Why So Little? The Curious Case of Taiwan's Defense Spending

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Abstract

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Taiwan's defense budget continues to be a friction point in U.S.-Taiwan defense relations. Despite having adopted allocating 3 percent of its GDP towards defense as a target, Taipei continues to hover around 2 percent in annual defense spending. This dissertation examines the reasons for this shortfall and also assesses if 3 percent is an appropriate or meaningful target. It argues that Taiwan's defense spending is constrained by a multitude of factors across political contexts, practical limitations, and procedural impediments. As such, using 3 percent of GDP as a standard for Taiwan's defense spending or measurement of its commitment to self-defense, without adequately understanding all the factors, would be inappropriate and superficial. First and foremost, international isolation along with domestic necessities shape Taipei's defense behavior politically. On the international level, geopolitical isolation makes Taiwan reliant on U.S. support but the fear of abandonment continues to motivate Taipei's behavior in its relationship with Washington. At the domestic level, the lack of

decision-making centrality and cohesion undermine Taipei's ability to change. Second, financial, geospatial, and demographic realities impose practical limitations that further constrain Taiwan's defense choices. A limited financial base forces Taipei to make investment tradeoffs in maximizing the island's security; Taiwan's small land mass and proximity to China makes the island prone to being saturated by defense hardware; and low birth rates and aging population negatively affect Taiwan's defense readiness. Finally, administrative obstacles procedurally undermine the effectiveness of U.S.-Taiwan defense interactions. Washington's restrictive approach to dealing with Taiwan and Taipei's bureaucratic rigidity collectively undercut effective U.S.-Taiwan defense interactions.

Disclaimer

The views expressed in this dissertation are those of the author and do not reflect the official policy or position of the United States Air Force, Department of Defense, or the US Government.

TABLE OF CONTENTS

Abstract	iii
List of Figures	vii
List of Acronyms	viii
Introduction: Overview of the Dissertation	1
Chapter One: Political Analysis	17
1.1: International Level1.2: State Level1.3: Individual Level1.4: Political Analysis Conclusion	21 61 79 84
Chapter Two: Practical Analysis	87
1.1: Financial Considerations1.2: Geospatial Considerations1.3: Demographic Considerations1.4: Practical Analysis Conclusion	88 107 114 132
Chapter Three: Procedural Analysis	133
1.1: Washington's Exceptionalism Without Exceptions1.2: Taipei's Bureaucratic Rigidity1.3: Procedural Analysis Conclusion	134 157 169
Chapter Four: Conclusion	171
Interviews	183
Bibliography	184

LIST OF FIGURES

Figure 1: China and Taiwan Defense Spending as Share of GDP	19
Figure 2: China and Taiwan Defense Spending in Constant 2018 US Dollars	20
Figure 3: China and Taiwan Defense Budget as Share of Total Government Spending	20
Figure 4: Security Consensus Behind Traditional Security Environments obtained from retired Taiwan Chief of Naval Operations, Richard Chen (陳永康), April 2019	22
Figure 5: President Trump with United States Air Force Academy graduating cadets, May 2019	34
Figure 6: Slide extracted from Richard Chen's presentation to Legislative Yuan	57
Figure 7: Taiwan Presidential palace in April 2012	136
Figure 8: Taiwan Air Force delegation visit to the U.S. Pentagon, 2012	137
Figure 9: U.S. Marines aircrew off-loading a pallet of relief supplies in Taiwan	138
Figure 10: Flow chart from Taiwan's National Defense Report, 2017	159
Figure 11: Recommendation Summary	177

LIST OF ACRONYMS

AFB Air Force Base

AIDC Aerospace Industrial Development Corporation

AIT American Institute in Taiwan

AIT-T American Institute in Taiwan – Taipei

AIT-W American Institute in Taiwan – Washington

AMRAAM Advanced Medium Range Air-To-Air Missile

AOR Area of Responsibility

ARIA Asia Reassurance Initiative Act

ATJ Advance Trainer Jets

BOS Base Operating Support

C5ISR Command, Control, Computers, Communications, Cyber,

Intelligence, Surveillance and Reconnaissance

CCP Chinese Communist Party

CIA Central Intelligence Agency

CNO Chief of Naval Operations

CODE Cyber Offensive and Defensive Exercises

COMINT Communications Intelligence

DASD Deputy Assistant Secretary of Defense

DoD Department of Defense

DPP Democratic Progressive Party

DSCA Defense Security Cooperation Agency

ELINT Electrotonic Intelligence

F-CK-1 Indigenously Developed Fighter

FISINT Foreign Instrumentation Signals Intelligence

FLIR Forward Looking Infrared

FMS Foreign Military Sales

FOC Full Operational Capability

GDP Gross Domestic Product

GWOT Global War on Terror

HA/DR Humanitarian Assistance and Disaster Relief

IA Inter-Agency

IDF Indigenous Defense Fighter

IDS Indigenously Developed Submarines

INSDR The Institute for National Defense and Security Research

IP Investment Plan

JAM-GC Joint Concept for Access and Maneuver in the Global Commons

JDCA Joint Defense Capabilities Assessment

KMT Kuomintang

LOA Letter of Offer and Acceptance

LOR Letter of Requests

LY Legislative Yuan

MAC Mainland Affairs Council

MANPADS Man-Portable Air-Defense Systems

MASINT Measurement and Signature Intelligence

MINDEF Minister of Defense

MND Ministry of National Defense

NCSIST National Chung-Shan Institute of Science and Technology

NDC National Development Council

NDU National Defense University

NIPO U.S. Navy International Program Office

NSC National Security Council

NT\$ New Taiwan Dollar

O&M Operating and Maintenance

ORD Operations Requirements Document

OSD Office of the Secretary for Defense

P&A Price and Availability

PAR Pre-Letter of Request Assessment Requests

PLA People's Liberation Army

PLAAF People's Liberation Army Air Force

PME Professional Military Education

POTUS President of the United States

PRC People's Republic of China

RIMPAC Rim of the Pacific

SAM Surface to Air Missile

SAR Systems Analysis Report

SCO Security Cooperation Organizations

SEAL Sea, Air and Land

SECAF Secretary of the Air Force

SECDEF Secretary of Defense

SIGINT Signal Intelligence

SIPRI Stockholm International Peace Research Institute

SRP Surveillance Radar Program

TAF Taiwan Air Force

TECRO Taipei Economic and Cultural Representative Office

TNSS Taiwan National Security Survey

TRA Taiwan Relations Act

TSFD Technology Security and Foreign Disclosure

UAV Unmanned Aerial Vehicle

US\$ U.S. Dollar

USAF United States Air Force

USAFA United States Air Force Academy

INTRODUCTION

Why any politically autonomous society interested in self-preservation would continue to underspend on defense is a conundrum, especially when faced with an increasingly existential threat from a much more powerful and hostile neighbor. Such is the case with Taiwan, a self-ruled island located approximately 100 miles off of China's coast, which in recent years has been spending approximately 2 percent of its GDP on defense, well below its self-proclaimed goal of 3 percent.

Ever since the post-Chinese Civil War split, relations between Taiwan and China have been tense, with occasional outbreaks of armed conflict. The present-day potential for conflict is as real as ever—China's leader Xi Jinping continues to declare his desire to "reunify" Taiwan with China, by force if necessary; China's military capabilities and show-of-force in the vicinity of the Taiwan Strait continue to increase; and China has 1200 to 1600 ballistic and cruise missiles aimed at Taiwan, which being only about 80 to 100 nautical miles away at the narrower parts of the Taiwan Strait, means missiles can start impacting Taipei five and a half minutes after Beijing decides to launch an attack against Taiwan.¹

Taipei's military spending, which should logically be the most evident expression of its commitment towards not only self-defense but also regime survival, steadily diminished from its highest point at 7.6 percent of GDP in 1979 to its lowest point at 1.6 percent of GDP in 2016.² Since President Tsai Ing-Wen entered office in 2016, the defense budget started to see modest

¹ Liu, Xing, 2009. Air Defense and Space Defense Information Systems and Their Integrated Technologies [防空防天信息系统及其一体化技术]. China: Beijing: National Defense Industry Press.

² Stockholm International Peace Research Institute, 2019. *SIPRI Military Expenditure Data*. May 5. Accessed May 14, 2019 https://www.sipri.org/research/armament-and-disarmament/arms-transfers-and-military-spenditure.

increases but still only reached 2.1 and 2.3 percent of GDP for 2019 and 2020 respectively.³ By comparison, other small nations such as Singapore and Israel respectively spent 3.3 and 5.7 percent of GDP on defense in 2017. Even South Korea, which has a bilateral mutual defense treaty with the United States and 28,500 American troops based in its country spent 2.6 of GDP on defense in the same year.⁴

Allocating 3 percent of Taiwan's GDP for defense spending has been a mainstay in U.S.-Taiwan defense relations over the last two decades. In addition to being discussed frequently in security cooperation interactions between Taiwan authorities and U.S. officials,⁵ policy observers persistently reference 3 percent in measuring Taiwan's defense spending.⁶ According to Chieh Chung (掲仲), a KMT think tank researcher and aid to former Taiwan Legislator Lin Yu-fang (林郁方), 3 percent of GDP emerged as a defense spending target during the Chen Shui-bian administration after a round of U.S.-Taiwan defense discussions that took place at Yuan Shan hotel.⁷ President Ma Ying-jeou (馬英九) officially adopted this target in Taiwan's

³ Teng, Pei-ju, 2018. "Defense budget to increase by NT\$18.3 billion in 2019." July 27. *Taiwan News*. Accessed May 14, 2019. https://www.taiwannews.com.tw/en/news/3492793. Wang, Flor, and Kai-hsiang You, 2019. "2020 national defense budget to account for 2.3 percent of GDP." August 15. Accessed May 27, 2020. https://focustaiwan.tw/politics/201908150023.

⁴ Stockholm International Peace Research Institute, 2019. *SIPRI Military Expenditure Data*. May 5. Accessed May 14, 2019 https://www.sipri.org/research/armament-and-disarmament/arms-transfers-and-military-spenditure.

⁵ According to former Taiwan legislator Lin Yu-fang, who was the Chair of Taiwan's Diplomacy and National Defense Committee, U.S. officials often emphasized that Taiwan needs to spend 3 percent of GDP on defense during his annual U.S. visits. Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

⁶ See writings by Glaser, Bonnie and Mark, Anastasia. "Taiwan's Defense Spending: The Security Consequences of Choosing Butter over Guns." https://amti.csis.org/taiwans-defense-spending-the-security-consequences-of-choosing-butter-over-guns/. Accessed July 18, 2020; Bush, Richard. "The United States Security Partnership with Taiwan." https://www.brookings.edu/wp-content/uploads/2016/11/fp_20160713_taiwan_alliance.pdf. Accessed July 18, 2020; Dickey, Laurent. "Taiwan's Search for Security Partners: Looking Beyond Washington." https://jamestown.org/program/taiwans-search-security-partners-looking-beyond-washington/. Accessed July 18, 2020.

⁷ Chieh, Chung. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

2009 National Defense Report.⁸ Dr. Alexander Huang (黃介正), professor at Tamkang University's Institute of International Affairs and Strategic Studies, who was also the lead KMT advisor during Taiwan's recent presidential election, thinks that 3 percent remains a target for successive Taiwan administrations because it is a means for Taipei to express self-defense determination to Washington.⁹ The problem is that despite all the discussions, proclamations, and recommendations, Taiwan has never reached 3 percent of GDP in defense spending since the target emerged, and, does not appear to be on track to do so anytime soon. This begs two questions—first, why Taiwan's defense spending remains below 3 percent. And Second, is 3 percent really an appropriate or useful measure?

Since 3 percent remains an enduring point of contention in U.S.-Taiwan defense relations, I use Taiwan's defense spending as an incision point to dissect U.S.-Taiwan security cooperation and peal back the layers of factors that lead Taiwan to spend less than 3 percent of its GDP on defense. My research suggests that for Taiwan, security cooperation with the United States is more than strictly a military endeavor. I argue that discussions of Taiwan's defense preparations need to extend beyond how much Taipei spends on defense and how Taiwan should plan to defend against a full-scaled PLA invasion. Using matrixes such as 3 percent of GDP for defense spending to measure Taiwan's commitment to self-defense is superficial since a comprehensive set of factors ultimately determine Taipei's defense behavior and prevent Taipei from reaching 3 percent. Moreover, even if Taipei reached 3 percent, Taiwan would still need U.S. assistance to successfully defend against an all-out Chinese attack. Consequently, U.S-Taiwan defense relations would be better served by addressing the political contexts, practical

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⁸ Taiwan Ministry of National Defense, *National Defense Report*. Taipei, Taiwan: October 27, 2009.

⁹ Huang, Alexander. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, October, 2018.

limitations, and procedural impediments that determine Taipei's behavior rather than misplacing the focus on 3 percent.

Background

My research interest was inspired by my practitioner experience as a Department of Defense Foreign Area Officer. As the U.S. Air Force Security Cooperation Officer stationed at the American Institute in Taiwan from 2009 to 2012, I observed from participating in various U.S.-Taiwan defense dialogues and interactions that Taiwan made a concerted effort from the Minister of Defense down to working levels to ask the United States for the same big-ticket items, such as F-16s and submarines, year after year while essentially side-lining U.S. DoD recommendations such as investing in more asymmetric and innovative capabilities. My impression was that U.S. and Taiwan defense counterparts often talked past each other and interactions became more of a formality rather than substantive. I concluded my assignment in Taiwan frustrated by the lack of efficiency in U.S.-Taiwan security cooperation and was left wanting to enhance the process.

My research interest was reinforced by the lack of change in U.S.-Taiwan defense-related interactions since 2012. When I attended the 2018 U.S.-Taiwan Defense Industry Conference in Annapolis, Maryland, I realized that while the language and emphases have evolved slightly, general underlying themes in U.S.-Taiwan security cooperation have remained largely stagnant since my time in Taiwan. Instead of a beacon of democracy, Taiwan was now referred to as a member of the "transparent and likeminded community." Instead of emphasizing how Taipei can support humanitarian assistance and disaster relief, pundits now discussed how Taiwan can

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¹⁰ From 2018 U.S.-Taiwan Defense Industry Conference discussions that were held in Annapolis, Maryland that the author attended.

better enable a "free and open Indo-pacific." Despite minor shifts such as promoting indigenously developed, autonomous or mobile capabilities, the focus remained squarely on requesting traditional big-ticket items such as submarines and fighter jets as the mainstays of U.S.-Taiwan security cooperation. Taiwan representatives still asked for the approval of big-ticket item sales and technology transfers as means to increase U.S. assistance and demonstrate U.S. support for Taiwan. U.S. defense representatives still emphasized innovation and asymmetry and asked Taiwan authorities to spend more on its own defense in order to demonstrate its self-defense determination. As an observer, I could not help but think of the Chinese proverb of 雞同鴨講(ji tong ya jiang, "the chicken talking to the duck"). I essentially walked away from a conversation between two parties in 2012 and returned to it six years later, only to find the two parties still restating the same points to each other. This left me wondering if perhaps my academic pursuit can help better connect the conversation between Washington and Taipei.

I started by surveying literature related to Taiwan's security and found that existing works are mostly limited to quantifiable and theoretical assessments from the outsider's perspective. The quantifiable assessments focus on comparing arsenals and capabilities while the theoretical concentrate on hypothetical scenarios and political theories. Authors tend to be outsiders, either career analysts with no practical experience or practitioners with narrow scopes of experience. What is missing is insider analysis that directly taps into the perspectives and thought processes of key decision-making elites in order to better understand Taiwan's defense behavior.

¹¹ Ibid.

Quantifiable analyses are abundant, and for good reason. Counting assets and making force-on-force comparisons between Taiwan's military and the PLA offers the most concrete assessment of the cross-Strait capabilities balance. A few examples of works that utilize this approach include DoD's Annual Report to Congress, CRS Reports on military sales to Taiwan, and CNA or RAND Corporation's various studies on personnel, missiles, fighter jets or naval vessels. The standard conclusion from this type of analyses is that the defense capability gap between Taiwan and China is widening in China's favor, which is eroding Taipei's ability to successfully fend off a PRC attack. Studies usually underscore that the widening defense gap is reason for intensifying concern and should potentially serve as an impetus for action to bolster either Taiwan's self-defense capabilities or America's support for Taiwan.¹²

Theoretical analyses are also prevalent. Authors emphasize different parts of the U.S-Taiwan-China relationship and project how conditions may affect bilateral or trilateral relationships. General themes are that China continues to view U.S. support for Taiwan with disdain and is becoming increasingly assertive in leveraging its global influence to express displeasure; Taiwanese identity is becoming more consolidated while being further isolated by China's swelling influence; and Washington continues to ground its relationship with Taipei in dual deterrence and strategic ambiguity. 15

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¹² See Department of Defense. Annual Report to Congress: Military and Security Developments Involving the People's Republic of China. 2019; Michael J. Lostumbo, et al. Air Defense Options for Taiwan: An Assessment of Relative Costs and Operational Benefits., 2016; Shirley A. Kan. Taiwan: major U.S. arms sales since 1990. Congressional Research Service (CRS) Reports and Issue Briefs, 2015.

¹³ See Taiwan's China Dilemma, by Syaru Shirley Lin, 2016, where she argues that the contestation of Taiwanese Identity has largely been resolved and Voting for Democracy by Shelly Rigger where she demonstrates that Taiwan's democratic process has clearly created a distinct Taiwanese identity. Lin, Syaru Shirley, 2016. *Taiwan's China Dilemma: Contested Identities and Multiple Interests in Taiwan's Cross-Strait Economic Policy*. Stanford, California: Stanford University Press. Shelley Rigger. *Politics in Taiwan: voting for democracy*. London; New York: London; New York: Routledge, 1999. Web.

¹⁴ Ministry of Foreign Affairs, Republic of China (Taiwan), 2014. *Diplomatic Allies*. Accessed May 11, 2020. https://www.mofa.gov.tw/en/AlliesIndex.aspx?n=DF6F8F246049F8D6.

¹⁵ For discussion of "Strategic Ambiguity" or "Dual Deterrence," see Bush, Richard C. *Untying the Knot*. Washington, D.C: Brookings Institution Press, 2005.

Despite the meticulous counting of quantitative approaches and the many mental gyrations of theoretical analyses, none sufficiently delivers a satisfactory explanation of why Taiwan continues to fall short of its goal to spend 3 percent of its GDP on defense while facing with an increasingly existential threat from PRC and urging from Washington to increase defense spending. Scholars tend to examine Taiwan's decision-making behavior through generic and traditional international relations frameworks, which do not adequately account for Taiwan's unique situation. No other country in the world is like Taiwan—an autonomously governed, democratic, politically divided and diplomatically isolated entity living at the doorstep of a much larger and stronger neighbor with hostile intent to absorb it, while simultaneously supported and constrained by an ambiguous relationship with the world's leading superpower. Without insider access and the ability to ask Taipei's decision-making elites why they do the things they do, analysts remain confined to inferring reasons for Taiwan's defense decisions.

Research Question

My primary research question is why does Taiwan continue to fall short of its self-pledged goal to spend 3 percent of GDP on defense despite PRC threat increases, and repeated calls from Washington to raise defense spending? I seek to discover what keeps Taipei from reaching 3 percent, and, if using 3 percent of GDP as a measure for adequate defense spending has any objective value. I decided to undertake this research project because as a former insider who still has special access to former and current policymakers involved with U.S.-Taiwan defense cooperation matters, I had a unique opportunity to contextualize U.S.-Taiwan security cooperation and examine elements that shape Taipei's decision-making. My aim is to illuminate

16 Ibid

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friction points in the U.S.-Taiwan defense relationship, and suggest some potential mitigation measures so that Washington and Taipei can enhance the effectiveness of future defense relations. I hope my discoveries will provide a more in-depth understanding of U.S.-Taiwan defense relations to policymakers, practitioners, academics, and enthusiasts alike, by showing that in addition to political contexts, which have the biggest effect on Taipei's defense behavior, practical considerations and procedural limitations further restrict Taipei's defense choices. I make the case that based on the parameters under which Taipei must make defense decisions, its behavior is not only logical, but also somewhat deterministic.

Importance

Understanding Taiwan's defense spending decisions has important implications for formulating effective U.S. Indo-Pacific strategy and foreign policy. The fact that China is becoming a "peer competitor," increasingly challenges the United States' ability to unilaterally secure the Indo-Pacific region and beyond. This makes cooperating with security partners such as Taiwan, which the commander of U.S. Indo-Pacific Command, Admiral Phil Davidson referred to as "the spine of the first island chain," 17 ever more important.

While the United States and Taiwan have carried on a defense cooperation relationship for the last forty years, restrictive policy resulting from the absence of official relations, ambiguous communications, and personnel turnover continue to challenge the effectiveness of the U.S.-Taiwan security relationship. Reacting to shifting diplomatic recognition to People's Republic of China in 1979, the United States Congress enacted the Taiwan Relations Act (TRA)

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¹⁷ According the American Institute in Taiwan's Chief of Security Cooperation Section, Colonel Donohue, Admiral Davidson use the reference in a meeting.

on April 10, 1979, which outlined guidelines for how to execute Washington's new relationship with Taipei.

The TRA not only detailed how to carry out the new unofficial (de facto) diplomatic relations, but also included a military provision, which mandated that the United States "will make available to Taiwan such defense articles and defense services in such quantity as may be necessary to enable Taiwan to maintain sufficient self-defense capabilities." The TRA further stipulated that the United States will "consider any effort to determine the future of Taiwan by other than peaceful means, including by boycotts or embargoes, a threat to the peace and security of the Western Pacific area and of grave concern to the United States." The ambiguous language of the TRA in conjunction with the lack of clearly stated grand strategies by both Washington and Taipei often complicate if not impede the execution of U.S.-Taiwan security cooperation—policy makers and practitioners often rely on organizational or even individual understanding, interpretation and judgment to determine suitability of policies or approaches. Consequently, the effectiveness of U.S.-Taiwan security cooperation is largely dependent on parochial interests, personalities and personal interpretations, which vacillate over time along with turnovers in respective positions on both U.S. and Taiwan sides.

Since the TRA continues to bind U.S. obligations and interests, Taiwan's commitment to its own defense and U.S. support for Taiwan's defense capabilities are both key factors in determining both Chinese military priorities and U.S. defense responses, making both unquestionably worthy of careful examination. As Nancy Tucker underscored in *Strait Talk*, "the Taiwan Strait is one of the most dangerous places in the world because nowhere else are two

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¹⁸ 96th Congress of United States of America, 1979. *H.R.2479 - Taiwan Relations Act, 1979*. April 10. Accessed January 15, 2018. https://www.congress.gov/bill/96th-congress/house-bill/2479.

nuclear powers, the United States and China, more likely to become entangled in a full-fledged conflict that "would be an immensely destructive war with repercussions not just for the adversaries, but also for the region and the world." Given China's recent bellicosity and continued refusal to renounce the use of force in achieving Beijing's goal to "reunify" Taiwan with China, the danger is as real as ever.²⁰

Methodology

My research effort was centered on interviews with Taiwan's officials, policymakers, and academics. I collected the perspectives of key personnel either currently or formerly involved with U.S.-Taiwan security cooperation and analyzed their perspectives by cross-referencing their rhetoric with behaviors and outcomes, which are obtained from secondary sources and personal observations. On the Taiwan side, I interviewed cabinet-level officials, current and former lawmakers, former high-ranking defense Ministry of Defense officials, academics, and individuals who are still actively involved with Taiwan's defense development. On the U.S. side, I interviewed the American Institute in Taiwan's (AIT) Chairman, current and former Directors, and Chief of the Security Cooperation Section. In addition, I also interviewed a Defense Security Cooperation Agency official who has been with the Agency for almost twenty years, and a former Office of the Secretary of Defense country-desk officer. While most officials agreed to be cited, some interviewees, especially those who are still actively involved in U.S.-Taiwan defense interactions, requested to remain anonymous.

¹⁹ Tucker, Nancy B, 2009. *Strait talk: United States-Taiwan relations and the crisis with China*. Cambridge, Mass.: Harvard University Press.

