advanced data analysis networks, stocks of managerial expertise, and stable political environments.<sup>21</sup> However, not all the nations with developed economies have the strongest force postures, mainly due to their low-threat security environments, limited global aspirations, and better national power potential. Developing nations with limited economic, technical, and industrial capacity face serious challenges in developing and maintaining potent force postures and are therefore reliant on advanced nations. A support that is not always available to everyone owing to the complex nature of international and regional alliances, preferences, and restrictions, and when it does become available, their meager economic capacity may hinder their defense aspirations.

### **National Prestige, Passion, and Honor**

National prestige, passion, and honor besides security, interests, and aspirations according to some studies, also play a contributory role toward military industrialization and the development of a particular force posture of a nation. Arms and space race between superpowers during the Cold War was also partially driven by national prestige, passion, and honor. Not only are developed countries influenced by these motives, but some developing states with broader interests and aspiration are also motivated by passion toward military industrialization and force posturing to earn recognition. According to a study conducted by David Kinsella at the University of Missouri about the military industrialization of five nations, including Brazil, Israel, India, South Africa, and South Korea, indicates the role of passion besides interests in their military endeavors.<sup>22</sup> It concludes that arms production in the Third World is also driven by states' passions by their quest to become modern nation-states.<sup>23</sup>

## **Nuclear Weapons**

Nuclear weapons have altered the very dynamics of force posturing options in the contemporary world. They provide a potent deterrent and international recognition to the states possessing nuclear capability and have become a vital determinant of their force postures. Nations possessing this prestigious capability are endeavoring to achieve a fine integration of nuclear and conventional capabilities to realize the full potential of nuclear weapons. A study conducted by Robert Peters, Justin Anderson, and Harrison Menke suggests that the marginalization of nuclear deterrence after the Cold War and changing nature of threats requires a fine integration of conventional and nuclear deterrence strategies.<sup>24</sup> States with nuclear capabilities have already started integrating the whole range of military capabilities for effective deterrence.<sup>25</sup> Gen John Hyten, while commanding US Strategic Command, observed: “We have adversaries that are looking at integrating nuclear, conventional, space and cyber, all as part of a strategic deterrent.”<sup>26</sup> thus, underpinning the role of nuclear weapons in deterring a wide range of threats with comprehensive force posturing solutions. Before getting into further discussion, it would be appropriate to have a quick scan of the prevailing security environment in general to ascertain the nature of threats that the nation-states are facing today to ascertain some general guidelines for the possible force postures options especially for industrially dependent countries.

### **Prevailing Security Environment and Concomitant Threats**

The international environment characterized by its anarchic nature and no central authority,<sup>27</sup> continues to be in a state of flux and is being denoted with the VUCA (Volatile, Uncertain, Complex, and Ambiguous) environment<sup>28</sup> owing to the ongoing competition for resources, power, and influence among the major players coupled with the unprecedented effects of technological boom, globalization, and associated new threats.

The ever-growing influence of science and technology, associated globalization, and unprecedented interconnectivity of economic interests among states and nonstate entities around the world have blurred the national boundaries thus affording greater freedom to nonstate actors, nongovernmental organizations, and multinational giants to influence affairs at the international, regional, and national canvases. New technologies like cyber, space, artificial intelligence (AI), big-data analytics, autonomy, robotics, directed energy, hypersonics, and biotechnology have revolutionized the scope of their potential for states and nonstate actors. Terrorism, transnational crime, cyberattacks, biological attacks, proxy warfare, social engineering, and the proliferation of lethal sophisticated technologies

(nuclear and biological) have emerged as major sources of concern and threats for the international community and the states in general.

The growing lethality of modern weaponry, catastrophic potential of weapons of mass destruction, complex global interconnectivity of economic interests, the cost of a conventional open military confrontation, and modern communication tools to influence societies have forced nations to adapt to the new environment. Globalization and technology have facilitated the almost simultaneous use of other instruments of national power and modern tools in sync with the military to coerce and compel the adversaries. All these new tools of warfare have transformed the very character of war. The means of modern warfare are no more restricted to conventional military means. Today's battlefields have extended to almost every field of human activity giving birth to a new generation of war—the hybrid war. Consequently, the gray-zone activities through subconventional and nonconventional means are the favorite tools of today's warfare. This tendency has blurred the boundaries between war and peace, friends and foes, and between civilians and combatants.