²⁰ Lee, Yimou, and Ben Blanchard, 2020. "Taiwan president rejects Beijing rule; China says 'reunification' inevitable." May 19. *Reuters*. Accessed June 2, 2020. https://www.reuters.com/article/us-taiwan-president-inauguration/taiwan-president-rejects-beijing-rule-china-says-reunification-inevitable-idUSKBN22W08X.

After leveraging 3 percent of GDP on defense spending as a conversation-starter with interviewees, I asked questions surrounding threat perceptions, spending patterns, budgeting considerations, spending prioritization, defense determination, and political strategy.

Although some information presented in this project may be sensitive, all discussions are unclassified.

The information presented in this project is Taiwan centric. My intent was to mainly explore the thought processes of Taiwan's decision makers. Comments from U.S. leaders and practitioners were mainly reference for context.

Terminology

As an active U.S. Department of Defense employee, I attempted to strike a balance between adhering to U.S. Executive Branch guidelines to avoid using language that acknowledged Taiwan's sovereignty and readability. Consequently, I reference "Taiwan" as opposed to "Republic of China," but I do use terms such as "government" or "nation" instead of strictly "Taiwan authorities" or "the area of Taiwan." I also avoided unique terms commonly used by U.S. government employees such as "Taiwans" (as opposed to Taiwansee) to refer to the collective people of Taiwan and instead used terms such as "population" or "constituents."

Roadmap

This dissertation is divided into four chapters—Political Analysis, Practical Analysis, and Procedural Analysis, followed by a Conclusion. The three main chapters argue that Taiwan's defense spending is constrained by a multitude of factors across political contexts, practical limitations, and procedural impediments. While political contexts have the biggest effect on

Taipei's defense behavior, practical considerations and procedural limitations further restrict
Taipei's defense choices. These three chapters collectively suggest that using 3 percent of GDP
as a standard for Taiwan's defense spending or measure of commitment to self-defense without
adequately understanding and addressing political, practical, and procedural constraints, is
inappropriate and superficial. Worthy of noting is that while I try to draw clear distinctions
between political, practical, and procedural analyses, the discussions in these chapters are not
mutually exclusive. Political contexts certainly influence practical and procedural decisions. And
vice versa. After the three main chapters, the conclusion will reemphasize selected main points
and offer some recommendations for improving the state of U.S.-Taiwan security relations.

The *Political Analysis* chapter examines the political contexts that shape Taipei's defense decisions on the international, domestic, and executive leadership levels. Internationally, isolation along with a fear of abandonment by Washington are the predominant driving forces for Taipei's defense decisions. Domestically, public and intragovernmental discord challenge consolidated decision making. Executive leadership, while dramatically different across various administrations, has marginal effects on defense decisions, at least with regards to spending.

At the international level, I present evidence showing how Taiwan's unique international situation along with a still-developing indigenous defense industry, forces Taipei to rely on an uncertain relationship with Washington to deter and defend against PRC aggression. This uncertainty is at the crux of why Taipei's assessment of its own defense needs and solutions are inconsistent with Washington's. I offer that although U.S.-China competition is boosting Washington's support for Taiwan, there is a profound disjuncture between U.S. and Taiwan perspectives on threat perceptions and defense prescriptions, which leads to diverging views on how much Taiwan should spend on defense and how the funds should be spent. While the United

States sees Taiwan's security challenge as predominantly a military problem that is the result of Taiwan's defense capability shortfalls, Taiwan sees its security challenge primarily as one of isolation and potential abandonment by Washington. Consequently, as the United States continues to call on Taiwan to spending more on defense preparations, Taiwan seeks to devote resources towards more integrated solutions. To put it more simply, while Washington wants Taipei to procure more military hardware in preparation for the most dangerous scenario, a full-scaled Chinese invasion, Taipei is more concerned with solidifying its security stance with steadfast U.S. political support, economic performance, and information management.

For Taiwan, its defense strategy vis-à-vis its security relationship with the United States, is at least as much of a political strategy as it is a military strategy. Given Washington's lack of explicit commitments to Taiwan's defense, the asymmetrical nature of the U.S.-Taiwan mutual dependence, and a history of U.S. willingness to neglect its relationship with Taiwan in the pursuit of self-interests, Taipei has sufficient reason to fear abandonment by Washington.²¹ Consequently, Taipei's defense decisions are largely manifestations of this fear of abandonment and Washington's defense recommendations will continue to miss the mark until this fear is alleviated.

On the domestic level, the lack of decision-making centrality and cohesion undermine Taipei's ability to significantly alter its defense behavior. Evidence suggests that Taiwan's population lack both threat perception and confidence in the government's ability to fend off an attack from China. This makes constituents favor spending on social benefits instead of defense requirements. Subsequently, Taipei's defense decisions must be formulated to consolidate public support and confidence.

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²¹ See Glenn H. Snyder's "The Security Dilemma in Alliance Politics" for an extended discussion on the fear of abandonment

The lack of intragovernmental cooperation also hinders Taipei's ability to significantly boost annual defense budgets. Within the ministry of defense, weapons system or service-based nepotism, and shifting defense strategies lead to infighting and discontinuity. Among legislators, contrasting political approaches lead to different funding priorities. And, across different agencies, schisms undermine effective defense budget formulation.

With regard to individual leadership, variations across the last three administrations were detectable but had limited effect on defense decisions, including budgeting. Regardless of rhetoric and priorities, defense preparations in terms of defense budgeting or cooperating with Washington in order to procure defense articles, did not show any dramatic fluctuations.

The *Practical Analysis* chapter explains how Taiwan's financial, geospatial, and demographic limitations constrain its ability to adhere to Washington's suggestions and spend more on defense preparations. I present information that can be easily overlooked when assessing Taiwan's defense situation. Gaining a better grasp on the realities presented in this chapter is important for understanding Taipei's defense decisions.

On the financial front, Taiwan has limited resources and therefore, must make investment tradeoffs to maximize the island's security. Taipei purchases smaller numbers of big-ticket items such as fighter jets and tanks mainly because it does not think there is a high probability of a kinetic (physical) PLA invasion. This strategy makes the most sense for dealing with Chinese aggression and coercion because it demonstrates self-defense determination to consolidate U.S. support, showcases national defense capability to strengthen domestic support, displays defense capabilities to bolster credible deterrence, and sustains favorable defense industry relationships to facilitate advantageous congressional lobbying in Washington.

In geospatial considerations, Taiwan's small land mass and proximity to China means the island reaches the saturation point for staging, testing, operating, storing, maintaining, expending, and disposing military hardware very rapidly. Purchasing smaller numbers of defense articles makes the most sense because ships, tanks, and airplanes need spaces to stage and train; Air missile defense systems and missiles need dedicated areas to set up, test, and store; and, weaponry cannot not be stockpiled because they have effective shelf-lives dictated by both technological advances and material expiration dates.

I also argue that Taiwan's demographic challenges limit both the size and quality of Taiwan's defense personnel and institutions, both effectively reducing the throughput capability of defense funds. Taiwan's population is aging and shirking, both reducing the size of the service-capable pool. Waning interest in military service along with the all-volunteer force transition exacerbate the situation by further reducing Taiwan's useful defense force size and the number of qualified personnel to manage defense needs. All of these conditions erode Taiwan's implement U.S.-recommended defense preparations.

The final main chapter, *Procedural Analysis*, examines how procedural impediments on both the U.S. and Taiwan sides reduce Taiwan's defense spending. I argue that the design of Washington and Taipei's respective defense engagement mechanisms diminish how well they can function together.

First, I propose that Washington's approach to dealing with Taiwan, which I characterize as "exceptionalism without exceptions" hinders Taipei's ability to fully benefit from a security relationship with the United States. I use "exceptionalism" to describe how Washington subjects Taipei to restrictive procedural practices, based on Taiwan's unique international political status, and "without exceptions" to describe how Washington relegates Taiwan to one-size-fits-all

bureaucratic processes and management without any exceptions that would mitigate the sideeffects of exceptionalism. I examine common practices and provide various examples on how these practices effect U.S.-Taiwan security cooperation.

I then outline how Taipei's bureaucratic rigidity undermines the effectiveness of U.S.Taiwan security cooperation. I submit that rigid internal bureaucratic processes along with
excessive deference towards their American counterparts sap the potency of Taipei's efforts to
bolster self-defense. The main point here is that Taiwan's defense decision-making products and
processes are too time-consuming, which deprives Taipei the flexibility to respond to dynamic
political and security environments.

The *Conclusion* chapter reemphasizes the predominant observations and arguments along with providing some suggestions for easing tensions that are present at various friction points in the U.S.-Taiwan security cooperation relationship. While some of the conditions that cause these frictions are more rigid than others, I believe that all have varying degrees of elasticity. To that extent collectively working towards short, intermediate, and long-term goals would maximize the utility of U.S.-Taiwan security cooperation.

CHAPTER ONE:

Political Analysis

This chapter conducts a political analysis of Taiwan's defense spending at international, domestic and individual leadership levels. The evidence suggests that while factors at each level affect Taipei's defense budgets, Taiwan's unique international situation has the most significant effect, followed by domestic politics and executive leadership. At the international level, isolation causes Taipei to remain reliant on the United States to help deter and defend against PRC aggression. The United States military authorities, by law, are charged with the responsibility to review Taiwan's defense needs and make recommendations to the President of the United States' (POTUS) and Congress on how to enable Taiwan's defense. The problem is that they see Taiwan's security situation differently than Taipei, which leads to recommendations inconsistent with what Taiwan officials want. This misalignment is a major cause of disagreement on how to carry on ideal U.S.-Taiwan security relations. As the situation currently stands, Washington wants Taipei to do more for its own defense, including raising its defense spending while Taipei seeks more dependable and comprehensive U.S. support, including allowing Taiwan to purchase the defense articles it sees as best suited for its defense needs.

At the state level, the lack of decision-making centrality and cohesion undermine Taipei's ability to significantly raise defense spending. Taiwan's domestic politics is complicated by democratic processes that must appease the often-competing interests of constituents, political parties, and different branches of government. Although the current administration is taking measures to cultivate public support, to foster inter-party consensus, and to promote intergovernmental cooperation that will steadily increase Taiwan's defense spending, significant challenges remain. Constituents lack a common threat perception and hold the military in poor

regard, which stifles support for increasing defense budgets. The proliferation of misinformation and disinformation in Taiwan's hyper developed media also undermines the government's ability to consolidate popular support. Moreover, the ruling Democratic Progressive Party (DPP) and minority Kuomintang (KMT) have up until recent 2020 elections had very different approaches to threat mitigation that lead to contrasting party priorities and undermine any agreements to increase defense spending. Finally, organizational rigidity and a lack of perspective inhibit adherence to centralized strategies and degrade intragovernmental cooperation.

At the individual level, executive leadership has some effect, albeit marginally, on defense decisions including budgeting. The personality traits and perspectives of presidents do shape each respective administrations' attitudes and approaches to national security but executive leadership has limited impact on the quantity of overall defense spending.

Consequently, even though Chen Shui-bien, Ma Ying-jiu, and Tsai Ing-wen led Taiwan's national policies very differently, total defense spending remained within a narrow range. This suggests that the effect of individual leadership on Taiwan's defense spending is subordinate to larger international and domestic conditions.

The three figures below provide the baseline information for discussing Taiwan's defense spending over the last twenty years (1999-2019). Figure 1 shows China and Taiwan's defense spending as a percentage of gross domestic product (GDP); Figure 2 shows China and Taiwan's defense spending in constant 2018 US dollars; and Figure 3 shows China and Taiwan's defense budget as share of total government spending. On all three figures, China data is outlined in red. Taiwan's data lines shift between green and blue to reflect administrations in office. Democratic Progressive Party (DPP) represented by green lines and Kuomintang (KMT) is represented by

blue lines. The figures are constructed from Stockholm International Peace Research Institute data.²²

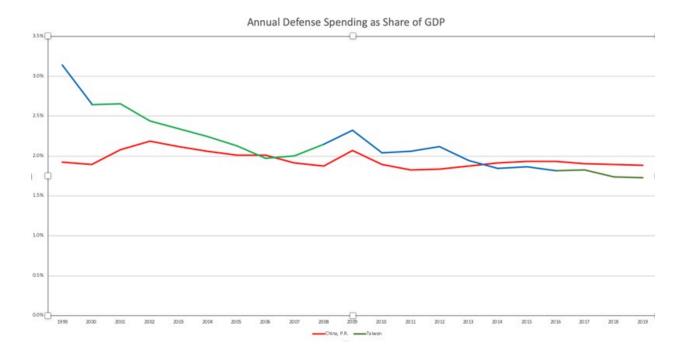


Figure 1: China and Taiwan defense spending as share of GDP.

As the above chart indicates, Taiwan's defense spending as a percentage of its GDP has been trending downwards over the last twenty years.

²² Stockholm International Peace Research Institute Military Expenditure Data , 2019, Stockholm International Peace Research Institute, May 14, 2019.

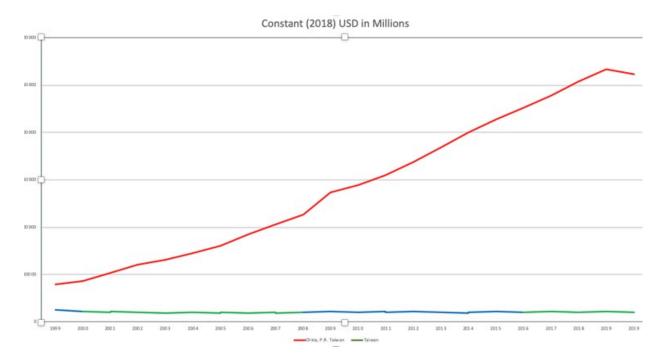


Figure 2: China and Taiwan defense spending in constant 2018 US dollars.

Figure 2 shows that Taiwan's defense spending has basically remained unchanged in terms of constant dollars over the last twenty years despite steady increase by across the Strait.

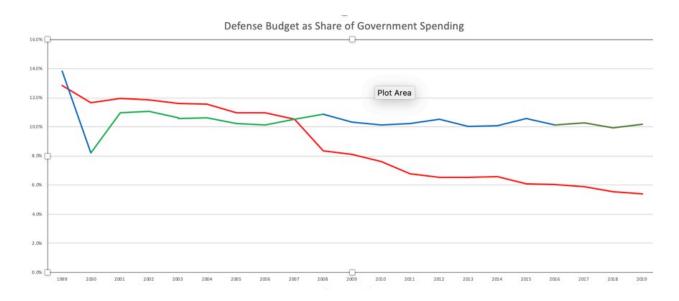


Figure 3: China and Taiwan defense budget as share of total government spending.

Figure 3 shows that Taiwan's defense spending as a portion of total government spending has remained fairly constant also.

International Level

At the international level, Taiwan's unique status remains the predominant determinant of Taipei's national security situation, and in turn, its defense spending. Faced with limited international support and a still-developing indigenous defense industry, U.S.-Taiwan security cooperation is vital because the United States is, by default, the only viable option for fulfilling Taiwan's defense requirements. Since the Trump administration came into office in 2017, increased competition between the United States and China is intensifying U.S.-Taiwan ties and Washington's willingness to support Taiwan's defense needs. However, contrasting threat perceptions and defense prescriptions between the Washington and Taipei lead to diverging views on how much Taiwan should spend on defense and how the funds should be spent. While U.S. military authorities, who are tasked by the Taiwan Relations Act to be responsible for reviewing Taiwan's defense needs and making recommendations to POTUS and Congress on how to enable Taiwan's defense, continue to perceive China's threat to Taiwan predominantly as a military problem, Taipei sees China as an integrated political, economic, military, and industrial threat. The result is that the United States continues to prescribe building up costeffective, asymmetric, and innovative military capabilities to prepare for a large-scale PRC military invasion while Taiwan seeks integrated, wide-spectrum, and flexible response options across all fronts. This dynamic is at the heart of why Taiwan's defense budget remains a contentious issue between Washington and Taipei.

Limited International Support

Although Taipei's international considerations are broad, opportunities for substantive defense related interactions with international partners are still limited and previous defense related engagements have not produced the desired results. Despite previous experiences, Taipei is still actively trying to expand its international relevance and defense connections. The English version of a slide extracted from a briefing given to Taiwan lawmakers illustrates how the state is well aware of the considerations surrounding security relationships in Asia and is actively considering how to integrate Taipei into the web of relationships (Figure 1).



Figure 4: Obtained from retired Chief of Naval Operations, Richard Chen (陳永康). April 2019.

Information collected during elite interviews also suggest that Taipei's efforts to diversify its reliance on the United States as the sole source of defense expertise is on-going. Dr. York Chen (陳文政), the Deputy Secretary General of Taiwan's National Security Council, explained

that Taiwan's defense budget plan is modeled after Australia in that it ties defense budget growth to GDP growth in order to provide stable, predictable, and sustainable defense spending increases year after year.²³ Former Minister of Defense, Kent Feng (馮世寬) cited on-going military cooperation with Singapore that provides both technology and training exchange opportunities as evidence of Taiwan's international defense connections.²⁴ The Director of the DPP's China Affairs Department, Johnny Lin (林琮盛), emphasized that Taiwan is not strictly a client state that is reliant on the United States and intends to use lessons learned from President Tsai Ing-wen's 2013 trip to Israel, before becoming president, to increase not only indigenous production but also civil-military cooperation in research and production.²⁵

Taipei's diversification attempts, however, have a contentious history to overcome. Procurements from France and Eurocopter provide good examples of why the United States may still be the most favorable option. These purchases have been plagued by maintenance and supply issues along with controversy and scandal that resulted in exorbitant operating and maintenance (O&M) and legal costs. According to a US-Taiwan Business Council report, "Based on FY2010 budget figures, the O&M cost per flight hour for the Mirage 2000-5 was approximately US\$26,670 (NT\$784,630), compared with US\$5,340 (NT\$157,100) for the F-16A/B Block 20 and US\$8,340 (NT\$245,360) for the F-CK-1A/B Indigenous Defense Fighter (IDF)." Consequently, the Mirage 2000 fleet alone consumed approximately 60 percent of Taiwan Air Forces' fighter jet budget. Further, Taiwan has pursued legal action against the French government regarding bribes and kickbacks in both the frigate and fighter jet sales. A

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²³ Chen, York. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

²⁴ Feng, Kent, Interviewed by Steven Li, Personal interview, Taipei, Taiwan, April 16, 2019.

²⁵ Lin, Johnny, Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 11, 2019.

French court ruled that France repay US\$875 million to Taiwan for bribes paid in the course of the frigate sales. Taiwan's Ministry of Defense is still tied up with the French court system in another case after hiring a French legal firm for US\$5.86 million to sue the French government for paying alleged kickbacks to French officials during the Mirage 2000 purchase process.

Taiwan's purchase of three EC225 helicopters from Eurocopter has been fraught with headaches as well. According to insiders who were unauthorized to publicly disclose details, Eurocopter misled the Taiwan Air Force in delivering capabilities promised under the contracted price. For example, while the contract specified that all three helicopters shall have a night operations capability afforded by a forward looking infrared (FLIR) system, Eurocopter undercut production costs by only providing a single FLIR ball for the three helicopters that were wired and bracketed to receive them. In essence, all three helicopters had a nighttime capability but only one aircraft at a time would have a FLIR capability since the FLIR ball would have to be moved from helicopter to helicopter. In order for all three to have the capability simultaneously, the Taiwan Air Force would have to procure additional FLIR balls, the most expensive part of the system, at an additional cost.²⁶

The above examples embody the challenges to Taiwan's ability to shift away from U.S. defense support. Despite past and active efforts, Taiwan's international support for enhancing national defense capabilities remains extremely limited. Potential partners generally eschew defense related interactions, especially military sales to Taiwan, in order to avoid backlash from China. As Beijing continues to maintain that Taiwan is a part of China, it denounces any weapon sales to Taiwan as interference in China's domestic affairs and often applies political or economic pressure accordingly. Beijing reacted to the French fighter and frigate sales by closing

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²⁶ Information relayed through active duty Taiwan Air Force contacts who requested anonymity.

the French consulate in southern Guangdong province and cutting French firms out of lucrative contracts. It is likely that Eurocopter managed to avoid repercussions from Beijing for selling to Taiwan because the helicopters were civilian variants, intended to bolster Taiwan's humanitarian assistance and disaster relief capabilities a year after Taiwan was impacted by Typhoon Morakot, which killed 673 people and caused roughly US\$3.3 billion in damages.

Still-Developing Indigenous Defense Industry

Despite making strides in cultivating indigenous defense production, Taiwan still lacks the production capability, technological expertise, and institutional maturity to optimally meet the island's comprehensive defense needs. Although Taiwan has demonstrated some success in producing certain defense articles such as missiles and UAVs, its ability to produce advanced systems including warships, submarines, and fighter jets is still lacking and depends, to varying degrees, on foreign assistance. Certain sectors such as surface-to-air and surface-to-surface missile systems are better developed than others, but even then, some defense observers question the level of autonomy in indigenous production. For example, a Raytheon representative, who asked not to be named, commented that Taiwan's purportedly indigenously developed Tien-Kung or Sky Bow missile system bears a striking resemblance to the Patriot missile system that Taiwan procured through foreign military sales from the United States.²⁷ Taiwan's production and retrofit processes also traditionally requires U.S. assistance. The F-CK-1, commonly known as the "Indigenously Developed Fighter," was produced with extensive assistance by led by General Dynamics and other American corporations.²⁸ The U.S. F-16A/B retrofit employs

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²⁷ According to a conversation with a Raytheon representative intimately familiar with Taiwan's missile defense systems who requested anonymity.

systems who requested anonymity.

28 Pike, John, 2000. *Ching-kuo Indigenous Defense Fighter*. April 4. Accessed November 30, 2019. https://fas.org/man/dod-101/sys/ac/row/idf.htm.

Lockheed-Martin as its integrator.²⁹ Even the highly publicized recently released prototype of Taiwan's indigenous advanced jet trainer (ATJ) is a function of its state-owned Aerospace Industrial Development Corporation (AIDC) experience from building the F-CK-1.³⁰

Yet another indication of a still-developing indigenous defense industry is the occasional and often disastrous setbacks in indigenous development and production of defense weapons systems. Such is the case with Taiwan's attempt to self-produce mine-sweeping ships. Ching Fu Shipbuilding won the contract in 2014 to build six minesweepers for NT\$34.9 billion (US\$1.13 billion) but five years later was found to be "not financially sound and incapable of fulfilling the contract." According to authorities, the Ching Fu scandal not only hurt the image of the Taiwan navy but also caused up to NT\$13.1 billion (US\$ 437 million) of losses for the lending banks. According to a high-ranking retired Taiwan naval officer familiar with this case, Taiwan's limited production know-how combined with the lack of private sector willingness to make defense-related investments collectively present significant challenges that Taiwan cannot overcome without leveraging U.S.-Taiwan security cooperation. Taiwan's inability to benefit from economies of scale, given the need of relatively small quantities and lack of export markets, also limit domestic production feasibility.

²⁹ From author's personal role in solidifying the F-16A/B retrofit contract and on-going familiarity with this FMS case.

³⁰ Kyodo News, 2019. "Taiwan's 1st indigenous advanced jet trainer makes public debut." September 24. *Kyoto News*. Accessed December 2, 2019. https://english.kyodonews.net/news/2019/09/1fdee542565d-taiwans-1st-indigenous-advanced-jet-trainer-makes-public-debut.html.

³¹ Agence France-Presse, 2019. "Taiwan jails head of ship firm contracted to build navy minesweepers." September 28. *South China Morning Press*. Accessed December 2, 2019. https://www.scmp.com/news/china/military/article/3030775/taiwan-jails-head-ship-firm-contracted-build-navy-minesweepers.

³² According to multiple discussions with retired Taiwan navy officer who did not wish to be cited. April 2019.

U.S.-Taiwan Security Cooperation

U.S.-China competition is intensifying and, as a consequence, U.S.-Taiwan ties, including security cooperation, are strengthening. Rhetoric, legislation and signaling all provide evidence indicating increased U.S. support for Taiwan. As the current Director of the American Institute in Taiwan (AIT), Brent Christensen, stated in an interview, "There is a fundamental change in Washington's attitude towards China, which has implications for United States' support for Taiwan's Defense." According to Christensen, current U.S.-Taiwan relations are stronger because the mood in D.C. is dominated by bipartisan recognition that relations with China won't make much progress while Xi Jing-ping remains in power." Consequently, the outlook towards China is generally hawkish and key personnel, the National Security Council, and Congress all support Taiwan.³³

There is solid rhetorical evidence that intensifying U.S.-China competition is shifting Washington's willingness to confront Beijing. Christensen pointed to Matt Pottinger's "rectification of names" speech as a good indication that the United States is increasingly willing to confront China on various issues, including Taiwan. In the referenced September 29, 2018 speech at the Chinese embassy in Washington to commemorate Chinese National Day, Pottinger, who at the time was the Senior Director for Asian affairs on the National Security Council, cited the Confucian Analects to emphasize the importance of honesty and proper nomenclature in conducting U.S.-China relations. After the Chinese Ambassador to the United States, Cui Tiankai, delivered a speech emphasizing cooperation, Pottinger followed with unexpected contrast by stating that, "We at the Trump administration have updated our China policy to bring the concept of competition to the forefront. It's right there at the top of the president's national security

³³ Christensen, Brent. Interviewed by Steven Li. Personal Interview. Taipei, Taiwan, April 9, 2019

strategy." The NSS actually labels China, along with Russia and North Korea, as a "revisionist power" that wants to "shape a world antithetical to U.S. values and interests." Pottinger, who is fluent in Chinese Mandarin, continued by quoting *The Analects* in clear Mandarin "名不正,则言不顺;言不顺,则事不成—If names cannot be correct, then language is not in accordance with the truth of things. And if language is not in accordance with the truth of things, affairs cannot be carried on to success." According to Pottinger, to avoid the acknowledgement of U.S.-China competition would be to "court misunderstanding and to invite miscalculation." Pottinger was appointed Deputy National Security Advisor in September 2019, the first Asia specialist in recent decades to take this position.

A Foreign Affairs article by Kirk Campbell, former U.S. Asst. Secretary of State for Asian & Pacific Affairs, also reflects Washington's shifting attitude towards China. According to Campbell, "nearly half a century since Nixon's first steps toward rapprochement, the record is increasingly clear that Washington once again put too much faith in its power to shape China's trajectory." Campbell goes on to state that "all sides of the policy debate erred...Neither carrots nor sticks have swayed China as predicted. Diplomatic and commercial engagement have not brought political and economic openness. Neither U.S. military power nor regional balancing has stopped Beijing from seeking to displace core components of the U.S.-led system. And the liberal international order has failed to lure or bind China as powerfully as expected." In

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³⁴ The White House, 2017. *National Security Strategy of the United States of America*. Accessed November 21, 2019. https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf.

³⁵ Goldkorn, Jeremy, 2018. "Trump official Matt Pottinger quotes Confucius, in Chinese, to make point about language and truth." October 1. *SupChina*. Accessed November 13, 2019. https://supchina.com/2018/10/01/matt-pottinger-quotes-confucius-in-chinese/.

³⁷ Hewitt, Hugh, 2019. "Deputy National Security Adviser Matt Pottinger On Change at the NSC, China and Turkey." October 11. *HughHewitt*. Accessed November 13, 2019. https://www.hughhewitt.com/deputy-national-security-adviser-matt-pottinger-on-change-at-the-nsc-china-and-turkey/.

Campbell's view, this reality "warrants a clear-eyed rethinking of the United States' approach to China." ³⁸

Recent U.S. legislation corresponds to changing attitudes towards China and increasing U.S. support for Taiwan. Former AIT Director Bill Stanton believes that we are witnessing the greatest shift in U.S. policy toward both China and Taiwan since 1971 when Henry Kissinger secretly visited Beijing where he "dismissed Taiwan as inconsequential, little more than a domestic political pawn" throughout his negotiations with the Chinese.³⁹ Stanton highlighted the passages of the Taiwan Travel Act, 2019 National Defense Authorization Act and Asia Reassurance Initiative Act (ARIA) as evidence that U.S. policy has dramatically evolved to support Taiwan.⁴⁰

The Taiwan Travel Act, signed into law on March 16, 2018, encourages the U.S. government to enhance interactions with Taiwan through more frequent contacts. The Act claims that "Since the enactment of the Taiwan Relations Act, relations between the United States and Taiwan have suffered from insufficient high-level communication due to the self-imposed restrictions that the United States maintains on high-level visits with Taiwan." As such, it should be U.S. policy to "allow officials at all levels of the United States Government, including Cabinet-level national security officials, general officers, and other executive branch officials, to travel to Taiwan to meet their Taiwanese counterparts" and "allow high-level officials of Taiwan to enter the United States, under conditions which demonstrate appropriate respect for

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³⁸ Campbell, Kurt M., and Ely Ratner, 2018. "The China Reckoning: How Beijing Defied American Expectations." March/April. *Foreign Affairs*. Accessed November 20, 2019. https://www.foreignaffairs.com/articles/china/2018-02-13/china-reckoning.

³⁹ Tucker, Nancy B, 2009. *Strait talk: United States-Taiwan relations and the crisis with China*. Cambridge, Mass.: Harvard University Press.

⁴⁰ Stanton, Bill. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

the dignity of such officials, and to meet with officials of the United States, including officials from the Department of State and the Department of Defense and other Cabinet agencies." The Act also reaffirms that "The United States considers any effort to determine the future of Taiwan by other than peaceful means, including by boycotts or embargoes, a threat to the peace and security of the Western Pacific area and of grave concern to the United States."

The 2019 National Defense Authorization Act signed on August 13, 2018, declares that "long-term strategic competition with China is a principal priority for the United States that requires the integration of multiple elements of national power ... to protect and strengthen national security." Not only does the bill support military exercises with Japan, Australia, and India to improve security cooperation in order to counter China's rising influence in Asia, Southeast Asia, and other regions, it specifically prohibits PRC participation in Rim of the Pacific (RIMPAC) naval exercises⁴² or using Confucius Institute funds for Chinese language instruction. Moreover, Section 1257 specifically states that "the Secretary of Defense shall, in consultation with...counterparts in Taiwan, conduct a comprehensive assessment of Taiwan's military forces, particularly Taiwan's reserves." Finally, Section 1258 states that "It is the sense of Congress that:

- 1) the Taiwan Relations Act ... and the 'Six Assurances' are both cornerstones of U.S. relations with Taiwan:
- 2) the United States should strengthen defense and security cooperation with Taiwan;
- 3) the United States should strongly support the acquisition by Taiwan of defensive weapons;
- 4) the United States should improve the predictability of arms sales to Taiwan...; and

⁴¹ 115th Congress of United States of America, 2018. *Taiwan Travel Act*. March 16. Accessed May 11, 2020. https://www.congress.gov/115/plaws/publ135/PLAW-115publ135.pdf.

^{42 115&}lt;sup>th</sup> Congress of United States of America, 2019. *National Defense Authorization Act for Fiscal Year 2019*. Section 1259. Accessed May 11, 2020. https://www.congress.gov/115/bills/hr5515/BILLS-115hr5515enr.pdf.

⁴³ 115th Congress of United States of America, 2019. *National Defense Authorization Act for Fiscal Year 2019*. Section 1091. Accessed May 11, 2020. https://www.congress.gov/115/bills/hr5515/BILLS-115hr5515enr.pdf.

5) the Secretary of Defense should promote Department of Defense policies concerning exchanges that enhance the security of Taiwan."⁴⁴

The Asia Reassurance Initiative Act (ARIA) signed into law on December 31, 2018, also emphasizes increase U.S. support for Taiwan. Section 209, "Commitment to Taiwan" states that it is the policy of the United States to "faithfully enforce all existing United States Government commitments to Taiwan" and "to counter efforts to change the status quo." ARIA goes on to state that POTUS "should conduct regular transfers of defense articles to Taiwan that are tailored to meet the existing and likely future threats from the People's Republic of China, including supporting the efforts of Taiwan to develop and integrate asymmetric capabilities, as appropriate, including mobile, survivable, and cost-effective capabilities, into its military forces."

Since the interview with Stanton, the Taiwan Allies International Protection and Enhancement Initiative has also been enacted to better support Taiwan. The bill advises the president to further strengthen bilateral trade and economic relations with Taiwan and its ties with other nations; advises the executive branch to maintain and strengthen Taiwan's official diplomatic relationships as well as partnership with other countries by considering to increase or alter U.S. economic, security, and diplomatic engagements with those countries; and encourages U.S. policy to help Taiwan gain entry either as a member or observer into international organizations.⁴⁶

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 ⁴⁴ 115th Congress of United States of America, 2019. *National Defense Authorization Act for Fiscal Year 2019*.
 Section 1258. Accessed May 11, 2020. https://www.congress.gov/115/bills/hr5515/BILLS-115hr5515enr.pdf.
 ⁴⁵ 115th Congress of United States of America, 2018. *Asia Reassurance Initiative Act of 2018*. December 18.
 Accessed May 11, 2020. https://www.congress.gov/bill/115th-congress/senate-bill/2736/text.

^{46 116&}lt;sup>th</sup> Congress of United States of America, 2019. *Taiwan Allies International Protection and Enhancement Initiative (TAIPEI) Act of 2019.* March 26. Accessed June 2, 2020. https://www.congress.gov/bill/116th-congress/senate-bill/1678/text.

In addition to legislation, political signaling also reaffirms increasing U.S. support for Taiwan. 2019 alone offers numerous examples—the declassification of the 1983 Reagan memo, increased Department of Defense activities favorable to Taiwan, and first U.S.-Taiwan combined exercise are just a few.

Both the content of the declassified August 17, 1983 memorandum from President Ronald Reagan to the secretaries of State and Defense regarding U.S. policy towards Taiwan and method of its release in September 2019, are indicative of increased U.S. support. President Reagan stated in this memorandum that "the US willingness to reduce its arms sales to Taiwan is conditioned absolutely upon the continued commitment of China to the peaceful solution of the Taiwan-PRC differences. It should be clearly understood that the linkage between these two matters is a permanent imperative of US foreign policy." Reagan also emphasized that "the quantity and quality of the arms provided Taiwan be conditioned entirely on the threat posed by the PRC." And that "both in quantitative and qualitative terms, Taiwan's defense capability relative to that of the PRC will be maintained." These statements certainly seem to be aimed at justifying on-going defense assistance to Taiwan. While Reagan's letter is by no means binds his successors, releasing this memorandum in 2019 on the website of the American Institute in Taiwan (de facto U.S. Embassy), definitively reemphasizes the history of U.S. commitment to Taiwan in a very public and official manner.

The United States Department of Defense is also signaling increased focus on China and support for Taiwan. In June of 2019, the DoD created the position of Deputy Assistant Secretary of Defense (DASD) for China. According to DoD, the new DASD-China will serve as "principal advisor to the Secretary of Defense on all things China and will be the single hub for policy and

⁴⁷ Reagan, Ronald, 1982. *Arms Sales to Taiwan*. August 17. Accessed November 19, 2019. https://www.ait.org.tw/wp-content/uploads/sites/269/08171982-Reagan-Memo-DECLASSIFIED.pdf

strategy development, oversight, authorities review, and national-level interagency integration to align the Department's efforts on China." Prior to the creation of this position, China was a part of DASD-East Asia portfolio, which included Japan, South Korea, Mongolia, China and Taiwan. While U.S. policies toward China and Taiwan are likely set the highest levels of the administration, having a standalone DASD-China helps align defense initiatives. Whereas the China portfolio would be competition-centric, the East Asia portfolio would be more cooperation-oriented.

Potentially linked to the Pentagon's increased China focus and reflecting an increased intention to confront China, two DoD entities elevated Taiwan's status within DoD by normalizing the reference of Taiwan as a country. This is significant because doing so is inconsistent with self-imposed executive branch guidance to refrain from acknowledging Taiwan's sovereignty. The United States Air Force Academy (USAFA) and U.S. Indo-Pacific Command both broke with norms in 2019. In the May USAFA graduation, the presiding U.S. Air Force official identified Taiwan as one of the 10 foreign nations that have a graduating cadet in the 2019 graduating class. Lessening the chance that referencing Taiwan as a country was unintended, Taiwan's flag was also on display on the graduation stage. Further lessening the chance that these occurrences were administrative oversights, a photo of President Trump posing

⁴⁸ Mehta, Aaron, 2019. "The Pentagon has created a new office solely focused on China. Is that a good idea?" October 1. *Defense News*. Accessed November 19, 2019. https://www.defensenews.com/pentagon/2019/10/01/the-pentagon-has-created-a-new-office-solely-focused-on-china-is-that-a-good-idea/.

⁴⁹ When dealing with Taiwan issues, the Executive branches of U.S. government normally follow the Department of State's "Guidelines on Contacts with Taiwan," which directs avoiding terms that highlight Taiwan's sovereignty. For example, Taiwan will be referenced as "Taiwan," not "Republic of China;" the government will be referenced as "Taiwan authorities;" and Taiwan will not be referred to as a "country." *Mandatory Guidance from Department of State Regarding Contact with Taiwan* (Declassified memorandum), September 2008. Accessed November 19, 2019. https://www.taiwanbasic.com/nstatus/guidance.htm.

with USAFA cadets with the Taiwan flag clearly in view was later posted to the White House Instagram page.⁵⁰



Figure 5 – U.S. Air Force Academy graduation, 2019.

Published on June 1, 2019, the United States Indo-Pacific Command's Strategy Report also references Taiwan as a country: "As democracies in the Indo-Pacific, Singapore, Taiwan, New Zealand, and Mongolia are reliable, capable, and natural partners of the United States. All four countries contribute to U.S. missions around the world and are actively taking steps to

⁵⁰ DeAeth, Duncan, 2019. "Taiwan Recognized as a Nation by US Air Force Academy." June 2. *Taiwan News*. Accessed November 19, 2019. https://www.taiwannews.com.tw/en/news/3715885.

uphold a free and open international order. The strength of these relationships is what we hope to replicate in our new and burgeoning relationships in the Indo-Pacific."⁵¹

Another important and very clear signal is the Pentagon's decision to dispatch a senior defense official, Deputy Assistant Secretary of Defense for East Asia Heino Klinck, to Taiwan for a visit at the end of November 2019. Speculation was that Klinck's visit intended to respond to Beijing's intimidation of Taipei and demonstrate U.S. military support for Taiwan ahead of its January presidential election. Klinck was the first senior defense official to visit Taiwan since Washington ended official diplomatic relations with Taipei over 40 years ago.⁵²

The first-ever international cyber exercises co-hosted by the United States and Taiwan, which took place in Taipei in November 2019, signified yet another sign of enhanced U.S.-Taiwan cooperation. This exercise, formally known as the U.S.-Taiwan Cyber Offensive and Defensive Exercises (CODE), was attended by more than 10 countries, including Australia, the Czech Republic, Japan and Malaysia. Although not a military exercise, events such as this can provide pathways to more extensive cooperation in the future and had potential relevance for staving off interference in Taiwan's 2020 election. AIT's Deputy Director noted that one potential may be to bring Taiwan into the Department of Homeland Security's Automated Indicator Sharing System, which shares cyber threat indicators at machine speed.⁵³

While all of the above rhetoric, legislation, and signaling should provide a better foundation for solidifying a shared vision and help synchronizing U.S.-Taiwan security

⁵¹ U.S. Department of Defense, 2019. *Indo-Pacific Strategy Report*, p. 30. June 1. Accessed November 19, 2019. https://media.defense.gov/2019/Jul/01/2002152311/-1/-1/1/DEPARTMENT-OF-DEFENSE-INDO-PACIFIC-STRATEGY-REPORT-2019.PDF.

⁵² Chung, Lawrence, 2019. "New shine on US-Taiwan ties with trip by top Pentagon brass." November 26. *South China Morning Press*. Accessed December 3, 2019. https://www.scmp.com/news/china/politics/article/3039292/new-shine-us-taiwan-ties-trip-top-pentagon-brass.

⁵³ Lim, Emerson, 2019. "First-ever U.S.-Taiwan cyber exercises open in Taipei." November 4. *Focus Taiwan*. Accessed November 19, 2019. http://focustaiwan.tw/news/aipl/201911040015.aspx.

cooperation, interactions between U.S. and Taiwan defense establishments seem to remain stagnant. One indication of this stagnation is that Washington and Taipei continue to repeat the same defense-related dialogues. As indicated in the Introduction, the defense conversation between the United States and Taiwan has not evolved since the author was involved in it from 2009-2012. While Washington is still calling on Taipei to increase defense spending to 3 percent of GDP and pursue cost-effective and innovative defense capabilities, Taipei continues to asks for increased integration with the U.S. defense apparatus, technology transfers, and cooperation opportunities such as combined military exercises or coproduction of defense articles. Yet another indication of stagnation is that Taiwan's defense spending both as a share of GDP and in constant dollars continue to remain below levels that Taipei claims it is aiming for and Washington wants Taipei to reach. These indications of stagnation between the two defense establishments provide fundamental indications of poor transfer, that is, the lack of effective conversion of the intent to cooperate into actual cohesive cooperation. This section argues that contrasting perspectives on threat perception and defense prescriptions between Washington and Taipei is the major cause.

Contrasting Perspectives

Contrasting threat perceptions and defense prescriptions between Washington and Taipei lead to diverging views on Taiwan's defense spending. Interviews with insiders and decision makers involved in U.S.-Taiwan security cooperation reveal significant differences in how the United States and Taiwan each assess the PRC threat. These differing assessments lead to diverging conclusions on how much Taiwan should spend on defense and how those defense funds should be allocated. Persistent U.S. requests for Taipei to not only increase overall defense

spending but also enhance cost-effective, innovative, and asymmetric deterrence and defense capabilities, indicate that Washington views Taiwan's military capabilities as the proverbial long pole in the tent supporting the island's national security. Taipei on the other hand, views the PRC threat as an integrated political, military, economic, and industrial problem that needs to be addressed with coordinated, wide-spectrum, and flexible response options. In the view of an influential Taiwan lawmaker, national security is like a roof being held up by four pillars—political, military, economic, and informational—and these pillars must be equal in length and strength in order to properly support and balance the roof. This long pole versus four pillars conceptual difference is what continues to perpetuate what a Chinese idiom refers to as a 雞同鴨 (chicken talking to a duck) situation—both parties in a conversation keep on repeating what they are saying but neither is understanding the other.

Washington and Taipei collectively see China as a credible and existential threat to Taiwan but governing authorities on both sides of the Pacific go about assigning risks to the elements of the PRC threat differently. While both American and Taiwan leaders can easily deduce that the PRC threat contains political, informational, military, and economic elements, consensus on how to prioritize the risks associated with these elements is elusive. The United States appears more concerned with the risks associated with the military element, such as the cross-Strait military imbalance and PLA aggression, which leads Washington to focus on enabling Taiwan's military deterrence and defense capabilities. Taiwan's leaders are more concentrated on political, informational, and economic elements. In their assessment, China's ability to sway U.S. political support, conduct social engineering against Taiwan interests, and inflict economic stagnation are greater risks to its national security than PLA capabilities.

prioritize the political, information, and economic developments, with military enhancements acting as a supporting function to these developments.

The U.S. Perspective

Seeing China's threat to Taiwan primarily as a military problem is pervasive and deeplyrooted in the U.S. defense establishment. American defense policy-makers, practitioners,
researchers, and industry representatives all focus on preparing Taiwan for a large or full-scaled
PRC military invasion. While defense planners understandably often gravitate towards preparing
for worst-case scenarios, the opportunity cost for doing so is underpreparing for the most-likely
scenarios. This appears to be the case with the United States in U.S-Taiwan security cooperation.
Members within the U.S. defense enterprise, from policy to tactical levels, are fixated on
countering PLA missiles falling out of the skies over Taipei and PLA troops making amphibious
attacks. Discussions on how political, informational, and economic considerations impact
Taiwan's national security are almost completely absent.

At the U.S. policy level, the message to prepare for the worst remains persistent. For example, David Helvey, the Principal Deputy Assistant Secretary of Defense for Indo-Pacific Security Affairs, has delivered essentially the same remarks throughout 2017-2019 speeches to Taiwan. These speeches urge Taiwan to prepare for a war it cannot afford to lose, devote more resources toward defense, make defense a higher priority, and build credible, resilient, and cost-effective defense capabilities.⁵⁴ Helvey continues to stress long-time U.S. recommendations to

⁵⁴ Helvey, David F., 2017; 2018; and, 2019: *Helvey Keynote Speech: US - Taiwan Defense Industry Conference*. Accessed November 21, 2019. 2017: https://www.us-taiwan.org/wp-content/uploads/2019/12/2017 october 16 david helvey dod keynote.pdf. 2018: https://www.us-taiwan.org/wp-content/uploads/2019/12/2017 october 16 david helvey dod keynote.pdf. 2018: https://www.us-taiwan.org/wp-content/uploads/2019/12/2017 october 16 david helvey dod keynote.pdf. 2018: https://www.us-taiwan.org/wp-content/uploads/2019/12/2017 october 16 david helvey dod keynote.pdf. 2018: https://www.us-taiwan.org/wp-content/uploads/2019/12/2017 october 16 david helvey dod keynote.pdf. 2018: https://www.us-taiwan.org/wp-content/uploads/2019/12/2017 october 16 david helvey dod keynote.pdf. 2018: https://www.us-taiwan.org/wp-content/uploads/2019/12/2017 october 16 david helvey dod keynote.pdf. 2018: https://www.us-taiwan.org/wp-content/uploads/2019/ october 2018: https://www.us-taiwan.org/wp-content/uploads/ october 2018: https://www.us-taiwan.org/wp-content/uploads/ october 2018: https://www.us-taiwan.org/wp-content/uploads/ october 2018: https://www.us-taiwan.org/wp-content/uploads/ october 2018: <a href="https://www.us-taiwan.org/wp-content/uploa

choose asymmetry and innovation over big-ticket defense articles. In his 2019 speech, Helvey specifically called on Taiwan to build a "distributed, maneuverable, and decentralized force" that is a "large numbers of small things." These small things may potentially include drones, boats, and mines. In addition, it should pursue capabilities such as "highly-mobile coastal defense cruise missiles, short-range air defense, naval mines, small fast-attack craft, mobile artillery, and advanced surveillance assets, all of which are particularly well suited for Taiwan's geography and to the mission of island defense." According to Helvey, "such systems are far less expensive to operate and maintain, and are more survivable, compared to more conventional platforms such as fighter aircraft or large naval vessels" and can better "operate in a degraded electromagnetic environment and under a barrage of missile and air attacks." In Helvey's assessment, "much remains to be done" to ensure that Taiwan can field a credible force "proficient in asymmetric warfare, force preservation, and littoral battle."

The Office of the Secretary for Defense (OSD) has long recommended asymmetry and innovation. A Taiwan funded and OSD-led Joint Defense Capabilities Assessment (JDCA) in the late 2000s concluded that while Taiwan has inherently strong civil infrastructure that could hold up well against PLA attacks, its military capabilities require comprehensive upgrades to replace

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content/uploads/2020/04/2018 october29 david helvey dod keynote.pdf. 2019: https://www.us-taiwan.org/wp-content/uploads/2020/04/2019 october07 david helvey dod keynote.pdf

⁵⁵ Helvey, David F., 2019. *Helvey Keynote Speech: US - Taiwan Defense Industry Conference*. October 7. Accessed November 21, 2019. https://www.us-taiwan.org/wp-content/uploads/2020/04/2019 october 07 david helvey dod keynote.pdf.

⁵⁶ Chiang, Chin-yeh and Chiang Yi-ching, 2019. "U.S. Official suggests Taiwan pursue more 'cost-effective' weapons." October 9. *Focus Taiwan*. Accessed November 20, 2019. http://focustaiwan.tw/news/aall/201910090009.aspx.

conventional weapons with newer, smaller, more high-tech, and more integrated systems. According to a now retired officer who was a member on Taiwan's General Staff, the dollar amount of recommended upgrades was approximately US\$10 billion.⁵⁷ Moreover, the JDCA recommended pursuing innovative and asymmetric capabilities such as sea mines and area defense/denial to defend against a PLA invasion.