However, it does not mean that the importance of conventional military forces has been undermined. Future wars between compatible adversaries, being technology intensive, are likely to be short, swift, intense, and comparatively limited in scope and scale. They would be preceded by the conditioning of the environment through other elements of national power for calibrated and precise application of military tool for quick and decisive results. The side having the technological edge across all domains, especially in the air (including cyber and space), with the capability to generate maximum effects in the shortest possible time, would have an edge. Thus, the importance of a potent force posture has increased tremendously. Force postures of the industrially independent or advanced nations today are designed to serve their individual national aspirations and objectives keeping in view their peculiar security environments and the direction of their grand strategies. However, developing nations are facing great challenges in meeting the technological demands of modern force postures.

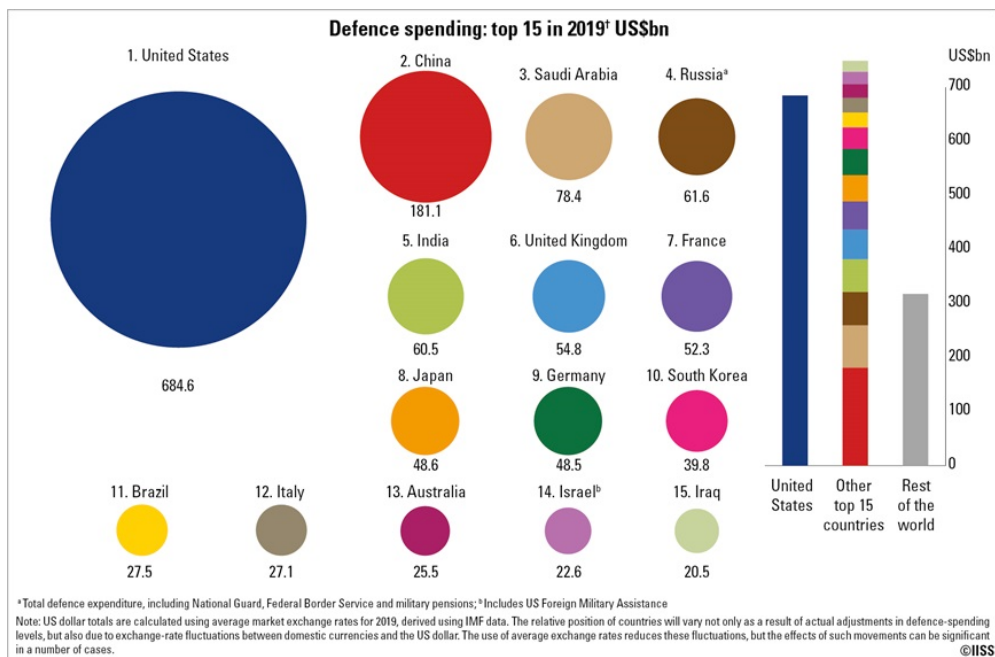
### **Force Postures of Powerful Nations**

Force postures also undergo evolution and change with the ever-changing and evolving security environment, shifting national aspirations, interests and objectives, and economic capabilities of the states. Any change in national aspirations and the grand strategy would also lead to an altered force posture, and since force postures are not easy to alter overnight, therefore, a careful articulation of grand strategy and national objectives is necessary to ensure their potency and effectiveness. A study of the past and present force postures of the advanced and powerful



nations also indicates the evolution and transformation of their grand strategies. Historically, the force postures of the major powers like the US (from a continental power to a hegemon), Russia (from a continental power to a global power), China (from a regional power to a rising global power), France (from a colonial power to a major power), United Kingdom (from a global colonial power to a major power), Germany (from an aspiring global hegemon to a major power), and so forth, and many others transformed and changed in line with their changing national aspirations, priorities, interests and objectives, security concerns, and economic capabilities or with the changing direction of their grand strategies.

A brief look at some of the developed and prominent states around the world indicates some interesting trends and conclusions regarding the interplay of economic strength, military power (force posture), and overall power. Figure 2 shows the world's top 15 military spenders in 2019.<sup>29</sup> Twelve of these (barring Saudi Arabia, Israel, and Iraq) are also among the top 15 economies of the world for the same year (fig. 3),<sup>30</sup> which indicates that larger economies are generally the highest spenders on military. Their force postures are mainly driven by their broader spectrum of interests, prestige, economic power and aspirations besides security concerns.