Ambassador James Moriarty, Chairman of the American Institute in Taiwan and one of the point men in U.S.-Taiwan relations, is also squarely focused on Taiwan's military preparations. In a speech at the U.S.-Taiwan Defense Industry Conference, Moriarty argued that Taipei's objective should be to convince the Chinese that taking over Taiwan will take time and will be difficult. This would deter the PLA from initiating conflict based on the difficulty and fear of U.S. intervention. In his view, military options such as building a large core of reserves, enhancing mobile costal defense, and increasing various missile defense capabilities are the best approaches to countering the PRC threat. He views buying "big shiny toys" such as tanks and advance fighters as poor defense spending choices from the return on investment perspective. When asked if big-ticket items can help bolster Taiwan's morale by signaling U.S. political support, he contended that Taiwan should build its morale by building its military capacity as opposed to pursuing political trophies. Moreover, Moriarty interprets the fact that Taiwan has not purchased all the defense articles that Washington has offered through foreign military sales as an indication that Taipei is not fully committed to matching defense expenditures to its proclaimed level of commitment to self-defense.⁵⁸

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⁵⁷ Liao, Anson, Interviewed by Steven Li. Personal interview, Taipei, Taiwan, April 8, 2019.

⁵⁸ Moriarty, James. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 20, 2019. Due the sensitive nature of on-going U.S-Taiwan discussion, the exact systems in question have been omitted.

The lead resident U.S. security cooperation advisor in Taiwan is also focused on preparing for large or full-scale PLA invasion. For U.S. Army colonel Luke Donohue, who leads the Security Cooperation Section within the American Institute in Taiwan, enabling Taiwan's defense needs requires appropriate risk assessment. Deficient defense capabilities on Taiwan's part raises the risk to U.S. interests in the U.S. Indo-Pacific Command's area of responsibility (AOR) and requires additional U.S. resources to compensate. From this perspective, enhancing Taiwan's military capabilities not only serves Taiwan's interests, but also that of the United States. Donohue is frustrated with the slow pace of FMS and hopes to expedite both the speed and quantity of U.S. defense article transfers to Taiwan.⁵⁹

U.S. military experts who do not reside in Taiwan but are involved in U.S.-Taiwan security cooperation are also focused on preparing for full invasion scenarios, to include battling the PLA on Taiwan's soil. A U.S. Marine Corps Lieutenant Colonel who spoke at the 2018 U.S.-Taiwan Defense Industry Conference discussed helping Taiwan hold the beachhead in a PLA invasion and emphasized that U.S. Marines would thrive by using a chaotic wartime environment with limited communications to its advantage over the PLA. From his perspective, a protracted conflict would favor Taiwan because the geography and chaos would both be home court advantages for capable soldiers.

Policy makers and military planners are not alone in fixating on preparing for full-scaled PLA invasion scenarios; researchers share this emphasis. For example, Ian Easton's *The Chinese Invasion Threat*, which was widely publicized and well-received in U.S. defense circles, overly emphasizes the worst-case scenario of the PRC threat. Easton painstakingly analyzes geography, capabilities, and orders-of-battle to draw conclusions on how a full-scale PLA cross-Strait

⁵⁹ Donohue, Luke. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

invasion would unfold. By concluding that China has hostile intent and capability that combine to pose extreme threat for Taiwan and that the United States has resources and the obligation to provide much needed assistance to a democratic partner to enhance deterrence and defense capabilities, Easton's analysis takes a reductionist approach by overemphasizing the military-to-military, force-on-force model of a PRC-Taiwan conflict and neglecting to account for the how political, informational, and economic complexities shape Taiwan's security environment.

Lastly, the U.S. defense industry, likely in the interest of profit, constantly promotes capabilities that support a full-scale kinetic conflict. From command, control, computers, communications, cyber, intelligence, surveillance and reconnaissance (C5ISR) systems to smart bombs and missiles, from big-ticket items to man-portable air-defense systems (MANPADS), defense industry representatives bombard Taiwan with item or capability-specific sales pitches. One industry representative even suggested that Taiwan should "stash a 'Javelin' in every convenience store" so that the Taiwan army would be better prepared to engage the PLA in protracted or guerrilla type of warfare once they make landfall.⁶⁰ For reference, the "Javelin" is a man-portable fire-and-forget anti-tank missile that uses infrared guidance to target tanks or armored vehicles and Taiwan has one of the world's highest concentrations of convenience stores (about 1 store for every 2500 people).⁶¹

The Taiwan Perspective

While all levels of the U.S. defense enterprise are focused on enhancing Taiwan's military capabilities to deter and defend against a full-scaled PLA invasion, Taiwan's decision

⁶⁰ Information acquired from discussion with retired U.S. Army officer who is now a defense industry representative who do not wish to be cited. April 19, 2019.

⁵³ According to Taiwan Ministry of Economic Affairs statistics on Taiwan convenient stores.

and policy-making elites have a different perspective on how best to mitigate its PRC threat. Taipei concentrates on day-to-day challenges that occur short of any full-scaled military conflict with the PRC. As NSC's Deputy Secretary York Chen stated, "putting all of our resources into military needs would be underestimating PLA. Defense requires more than military capabilities. Americans and Europeans see Taiwan in their own image...They need to better understand Chinese history, thinking, culture and methods." Former Minister of Defense Kent Feng offers a similar assessment, pointing out that even Mao knew that Taiwan was a political problem, not a military problem. In this context, FMS will never be sufficient enough to completely meet Taiwan's defense needs. In this context, Taiwan leaders prioritize consolidating U.S. political support, managing information flows in society, and promoting economic development as keys to countering the PRC threat. Military enhancements are subordinate to and only serve to support political, informational, and economic goals.

Political Pillar

First and foremost, Taipei's elites indicate that reliable and sufficient U.S. political support is essential for Taiwan's survival. In their view, the cross-Strait military imbalance is so significant that Taiwan alone cannot fend off a determined PLA attack. To put it plainly, for Taiwan to survive beyond the initial salvos of PLA military attacks, the United States must intervene. Against this backdrop, purchasing American weapons and spending on defense are only useful if the United States will come to Taiwan's rescue. Otherwise, defense spending only marginally delays Taiwan's inevitable demise in an all-out cross-Strait military conflict.⁶⁴ As the

⁶² Chen, York, Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

⁶³ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

⁶⁴ General consensus from all interviewees.

Deputy Minister of the Mainland Affairs Council, Chen Ming-chi so aptly stated, "if we spend another US\$1 billion and it only buys us one more day, then what's the point of that?"⁶⁵

The absence of complete trust in U.S. political support is one reason Taiwan defense decision makers hesitate to spend more on defense. According to multiple elite interviews conducted for this research, the U.S.-China political relationship impacts the intensity of U.S. support for Taiwan so much that it's difficult for Taipei not to feel like a pawn or a chip caught in a chess or poker game between Washington and Beijing. ⁶⁶ One insider believed China's 1989 crackdown on democracy was the primary cause of a favorable U.S. decision to sell Taiwan 150 F-16A/Bs. 67 Interestingly, conventional U.S. view is that George Bush's decision to sell Taiwan F-16s was primarily motivated by re-election ambitions.⁶⁸ Another Taiwan military insider commented that Washington betrays Taipei about every 30 years. He assessed that the United States withdrew support for Taiwan's submarine acquisition when Washington needed Beijing's support for the "global war on terror (GWOT) that responded to September 11th attacks.⁶⁹ Taipei also sees the recent increase in U.S. support as a function of the United States' intensifying competition with China. During these interviews conducted in April 2019, most elites still feel like U.S.-China trade talk process will directly impact Washington's final decisions to sell Taiwan F-16V fighters and M1A2 tanks.⁷⁰ While these assessments are very simplified, they do clearly reveal an underlying concern in Taipei that U.S. political support vacillates contingent upon U.S.-PRC relations.

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⁶⁵ Chen, Ming-chi. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

⁶⁶ Chen, Richard; Lo, Chih-cheng; and, et al. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

⁶⁷ Liao, Anson. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

⁶⁸ Tucker, Nancy B, 2009. *Strait talk: United States-Taiwan relations and the crisis with China*. Cambridge, Mass.: Harvard University Press.

⁶⁹ Yen, TL. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

⁷⁰ From interviews with Legislative Yuan members who do not wish to be cited. April, 2019.

In the above context, Taiwan elites are frustrated by the lack of reliable U.S. political support in U.S.-Taiwan relations. When asked why Taiwan does not directly voice its concerns for vacillating U.S. support, lawmaker Lo Chih-cheng, who sits on the LY's Diplomacy and National Defense Committee, indicated that Taiwan defaults to politeness despite years of frustration due to the lack of alternative options. He explained that whenever Taiwan attempts to upgrade political or military dialogues, Washington is always passive or non-responsive because the United States does not want to antagonize China. In Lo's view, the impediment to better U.S.-Taiwan security cooperation is squarely on the U.S. side. Taiwan wants more of all types of dialogues but the United States keeps on self-imposing restraints.⁷¹

Taiwan wants more substantive engagements instead of just those of a political nature. Multiple legislators and officials highlight that President Tsai continues to rebuff invitations from the U.S. Congress to speak in the United States because she sees it as a political move that would unnecessarily elicit adverse PRC reactions. Conversely, Taipei would welcome upgrading military-to-military dialogues because they would be more useful and substantive. But even now, they point out, after the passage of the Taiwan Travel Act, no active duty general officers come to Taiwan for defense dialogues. In Legislator Lo's view, concrete actions need to follow the passage of legislation. Lo feels fortunate for having robust support in U.S. Congress, but laments that administrations in general are more reluctant to have better relations with Taiwan. Lo does not think the absence of support from American presidential administrations will guarantee the avoidance of provocation. In his words, "China is going to get pissed off and complain about everything anyway. We just need to routinize and desensitize China to increased activities... Of course, there are possible reactions from China. But we can have coordinated mitigation

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⁷¹ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

⁷² Consensus among DPP and KMT legislators interviewed.

measures to counter." According to Lo, "There is no need to impose unnecessary self-censorship where we base our decisions over small matters on our estimations of China's potential reaction." He believes that continuing to do so will "reinforce many people's view that Taiwan is just a pawn in the U.S.-PRC relationship."

Taiwan authorities believe increasing the frequency of substantive engagements will improve mutual trust, which is critical to security cooperation. Legislator Lo argues that the history of mistrust between the United States and Taiwan, exacerbated in recent years by the Chen Shui-bian administration has legacy effects. He asserts that increasing political interactions between Washington and Taipei will demonstrate that mistrust is no longer necessary and that the Tsai administration is stable and predictable. He points out that the current administration intentionally avoids discussing any constitutional amendment or introducing referendums to show both Washington and Beijing that it intends to maintain the status quo. In his view, only when Washington and Taipei trust each other, can U.S.-Taiwan security cooperation be effective.⁷⁴

Legislator Jason Hsu (許毓仁) shares the same sentiment. In his remarks during an event to commemorate the 40th anniversary of the Taiwan Relations Act, he commented that while the United States has recently passed numerous acts of legislation supporting Taiwan, "Laws are only code. Automation is indication of trust." By his reasoning, merely passing legislation is insufficient. The United States needs to take actions allowed by such laws in order to demonstrate trust. Everything considered, the message from Taipei is that substantive interactions can act as confidence-building measures that accomplish two objectives. First,

⁷³ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

⁷⁴ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

⁷⁵ Hsu, Jason. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

interactions will help convince the United States that Taiwan will not get too close to or purposely antagonize China. Second, interactions will help assure Taiwan of reliable and sincere U.S. commitment.

Informational pillar

Taipei is extremely concerned with PRC's attempts to disrupt social cohesion via influence operations. From widespread cyberattacks to misinformation and disinformation campaigns, the current administration dedicates tremendous resources towards moderating the effects of social engineering. The difficulty of these efforts is only exacerbated by the Taiwan's hyper developed media, which acts as an echo chamber that amplifies and accelerates information flow. The next section on domestic level analysis will further elaborate on Taipei's information management challenges.

Military Pillar

Since defense spending is a function of politics and strategy, misaligned priorities between Washington and Taipei default to lower defense spending by Taipei. As previously indicated, while Washington conceives Taiwan's military capabilities as the ultimate means of the Island's defense against the PRC, Taipei sees military capabilities as a supporting function for political, informational, and economic goals. This dynamic has three distinct effects. First, it creates a different conceptual understanding of asymmetry and innovation between Washington and Taipei so that even though both sides are referencing the same words, each have their own intended meaning. Second, Taiwan does not necessarily want to buy all the defense articles that

America wants to sell because not all items offered are conducive to achieving Taipei's priorities. Third, Taiwan cannot always purchase the defense articles or services that it desires because the United States, as the default sole foreign procurement source, will only sell what Washington sees as fitting for Taiwan.

Washington and Taipei do not share the same conception of asymmetry and innovation. According to former AIT Director Bill Stanton, "Too many Americans go into meetings with Taiwan with their own preconceptions... Taiwan is so tired of asymmetrical and innovation."⁷⁶ Stanton's assessment appears to be accurate. At the policy level, Deputy Secretary General York Chen stated that "your understanding of asymmetry is not the same as ours. You are still thinking of asymmetrical warfare in WWII framework." According to Chen, the American conception is outdated because "asymmetry is a function of predictability." Hence, "if the PLA thinks we're going to employ something, it's no longer asymmetry."⁷⁷ By this reasoning, American asymmetrical capability recommendations such as missiles, mines, small boats, and UAVs do not make sense. Lin Yu-fang, the former Chair of Taiwan's Diplomacy and National Defense Committee, agrees. The military, he claims, is political instrument, which means U.S. recommended asymmetrical capabilities like missiles and mines have limited utility in situations short of war. As an example, Lin pointed out that Taiwan obviously cannot drop mines or launch missiles every time the PLA crosses the centerline of the Taiwan Strait, because doing so would only escalate conflict. This makes the "asymmetrical" tools with limited application flexibility, useless in supporting peacetime political objectives.⁷⁸

⁷⁶ Stanton, Bill. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

⁷⁷ Chen, York. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

⁷⁸ Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

At the operational level, Taiwan's Former Chief of Naval Operations retired Admiral Richard Chen (陳永康) thinks the American conception of asymmetry is too naïve and that the current U.S. suggestions are only a means to avoid real requirements discussions that are confined by political priorities. In Chen's assessment, asymmetry goes far beyond the simple capabilities advocated by American advisors. He believes asymmetry requires coordinated countermeasures that defend against China's simultaneous and persistent attacks on four centers of gravity—collapsing population morale on Taiwan (崩潰島內民心士氣), isolating Taiwan politically and physically (獨立島內聯外管道), attacking Taiwan's political-military cohesion (擊毀島內軍政措施), and defending against amphibious landings (登島輾壓防禦陣線). By this reasoning, U.S. recommendations such as leveraging the "porcupine strategy" and swarming missile boat tactics miss the big picture because they are too simplistic and insufficient.

Former Taiwan Air Force Commanding General and Defense Minister Kent Feng, who is now the Chairman of INSDR, a Ministry of Defense think tank purportedly set up to rebuff U.S. recommendations, also has a different concept of asymmetry than U.S. advisors. For Feng, pursuing asymmetry is not an arms race or capability competition, but rather leveraging existing military capabilities and conventional weapons in asymmetric ways. For example, during his tenure as the Minister of Defense, he ordered deployment and redeployment of military assets, such as armored personnel carriers, to and from military exercises during daylight and commute hours in order to demonstrate military readiness, bolster civilian confidence in the military and inspire national pride. According to Feng, the decision was well received by the population and helped promote the military as brave, honorable, and capable. As Feng see it, "A fish-gutting knife can be used for more than just one thing. It can also kill a chicken or cut beef."

⁷⁹ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

What is clear at both the policy and operational levels is that asymmetry means different things to Washington and Taipei. Interestingly, while interviewees collective discredited the U.S. conception of asymmetry, none delved into details on what Taiwan's asymmetrical capabilities are. Understandably, there is probably good reason for Taipei not to completely tip its hand. The main point here is that the United States and Taiwan have different core understandings of what constitutes as the primary threats to Taiwan and what the appropriate mitigation measures ought to be. While Washington recommends a "large number of small things," to prepare for "a war Taiwan cannot afford to lose," Taipei has a larger picture in mind and actively seeks to leverage military capabilities to support goals beyond military objectives. These differences have direct impacts on Taiwan's defense procurement, and, in turn defense spending.

Given the disjuncture between Washington and Taipei perspectives described above, it makes sense that Washington would offer different weapons than those that Taiwan seeks. Taipei identifies the inability to purchase desired defense articles as one of the primary reasons for low defense spending. According to the elites interviewed, the lack of defense funds is not the root of Taipei's angst. Former legislator Lin Yu-fang proclaimed that "we will buy if you approve." Lin expressed great frustration with the U.S.-Taiwan defense spending discussion. He recalled being challenged repeatedly by top Pentagon officials to spend more on defense during his annual visits to Washington as the Chair of Diplomacy and National Defense Committee but always able to silence the challenges by retorting, "If I want to buy new fighters or an aircraft carrier, would you approve?"80 Retired Defense Minister Feng recalls that the United States denied eighteen out of nineteen procurement requests during the August 1990 meeting he attended in the United States while still on active duty. While Washington approved the sale of F-16A/Bs, it

⁸⁰ Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

denied other capabilities such as mine-dropping. Retired General Liao, a former member of Taiwan's General Staff shares similar sentiments, highlighting Taiwan's "Q-case," which is an on-going FMS case that provides flexible funding to pay for various training programs as an example. Liao recalls that seventy percent of Taiwan's training requests would be denied by U.S. military authorities. Year after year, Taiwan's defense funds dedicated to the Q-case would just sit in a U.S. bank account, unspent. The underlying reason is the lack of U.S. willingness to share technologies or tactics that Taiwan requests, not Taiwan's unwillingness to expend defense funds. Former Defense Minister Feng solidified this point with another analogy, "The United States is not a fruit stand where you can buy whatever you want, anytime you want...There are U.S. interests and considerations involved."

Legislator Lo Chih-cheng also underscored the fact that Taiwan's defense spending is limited by opportunity availability. In his words, "FMS is a seller's market, not a buyer's." He proposes that buying M1A2 tanks might be driven by availability as opposed to Taiwan's actual requirements. According to Lo, Taiwan's defense procurement options are limited so Taipei always has to balance what is the most feasible with what is actually available for purchase. As an example, while Taipei may think F-35s are the best option, it has to settle for F-16Vs because it is the only system the United States would agree to sell. Lo bemoans the fact that other U.S. allies such as Japan and Korea have access to more advanced items and cites that as the reason that some people in Taiwan doubt the seriousness of U.S. support. Lo said that "while we acknowledge potential espionage concerns (secrets or designs leaking to PRC), we are still concerned about not being treated like a true ally (in a solidarity as opposed to a technical

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⁸¹ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

⁸² Liao, Anson. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

⁸³ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

sense)." He also expressed that there is a perception among some constituents that U.S. items are more expensive than fair and that the exorbitant costs are seen simply as paying protection money to the United States.⁸⁴

For the reasons that Lo highlights, Taiwan does not always want to buy all the defense articles and services offered by the United States. Contradictions between U.S. rhetoric and actions exacerbate suspicions. For example, although U.S. military authorities emphasize costeffectiveness, it condones favorable exorbitant spending. The FMS case that pays for a squadron of fourteen Taiwan Air Force F-16s stationed at Luke AFB for training, absorbs half of the entire Taiwan military annual training budget. From the perspective of some elites interviewed, Washington turns a blind eye to these exorbitant costs because Taiwan is paying the salary of American instructors and helping to defray the cost of maintaining facilities, runways, and infrastructure of a U.S. Air Force base. One official estimated that Taiwan paid for twenty-five percent of Luke AFB base operating support (BOS) costs. 85 In 2004, when Taiwan's Minister of Defense Lee Jye wanted to withdraw from the training arrangement, the Defense Department stressed the value of continuing the training program to develop "mission ready and experienced pilots" with improved tactical proficiency shown by graduated pilots who have "performed brilliantly," as explicitly notified to Congress. 86 Taiwan's F-16 training FMS case continues but the program relocated to another U.S. Air Force base recently because Luke AFB is being converted to strictly support F-35 training.

⁸⁴ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

⁸⁵ According to interviews with officials who requested non-attribution for this comment.

⁸⁶ Kan, Shirley A. "Taiwan: Major U.S. Arms Sales since 1990." Congressional Research Service (CRS) Reports and Issue Briefs, 2015.

As a whole, conceptual differences over asymmetry and innovation, not being able to procure the most desired defense articles and services and not wanting everything Washington offers collectively decreases Taipei's ability and willingness to spend more on defense. Taiwan has a level of mistrust of the American military-industrial complex and the revolving door between government and industry. This keeps pundits on guard to the potential that Taiwan will be used as a dumping ground for over-priced and out-of-date defense articles. Taipei proceeds with caution in its security relationship with the United States, exercising freedom where it can by being selective of the type and quantity of defense articles and services Washington would support but feeling helpless at times with the situation. Former Legislator Lin Yu-fang even remarked that "China is not afraid of Taiwan, they are afraid of America...China's decision to attack Taiwan is not based on Taiwan's defense capabilities but rather its assessment on how Washington would respond." With limited ability to alter the above dynamics, Taipei keeps defense decisions subordinate to political, informational, and economic interests.

Economic Pillar

Interviews with Taiwan decision makers indicate that since they see economic security as an integral part of national security, they want to spend defense funds in ways that benefit economic performance, which by default means they eschew forms of defense spending that do not benefit Taiwan's economy. In the previous administration, Ma Ying-jiu promoted friendlier cross-Strait relations as the means to stimulate economic development, lower tensions, and reduce defense requirements, which in turn suppressed defense spending.⁸⁸ Faced with evolving

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⁸⁷ Lin, Yu-fang, Interviewed by Steven Li, Personal interview, Taipei, Taiwan, April 19, 2019.

⁸⁸ According to SIPRI data, Taiwan's defense spending under Ma peaked at 2.3 percent of GDP in 2009 and decreased to 1.8 percent in 2014. Stockholm International Peace Research Institute, 2019. *SIPRI Military*

economies and diverging political perspectives, the current administration acknowledges the need to bolster defense capabilities but is choosing to do so by seeking synergy between economic growth and enhancing defense capabilities. To promote this desired synergy, the Tsai administration is attempting to leverage defense spending as a form of economic investments in Taiwan's economy, which does not translate to immediate and significant increases in the annual defense budget. For example, Taiwan is expanding its shipping building industry to include the capability to produce sub-surface vessels, i.e. submarines. Cultivating the domestic defense industry capabilities such as these requires transition time, meaning investments are not always reflected in defense spending.

Taiwan's governing elites are unanimous in seeing economic security as the bedrock of national security. DPP legislator Lo listed the current administration's top two priorities as economic performance and national security before supplementing that the latter is not possible without the former. Furthermore, he underscored the importance of economic prosperity to elections and political stability—"For elections, we need a good economy...We all want the same thing. If we don't let relations with China deteriorate, the economy will remain good and we can spend more on defense." The National Security Council Deputy Secretary General York Chen offers the same assessment. In his view, "Raising defense spending to 3 percent of GDP is meaningless if the economy falters." He added that since Taiwan does not have the economic base of China or the United States, increasing the defense budget drastically in the short term will just get those in charge voted out of office. After which, defense spending will return to a sustainable level with the next administration. With this reasoning, Chen argues that

Expenditure Data. May 5. Accessed May 14, 2019. https://www.sipri.org/research/armament-and-disarmament/arms-transfers-and-military-spending/military-expenditure.

⁸⁹ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

promoting a rising economy, which will lift all budgets, is the best option for ensuring a stable and predictable national security environment. Former Defense Minister Kent Feng, INSDR (MND think tank) Chairman, also believes that defense budgets definitely depend on economic performance. In his words, "Our economy is much smaller than yours (United States) and has lots of needs. If the economy is stable, we stay in office and continue tracking with current increases, Taiwan might reach 3 percent GDP defense spending in 10 years. The key is to keep the economy on-track." An influential figure in U.S.-Taiwan security cooperation, retired Taiwan Air Force General Mike Tien also concurs, claiming that, "If the economy weakens, everything fails." Therefore, the government must keep the economy stable. According to Tien, the China-Taiwan annual trade is approximately US\$200 billion, which is about the same as same amount as U.S.-Japan, making cross-Strait relations very important. This perspective appears to emphasize economic stability over security. Tien did not address how over relying on the PRC economically could potentially threaten Taiwan's security by limiting economic options.

While leaders unanimous agree that economic security is the bedrock of national security, they have different outlooks on leveraging economic relations with China to sustain economic development. Some insiders believe shifting economies and political contexts diminish the likelihood that stable cross-Strait relations and economic prosperity will continue. China has demonstrated the ability to exert significant economic pressure by limiting tourism, canceling flights, and impeding business cooperation. Current AIT director Brent Christensen and the China Affairs Department director Johnny Lin both noted that as China's economy becomes

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⁹⁰ Chen, York, Interviewed by Steven Li. Personal interview, Taipei, Taiwan, April 22, 2019.

⁹¹ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

⁹² Tien, Mike. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 9, 2019.

more technologically advanced, the once strong cross-Strait economic cooperation is increasingly turning towards competition. According to Lin, the current administration understands there is a need to shift Taiwan's economy away from being dependent on China, which is precisely what the Southbound policy seeks to accomplish. As Lin stated, "Taiwan never denied the importance of China to Taiwan's economy. But we cannot not put all our eggs in one basket." According to Lin, the height of Taiwan investment in China was during the Chen Shui-bian administration. But now many businesses are returning to Taiwan or moving elsewhere because China's maturing industries are squeezing out foreign investments.⁹³ The U.S.-China trade war and current COVID-induced political economic shifts will also likely help Taiwan's cause.

As Legislator Jason Hsu stated, every administration needs to respond to the current situation. From Hsu's observation, the previous Ma administration did not have an immediate or substantial military threat from China so it focused on building the domestic economy. However, he assesses the PRC threat to be more imminent now, elevating the need for increased defense-oriented actions. Hence, Taipei sees protecting economic infrastructure and cultivating domestic economic development, as opposed to the U.S. recommendation to develop cost-effective and asymmetrical capabilities, to be the appropriate measures for Taiwan's current situation.

Taiwan's defense insiders believe that protecting the flow of commerce is crucial. For example, Taiwan's Former Chief of Naval Operations Admiral Richard Chen emphasized that it is crucial to dedicate sufficient military capabilities towards keep shipping lanes open. In his assessment, any blockade threats or surges in shipping risks would excessively increase

⁹³ Lin, Johnny. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 11, 2019.

⁹⁴ Hsu, Jason. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

operating costs such as shipping insurance, making business less profitable and damaging economic performance. Chen also highlighted Taiwan's cyber connection as a vulnerability that requires protection. He used the slide below, which depicts the Asia Pacific Gateway submarine web connection network, to illustrate Taiwan's exposure to losing connectivity to commerce partners. In his assessment, the PRC can easily attack Taiwan's link to the network, which makes the protection of this link essential to preventing the crippling of Taiwan's economy. While satellite communications can facilitate limited connections to the outside world, such connections would be expensive to maintain and only provide the tiniest fraction of the bandwidth of a submarine cable.

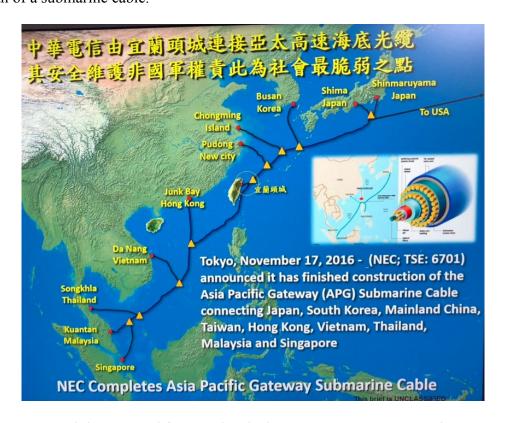


Figure 6 – Slide extracted from Richard Chen's presentation to Legislative Yuan.

⁹⁵ Chen, Richard. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 17, 2019.

Beyond protecting economic infrastructure, current leaders intend to leverage defense spending to stimulate Taiwan's economic growth. President Tsai Ing-wen planned to align national security and economic growth even before taking office. In the foreword of the DPP's Defense Policy Blue Paper No. 12: "Preparing the Development of Indigenous Defense Industry" issued in May 2015, Tsai stated that the government must "transform the current dynamic of competition for resources between defense and economic growth into a mutually beneficial relationship." Since taking office, the Tsai administration has made comprehensive efforts to maximize how defense spending can contribute to Taiwan's economy. According to Legislator Lo, the National Defense Industry Development Act, which was passed on May 31, 2019, exemplifies the administration's intent. 97 The act aims to develop Taiwan's domestic defense industrial base by facilitating public-private partnerships; establishes a new MND agency to support joint defense research, development, and production projects; introduces supplier information security controls (including measures to ensure that components and raw materials are not sourced from China); establishes measures to assist local industry to comply with foreign equipment certification requirements; and promises greater government assistance for local industry to enter collaborative projects with foreign companies.⁹⁸

Since 2016, the effort to align national security and economic development appears to have widespread support and unified effort. Legislator Jason Hsu emphasized that Taiwan needs American support to expand international industrial cooperation.⁹⁹ Legislator Lo thinks that the

⁹⁶ New Frontier Foundation Defense Policy Advisory Committee, 2015. *Defense Policy Blue Paper No. 12: Preparing the Development of Indigenous Defense Industry*. Accessed November 15, 2019. https://www.ustaiwandefense.com/tdnswp/wp-content/uploads/2014/12/20150526 DPP Defense Blue Paper 12.pdf.

⁹⁷ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

⁹⁸ New Delhi Times, 2019. "Taiwan Sanctions Defense Industry Act." June 10. *New Delhi Times*. Accessed December 7, 2019. https://www.newdelhitimes.com/taiwan-sanctions-defence-industry-act/.

⁹⁹ Hsu, Jason. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

new focus to enhance domestic industries will have positive economic spill-over effects. 100 Long-time U.S.-Taiwan security cooperation point man, now retired Taiwan Air Force General Mike Tien, agrees that domestic production is the right choice to stimulate economy and enhance domestic support.¹⁰¹ Admiral Lee Hsi-min, who was Taiwan's Vice Minister for National Defense Policy, stated in his 2016 U.S.-Taiwan Defense Industry Conference keynote address, "Taiwan's defense challenges come not only from a much larger enemy force, but also our isolated status in the international community. The United States is no doubt providing unwavering support to Taiwan. We, however, cannot rest all our hopes on one source of arms supply." He went on to emphasize that Taiwan will be looking at defense budgets as an investment to promote economic growth and that national defense and economic growth will be mutually supportive. 102 In 2018, Vice Minister of Defense Chang Chang-kuan (張長冠) remarked that Taipei's push to develop indigenously produced main, sub-systems, and critical modules along with supporting market mechanisms, is fundamental to Taiwan's defense policy. 103 With this in mind, Chang emphasized the need for U.S. help with industrial cooperation programs and technology transfers. 104

International Level Summary

As Taiwan continues to contend with limited international support and a still-developing indigenous defense industry, U.S.-Taiwan security cooperation remains vital to fulfilling

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¹⁰⁰ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

¹⁰¹ Tien, Mike. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 9, 2019.

¹⁰² U.S. Taiwan Business Council, 2020. 2016 U.S.-Taiwan Defense Industry Conference keynote address. Accessed December 9, 2019. http://us-taiwan.org/reports/2016 october3 vice minister lee mnd keynote.pdf.

¹⁰³ Chiang, Chin-yeh and Frances Huang, 2018. "Taiwan defense strategy built on dual-development system: official." October 30. *Focus Taiwan*. Accessed December 9, 2019. http://focustaiwan.tw/news/aipl/201810300006.aspx.

Taiwan News. Accessed December 9, 2019. https://www.taiwannews.com.tw/en/news/3563190.

Taiwan's defense requirements. However, despite strengthening U.S.-Taiwan defense cooperation that resulted from increased U.S.-China competition, American recommendations are misaligned with Taipei's vision, which continues to cause Taiwan's defense budgets to remain lower than the self-set 3 percent of GDP target that Washington would also like to see. While U.S. military authorities, who are by law responsible for reviewing Taiwan's defense needs and recommending countermeasures, continue to perceive China's threat to Taiwan predominantly as a military problem, Taipei sees China as an integrated political, economic, military, and industrial threat. The consequence is that the while United States continues to prescribe a building up of low-cost, asymmetric and innovative military capabilities to prepare for a large-scale PRC military invasion, Taiwan is seeking integrated, wide-spectrum and flexible responses options across the political, economic, military, and industrial fronts. This dynamic suggests that for Taiwan leaders, the United States might have a knowledge illusion— That is, the U.S. defense enterprise may think it knows more about Taiwan's defense needs than it actually does. As the Deputy Secretary General of Taiwan's National Security Council commented, "We can learn from your science, but you don't understand our art." ¹⁰⁵

For Chieh Chung, a KMT defense policy think-tank fellow, spending 3 percent of GDP on defense is nothing more than a political statement, a visible means to show commitment to national defense. ¹⁰⁶ In this regard, using such a measure honors form over function—While annual defense spending might be an easy tool to measure of Taiwan's commitment to self-defense, it may not be a reliable one. Perhaps the prevalence of using defense spending as a measurement tool will diminish as more Washington insiders like AIT's Deputy Director realize that Taiwan's "biggest threats today are no longer troops landing on beaches but efforts by

¹⁰⁵ Chen, York. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

¹⁰⁶ Chieh, Chung. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

maligned actors to use the openness of societies and networks to attack industries, democratic institutions, and the integrity of critical infrastructure."¹⁰⁷And with approximately half of Taiwan's defense spending traditionally going towards personnel compensation, is defense spending really a good measure of defense readiness?

State Level

Taiwan's domestic politics, as can be expected from a vibrant democracy, lacks decision-making centrality, which undermines unified support for higher defense spending. The lack of constituent backing and intragovernmental cooperation collectively inhibit Taipei's ability to significantly boost the defense budget. So, while Helvey's charge that the "defense of Taiwan must be a whole-of-society mission" is accurate, it is a tall order for Taiwan, where the democratic population generally marginalizes national defense requirements and intragovernmental agencies lack common strategies and priorities. ¹⁰⁸

According to the elites interviewed, Taiwan's constituents are not willing to support defense spending increases because they prioritize social needs over those of defense. As a baseline, Taiwan's civilians generally do not feel an imminent PRC threat, a connection to the island's defense, or the willingness to make personal sacrifices. The situation is exacerbated by Taiwan's media, which according to governing authorities interviewed, acts as an echo chamber for misinformation, disinformation and discontent. This dynamic creates a powder keg that ruling authorities spend extensive resources contending with. Taipei is under persistent pressure

¹⁰⁷ Lim, Emerson, 2019. "First-ever U.S.-Taiwan cyber exercises open in Taipei." November 4. *Focus Taiwan*. Accessed November 19, 2019. http://focustaiwan.tw/news/aipl/201911040015.aspx.

¹⁰⁸ Helvey, David F., 2019. *Helvey Keynote Speech: US - Taiwan Defense Industry Conference*. October 7. Accesed November 21, 2019. https://www.us-taiwan.org/wp-content/uploads/2020/04/2019 october 07 david helvey dod keynote.pdf.

to nurture connections between the civilian population and national defense requirements, promote defense spending as a form of domestic investment, and mitigate negative information flows that undermine support for national defense requirements. As Deputy Secretary General York Chen emphasized, "In a democracy, increasing the defense budget requires shaping public opinion." However, it is "hard to justify military spending, especially when Taiwan has not been involved in a kinetic conflict."¹⁰⁹

The lack of intragovernmental cooperation and consensus also complicate Taipei's ability to raise defense spending. Within individual branches of military services, leaders promote successors and advocate for funding based on personal connections and preferences. Between the branches of military, service chiefs vie for funding with zero-sum mentalities. At the Minister of Defense level, leadership changes undermine operational continuity. Among legislators, different perspectives result in contrasting funding priorities. Finally, interagency differences stifle effective defense decision-making.

Lack of Constituent Support for Defense Spending

Constituents generally do not perceive an imminent threat from China. Geographic separation, cultural connections, and economic ties all dilute the threat perception. As Legislator Johnny Lin pointed out, "Taiwan's blessing and curse is that there is a strait between us (Taiwan) and China. The Strait provides some safety but also a mislaid or misplaced sense of security." In Lin's view, although amphibious operations would be difficult, PLA's advanced military capabilities such as surface-to-surface missiles always threatens Taiwan. Unfortunately, the population does not react to threats they do not see on a day-to-day basis. 110 Former Legislator

¹⁰⁹ Chen, York. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

¹¹⁰ Lin, Johnny. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 11, 2019.

Lin Yu-fang highlighted how cross-Strait cultural connections undermine threat perception, indicating that Taiwan values and "appreciates Chinese culture, arts and history, just not the communists."¹¹¹ In his view, having a cultural connection weakens the "us versus them" dynamic, lowering the threat perception. Mainland Affairs Council's Deputy Minister, Chen Ming-chi, deems that cross-Strait economic ties have great appeal. He suggests that China's economic prowess has created an alternative modernity, where wealth and authoritarianism is a conceivable alternative to Taiwan's liberal democratic existence. Taipei authorities believe the three factors above collectively degrade the public's threat perception and perpetuate the public's complacency on defense matters. This is what makes Helvey's call for national defense a "whole-of-society mission," a tall order to fulfill. In reality, Taiwan's civilian population views defense preparations more as mechanical gestures rather than survivability measures. According to the 2017 Taiwan National Security Survey, which is a collaborative project between Duke University and the Election Study Center of Taipei's National Chengchi University, only a small minority would actively resist in some way. 4.9 percent would join the military and 4.1 percent would actively resist. The group of respondents with the highest percentage, 36.9 percent, indicated they would go along with the course of events (順其自然). 16 percent responded they would escape or leave the country, and 23.3 percent refused to answer, did not have an opinion, did not know, or will wait and see. 112 As such, descriptions like Ian Easton's dramatization at the beginning of *The Chinese Invasion Threat*, where all citizens committedly partake in "intense and realistic" drills to prepare for a potential PRC attack, is nothing short of absurd. 113

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¹¹¹ Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

¹¹² Niou, Emerson, 2019. *Taiwan National Security Surveys*. December 8. Accessed January 15, 2019. https://sites.duke.edu/pass/taiwan-national-security-survey/.

¹¹³ Easton, Ian. *The Chinese Invasion Threat: Taiwan's Defense and American Strategy in Asia*. The Project 2049 Institute, 2017. p. 1-2.

Besides having a diluted threat perception, most citizens have neither confidence in MND's ability to repel a PRC attack nor any personal connection to Taiwan's national defense. A survey by the Taiwanese Public Opinion Foundation that was conducted just before a 2018 live-fire military exercise by China in the Taiwan Strait, indicated that 65.4 percent of Taiwanese had no confidence in the country's defense against an attack by China. Only 27.1 percent thought Taiwan forces could repel any PLA invasion. 114 These numbers are similar to results gathered by the annual Taiwan National Security Survey (TNSS). An on-going annual collaborative effort between Taiwan's National Chengchi University Election Study Center and Duke University's Program in Asian Security Studies since 2002, the 2018 TNSS survey found that 60 percent did not think the military could repel a PLA attack. Only 20 percent believed that the military is capable of defending Taiwan (20 percent did not respond). 2017 TNSS results were even worse, with only 12.7 percent believing the military was capable of defending the island and 75.5 percent thinking otherwise. 115

Further undermining civilian confidence is the doubt that the United States would assist Taiwan in a conflict. Former Taiwan Army general Anson Liao, who led MND's Integrated Assessment Office during active duty, commented that he estimates that 80 to 90 percent of Taiwan's citizens do not believe the United States will assist Taiwan in a cross-Strait conflict, no matter how much U.S. military hardware Taiwan buys. From this perspective, the notion that all empires will fall and it is only a matter of time is prevalent among Taiwan's citizens.

Consequently, Liao thinks the civilian population sees no reason to waste money in the effort to prevent the inevitable if the status quo breaks down. From the civilian perspective, absent

Hsieh, Chia-chen and Elizabeth Hsu, 2018. "Most Taiwanese think military cannot fend off China attack: poll."
 April 23. Focus Taiwan. Accessed December 4, 2019. http://focustaiwan.tw/news/acs/201804230015.aspx.
 Niou, Emerson, 2019. Taiwan National Security Surveys. December 8. Accessed January 15, 2019. https://sites.duke.edu/pass/taiwan-national-security-survey/.

sufficient U.S. assurance, defense spending would simply be throwing money into a bottomless pit. Liao went on to comment that those Taiwanese who have traveled to China often believe they can still survive or perhaps even thrive under communist rule. Hence, civilians would rather see tax dollars converted into social benefits instead of hedged against a potential conflict. In Liao's assessment, most people are simply electing to deal with China as needed if the time ever comes.¹¹⁶

Beyond having low confidence in the military, Taiwan citizens are disconnected to national defense in general. National Chengchi University professor of political science and Election Study Center research fellow, Eric Chen-hua Yu (俞振華), does not think Taiwan's population cares much about nation defense issues. In his assessment, media coverage provides a good measurement for what the population is interested in—important issues usually linger in the media's limelight for a week or more. Perhaps a legacy reaction to the militarized state under the KMT, current National defense related topics such as foreign military sales and PLA incursions rarely have any staying power in the media. 117 Legislator Jason Hsu thinks the public has become disconnected because they have become desensitized to military issues such as PLA incursions. Therefore, they do not get excited about defense-related news and "just go back to eating beef noodles." He also thinks the public is disconnected with national defense because the population sees military members as "strange animals," not an integral part of society. 118

Legislator Lo senses this disconnect, too. He thinks most citizens lack a connectedness to both the geography and people of Taiwan in general, which undermines their overall appreciation for national defense needs.¹¹⁹ Lo conveyed a sense where even though the

¹¹⁶ Liao, Anson. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

¹¹⁷ Yu, Eric. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

¹¹⁸ Hsu, Jason. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

¹¹⁹ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

population has a consolidated concept of Taiwanese identity, such conception stops short of manifesting itself in actual defense preparations. According to legislators, there is a vicious cycle that marginalizes defense budgeting—as constituents become less interested in defense topics, politicians spend less time discussing issues, which further decreases public interest.¹²⁰

Low confidence in the military and disconnectedness to national defense requirements lead to an unwillingness to make personal sacrifices on the part of constituents. Citizens are not willing to actively participate in Taiwan's defense or forgo social welfare benefits in favor of national defense spending. According to Dr. Alexander Huang, professor at Tamkang University's Institute of International Affairs and Strategic Studies, also lead KMT advisor during Taiwan's recent presidential election, young people are simply not interested in fighting for Taiwan's defense. Huang claims that although his students are very outspoken about issues such as democracy and Chinese influence, they turn mute if asked if they themselves would take up arms and fight to defend Taiwan. ¹²¹ Poll data supports his claim. According to the 2018 TNSS, only 9 percent of the population would join the military to defend Taiwan. An additional 6.4 percent would actively resist by joining some form of civil service. The majority of the population would elect to let events unfold, hide, or escape. Interestingly, 62 percent of respondents in the same survey thought that Taiwan's population would be willing to fight. 122 Apparently, respondents assume that active resistance is someone else's role, not a personal responsibility. This is consistent with former legislator Lin Yu-fang's assessment that no young people want to defend Taiwan by joining military because "defense is for guys in uniform. And if China takes over, it won't make a big difference because it'll just be another bad government

¹²⁰ Hsu, Jason, and Lo Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April, 2019.

¹²¹ Huang, Alexander, Interviewed by Steven Li, Personal interview, Taipei, Taiwan, October, 2018.

¹²² Niou, Emerson, 2019. *Taiwan National Security Surveys*. December 8. Accessed January 15, 2019. https://sites.duke.edu/pass/taiwan-national-security-survey/.

in charge." Lin also notes that parents actively deter their offspring from serving in the military, too. In his view, very few people see military service as a suitable career choice. 123

In addition to shunning military service as a means of making personal sacrifices, legislative interviewees expressed that constituents would resist any government attempts to shift funds from social welfare programs such as education, medical care, and labor insurance to defense spending. As Deputy Secretary General York Chen stated, "There are too many needs in society. Defense spending is only a part of the equation." Chen thinks that Taipei must balance other domestic needs with defense requirements in a way that is consistent with constituent will. 124

Former AIT director Bill Stanton sympathizes with Taipei's difficult position. He sees public benefits such as virtually free medical care and education as linchpins to retaining public support. Stanton noted that with an average income tax rate of around 13 percent for individuals and public pensions that yielded 18 percent interest annually, it is very difficult for Taiwan's low tax base to support huge public benefit costs. ¹²⁵ For background, Taiwan's public servants such as military, police, and teachers, had retirement pension return rates that were guaranteed by the government to yield 18 percent, which by some accounts is absurdly high. This would be like if the U.S. government were to guarantee an 18 percent return rate for all government employee 401Ks. The Tsai administration initiated various pension reforms to eliminate such lucrative returns, which resulted in wide-spread outcry. The reform efforts to reduce pension benefits caused violent demonstrations and tremendous political fallout. Stanton believes rolling back the pension return rate is precisely what caused the DPP to perform poorly in the 2018 elections.

¹²³ Lin, Yu-fang, Interviewed by Steven Li, Personal interview, Taipei, Taiwan, April 19, 2019.

¹²⁴ Chen, York. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

¹²⁵ Stanton, Bill. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

Taiwan's media makes the consolidation of constituent support for raising defense spending even more challenging. With a population of only 23 million people, Taiwan has seven twenty-four-hour news networks, about 200 radio stations, and an internet penetration rate of approximately 90 percent. 126 The competition for market share between media outlets sometimes leads to sensationalized or poorly fact-checked information being propagated. Robust media penetration rates also facilitate the swiftness and extensiveness of information flow, accelerating the ability of isolated incidents or pieces of information to cause largescale reactions and political opinion fluctuations. Taipei is acutely aware of this dynamic and sees it as a significant challenge. Retired General Liao believes that mass media allows populism to form mainstream opinions. 127 China Affairs Department Director Johnny Lin insists that people are often misled because they are busy and "like simple and easily digestible narratives." ¹²⁸ According to interviewees, media reports on incidents are often exaggerated or misleading, with the potential to trigger largescale reactions in the population and exert tremendous pressure on defense-related decisions. Examples include the death of a young conscript in 2013 after being punished for misconduct, the accidental firing of an anti-ship missile in 2016 that killed a fisherman, and even a soldier spotted in uniform at McDonalds having lunch with his family. Each event caused wide-spread coverage, resulting in public outcry that put tremendous pressure on the ruling authorities.

Public opinion is so important to Taipei that the current administration has mandated a one-hour response time to all media, including social media stories related to politics or governance. Mainland Affairs Council Deputy Minister Chen Ming-chi indicated that "For me,

¹²⁶ Lin, Lihyun, 2019. *Digital News Report, Taiwan*. Accessed December 16, 2019. http://www.digitalnewsreport.org/survey/2019/taiwan-2019/.

¹²⁷ Liao, Anson. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

¹²⁸ Lin, Johnny. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 11, 2019.

there's only one war to fight and that's over the media." In his view, China's information warfare against Taiwan, if left unchecked, eliminates the need to attack Taiwan militarily. As such, Beijing's efforts to influence the hearts and minds of Taiwan's people through misinformation and disinformation must be dealt with accordingly. "We respect freedom of speech and press until it hurts too much," Chen explained. Further, he described instances such as unknown third parties purchasing social media accounts with large followings and then using these accounts to propagate antigovernment sentiments or information. He also expressed grave concern with shady funding streams behind some of Taiwan's predominant media outlets and claimed that Beijing has a virtual direct line to the editor or producer's desk of many media sources. 129

Taipei leaders claim that many defense policy-related decisions are to a large extent aimed at overcoming the dynamics discussed above. For Taipei, the imperatives are to shape public threat perception, strengthen domestic confidence in defense capabilities, nurture civilian connectedness to national defense, and promote a positive-sum defense spending mentality.