<sup>†</sup> At current prices and exchange rates

**Figure 2. Top 15 in defense spending in 2019**

## THE WORLD'S TOP 20 LARGEST ECONOMIES IN 2019.



- |                   |                  |
|-------------------|------------------|
| 1. UNITED STATES  | 11. SOUTH KOREA  |
| 2. CHINA          | 12. RUSSIA       |
| 3. JAPAN          | 13. AUSTRALIA    |
| 4. GERMANY        | 14. SPAIN        |
| 5. INDIA          | 15. MEXICO       |
| 6. FRANCE         | 16. INDONESIA    |
| 7. UNITED KINGDOM | 17. NETHERLANDS  |
| 8. ITALY          | 18. SAUDI ARABIA |
| 9. BRAZIL         | 19. SWITZERLAND  |
| 10. CANADA        | 20. TAIWAN       |

Source: CEOWORLD magazine

### Figure 3. Top 20 largest economies in 2019

Figure 4 shows the 15 strongest militaries of the world for 2019.<sup>31</sup> Here we find four countries, that is, Turkey, Egypt, Iran, and Pakistan that are not among the top 15 economies yet maintaining very strong force postures without being among the top 15 military spenders. A closer look at these countries indicates that their force postures are mainly driven mainly by their security environments and concerns besides other factors. This examination shows that security concerns generally force the countries to develop strong force postures despite their economic weaknesses (Egypt, Iran, and Pakistan); mostly at the cost of national prosperity. We can also say that generally a large military spending (Israel, Iraq, Saudi Arabia, and Australia [fig. 2 and 4]) or having a larger economy (Canada, Australia, Spain, and Mexico [fig. 2 and 4]) does not always mean one of the strongest military or force posture in the world as force posture is relative and driven by the grand strategy of a nation.