To shape threat perception, Taipei often references the democratic backsliding of Hong Kong and China's dangerous authoritarianism to remind the public of the inherent dangers of dealing with Beijing. In a recent debate leading up to the January 2019 presidential election, Tsai Ing-wen emphasized that, "The situation in Hong Kong makes it very clear to all of us that democracy and authoritarianism are in conflict. The two systems cannot coexist in one country." According to former Minister of Defense Kent Feng, "People need to understand that China is not a pet. They are not going to become nicer to you just because you are good to

¹²⁹ Chen, Ming-chi. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

¹³⁰ Blanchard, Ben, 2019. "China fears Taiwan's democracy the most, island's president says in election pitch." December 18. *Reuters*. Accessed December 18, 2019. https://www.reuters.com/article/us-taiwan-election/china-fears-taiwans-democracy-the-most-islands-president-says-in-election-pitch-idUSKBN1YM1M3.

them. They are more like a wild beast—they will take your food if you feed them but they will still bite you when they get the chance."¹³¹

Taipei utilizes U.S.-Taiwan security cooperation, specifically the FMS process, as a means to strengthen public confidence. According to Deputy Secretary General York Chen, one of the main reasons that Taiwan is purchasing M1A2 tanks is to assure the public that Taiwan's military will have the means to defend Taipei even if the PLA makes an amphibious landing and wages a land attack on the capitol. Legislator Lo concurs with the idea that FMS is an important mechanism for strengthening public confidence. Taiwan wants to buy big-ticket and advanced weapon systems from the United States, he insists, because constituents associate Washington's willingness to sell these systems to Taiwan with the steadfastness of U.S. political support, making the FMS process not only a method to acquire specific military capabilities but also a political promise to Taiwan's people. Mainland Affairs Council Deputy Minister Chen Ming-chi also agrees and sees FMS procurement as a means to satisfy both practical and psychological defense needs. Mainland Affairs Council Deputy Minister Chen Ming-chi also agrees and sees FMS procurement as a means to satisfy both practical and

Leaders also stressed the importance of cultivating domestic connectedness to Taiwan's defense. Legislator Lo believes that most young people are very localized in their surroundings and never get exposed to most of Taiwan, which undermines their connectedness to the island and the desire to defend their homeland. To change this, he suggested having recruits walk the entire island on foot during training as a method to connect military recruits with their homeland. Former Defense Minister Feng attempted to build interest in national defense

¹³¹ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

¹³² Chen, York. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

¹³³ Lo, Chih-cheng, Interviewed by Steven Li, Personal interview, Taipei, Taiwan, April 21, 2019.

¹³⁴ Chen, Ming-chi. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

¹³⁵ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

through exposure by creating a program for high school students to receive introductory small arms training at military shooting ranges. The idea was to build an association between the natural curiosity for weapons with an awareness of national defense needs. Deputy Secretary General York Chen created Military Day to boost military status in society. These types of programs, while not consistent with American recommendations for defense preparations, are very much at the center of Taipei's perceived defense needs.

Taipei is also trying to consolidate public support for bigger defense budgets by integrating defense spending with domestic investment in order to create a positive-sum dynamic. The goal is to show constituents that defense expenditures can create human capital through vocational training and stimulate the economy through industrial investment, negating the constituent mindset that funds spent on defense must come as a tradeoff that shortchanges other domestic needs. As the Director of China Affairs Department Johnny Lin pointed out, the main challenge is motivating society to support defense budget increases. He suggests that constituents would support military spending if they feel like it is worth it. From this perspective, taking measures to consolidate public support is vital.¹³⁷ Deputy Secretary General York Chen concurs and reasons that in addition to spending defense funds on high-visibility items such as fighters and tanks that the public can see as assurances of U.S. political support, the administration must gain public support by demonstrating that defense expenditures are also economic investments. He proposes that the United States can aid Taipei in this effort by increasing technology transfers and joint ventures such as co-development and co-production.¹³⁸

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¹³⁶ Feng, Kent, Interviewed by Steven Li, Personal interview, Taipei, Taiwan, April 16, 2019.

¹³⁷ Lin, Johnny. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 11, 2019.

¹³⁸ Chen, York. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

Lack of Intragovernmental Consensus and Cooperation

Intragovernmental competition and disagreements undercut overall defense spending by creating budgeting dysfunction. Within military services and between branches of services, weapon system and service-based nepotism lead to cutthroat competitions for already limited defense funding. At the Ministry of Defense level, shifting service loyalties and strategies that come with respective defense minister appointments undermine policy continuity. Further complicating the budgeting process, diverging defense approaches and assessments between the DPP and KMT periodically cause debilitating defense budgeting impasses. Finally, frictions between various sections of government cripple effective defense budgeting cooperation.

Because of these dynamics, Taipei may find solidarity in comprehensive austerity more preferable than discord in selective sufficiency when it comes to apportioning defense spending.

Intra-Ministry of National Defense Differences

Within the ministry of defense and branches of military services, fixed pie assumptions lead to intense competitions that continue to undermine defense spending consensus. At the service level, leaders show favoritism toward those from their own weapons system-based communities. Retired Chief of Naval Operations Richard Chen used the Taiwan Air Force (TAF) as an example, noting that the last five TAF Commanding Generals have been Mirage fighter pilots; Leaders keep promoting those from within their own community. This not only becomes problematic for morale and unity within the service but also causes serious budgeting contentions that often lead to intense frictions. For example, the TAF Commanding General, having been a Mirage fighter pilot, may support extending more resources to the Mirage community. However, the non-Mirage community, F-16 and F-CK-1 pilots, may deeply resent

the fact that a fleet of approximately 60 French produced Mirage fighter jets costs as much to maintain as the fleet of 145 U.S. produced F-16 fighters.¹³⁹

Among the branches of service, parochial interests complicate the defense budgeting process. Branches of service vie for as much of the defense budget as possible by advocating for service specific capabilities such as fighters, tanks, or submarines. According to Legislator Lo, such is the case with M1A2 tank purchase, which he thinks is a poor operational choice only procured as a necessary concession to appease those who embrace Taiwan's traditional big army doctrine. Making these tradeoffs is often the only way to overcome the stalemate of inter-service and intragovernmental budgeting impasses.¹⁴⁰

At the Ministry of Defense level, ministers are often former services chiefs and bring different strategies and service loyalties with them into the MINDEF position. Based on their individual expertise and experience, ministers frequently have different ideas on how best to defend Taiwan. This leads to an emphasis on different capabilities and priorities that undermine continuity and budgeting. Former army generals may stress fighting on land with tanks; Air Force generals may focus on air superiority over both the Strait and the Island; and Navy Admirals may prioritize preventing blockades and amphibious landings with submarines and sea mines. Beyond these differences, there is also a matter of who controls and pays for the assets. For example, which service should pay for the P-3 submarine-hunting aircraft? While this is an aircraft operated by the Air Force, it clearly supports a Navy mission. These decisions are often adjudicated by the Minister of Defense, which means they can vacillate depending on which minister is appointed by the administration. These leadership changes cause institutional shifts and prevent strategy continuity, often leaving services exhausted and feeling helpless. According

¹³⁹ Chen, Richard. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 17, 2019.

¹⁴⁰ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

to Admiral Chen, while the services struggle, there is not much that can be done because there is a de facto gag order preventing services from raising issues with the administration and defense leadership.¹⁴¹

Interparty Differences

The two main political parties have different conceptual approaches and practical assessments, which lead to diverging defense priorities and cause defense budgeting impasses. While the KMT prioritizes good cross-Strait relations as a way to sustain economic development and lower conventional defense requirements, the DPP believes building up defense capabilities to ensure national security is the foundation for economic stability. So, while the DPP believes Taiwan needs to spend more on defense readiness, the KMT believes that current levels of defense spending are already sufficient. These interparty differences lead to disagreements on national defense requirements and in turn, defense spending.

The DPP and KMT parties have starkly different approaches to mitigating the China threat. According to Dr. Chung Chieh (揭仲), who is a research fellow at the KMT National Policy Foundation think tank, the DPP intends to counter China by defending and balancing against Beijing. In this effort, the party not only intends to enhance military defense capabilities but also bolster international relationships with partners such as Washington and Tokyo. Chieh went on to say that by contrast, the KMT believes cross-Strait cooperation is the best means to mitigate the threat. As he explained, the actual DPP and KMT goals are the same, which is to enhance Taiwan's security but the two parties simply seek to go about doing so in different ways. 142 DPP's Director of China Affairs Department Johnny Lin, agreed that security is the

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¹⁴¹ Chen, Richard. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 17, 2019.

¹⁴² Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

DPP's top priority and reasoned that "There can be no economic development if Taiwan ceases to exist." DPP member and Mainland Affairs Council Deputy Minister Chen Ming-chi agreed. When asked if procuring military hardware for the sake of enhancing security can potentially be construed as provocation by Beijing, he replied, "Weakness is provocation." In his reasoning, deficient defense capabilities are what invites aggression. Perhaps these interparty differences will become less stark as the KMT shows signs of distancing itself from the "1992 Consensus." How such a shift will impact CCP-KMT relations remains to be seen.

The KMT and DPP also have different practical assessments of current defense spending levels. While the DPP, led by President Tsai, is pursuing steady annual increases in the defense budget, KMT representatives argue that the current spending level is already sufficient.

Legislator Lo Chih-cheng, a DPP member of the Foreign Affairs and National Defense

Committee, indicated that Taiwan intends to increase defense spending and is doing so with purpose. "Lack of defense commitment critiques," he contends, "are only peace time critiques.

No one in Taiwan will willingly give up or surrender in time of war." Lo emphasized that "This is our homeland. This is our lives and we will fight until the last minute." "145 Unfortunately, such affirmations appear to be out of synch with political opinion polls referenced earlier.

From the KMT camp, Dr. Chieh Chung sees setting the defense budget target at 3 percent of GDP as both impractical and arbitrary as it would mean that almost one quarter of total national spending would be allocated towards defense, which is simply not feasible given the competing requirements of other vital programs such as education and social welfare. Chieh believes that using 3 percent as a target, a practice first started during the Chen Shui-bian era at

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¹⁴³ Lin, Johnny, Interviewed by Steven Li, Personal interview, Taipei, Taiwan, April 11, 2019.

¹⁴⁴ Chen, Ming-chi. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

¹⁴⁵ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

the recommendation of U.S. advisors, slowly evolved into a political statement repeated by subsequent leaders to demonstrate Taipei's defense commitment to Washington. In Chieh's view, Taipei should abandon this outdated measurement because the defense force size has been dramatically reduced and therefore does not require as much funding. He Former KMT Legislator Lin Yu-fang who served as the Chair of Diplomacy and National Defense Committee from 2008 to 2016, reinforced that a smaller force size requires less funding to pay for personnel compensation, equipping, and training. He also stressed that the current major weapon system readiness rates, being at about seventy percent mission capable, are comparable to the readiness rates of U.S. military weapons system. They are already at satisfactory levels, negating the need for more maintenance and logistics funds. Lin facetiously argues that the only way the Ministry of Defense can spend more is if "they feed Taiwan soldiers American beef at every meal." He

The diverging defense approaches and assessments between the DPP and KMT described above periodically debilitates defense budgeting processes. According to Legislator Lo, when KMT lawmakers were in the majority, they boycotted special military budgets 4 years in a row for partisan-politics reasons, inhibiting Taiwan's ability to move forward with defense procurements. As Lo pointed out, since passing special budgets only requires a simple majority in the Legislative Yuan, political parties must consolidate both intra and interparty cooperation to in order to pass these measures. Regrettably, cooperation is often elusive as legislators hurl insults and point fingers at each other. While the KMT asserts that the DPP focuses on security issues as a means of diverting attention away from its mismanagement of the economy, the DPP

¹⁴⁶ Chieh, Chung, Interviewed by Steven Li, Personal interview, Taipei, Taiwan, April 19, 2019.

¹⁴⁷ Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019. For context, American beef imports was a big point of contention in the late 2000s. Taiwan at one point banned the import of American beef due to the use of ractopamine, a meat-leaning agent, in raising U.S. cattle. However, the restrictions were later relaxed at the urging of U.S. government and business. American beef is commonly perceived as a tasty but pricey meat choice compared to indigenously raised alternatives.

accuses the KMT of having its strings pulled by the CCP.¹⁴⁸ According to Lo, "We try not to get into fights, but there are never any guarantees."¹⁴⁹ Past passionate disagreements between legislators have even resulted in mutual shoving, umbrella-swinging, and lunchbox-throwing during LY sessions. The net effect is that interparty cooperation on defense is an exception rather than the norm, and, the most probable way to reach common ground is by defaulting to spending money on the social programs supported by all constituents.

Intragovernmental Differences

Frictions between the various parts of government cripple effective defense budgeting cooperation. Position-based expertise and subjectivity lead to the lack of consensus and effective cooperation on defense budgeting matters. Executive branch authorities, legislators, and military leaders are often caught somewhere between stalemates or muddle-throughs while playing waiting games or casting mutual blame.

Civilian authorities and military leaders displace the responsibility to provide strategic clarity on each other. This appears to be a classic chicken-or-the-egg-coming-first situation—military leaders want civilian authorities to define political strategies so military planners can determine complementing national defense requirements. On the other hand, civilian authorities want military leaders to specify defense capabilities so policymakers can formulate appropriate political strategies. For military leaders, civilian authorities do not have sufficient grasp on the defense matters. Former Defense Minister Feng and Former Chief of Naval Operations Admiral Chen both commented that civilians neither understand nor care about operational details. All

¹⁴⁸ Lin, Yu-fang and Chen, Ming-chi. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April, 2019.

¹⁴⁹ Lo, Chih-cheng, Interviewed by Steven Li, Personal interview, Taipei, Taiwan, April 21, 2019.

they really want to know is "How long can you hold off the PLA and if the Americans are coming to our aid."¹⁵⁰ From the perspective of civilian authorities, military leaders alone should be responsible for determining defense requirements because they are the defense experts. As Dr. Chieh Chung, who was a staff member while Lin Yu-fang was the Chair of Diplomacy and National Defense Committee noted, it is MND's job to inform the civilian leadership what the defense plan is and how much money they need to fulfill their requirements.¹⁵¹

While civilian and military authorities continue to wait on each other to provide clarity, civilian authorities from the legislative and executive branches cast mutual blame for low defense budgets. According to former Legislator Lin Yu-fang, he did not have any ability to increase defense budgets while he served as the Chair of Diplomacy and National Defense Committee because the LY can only cut but not add to budget allocations determined and passed down by the Executive Yuan. ¹⁵² From the Executive Yuan's position, budgets are not arbitrarily determined and are certainly coordinated with the legislative body before being passed to the LY for approval. ¹⁵³ The finger-pointing continues.

State Level Summary

Taiwan's domestic politics, with regard to increasing defense spending, has difficulty overcoming the lack of constituent backing and intragovernmental cooperation. This section consolidated the perspectives of lawmakers and leaders to argue that constituents marginalize defense spending because as a baseline, they do not feel an imminent PRC threat, a connection to the island's defense requirements, or the willingness to make personal sacrifices. These

¹⁵⁰ Feng, Kent and Chen, Richard. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16-17, 2019.

¹⁵¹ Chieh, Chung, Interviewed by Steven Li, Personal interview, Taipei, Taiwan, April 19, 2019.

¹⁵² Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

¹⁵³ Yu, Eric. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

tendencies are exacerbated by Taiwan's media perpetual anti-defense establishment sentiments. This section also argues that the lack of intragovernmental cooperation hinders Taipei's ability to significantly boost the defense budget. Within the Ministry of Defense, weapons system or service-based nepotism, and shifting defense strategies lead to infighting and discontinuity. At the legislative level, different approaches lead to different funding priorities. Among the different arms of the governing apparatus, schisms undermine effective defense budget formulation. Taken together, solidarity in comprehensive austerity may be Taipei's answer to dealing with the lack of consolidated support for larger defense budget increases.

Individual Level

At the individual level, executive leadership matters, but only marginally within broader domestic and international contexts. According to interviewees, the traits of Taiwan's last three presidents have all had detectable impacts to Taiwan's defense spending. As Legislator Jason Hsu commented, presidential leadership is important because it affects Taiwan's grand strategy for defense. This section briefly comments on how even though Chen Shui-bien, Ma Ying-jiu, and Tsai Ing-wen shaped Taiwan's national security policies differently, the outcome of their leadership, with regard to defense spending, remained within a narrow range.

Presidents provide strategic direction and leadership across different branches of government and therefore have some influence on the discourse of defense decision-making. Evidence of this exists across the past two and current administrations. President Chen Shui-bian was a more controversial figure who Washington sometimes viewed as a maverick, if not a trouble-maker, which affected the cohesiveness of U.S.-Taiwan security cooperation and Chen's ability to actualize his hawkish defense ambitions. President Ma Ying-jiu was described as "a

good gentleman but not a good leader or politician" by a high-ranking defense official who served Ma's administration. 154 According to this now retired general officer, in addition to a preference towards enhancing cross-Strait ties, Ma had no interest in military affairs and did not prioritize military developments because he thought of war and intelligence as dirty business, not an honorable means of conducting governance and international relations. According to this insider source, Ma on more than one occasion fell asleep during his daily one-on-one intelligence briefings, demonstrating his lack of interest or concern with defense related matters. 155 In this context, Ma's dovish defense outlook and personal contempt for what the military represents, undermined Taiwan's defense readiness and the social status of military members in general. Echoing the assessment of this retired defense official, a former Minister of Defense who served during Ma's administration, recounted how Ma directed "rank-buying" investigations and "rankjustifying" hearings that collectively degraded military morale, especially among the officer corps, and eroded the social status of military members in society. 156 Even Lin Yu-fang, the recently retired long-time Chair of Diplomacy and National Defense Committee, highlighted how vehement differences were between Ma and him over how quickly to end conscription. These resulted in an ugly political fight that spilled into media. Ma wanted to end conscription completely and finalize the transition to an all-volunteer force during his tenure but Lin insisted that the transition be more incremental. Chen's and Ma's personality traits and leadership decisions are dramatically different than those of the current administration under Tsai Ing-wen.

Tsai appears to lead from a well-balanced position, making her more of an owl on defense issues. According to government and defense industry insiders in Taipei, Tsai is level-

¹⁵⁴ According to a high-ranking general officer who served the Ma administration who did not want to be cited.

¹⁵⁵ Source asked to remain anonymous.

¹⁵⁶ From interview with a former Minister of Defense who served the Ma administration who do not wish to be cited.

headed and deliberately balances enhancing defense capabilities with avoiding provocation. To enhance defense capabilities, Tsai continues to lead incremental but steady defense budget increases and balances acquiring U.S. defense hardware with fostering indigenous defense production. To avoid provoking Beijing, Tsai maintains political steadfastness without making any overtures towards independence or changing the status quo.

Commenting on Tsai's determination to enhance Taiwan's defense capabilities through a balanced approach, the National Security Council Deputy Secretary General, Dr. York Chen remarked, "She is gutsier than any man I know." 157 Chen cited two examples, one involving foreign procurement and the other, indigenous production, to illustrate this point. First, he indicated that Tsai insists on expanding Taiwan's fighter aircraft inventory by procuring 66 F-16Vs from the United States to supplement the fighter fleet, and keeping the French-built Mirage fighters operational, instead of retiring the Mirage fighters after the new F-16s come one line. 158 This is undoubtedly an unpopular political decision on multiple fronts. On the domestic front, the Mirage fighters are expensive to maintain and continue to eat away a significant portion of the maintenance of logistics budget. As previously noted, the sustainment cost of the Mirage fleet is approximately equal to that of the F-16 fleet, even though the F-16 fleet is more than twice as large. On the international front, the decision to keep the Mirage fleet in service may potentially irritate Taiwan's supporters among the U.S. military and defense industry, who see the Frenchproduced weapon system as an impediment in better streamlining Taiwan's fighter aircraft maintenance and logistics support. Finally, expanding Taiwan's total defense arsenal will likely make Tsai appear more provocative to Beijing. However, despite these potential drawbacks, Tsai is still willing to accept these consequences to upgrade defense capabilities, demonstrate

¹⁵⁷ Chen, York. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

commitment to national defense, and consolidate the relationship with Taiwan's most significant defense partner, the United States.

Dr. York Chen's second example cited Tsai's directive to produce indigenously developed submarines (IDS) and reach full operational capability (FOC) by 2025. According to Chen, when he questioned Tsai's wisdom of taking on all the political risk for setting such a lofty goal and not being able to reap any of the credit (she will not be in office by 2025 due to term limits), Tsai only replied, "That's not your problem to worry about." Tsai understands that expanding Taiwan's indigenous defense production capability not only enhances self-sufficiency but also stimulates the economy by putting defense dollars back into domestic industries such as ship-building and high-tech sectors. Therefore, she is willing to risk the political fallout from pursuing potentially overambitious goals for the great national benefit.

Along the way to enhance Taiwan's defense capabilities, Tsai also likely has to overcome many dissenting perspectives, further elevating her credibility for being committed to boosting Taiwan's defense. For example, when discussing the IDS program, one former high-ranking Taiwan Navy officer who is now a defense industry consultant on the IDS program, relayed a common joke among Taiwan's defense community that because Tsai has never had a baby, she does not know how the process works—"Babies cannot run at birth, just as Taiwan's shipbuilding industry cannot produce a fully operational submarine in the infant stages of developing submarine-building capabilities." Perspectives such as this, laced with doubt and misogyny, are unlikely to be isolated, making Tsai's willingness to enhance Taiwan's defense less questionable and her ability to make progress in this effort commendable.

¹⁵⁹ Ibid

¹⁶⁰ From April 19, 2010 interview with retired Taiwan Navy officer who requested to remain anonymous.

Just as Tsai displays a balanced approach to enhancing defense capabilities, she also strikes a balance between political steadfastness and non-provocation. To demonstrate the former, Tsai continues to resist pressures from Beijing to acknowledge the so-called "1992 consensus" and is staunchly against even considering China's "one-country, two systems" proposal. Furthermore, Tsai reacts to PRC bullying with measured responses. For example, the day after PLAAF fighters crossed the traditional centerline, Tsai responded by making an unscheduled visit to Chiayi, in order to highlight that Taiwan's fighter jets are to defend Taiwan's airspace. While some critics may highlight these choices as provocation, members of Tsai's administration emphasize that Tsai also deliberately signals a willingness to maintain stability and avoid escalation to Beijing. In separate interviews with various members of Tsai's administration, officials all underscored that Tsai goes to great lengths to promote stability and avoid provocation. Examples of these efforts include not officially declaring independence, not orchestrating referendums, which one lawmaker said the DPP can be "very effective at," and repeatedly deferring U.S. congressional invitations to deliver speeches in Congress. ¹⁶¹ By all accounts, Tsai provides a dramatic contrast to the Chen and Ma administrations. However, as the Deputy MAC Minister lamented, these efforts to signal steadfastness and non-provocation probably go unappreciated, if not completely unacknowledged by both Washington and Beijing. 162

Underappreciation and under-acknowledgement are good indications that the role of executive leadership is shaped by international and domestic influences. Despite the Tsai administration's attempts to balance military strength with non-provocation, predictability and

¹⁶¹ Chen, York; Lin, Johnny; and Chen, Ming-chi. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 2019

¹⁶² Chen, Ming-chi. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

reliability, Taiwan's national security situation remains uncertain. Taipei continues to contend with Beijing's growing influence and shrinking international maneuvering space. As the number of diplomatic allies grow fewer, the cross-Strait military imbalance increasingly tips in China's favor. All the while, Taiwan's defense spending has only received symbolic 2-3 percent annual increases since Tsai took office and Washington continues to provide defense support that is misaligned with Taipei's desires. The saving grace is that Tsai's administration maintains measured political stability and promotes national security urgency. Perhaps the effects of these efforts will become more substantial as time goes on.

Political Analysis Conclusion

This chapter analyzed how factors at the international, domestic, and individual levels affect Taiwan's defense annual spending and concludes that while factors at each level influence Taipei's defense budgets, Taiwan's unique international situation makes the most significant difference. Domestic politics also raises some noteworthy obstacles in raising defense spending and individual leadership has some marginal bearing.

At the international level, isolation causes Taipei to remain reliant on the United States to help deter and defend against PRC aggression. The glaring problem is that the United States military authorities, who the Taiwan Relations Act charges with the responsibility to review Taiwan's defense needs and make recommendations on how to enable Taiwan's defense to the United States' President and Congress, see Taiwan's security situation differently than Taipei, which leads to making recommendations inconsistent with Taiwan's self-assessed needs. This misalignment between U.S. military recommendations and Taipei's self-assessed needs is the major cause of consternation in the U.S.-Taiwan security cooperation relationship. So, as

Washington persists in challenging Taipei to raise defense spending as a means of demonstrating its commitment to self-defense, Taipei passively resists by seeking more dependable and comprehensive U.S. political support and latitude to procure weapons from the United States that are better for fulfilling its own assessed needs.

At the state level, the lack of cohesion and decision-making centrality collectively undermine Taipei's ability to significantly raise defense spending. First, Taiwan's democratic process requires constituents to buy-in in order to raise defense spending. Unfortunately, the public lacks threat perception and has very little willingness to forgo public benefits or make personal sacrifices to support bigger defense budgets. A hyper-developed media that perpetuates populism makes Taipei's attempt to build public support even more challenging. Also, the lack of intra-governmental cooperation derails opportunities to increase defense spending.

Competition, nepotism, disagreements, organizational rigidity and the lack of perspective within military services, the ministry of defense, the Legislative Yuan, and government in general, all limit Taipei's ability to pass bigger defense budgets. What remains is the displacement of responsibility and mutual blame.

At the individual level, executive leadership has marginal effect on defense budgeting. The last three successive presidents, who had dramatically different personality traits and perspectives, have demonstrated limited ability to alter the size of Taiwan's defense budgets. This suggests that the effect of individual leadership on Taiwan's defense spending is subordinate to larger international and domestic conditions in the short-term. The only potential is that the current administration's defense approach will exhibit some cumulative effects as time goes on.

CHAPTER TWO

Practical Analysis

In the U.S.-Taiwan security cooperation relationship where Washington recommends higher defense spending overall and focusing on "a large number of small things," Taipei has valid practical reasons to spend parsimoniously on a small number of large things instead. This chapter intends to demonstrate that beyond the political considerations outlined in the previous chapter, Taiwan's defense spending pattern is also shaped by practical considerations. The United States underappreciates how Taiwan's financial, geospatial, and demographic characteristics constrain Taipei's defense spending. From a financial perspective, Taiwan cannot compete with China's economic and commensurate defense spending growth, which necessitates making difficult investment tradeoffs in order to maximize the island's security. For decisionmakers in Taipei faced with limited resources, low probabilities of a kinetic PLA invasion, and the principle of diminishing returns, purchasing smaller numbers of big-ticket items makes the most sense for dealing with Chinese aggression and coercion. This strategy would demonstrate self-defense determination to consolidate U.S. support, showcase national defense capability to strengthen domestic support, display defense capabilities to bolster credible deterrence, and sustain favorable defense industry relationships to facilitate advantageous congressional lobbying in Washington. Based on geospatial considerations, purchasing smaller numbers of defense articles makes the most sense because Taiwan's small land mass and proximity to China means the island reaches the saturation point for staging, testing, operating, storing, maintaining, expending, and disposing military hardware very rapidly. Ships, tanks, and airplanes need spaces to stage and train; Air missile defense systems and missiles need dedicated areas to set up, test, and store; and, weaponry cannot not be stockpiled because they have

effective shelf-lives dictated by both technological advances and material expiration dates.

Lastly, Taiwan's demographic challenges limit both the size and quality of Taiwan's defense personnel and institutions, both constraining the throughput ability of defense funds. The confluence of a shrinking service-capable population and waning military service interest with the all-volunteer force transition is reducing Taiwan's defense force size and the number of qualified personnel to manage defense needs, both of which decrease the throughput capacity, or the ability to administer, Taiwan's defense spending. The following analysis intends to mitigate the mirroring tendency that Deputy Secretary General York Chen referred to in the previous chapter where Americans see Taiwan in their own image in order to help observers better understand why Taiwan does not spend more on defense.

Financial Considerations

In allocating defense spending funds, the most pragmatic solution for Taipei is to maximize the effect of limited defense dollars by purchasing small numbers of big-ticket items. Despite increases under President Tsai In-wen's administration, Taiwan's defense spending remains lower both as percentages of GDP and actual dollar amounts when compared to other U.S. defense partners facing hostile neighbors. Taiwan spent 2.1 and 2.3 percent of GDP on defense for 2019 and 2020 respectively. By comparison, Singapore and Israel respectively spent 3.2 and 5.3 percent of GDP on defense in 2019. Even South Korea, which has a bilateral mutual defense treaty with the United States and 28,500 American troops based in its country

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Teng, Pei-ju, 2018. "Defense budget to increase by NT\$18.3 billion in 2019." July 27. *Taiwan News*. Accessed May 14, 2019. https://www.taiwannews.com.tw/en/news/3492793. Wang, Flor, and Kai-hsiang You, 2019. "2020 national defense budget to account for 2.3 percent of GDP." August 15. *Focus Taiwan*. Accessed May 27, 2020. https://focustaiwan.tw/politics/201908150023.

spent 2.7 percent of its GDP on defense in the same year.¹⁶⁴ In terms of real dollars, Taiwan's 2019 budget was US\$10.4 billion versus South Korea's US\$43.8 billion, Israel's US\$ 20.46 billion, and Singapore's US\$11.2 billion in the same year.¹⁶⁵ For Taiwan, comprehensive and sustainable defense, which would require large quantities of military hardware and complementary military-civilian capabilities, appears to be cost-prohibitive.

Taiwan's economy cannot support purchasing enough defense articles or fully fortifying the civilian infrastructure for extended combat operations. This means that by default, Taipei's defense spending must be based on practical assessments. For decision makers in Taiwan who view a full-scaled military invasion as the least likely method of a PRC attack, purchasing small numbers of big-ticket items is the best defense option because doing so maximizes favorable political outcomes and mitigates diminishing return effects. As KMT think-tank researcher Chieh Chung expressed during an interview, Taiwan must make tough choices because it cannot sustain 3 percent of GDP defense spending. With defense spending already consuming over 16 percent of total annual government spending¹⁶⁶, allocating more funds to defense would neglect education, social welfare, and other civil requirements. In Chieh's view, expressing the intent to spend 3 percent of GDP on defense is only a mechanism for Taipei to make a political statement in the effort to demonstrate self-defense determination.¹⁶⁷ From this disposition, the hollow 3

¹⁶⁴ Stockholm International Peace Research Institute, 2019. *SIPRI Military Expenditure Data*. May 5. Accessed May 14, 2019 https://www.sipri.org/research/armament-and-disarmament/arms-transfers-and-military-spenditure.

¹⁶⁵ All amounts are given in current U.S. dollar values according to Stockholm International Peace Research Institute Military Expenditure data. Ibid.

¹⁶⁶ Directorate-General of Budget, Accounting and Statistics, Executive Yuan, R.O.C (Taiwan),

^{2019.} The General Budget of Central Government – Brief Presentation on Analysis of Annual Revenue and Expenditure (Executive Yuan budget figures). Accessed May 27, 2020.

https://eng.dgbas.gov.tw/public/Attachment/922614347T64W6LTY.pdf. Note: The Executive Yuan's figures are higher than SIPRI figures cited in at the beginning of the *Political Analysis* chapter. This is likely due to variances in accounting methods.

¹⁶⁷ Chieh, Chung. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

percent proclamation only obfuscates the U.S.-Taiwan relationship by overlooking Taiwan's limitations, priorities, and strategic intent discussed below.

Cost Prohibitive

Comprehensive and sustainable defense is cost-prohibitive because it requires both large quantities of military hardware and complementary military-civilian defense capacities.

Observers of cross-Strait defense issues collectively understand that Taiwan simply cannot match PLA military capabilities in terms of quantity and spending. China's military developments in recent years has increasingly eroded Taiwan's once technological superiority. Against the backdrop, the general assumption among defense insiders is that Taiwan would require external assistance, most likely from the United States, to fend off a PLA attack lasting beyond a few days. What is neglected in these considerations is that even if Taiwan receives timely external assistance, the disparity between Taiwan's military and civilian capacities to withstand sustained conflict undermines the likelihood of a successful defense. To put it plainly, while Taiwan's military has both the training and equipment to endure extended contingency operations, its civilian counterparts do not. And since procuring complementary capacities for civilians would be cost-prohibitive, the island's ability and will to functionally resist a prolonged PLA conflict is limited by the weakest link—its civilian capacity.

Former Chief of Naval Operations, retired Admiral Richard Chen highlighted the fact that in order for military defenses to be effective and sustainable, the whole-of-society needs to have complementary capacities. He believes that defense capacity is a function of both readiness and sustainability and that while Taiwan's civilian infrastructure may be capable of dealing with short periods of disruptions from events such as typhoons and earthquakes, it cannot withstand

extend conflicts. In his assessment, beyond the necessity to provide essentials such as reliable water, food, and shelter, authorities would also need to have provisions in place to provide services such as medical care, electricity and communications.¹⁶⁸

Admiral Chen provided two examples to illustrate why obtaining complementary military-civilian capacities would have astronomical costs. He used the cost disparity between military and civilian electricity generators as the first example. Military grade generators, while expensive, have large fuel tanks and robust cooling capabilities that enable continuous operations in harsh environments. Because of this, these generators are bigger and heavier than civilian versions that provide similar output. By contrast, cheaper civilian generators with smaller fuel capacities, less robust construction, and more stringent cooling requirements, are unsuitable for prolonged use. According to Chen, most buildings like hospitals and banks have generators that can run sporadically for a maximum of two days before they are out of fuel or will require maintenance. Parts such as lower quality bearings in civilian versions are simply not designed for extended operations. While providing military-grade equipment to civilian sectors would be beneficial, the cost associated with replacing all backup generators on the island would be astounding.

Chen's next example was communications. While the military has a limited number of vehicle-mounted mobile relay stations that can facilitate tactical communications after the Island's normal communication infrastructure gets knocked offline from an attack, there is no equivalent capacity for civilians. The limited military assets cannot handle the civilian communication load and acquiring a similar system to handle the civilian communications requirements is not financially feasible. This means that Taiwan's population of more than 23

¹⁶⁸ Chen, Richard. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 17, 2019.

million people would not have any mobile phone or internet service during times of conflict. Based on the two examples above alone, Chen hypothesized that a civilian population without the ability to seek care in hospitals, withdraw money from banks, or communicate via their mobile devices would succumb to the PRC's will long before the Taiwan military reaches the limit of its ability to resist or external assistance arrives. From this perspective, the practical needs of the population would likely supplant any "rally around the flag effect" within a short period of conflict.

Former Integrated Assessment Office member, retired General Anson Liao concurs with Admiral Chen's evaluation that a comprehensive defense is cost prohibitive. Liao emphasized the notion that defending against offensive systems is both technically difficult and costly. In the case of missile defense, he estimated that there is a 10 to 1 ratio for money spent on offense versus defense—i.e., for every dollar the attacker spends on producing missiles, the defender would have to spend ten dollars on mitigation measures such as missile tracking/interception and hardening infrastructures for impact. ¹⁶⁹ Given that intercepting missiles is very technically difficult and the effects of missile impacts can be very grave, defenders must plan to not only intercept incoming missiles in flight but also prepare for scenarios where interceptions fail. This combination is what makes missile defense so costly.

The above examples collectively accentuate the fact that from a practical perspective, Taipei cannot afford to acquire whole-of-society defense capacities required for effective and sustainable national defense because complementary military and civilian capacities would simply be too expensive and impractical. Underappreciating this fact, the late 2000s comprehensive Joint Defense Capabilities Assessment (JDCA), funded by Taiwan but led by the

¹⁶⁹ Liao, Anson. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

U.S. Office of the Secretary of Defense, lauded Taiwan's civil defense readiness for being "inherently strong" due to the fact that Taiwan's infrastructure is built to be typhoon and earthquake-resilient. What the JDCA failed to acknowledge is that resiliency towards brief natural disaster episodes does not necessarily equate to resiliency towards extended kinetic conflict. Buildings, power grids, and roadways that can withstand high winds, heavy rains, and reasonable trembles from typhoons and earthquakes, are not necessarily any better at withstanding missile attacks. Both the magnitude and duration of wars are more severe than natural disasters. Typhoons offer plenty of warning and pass within days. Earthquakes only shake for matter of seconds or minutes at a time. War, on the other hand, is not predictable or swift and can come with much more destructive impacts. Understanding that Taiwan does not realistically have enough money to spend on fortifying civilian infrastructure to the extent required for prolonged war, Taipei is forced to conduct practical assessments, prepare for most likely scenarios, and accept calculated risks.

Practical Assessments

From Taipei's perspective, focusing the preponderance of resources on conventional military preparations may not be the best approach to maximize Taiwan's security. Although mainstream discussions among defense pundits revolve around the cross-Strait military capability imbalance, decision makers in Taipei appear to believe that the likelihood of a full-scale PLA invasion is low and estimate that even if the PLA mounted a cross-Strait invasion, the Taiwan military in its current state, can still outlast the civilian population's will to resist. In this assessment, the more practical approach to enhancing the Island's security is to dedicate

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¹⁷⁰ From the author's reading of the JDCA out-brief that was not made public.

resources toward defending against attack methods with higher probabilities such as cyberwarfare and informational management while accepting calculated risks on traditional military fronts. The combination of Taipei's rhetoric, focus, and omissions collectively supports this hypothesis.

Among decision makers in Taipei, there appears to be a pervasive acceptance of rhetoric initially stated by Dr. Chong-Pin Lin during an interview at a "China Forum" hosted by the Lowy Institute, an Australian independent think-tank conducting original, policy-relevant research about international political, strategic and economic issues. In a discussion on Taiwan's relations with mainland China with the Institute's Sam Roggeveen, Dr. Lin noted that Beijing has now learned that "buying Taiwan is cheaper than attacking Taiwan," adding that the risk of conflict between Taiwan and China has been reduced to "close to zero." The idea is that Beijing no longer needs to physically attack Taiwan because it can leverage its economic clout to subvert Taipei. China can now exert influence by manipulating Taiwan's commercial interests and media outlets.

In addition to retired General Anson Liao, National Security Council Deputy Secretary General York Chen and Department of China Affairs Director Johnny Lin both directly articulated this concept during interviews.¹⁷² To stress this point, Deputy Secretary Chen expressed that coherent policy must mitigate against the most likely scenarios, signaling that he does not think Taiwan should overly concentrate on military capabilities in its defense preparations.¹⁷³ Director Lin conveyed that instead of military strength, China's information

¹⁷¹ Roggenveen, Sam, 2013. *In conversation: China-Taiwan Relations and Taiwanese Defense Policy*. Accessed February 28, 2020. https://www.lowyinstitute.org/news-and-media/multimedia/video/conversation-china-taiwan-relations-and-taiwanese-defence-policy-%E2%80%94.

¹⁷² Liao, Anson; Chen, York; and Lin, Johnny. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April, 2019.

¹⁷³ Chen, York. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

manipulation and economic prowess are the primary threats currently undermining Taiwan's security.¹⁷⁴

Leaders interviewed who did not directly reference the idea that economic and information subversion are greater threats than physical attack essentially indicated endorsement with their intended focus. As noted in the State Level analysis of the previous Political chapter, efforts of Taipei's leaders are very much fixated on information and economic concerns. While specific dollar amounts dedicated to fighting influence-operations are not available, responses from policymakers clearly indicate there is a collective belief in Taipei that China's ability to convert wealth into information and economic manipulation holds the most danger for Taiwan. Interviewees appear to unanimously agree that losing the information war or allowing the economy to falter eliminates the need for a military attack. Recall from the previous chapter that Tsai's administration instituted a one-hour news response cycle to moderate the effects of misleading narratives from the all forms of media—the effort was so important that the Deputy China Affairs Chair stated, "For me, there's only one war to fight and that's over the media." ¹⁷⁵ With regard to economic performance, every single leader emphasized that a robust economy was the bedrock of national security. They only differed on how to achieve economic performance, whether by cooperating with China or diversifying to be less dependent.

Taiwan's defense budget breakdown affirms that bolstering defense by procuring new military hardware is not Taipei's top priority. In the fiscal year 2020 defense budget for example, funds allocated for personnel and sustainment far surpass what is programed for training and investment, which funds new procurements. Taiwan's total 2020 defense budget is NT\$358 billion (US\$11.4 billion). Within this amount, the largest portion, 46.4 percent or NT\$166 billion

¹⁷⁴ Lin, Johnny. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 11, 2019.

¹⁷⁵ Chen, Ming-chi. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

(US\$5.2 billion), is dedicated towards personnel costs. Next, 26.8 percent or NT\$96 billion (US\$3 billion), is slated for maintaining equipment and facility operations. Finally, the remaining 26.8 percent or NT\$96 billion (US\$3 billion), funds both training programs and investments. While the exact figure is not clear, the acquisition of new defense capabilities, being a subset of investments, will obviously only receive a fraction of the 26.8 percent annual defense budget.

Mile the PLA's increasing military assertiveness dominates media headlines, all exercises and transits have occurred in international airspace or waters, violating no international law.

Receiving less attentiveness are the day-to-day non-kinetic activities such as cyber-attacks and influence operations that pose a substantial challenge to Taiwan's security. According to Howard Jyan (簡宏偉), Director General of the central government's Cyber Security Department, Taiwan is particularly threatened by such attacks and its public sector faced an average of 30 million cross-border cyberattacks per month in 2018, about half of all the attacks came from China. While only a small fraction of attacks resulted in theft or tampering of confidential or sensitive information, the number of cyberattacks against Taiwan are relatively high when compared to European countries that on average receive only several thousand attacks monthly. What makes cyber-attacks and influence operations even more difficult to contend with is that they are cheap to wage and hard to deter against. As highlighted in various papers and articles on cyber

¹⁷⁶ DeAeth, Duncan, 2019. "Taiwan approves US\$11.4 billion for 2020 defense budget." September 15. *Taiwan News*. Accessed May 20, 2020. https://www.taiwannews.com.tw/en/news/3763524.

¹⁷⁷ Lim, Emerson, 2019. "First-ever U.S.-Taiwan cyber exercises open in Taipei." November 4. *Focus Taiwan*. Accessed November 19, 2019. http://focustaiwan.tw/news/aipl/201911040015.aspx.

security, the most practical deterrence these types operations thus far are limited to effective defense and conventional (i.e. diplomatic, economic, or military) punitive measures.¹⁷⁸

In a zero-sum budgeting reality, the costs of defending against non-kinetic activities like cyber-attacks and information management must come at the expense of decreasing spending elsewhere, forcing Taiwan to accept certain levels of calculated risk in areas such as amphibious invasion defense. According to retired General Liao, Taiwan's solution to not being able to close the defense gap with China through increased spending and having to fend off non-kinetic attacks is to accept calculated risk by making smart defense decisions, selectively investing in both offensive spending and defensive capabilities according to situational needs. As an example, he estimated that amphibious attackers lose effectiveness at approximately thirty percent force attrition. By contrast, coastal defenders can still retain effectiveness even at sixty to seventy percent force attrition. In this type of interesting dynamic, leaders consciously reallocate resources from traditional capabilities such as coastal defense to fulfill emerging requirements from other areas including cyber or information warfare.

Beyond the fact that stated rhetoric and intended focus appear to suggest that Taiwan authorities place little credence on the probability of a full-scale PLA kinetic attack, how subjects omitted discussions surrounding the effectiveness, reliability, or survivability of purchased U.S. weapons during all the interviews is also potentially telling. These omissions suggest that the capabilities of purchased U.S. weapons are either assumed or irrelevant. Either way, this observation should inform the U.S.-Taiwan security relationship. Taipei's leaders are

¹⁷⁸ McKenzie, Timothy M., 2017. "Is Cyber Deterrence Possible?" Accessed May 27, 2020. https://media.defense.gov/2017/Nov/20/2001846608/-1/-

^{1/0/}CPP 0004 MCKENZIE CYBER DETERRENCE.PDF; and. Pomerleau, Mark, 2019. "Is there such a concept as 'cyber deterrence?" April 30. *Fifth Domain*. Accessed May 27, 2020. https://www.fifthdomain.com/dod/2019/04/30/is-there-such-a-concept-as-cyber-deterrence/.

either oblivious to how U.S. weapons actually perform or they could be only concerned with the possession and not necessarily the performance of U.S. weapon systems.

From a defense planning perspective, the effectiveness, reliability, and survivability of the U.S. weapons that Taiwan has purchased warrant scrutiny. Patriot air defense missile systems, advanced medium range air-to-air missiles (AMRAAMs), and surveillance radar program (SRP) illustrate this point. Although Patriots batteries are Taiwan's premier air defense systems that protect its high-value assets, past performance in real-world situations provide reason to question the system's actual effectiveness. AMRAAMs are radar homing, beyond-visual-range air-to-air missiles capable of all-weather day-and-night operations employed on Taiwan's F-16 fighter jets but have challenged the Taiwan Air Force with reliability issues in the past. SRP is a phased array early-warning radar system that can detect a multitude of threats from over 3,000 miles away but is unlikely to survive first contact in a war with China.

Taiwan's leaders have reason to question the effectiveness of Patriot missile systems in defending Taiwan's high-value assets because Patriot systems have a questionable record. As outlined by Jeffrey Lewis in a 2018 *Foreign Policy* article, Patriot systems have not proved to be effective in real-world situations. From attacks on Iraq to Saudi Arabia, there is little evidence to demonstrate that the Patriot air defense system successfully intercepted incoming threats. The *New York Times* cited a team of researchers who seriously doubted the Patriot system had any effectiveness in defending against the 2017 missile attack on Saudi Arabia's capital, Riyadh, by Yemen's Houthi rebel group. Regardless of whether these concerns are exaggerated, Taiwan's

¹⁷⁹ Lewis, Jeffrey, 2018. "Patriot Missiles are made in America and Fail Everywhere." March 28. *Foreign Policy*. Accessed January 29, 2020. https://foreignpolicy.com/2018/03/28/patriot-missiles-are-made-in-america-and-fail-everywhere/.

¹⁸⁰ Fisher, Max, Eric Schmitt, Audrey Carlsen, and Malachy Browne, 2017. "Did American Missile Defense Fail in Saudi Arabia?" December 4. *New York Times*. Accessed March 2, 2020. https://www.nytimes.com/interactive/2017/12/04/world/middleeast/saudi-missile-defense.html.

decision makers should in theory understand that "shooting a moving target out of the sky is fundamentally difficult, requiring considerable speed and accuracy." Furthermore, they should also realize that missile defense systems have limited success rates and engagement radiuses, meaning that many air missile defense systems would have to be interspersed throughout the island in order to have a real chance of shielding Taiwan's infrastructure and population from PLA missiles attacks. Finally, informed leaders would also know that the proliferating use of aerial drones in attacks, especially when employed with swarm tactics where a large number of drones overwhelm air defense systems, is a game-changer. Traditional air defense systems such as the Patriot have limited effectiveness against swarming, small, low-flying, and slow-moving targets. Considering all the reasons to doubt the Patriot's effectiveness, it is interesting that none of the interviewed leaders leveraged this issue to rebuff U.S. criticisms on Taiwan's low defense spending. Interviewees could have easily argued that the potential lack of effectiveness is the reason why Taipei does not commit more funds toward purchasing American defense hardware.

The lack of reliability leading to lower spending argument could have also been applied to other U.S. systems such as the AMRAAM. AMRAAMs, which are supposed to enable the combat lethality of the F-16 fighter jets as Taiwan's first line of air-to-air defense, should logically be crucial to Taiwan's security. Unfortunately, these missiles have been affected by reliability issues in the past. The structural integrity of these missiles came into question within the last decade as numerous units failed either while in storage containers or mounted on fighter jets. From a defense decision-maker's perspective, this issue would have certainly provided

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¹⁸¹ Taylor, Adam, 2019. "Billions spent on U.S. weapons didn't protect Saudi Arabia's most critical oil site from a crippling attack." September 17. *Washington Post*. Accessed March 1, 2020. https://www.washingtonpost.com/world/2019/09/17/billions-spent-us-weapons-didnt-protect-saudi-arabias-most-critical-oil-sites-crippling-attack/.