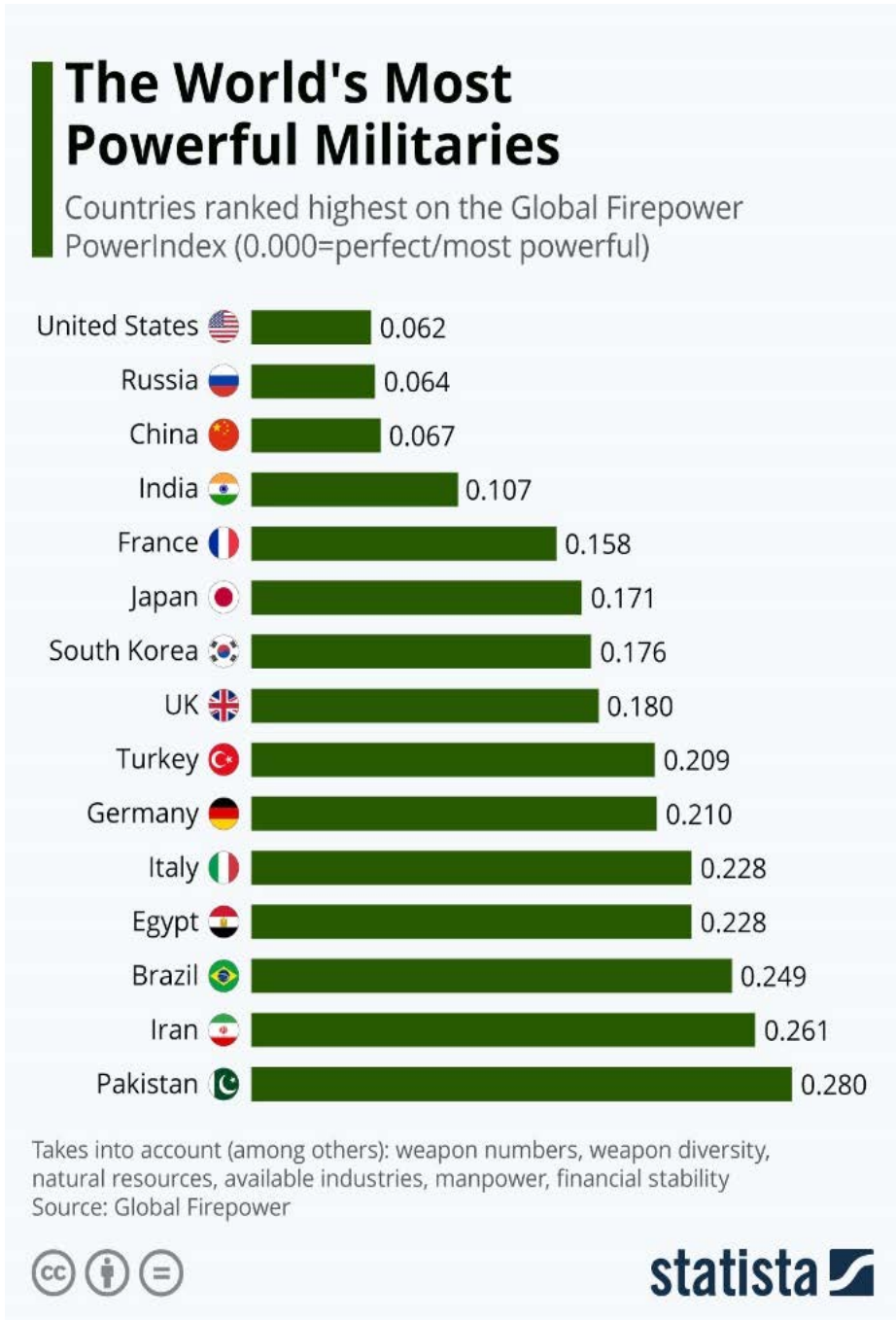


Figure 4. The world's most powerful militaries

We come across another interesting fact when we look at the 15 most powerful nations of the world for 2019.<sup>32</sup> The list shows six countries, that is, Israel, Saudi Arabia, United Arab Emirates, Canada, Switzerland, and Australia, that are not among the 15 most powerful militaries but are among the list of 15 most powerful nations (fig. 5).<sup>33</sup> This fact indicates that a strong force posture alone does not determine the overall national power and influence indicating the interplay of other factors and instruments of national power.<sup>34</sup> India, for example, despite being the fourth strongest military and fifth largest economy of the world, is not among the 15 most powerful countries in the world.

## HERE ARE THE WORLD'S 20 MOST POWERFUL COUNTRIES IN 2019.



- |                   |                          |
|-------------------|--------------------------|
| 1. UNITED STATES  | 11. UNITED ARAB EMIRATES |
| 2. RUSSIA         | 12. CANADA               |
| 3. CHINA          | 13. IRAN                 |
| 4. GERMANY        | 14. SWITZERLAND          |
| 5. UNITED KINGDOM | 15. AUSTRALIA            |
| 6. FRANCE         | 16. TURKEY               |
| 7. JAPAN          | 17. INDIA                |
| 8. ISRAEL         | 18. ITALY                |
| 9. SAUDI ARABIA   | 19. IRAQ                 |
| 10. SOUTH KOREA   | 20. SINGAPORE            |

Source: CEOWORLD magazine

### Figure 5. The world's most powerful countries

Thus, we can say that different countries are maintaining different force postures best suited to serve their grand strategic objectives. Countries with limited global aspirations and low-to-medium threat environment like Canada, Australia, Switzerland, Spain, and so forth, despite being stronger economies, are maintaining moderate force postures while the US, Russia, China, and major powers in Europe have force postures commensurate with their larger national aspirations, interests, and security environments. Others (Saudi Arabia, Pakistan, Israel, and so forth) are driven either by their security environments or aspirations to become global/regional players (India, Brazil, and so forth) or by a combination of both.

While any potent force posture in the contemporary security environment is exorbitantly expensive, a common trend observed in most of the modern or industrially independent nations is a positive shift from numbers to quality driven by technology with main focus on lethality, precision, flexibility, speed, and efficiency.<sup>35</sup> Being industrially independent, economically strong and technologically self-reliant, the advanced countries find it comparatively easy to manage required force postures. However, it has become increasingly challenging for the industrially dependent and developing nations with diverse security concerns to develop and maintain requisite force postures in the face of economic, technological, and political constraints.

### **Force Posturing Options for Industrially Dependent Countries**

From the discussion so far, we have seen that force postures of the nations are driven by a number of factors but limited only by the scope of their capabilities (economic and industrial) and aspirations. We have also observed that variety and scope of threats across the spectrum of conflict has increased tremendously in the contemporary security environment. In such a complex environment, only technology savvy, agile, lethal, and efficient militaries shall be able to withstand the challenges of contemporary warfare. While industrially independent and advanced nations have little difficulties realizing this, let us see what force posturing options are available with developing or industrially dependent nations in the face of multiple economic, political, and technological constraints. While no single force posturing solution can be an answer for everyone's needs and aspirations, some general guidelines to plug in the inherent limitations of industrially dependent countries can be put forward.

**Economy.** As discussed earlier, economic well-being is one of the primary determinants of a potent force posture. Poor states simply cannot offset the military deficiencies inherent in their economic backwardness.<sup>36</sup> Therefore, they have to strike a balance between guns and butter as per the dictates of their security environment and the economic capability. Since the common purpose of every state is the well-being, peace, and prosperity of its people, any force posturing effort that pulls a country away from this purpose becomes detrimental to the broader future of the state in the long run. Developing states must remember that force postures are the means toward larger ends and not the ends in themselves. The main issue for them, however, is not whether they raise their defense budgets or increase their access to advanced technologies from abroad—though these factors remain important—but whether they develop the economic capacity to produce, maintain, and coordinate complex military systems.<sup>37</sup> Long-term dependence on others would otherwise over-stretch and exhaust their meager

economic resources resulting in a decline in overall national power. There is no ideal alternative to economic development. Industrially dependent states have to figure out ways, like mitigating or reducing the sources of conflict for improving their economies. Strengthening other elements of national power, including diplomacy, information, and the projection of soft power would also help in boosting national power—compensating for weaknesses in the force posture.

**Alliances, partnerships and friends.** Finding common ground for materializing suitable alliances (tactical, strategic, historical, and so forth) with powerful nations is a challenging proposition for the developing nations. However, having powerful and strong allies, partners, and friends with common interests and mutually beneficial relationships could help the developing or industrially dependent states in many ways. Maintaining friendly relations with the advanced countries may be comparatively easier and more in the benefit of developing states to catch up with the modern world and share the fruits of globalization. Besides ease of access to the latest technologies and education, they provide much needed military and economic sustenance along with the political and diplomatic support at international and regional levels. Close and friendly interaction with advanced countries would keep the military personnel of the developing states abreast with the latest developments thus providing strength to their force postures. However, shifting strategic alliances of the powerful nations with some at the cost of others, in some regions when undertaken without taking into cognizance the on-ground security realities and repercussion tend to disturb the existing balance of power resulting in increased instability. Consequently, technologically reliant states affected by such alliances find it extremely difficult to sustain their force postures as their security concerns exacerbate. Such developing states are under immense pressure to divert already scarce resources toward the military to bridge the widening gap with their adversaries or keep it within manageable limits, thus putting extra pressure on their weaker economies. They are also forced to rely on nonconventional means for ensuring their security against militarily stronger and technologically superior adversaries. However, in most cases, states bound in strategic alliances with advanced countries end up benefiting at both the internal and external fronts.

**Indigenization and Innovation.** Developing nations must invest optimally on indigenization to explore innovative solutions for their force posturing challenges. Owing to the multidimensional interests of the powerful and advanced nations cutting across a broader range of partners, friends, and allies, some developing states are denied access to the latest technologies and weapons. Having indigenous capabilities helps during such transitory periods without serious fallouts for force postures. However, to have such a capability, you need more than mere economic

resources. Highly educated human resources and access to the latest technologies are a must for realizing indigenization and innovation necessitating cordial relationships with developed nations.

Regular and calculated investment in the existing military industrial capabilities under a long-term strategy for improving self-reliance is of great value for industrially dependent states. Countries like Israel, Indonesia, and Singapore have made astounding progress in this respect and can be followed as role models by the developing nations. According to a few studies, investments in military industrial complex can be a stimulus for economic growth as well and a motivation for calculated investment in military indigenization.<sup>38</sup>

**Military Training.** Clausewitz considered war as the realm of physical exertion and suffering. We can term today's wars as the realms of physical, mental, emotional and psychological exertion, and suffering. Today's military training must provide military men with that strength and balance of body and soul to withstand the challenges of modern warfare as highly professional soldiers. Developing nations need superior training more than anyone else as they can hardly afford mistakes during peace or war. Similarly, military-to-military cooperation and international exercises with developed nations provide developing nations with those unique opportunities to train their human capital with the latest trends in warfare. Industrially dependent nations also need to evaluate the evolving character of warfare that is technology intensive and keep their human resource abreast with the latest developments.

**Modernization.** The quality of human resources, equipment, and infrastructure tailored to meet the demands of contemporary and projected future environment has become a compulsion for everyone especially the developing states. They must utilize their friendly relations with the advanced nations and their own indigenous capabilities to keep modernizing their equipment and infrastructure to stay abreast with the latest technological developments and be ready for the future. Cyber, space and AI are the game-changing technologies of the future warfare. While space is extremely expensive, developing states must harness the immense potential of cyber and AI. Since modern state-of-the-art platforms are highly expensive, developing nations must invest on capability enhancement besides the acquisition of new platforms when economically viable. Their main focus should be lethality, ingenuity, creativity, and innovation to modernize their forces utilizing indigenous capabilities as far as possible and practical. Future militaries must be equipped and trained to retain independence of action in the degraded future environments full of chaos and confusion.

**Professional military education.** A well-crafted system of professional military education (PME), is the strategic asset of any military today. PME has been

the backbone of military organizations around the world and has helped military leaders in understanding the ever-changing character and the complex nature of warfare influenced by social, political, cultural and economic factors driven by the perpetual technological advancement. Today's system of PME must be aimed at developing leaders with inquisitive minds equipped with critical and creative thinking, comprehensive analytical abilities, and an aptitude to come up with innovative and out of the box solutions in stressful environments. They must be educated in international relations, strategy, leadership, strategic thinking, military planning, and above all, military history. If we ask Clausewitz about the importance of military training or military education, he understands it as being able to draw upon principles extending across time and space, so that you will have a sense of what has worked before and what has not. You then apply these to the situation at hand. The result is a plan, informed by the past, linked to the present, for achieving some future goal.<sup>39</sup>

Such a system of PME should produce professionally educated, highly motivated, morally upright, and balanced but dynamic leaders capable of comprehending the complexities of prevailing environment at strategic level and capable of taking bold, calculated, and timely decisions when needed while understanding and avoiding the dangers of vacillation that ensnares them. An efficient system of PME must be able to nurture Clausewitz military genius who is a harmonious combination of many elements of intellect and temperament, in which one or the other ability may predominate, but none may be in conflict with the rest.<sup>40</sup> No other quotation explains the importance of a well-crafted PME than these words generally attributed to Thucydides and William Francis Butler both: “The *Nation that makes a great distinction* between its scholars and its warriors will have its thinking done by cowards and its fighting done by fools.”

**Leadership and strategy.** Superior and huge militaries equipped with state-of-the-art weaponry if employed without political foresight, sound doctrine, and ingenious strategy would fail to achieve the political objectives of war. While historically superior economies and huge militaries have generally prevailed during war, history is also a witness to numerous strategic failures of superior militaries and stronger economies. What happened to the Persians in Greece led by the great Xerxes, to Athenians in Sicily, to the Roman Legions in the Teutoburg Forest, to the Spanish in the English Channel, to the British in America, to Napoleon in Russia,<sup>41</sup> and many more recent examples, are lessons of history trying



to inform today's civilian and military leaders that mere plenitude of resources and military might cannot not rescue a flawed strategy.

War has an enduring nature that demonstrates four continuities: political, human, the existence of uncertainty, and the contest of wills.<sup>42</sup> While these continuities are present in all wars, every war exists within its own social, political, and historical contexts, giving each war much of its unique character.<sup>43</sup> Besides other factors, technology has a significant influence on warfare. Both the nature of war and the changes in the character of warfare influence strategy. Therefore, the “most far-reaching act of judgment that the statesman and commander of today have to make is to establish the kind of war on which they are embarking. They must remember one fact: war is not the end in itself, it is just the means to the end, it is about the peace that follows. It should serve and not consume the very states it is trying to protect.”<sup>44</sup>

Industrially dependent countries with scarce resources can hardly afford strategic miscalculations and tactical blunders. Their PME systems should be able to produce leaders equipped with the strategic dexterity to manipulate the multiple contradictions of strategy to balance the intricate equation of end-ways-means. They must also regularly update their war-fighting doctrines—the key to military effectiveness—with evolving capabilities and changing threat scenarios. As President George Washington noted in his eighth annual message to the Congress in 1797: “However pacific the general policy of a nation may be, it ought never to be without a stock of military knowledge for emergencies.” Doctrine is that knowledge.<sup>45</sup> The interdependence of doctrine and strategy requires a regular scanning of security environment, changing nature of threats, national means and capabilities. While material resources and strong industrial base are prerequisites for a strong force posture, superior leadership, sound doctrine, and ingenious strategy provide military postures the cutting-edge required to prevail during war.

## **Conclusion**

Historically, the military has been the preferred choice of states to thwart aggressions, ensure survival, and to force the adversary into submission. However, unprecedented technological advancement and globalization has transformed the international security environment. Yesterday's conventional threats have been multiplied exponentially manifesting themselves into areas not directly related to the military. The accumulative effective of technology, worldwide connectivity, and globalization has superimposed economy, diplomacy, information, along with

social and cultural factors over the traditional understanding of warfare, thus attempting to alter the very nature and character of war. With this transformation, the tools and threats to subdue the adversary have also multiplied exponentially. Future wars are likely to be short and intense and exceedingly dominated by latest technologies. They would be preceded and supplemented by a plethora of new coercive tools available with states. The military would be applied in a calculated way at an opportune time to accrue maximum political benefit.

Developing and maintaining potent force postures designed to address this new spectrum of threats under the prevailing VUCA environment has become a challenging task for developed as well as developing nations. However, challenges faced by the industrially dependent countries with weaker economies are numerous.

While their first and foremost priority should be the improvement of the economy, they need to invest in indigenization, innovation, modernization of existing equipment, and infrastructures to transform their militaries into lethal, agile, and efficient tools. They also need cordial relations with developed and industrially independent countries to retain access to the latest technologies and education besides other commercial, diplomatic and political benefits. Finally, they must ensure efficient and future-oriented training besides keeping their war-fighting doctrines and strategies abreast with the requirements of latest developments in their security environment.

**Air Commodore Nasim Abbas Khan, Pakistan Air Force**

Air Commodore Abbas Khan (MA, National Defense University Islamabad; MA, National Defense University Islamabad) is a senior instructor at the Pakistan Air Force Air War College. He is a graduate of German General Staff Course and a Distinguished Graduate of US Air War College, Grand Strategy Seminar AY-18. With more than 2,500 hours of flying experience, Air Commodore Abbas has held various command and staff appointments during his career, including command of a fighter squadron, deputy director, and director at Air Headquarters.

## Notes

1. Dr. Daniel Goure, "Rethinking the U.S. Strategic Posture," a paper Presented to the Commission on the Strategic Posture of the United States, 10 September 2008. <https://www.lexingtoninstitute.org/>.
2. Goure, "Rethinking the U.S. Strategic Posture."
3. "Military Posture," accessed 28 February 2020, <https://www.militaryfactory.com/>.
4. M. Elaine Bunn, "Force Posture and Dissuasion," accessed 28 February 2020, <https://www.comw.org/>.
5. Bunn, "Force Posture and Dissuasion."
6. John J. Mearsheimer, *Tragedy of Great Power Politics* (New York: W. W. Norton & Co., 2014), 29–30; and W. Julian Korab-Karpowicz, "Political Realism in International Relations," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Summer 2018 (Stanford University Metaphysics Research Lab, 2018), <https://plato.stanford.edu/>.
7. Mearsheimer, *Tragedy of Great Power Politics*, 29–30.
8. *The Landmark Thucydides: A Comprehensive Guide to the Peloponnesian War*, ed. Robert B. Strassler (New York: Free Press, 2008), 352.
9. Ronald Reagan National Security Speech, 23 March 1983 "Weakness Only Invites Aggression," accessed 29 February 2020, <http://tpartyus2010.ning.com/>.
10. John Levi Martin, "What is Ideology?," University of Chicago, <http://home.uchicago.edu/>.
11. Martin, "What is Ideology?"
12. Martin, "What is Ideology?"
13. James Kurth, "America's Grand Strategy: A Pattern of History," *National Interest* 43 (Spring 1996): 3–19.
14. Stacie L. Pettyjohn, *U.S. Global Defense Posture, 1783/2011* (Santa Monica, California: RAND, 2012).
15. Imsu Jinger, "Hindutva: The Ideology, the Impact and the Implications," accessed 9 March 2020, <https://www.academia.edu/>.
16. Richard Ned Lebow, *The Tragic Vision of Politics: Ethics, Interests and Orders* (Cambridge, Cambridge University Press, 2003).
17. Sandeep Bhardwaj, "India and the Mantle of Regional Hegemon—Asia Dialogue," accessed 9 March 2020, <https://theasiadialogue.com/>.
18. Michael Beckley, "Economic Development and Military Effectiveness," *Journal of Strategic Studies* 33, no. 1, 43–79, February 2010, <https://www.tandfonline.com/>.
19. Beckley, "Economic Development and Military Effectiveness," 43–79.
20. Beckley, "Economic Development and Military Effectiveness," 43–79.
21. Beckley, "Economic Development and Military Effectiveness," 43–79.
22. David T. Kinsella, "Forces Driving Third World Military Industrialization: Interests and Passions," 2000. <https://www.semanticscholar.org/>.
23. Kinsella, "Forces Driving Third World Military Industrialization."
24. Robert Peters, Justin Anderson, and Harrison Menke, "Deterrence in the 21st Century: Integrating Nuclear and Conventional Force," *Strategic Studies Quarterly* 12, no. 4 (2018): 15–43, <https://www.jstor.org/>.
25. Peters, Anderson, and Menke, "Deterrence in the 21st Century."
26. Peters, Anderson, and Menke, "Deterrence in the 21st Century."

27. W. Julian Korab-Karpowicz, "Political Realism in International Relations," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Summer 2018, Stanford University Metaphysics Research Lab, <https://plato.stanford.edu/>.
28. Paul Kingsinger and Karen Walch, "Living and Leading in a VUCA World," Thunderbird University, 9 July 2012, <https://www.scribd.com/document/440363399/Living-and-Leading-in-a-VUCA-World-Thunderbird-School>.
29. "Global Defence Spending: The United States Widens the Gap," IISS, accessed 11 March 2020, <https://www.iiss.org/>.
30. Emma London, "GDP Rankings Of The World's Largest Economies, 2019," *CEO-WORLD Magazine*, blog, 28 December 2018, <https://ceoworld.biz/>.
31. Statista, "The World's Most Powerful Militaries," chart, accessed 11 March 2020, <https://www.statista.com/>.
32. Anna Papadopoulos, "Here Are the World's Most Powerful Countries In 2019," *CEO-WORLD Magazine*, blog, 16 December 2019, <https://ceoworld.biz/>.
33. Papadopoulos, "Here Are the World's Most Powerful Countries."
34. Papadopoulos, "Here Are the World's Most Powerful Countries."
35. 2017 Defense Posture Statement: "Taking the Long View, Investing for the Future," Secretary of Defense Ash Carter, <https://dod.defense.gov/>; North Atlantic Treaty Organization, "Deterrence and Defence Posture Review," 20 May 2012, <https://www.nato.int/>; and Jacek Durkalec et al., "Trends in Force Posture in Europe," <https://www.pism.pl/>.
36. Beckley, "Economic Development and Military Effectiveness," 43–79.
37. Beckley, "Economic Development and Military Effectiveness," 43–79.
38. Adrian Kuah and Bernard Loo, "Examining the Defence Industrialization—Economic Growth Relationship: The Case of Singapore," Institute of Defence and Strategic Studies Singapore, July, 2004.
39. John Lewis Gaddis, *On Grand Strategy* (New York: Penguin Press, 2018), ch. 1, pt. 11.
40. Gaddis, *On Grand Strategy*, ch. 7, pt. 6.
41. Gaddis, *On Grand Strategy*, ch. 7, pt. 3.
42. "Nature and Character of War and Warfare," "Maneuver Self Study Program," Benning. army.mil, <https://www.benning.army.mil/>.
43. "Nature and Character of War and Warfare."
44. John Lewis Gaddis, *On Grand Strategy* (New York: Penguin Press, 2018), ch. 8, pt. 7.
45. Andrew A. Gallo, "Understanding Military Doctrinal Change During Peacetime," Columbia University, 2018, <https://academiccommons.columbia.edu/>.