¹⁸² The author was the lead action officer on the AMRAAM FMS case and therefore gained insider knowledge of circumstances.

credible reasoning to explain why Taiwan has not spent more money on its own defense, vis-à-vis purchasing more American defense hardware. But once again, none of the interviewees leveraged the reliability in discussions centered on U.S. criticisms of Taiwan's low defense spending. The only time reliability was touched upon was when former legislator Lin Yu-fang proposed that since the readiness rates of its F-16 fleet is comparable to that of USAF F-16 fleet, Taiwan already spends enough on maintenance and logistics.¹⁸³

Besides effectiveness and reliability, the survivability of U.S. weapon systems, which logically should have been a discussion item as well during interviews on Taiwan's defense spending, was also absent. SRP was a US\$1.4 billon fixed-site radar system that Taiwan contracted the United States to build through an FMS case initiated during the Clinton administration. The massive 10-stories high radar facility, built on a mountain top in central Taiwan, was grossly over-budget and delayed relative to initial plans. After finally becoming operational in 2013, the radar has been very capable in providing signal intelligence (SIGINT). The problem is that the location of this radar site is widely known—so much that both its location and satellite image actually showed up on Apple Maps, making it a probable and easily-located target during a conflict with the PLA. The Former CIA weapons analyst Allen Thompson remarked that "it's a very important system, sitting there on a mountain...but 10 minutes before it gets blown up, it'll provide warning. Just as with reliability issues, the low survivability probability of this expensive system purchased from the United States could have been useful in justifying lower spending on U.S. defense hardware. However, none of respondents mentioned

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¹⁸³ Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

Ackerman, Spencer, 2013. "Taiwan's Massive, Mega-Powerful Radar System is Finally Operational." March 8. *Wired.* Accessed March 2, 2020. https://www.wired.com/2013/03/taiwan-radar/.

Associate Press, 2012. "Taiwan asking Apple to blur satellite image." October 9. *Taiwan News*. Accessed March 2, 2020. https://www.taiwannews.com.tw/en/news/2043949.

¹⁸⁶ Ackerman, Spencer, 2013. "Taiwan's Massive, Mega-Powerful Radar System is Finally Operational." March 8. *Wired.* Accessed March 2, 2020. https://www.wired.com/2013/03/taiwan-radar/.

survivability in any of the interviews, which may suggest that respondents are more concerned with the political instead of the operational value of American defense systems.

Maximizing Defense Spending Impact

Given the prohibitive costs of achieving complementary military-civilian capabilities capable of enduring extended conflict and the practical need to defend against the most likely attack methods, maximizing the effect of limited defense resources in shoring up Taiwan's security is imperative. For Taipei, purchasing small numbers of big-ticket items creates tremendous political value as doing so demonstrates self-defense determination to consolidate U.S. support, showcases national defense capability to strengthen domestic confidence, displays defense capabilities to bolster deterrence, enhances relationships with the U.S. defense industry to facilitate favorable lobbying in Washington, and mitigates against the dynamic of diminishing returns. From this perspective, Taipei's calculations may be more political instead of defense-based. For Taiwan authorities, acquiring small numbers of large things, such as F-16s or tanks, may have far greater effect on Taiwan's security than procuring the U.S. recommended "large number of small things," such as mines, drones, and signal jammers. 187

Taipei has limited resources and therefore must leverage them wisely in the effort to maximize the effect of defense spending. Taiwan simply cannot close the cross-Strait defense gap by directly competing with China's economy or defense spending. As Legislator Lo Chihcheng stated, "Taiwan can never compete in an arms race with the PRC. No country in the area can match Beijing's defense spending increases. Not even the United States can match the

¹⁸⁷ "Large number of small things" attributed to David Helvey's speech at 2019 U.S.-Taiwan Defense Industry Conference. Helvey, David F., 2019. *Helvey Keynote Speech: US - Taiwan Defense Industry Conference*. October 7. Accessed November 21, 2019. https://www.us-taiwan.org/wp-content/uploads/2020/04/2019 october 07 david helvey dod keynote.pdf.

percentage of China's annual defense spending increases." He went on to emphasize that the best Taiwan can do is provide a credible and resilient defense: "It's about the strategy itself. Spending more money on defense is only one element and looking at the defense budget is only one way of looking at the cross-Strait military balance." Although Lo did not clearly articulate what Taiwan's exact strategy is, one can deduce that he believes spending on strategic defense effects may be smarter than pursuing operational capabilities.

Although acquiring big-ticket item goes against the U.S. recommendation to pursue "large number of small things," continuing to do so achieves the important effect of consolidating U.S. government support by demonstrating Taipei's self-defense determination to Washington. Foreign military sales, especially those involving big-ticket items, generate high-levels of coordination and visibility. In the upper echelons of the U.S. government, interagency coordination takes place to assess procurement requests, consider country team and combatant command recommendations, conduct pricing and analyses, deliberate political implications, investigate potential human rights violations, and wargame courses of action. By engaging the FMS process for big-ticket items, Taiwan energizes the core of U.S. government, both civilian and military, to reassure U.S. policymakers that Taiwan is committed to its own security. From the perspective of all those involved in the process, while Taiwan is not necessarily adhering to all U.S. recommendations, at least they are actively enhancing their defense capabilities, which is a positive attribute for a U.S. defense partner.

Procuring big-ticket items consolidates domestic political support by boosting constituent confidence. Regardless of actual effectiveness, reliability or survivability, purchasing and showcasing American defense hardware strengthens Taipei's ability to convince its population

Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.Ibid

that the incumbent administration has the means to deter and defend against Chinese aggression. Constituents, generally not technically savvy on the performance parameters of defense systems, associate weapons transfers from the United States as indications of Washington's support for the Taiwan. Within these dynamics, the high visibility associated with purchasing big-ticket items facilitates Taipei's efforts to effectively reassure its constituents. As Department of China Affairs Director Johnny Lin underscored, "Society's opinion drives procurement, too. We need to satisfy public opinion and defense needs alike. Psychological effects and practical needs both matter." 190

Displaying big-ticket military capabilities obtained from the United States bolsters deterrence. For Taiwan to achieve effective deterrence, China has to be aware of its military and political capabilities prior to war. Flying U.S.-produced F-16s to intercept PLA aircraft in the Taiwan Strait shows China two things, that Taiwan has the hardware to respond to incursions, and that Taipei has the implied backing of the United States. While asymmetric weapons such as sea mines and "a large number of small things" recommended by the United States have tremendous tactical value in complicating PLA planning, they do not have the same kind of deterrent value because their effects cannot be exhibited in situations short of war. Flaunting U.S. weapons and interactions in peacetime is what helps Taipei remind Beijing that it has Washington's support. During a dinner conversation between Former Minister of Defense Feng and then U.S. Air Force Chief of Staff General Merrill McPeak regarding the set-up of combined training between U.S. and Taiwan Air Force pilots, McPeak asked Feng why Taiwan wants to train with active duty U.S. Air Force instead of Air National Guard pilots when Guard pilots are more experienced and qualified. Feng explained that Taiwan preferred a relationship with active

¹⁹⁰ Lin, Johnny. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 11, 2019.

duty USAF pilots for interaction and political reasons. The point being there is a difference between practical and symbolic solutions. Publicizing on-going interaction with active duty USAF pilots is more conducive for advertising the ability to secure U.S. backing, which is certainly Taipei's largest deterrent against Beijing.

Routinizing FMS activities sustains favorable relations with the U.S. defense industry, which facilitates constructive lobbying on Taiwan's behalf in Washington. Taiwan spends a considerable amount of money on purchasing hardware produced by various companies of the U.S. defense industry. As such, companies with powerful lobbying capabilities such as Lockheed Martin, Raytheon, and Northrup Grumman want to ensure that the U.S. government continues to have favorable security cooperation relationships with Taiwan. By purchasing or simply demonstrating the interest to purchase big-ticket items, Taipei can mobilize the lobbying capabilities of the U.S. defense industry. Many big-ticket items have production facilities strategically spread out across the United States in different congressional districts. This provides better leverage for the defense industry to align business interests with constituent support needs of congressional members seeking reelection.

Finally, purchasing small numbers of big-ticket items mitigates against diminishing returns. Whereas purchasing big-ticket items makes sense for Taiwan, doing so in large numbers does not. The most obvious reason is that the cost of maintaining large inventories of weapons would be expensive. For instance, the 2012 FMS case to modernize Taiwan's modest fleet of 145 F-16 A/B fighters alone was US\$ 3.8 billion.¹⁹² Taipei has no reason to endure the cost of

¹⁹¹ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

¹⁹² Hammond-Chambers, Rupert, 2012. "Commentary: Signing of an LOA to Upgrade Taiwan's F-16 A/B Fighters." July 18. *US-Taiwan Business Council*. Accessed February 12, 2020. https://www.us-taiwan.org/resources/singing-loa-to-upgrade-taiwans-f16-ab-fighters/.

bigger fleets when there is no need to display a large number of assets in order to achieve strategic effects. Returning to the F-16 intercept example, Taiwan does not need to dispatch a large fleet of F-16 fighters to intercept PLA aircraft in order to display its air-to-air defense capability and hardware purchased from the United States. Dispatching a large interception fleet may actually cause escalation and be counterproductive. Hence from the perspective of fulfilling strategic intent instead of operational attrition needs, the value of buying a large number of F-16s would certainly come with diminishing returns.

Financial Considerations Summary

Since fully preparing the whole-of-society for a kinetic conflict that lasts more than a couple of days is cost prohibitive, Taipei's practical assessments lead decision makers to dedicated fewer resources towards acquiring new defense systems as the primary means to guard against imminent threats. Taiwan's defense budget, which allocates less than a quarter of the annual defense spending towards the procurement of new defense systems, provides a good indication that new military hardware is not the main thrust of Taipei's defense plan. Instead, the responses and actions of decision makers suggest that they opt to accept calculated risks and pursue favorable strategic outcomes. At the tactical level, comprehensive and sustainable defense is cost-prohibitive because it requires both large quantities of military hardware and complementary military-civilian defense capacities. Because Taiwan does not have the resources to fund a force-on-force arms race with China and upgrading civilian defense capabilities to complement military capabilities is not feasible, the default alternative is to make practical assessments on how to achieve the most security within the constraints of available resources. On an operational level, Taipei's rhetoric, focus, and omissions collectively suggest that practical

assessments lead decision makers to prioritize defending against high probability non-kinetic attack scenarios such as cyber-warfare and influence operations while accepting calculated risks on traditional military fronts such as beachhead defense. At the strategic level, Taipei maximizes the effect of defense spending by purchasing smaller numbers of big-ticket items because doing so demonstrates the self-defense determination needed to consolidate U.S. support, showcases national defense capability to strengthen domestic confidence, displays defense capabilities and relations with the Washington in order to bolster deterrence, enhances relationships with the U.S. defense industry to facilitate favorable lobbying in Washington, and mitigates against the dynamic of diminishing returns. The bottom line is that from the perspective of financial considerations, purchasing smaller numbers of large things is not only the default option, but also has greater influence on Taiwan's security than procuring the U.S. recommended "large number of small things." Due to the fact that Taiwan's security is heavily dependent on sustaining a robust security relationship with the United States, big-ticket items provide the most effective means to consolidate U.S.-Taiwan security relations. As retired Chief of Naval Operations Admiral Richard Chen keenly noted, "Big-ticket items such as M1 tanks are symbolic for Taiwan and financially beneficial for the United States... These are not practical choices for defense, but have psychological value and satisfies parochial interests."¹⁹³

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¹⁹³ Chen, Richard. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 17, 2019.

Geospatial Considerations

Taiwan's small land mass, high population density, and close proximity to China collectively make the island prone to being saturated by weapons and constrained by the PLA. Saturation occurs in terms of the ability to stage, test, operate, store, maintain, expend, and dispose of weapons systems and wartime provisions. Constraints stem from the PLA's ability to surveil all of Taiwan's military operations and readily target or engage its assets. Whereas stealth air, surface, and sub-surface weapons systems would potentially remedy these limitations, such options are not feasible for Taiwan in terms of desired effect, cost, and availability. In terms of desired effect, stealth would detract from Taipei's ability to operationally showcase highvisibility defense articles for political and deterrence purposes as explained in the previous section. With regard to cost, stealth technology has specific operational and maintenance parameters that make it very technically difficult and expensive to sustain. 194 As for availability, Taipei has neither the political latitude to purchase stealth technology from the United States nor the domestic capability to produce and maintain stealth fleets. For Americans defense counterparts who are accustomed to operating on a global scale without similar constraints, it can be easy to underappreciate how Taiwan's geospatial limitations effect the operations of its conventional weapons.

As a starting point, Taiwan has zero-sum land use reality, which means allocating any space for defense needs would come at the cost of undercutting other domestic requirements. Taiwan is only 394 kilometers (245 miles) long and 144 kilometers (89.5 miles) wide at its broadest point. The Central Mountain Range bisects Taiwan from north to south and about two-

¹⁹⁴ See *Skunk Works: A Personal Memoir of My Years of Lockheed* by Ben Rich and Leo Janos for an unclassified introduction to why stealth technology is both difficult and expensive to sustain. Rich, Ben, and Leo Janos, 1994. *Skunk Works: A Personal Memoir of My Years of Lockheed*.

¹⁹⁵ Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

thirds of the island is covered with forested peaks.¹⁹⁶ There are roughly 200 peaks exceeding 9,840 ft. (3,000 m). Yu Shan is Taiwan's highest point at 12,966 ft.¹⁹⁷ The rest of the island is made up of foothills, terraced flatlands, and coastal plains and basins.¹⁹⁸ According to the CIA Factbook, Taiwan's total land area including the Pescadores, Matsu, and Quemoy islands is 32,260 square kilometers (12,356 square miles), which means all of Taiwan's islands together are slightly smaller than Maryland and Delaware combined. For further reference, Taiwan's total area is only 7.5 percent of California and 4.6 percent of Texas. Moreover, 22.7 percent of Taiwan's usable landmass is dedicated to agricultural needs.¹⁹⁹While techniques such as tunneling may create additional land space, cost, safety, and likelihood of use make such options infeasible.

Taiwan's high population density makes designating land for defense preparations even more difficult. Taiwan's overall population density, at 1,704 people per square mile, is ranked number 17 in the world. For comparison purposes, the United States is ranked number 174 in the world with a population density of only 91 people per square mile.²⁰⁰ Taipei, Taiwan's most densely populated city, is far denser when compared to metropolis American cities though. For example, while New York City and San Francisco have population densities of 28,211 and 18,581 people per square mile respectively, Taipei has a density of 39,263 per square mile.²⁰¹

¹⁹⁶ Global Security, 2020. *Taiwan Geography*. Accessed January 22, 2020. https://www.globalsecurity.org/military/ops/taiwan-geo.htm.

World Atlas, 2017. *Taiwan Geography*. Accessed January 22, 2020. https://www.worldatlas.com/webimage/countrys/asia/taiwan/twland.htm.

¹⁹⁸ Global Security, 2020. *Taiwan Geography*. Accessed January 22, 2020. https://www.globalsecurity.org/military/ops/taiwan-geo.htm.

¹⁹⁹ Central Intelligence Agency Library, 2020. *East Asia/Southeast Asia: Taiwan*. Accessed January 22, 2020. https://www.cia.gov/library/publications/the-world-factbook/geos/print_tw.html.

²⁰⁰ World Population Review, 2020. *Countries by Density 2020*. Accessed March 12, 2020. https://worldpopulationreview.com/countries/countries-by-density/.

²⁰¹ Klob, Elzy, 2019. "75,000 people per square mile? These are the most densely populated cities in the world." July 11. *USA Today*. Accessed March 25, 2020. https://www.usatoday.com/story/news/world/2019/07/11/the-50-most-densely-populated-cities-in-the-world/39664259/. Maciag, Mike, 2017. "Population Density for U.S. Cities

Since military equipment and wartime provisions have safety and security requirements that require specified safety distancing from civilian populations and infrastructures, a higher population density directly reduces effective usable space for defense purposes.

Examples of land use limitations are pervasive. Fighter jets such as F-16s need runways, taxiways, parking aprons, maintenance hangars, fuel, and munition storage depots in order to operate. These jets also need hardened shelters to protect them from wartime bombardment. While the Taiwan Air Force has some aircraft shelters inside of mountains, space is limited because tunneling is expensive and moving/operating aircraft in and out of mountains is logistically difficult. Taiwan also advertises the ability to use segments of highways as runways for its military aircraft and often demonstrates this capability during annual military exercises. The reality, however, is that these highway landing strips can only accommodate a limited number of aircraft and offer little logistics support in terms of maintenance, refueling, and rearming capabilities.

Missile defense systems such as Patriot batteries also reveal how space limitations constrain defense preparations. Former Legislator Lin Yu-Fang specifically used Patriots as an example to argue that Taipei simply does not have the space to accommodate any more defense systems. He explained that each missile defense system needs three separate sites with specific placement and configuration requirements to accommodate guidance and launcher equipment. To add more missile defense systems, governing authorities would have to confiscate civilian property, demolish structures, and repurpose land for defense use, which is completely incompatible with the fact that Taipei is a heavily populated city surrounded by mountains.²⁰²

Statistics." November 29. *Governing*. Accessed March 25, 2020. https://www.governing.com/gov-data/population-density-land-area-cities-map.html.

²⁰² Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

Essentially, Taipei is a basin city and the basin is already full, if not overflowing, leaving no space for more missile defense equipment. While ship-based missile defense can augment land-based systems such as the Patriot, such systems are easily targeted and expensive to operate and maintain.

Land availability also limits civilian infrastructure preparedness. Retired Chief of Naval Operations Richard Chen pointed out that Taipei simply cannot outfit civilian buildings such as hospitals with large fuel storage tanks to hold fuel for backup generators. Not only is space limited in buildings within the city, large fuel tanks would also be safety and fire hazards to infrastructures and the population.²⁰³ In this regard, not only does the government lack the space for wartime provisions such as fuel, safety concerns preclude the storage of these provisions alongside of densely populated civilian dwellings.

Former Minister of Defense Kent Feng highlighted how the lack of usable land space in Taiwan limits the availability of live-fire ranges, causing great difficulties for the Taiwan military to test and train with live ordinances. Since safety considerations limit where live-fire ranges can be established, Taiwan's military is confined to having only a single small live-fire range in the southern part of the island. The size of the current range is so small that it limits the amount of munitions that can be expended within its confines, failing to meet both operational and logistical needs of the Taiwan military. Taiwan spends millions of dollars each year disposing of unexpended munitions that have reached the end of their lifecycles and become no longer safe to deploy. Under these conditions, Feng rhetorically asked, "Why would Taiwan buy even more munitions?" Buying more ordinance would cause Taiwan not only to have to spend more on storing, inspecting, maintaining, and updating these items during the effective service

²⁰³ Chen, Richard. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 17, 2019.

²⁰⁴ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

life, but also to have to pay to dispose of these unexpended items at the end of their lifecycles. This dynamic provides a plausible reasoning to why Taiwan chooses not to stockpile munitions. Former legislator Lin Yu-fang and former Taiwan Navy Rear Admiral David Liu both noted how usage rates, limited by usage opportunities, impact the Taiwan's ability to purchase munitions in bulk.²⁰⁵ Understanding that crises can bring demand surges for munitions, Taiwan's Ministry of Defense has routinely simulated emergency munitions resupply operations from the United States during past military exercises, such as Han-Kuang, to fulfill would-be shortfalls.

In addition to not being able to expend all purchased munitions prior to expiration dates, purchasing in bulk undermines defense readiness. Minister Feng pointed out that staying abreast of technological enhancements is a good reason for making periodic purchases. In his view, since systems like air-to-air missiles are always being updated and redesigned, phasing software or firmware upgrades, retrofitting or replacement makes the most sense. Former legislator Lin Yu-fang agreed, noting how buying in bulk, as in purchasing missiles from the same production lot, would mean that munitions all expire at same time, which can either undermine defense readiness by exposing Taiwan to replacement gaps or overwhelm storage capacity during replacement turnover. He noted that since new generations of munitions such as missiles come out about every 5 years, buying in bulk also means having to dispose obsolete items and replace them in bulk. So, while DoD and defense industry representatives want Taiwan to purchase, retire, and replace in bulk for administrative and logistics simplicity, Taiwan phases purchases to overlap readiness and prevent inventory overflow. Lin stated that this is specifically why he

²⁰⁵ Lin, Yu-fang; and Liu, David. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April, 2019.
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directed MND to only purchase one third (1/3) of munition requirements, as defined by wargame simulations, at a time while he was the Chair of Diplomacy and National Defense Committee.²⁰⁷

Finally, Minister Feng introduced the idea that defense land use requirements are compounding. All systems need access and protection infrastructures such as roads, tunnels, waterways, hardened shelters, dry-docks, and harbors. Feng noted that the procurement of the indigenously developed submarines (IDS) to the inventory is only a small part of the equation. These submarines require suitable and secure docking, refueling and servicing facilities too, which greatly expands the need for dedicated space. Applying this concept to all of Taiwan's weapons inventory, even small additions can lead to large land-use requirements.

Besides usable land space and population density, Taiwan's proximity to China also complicates defense preparations. The PLA has increasingly capable air and surface-based platforms capable of monitoring Taiwan's military activities both on the island itself and in the immediate vicinity by collecting intelligence from international waters or airspace. The platforms collect various types of signal intelligence (SIGINT), including electronic intelligence (ELINT), communications intelligence (COMINT), and foreign instrumentation signals intelligence (FISINT). In addition, they can collect measurement and signature Intelligence (MASINT). Collectively, these platforms collect information that can enable the PLA to disrupt or destroy the effective operation of Taiwan's military assets. The Taiwan Strait, with an average width of 110 miles, and only 81 miles across from shore to shore at the narrowest part, ²⁰⁹ affords the PLA ample opportunities to not only monitor, but also harass, or engage Taiwan military assets at any given time.

²⁰⁷ Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

²⁰⁸ Ibid

²⁰⁹ Kiprop, Joseph, 2018. "Where is the Taiwan Strait Located?" May 14. *World Atlas*. Accessed January 22, 2020. https://www.worldatlas.com/articles/where-is-the-taiwan-strait-located.html.

A senior Taiwan defense insider, who asked not to be identified, used Taiwan's fighter jets to highlight how the close proximity to China complicates Taiwan's defense preparations. To begin with, Taiwan Air Force (TAF) pilots have difficulty obtaining realistic training during peacetime. Commercial-use airspace and airways surrounding Taiwan limit the availability of airspace the military can use for training, confining TAF pilots to maneuvering within small areas, undermining realistic training. Next, fighter pilots have limited opportunities to test or train with electronic warfare equipment, communication systems and live ordinances because any use of these systems would likely be collected by nearby PLA assets, in effect revealing sensitive data. In war time, Taiwan's jets would have a difficult time getting off the ground if the PLA targets runways with missiles. Even if TAF fighter jets make it off the ground, they immediately enter the PLA's land or sea-based anti-aircraft engagement envelope upon after take-off, greatly reducing their survivability (fighter aircraft, having bigger radar cross sections and slower than missiles, are much easier to shoot down by SAMs). Furthermore, if runways are damaged or destroyed after take-off, TAF fighter pilots may have to ditch their jets and bailout into the ocean because Taiwan has no organic aerial refueling capability to keep its fighter jets with very limited fuel capacities loitering while awaiting the completion of any runway repair operations. From this perspective, the senior defense expert saw Taiwan's proximity to China as a significant limiting factor for effective military operations.²¹⁰

Geospatial Considerations Summary

The combination of limited useful land space, population density, and proximity to China collectively undercut Taiwan's ability to fully fulfil the island's self-defense requirements

²¹⁰ Source was senior defense official familiar with Taiwan's security environment and asked not to be identified.

through weapons procurement. Limited space and population density oblige Taipei to maintain smaller inventories of weapon systems. Taiwan's close proximity to China also reduces the maneuvering ability and effectiveness of military training and operations. Taken together, these factors provide little opportunity to gain operational value by expanding Taiwan's military arsenal. From Taipei's perspective, limiting the inventories of weapon platforms and avoiding the stockpiling of expendable munitions is a smart approach to balancing weapons procurement requirements. As Legislator Jason Hsu noted, "We (Taiwan) need to look at the defense situation from the practical rather than the face value perspective—Taiwan definitely needs weapons...maybe not in the exact type and quantities you (Washington) offer but perhaps something close to it. Taiwan needs to show China we are serious but cannot fall into a spending trap...We need to figure out are we buying paint because the house needs to be painted or are we just buying because we think paint might not be available later on (i.e. hording or stockpiling)."211 Better understanding how Taiwan's geospatial constraints shape Taipei's defense procurement and spending decisions is an important step reducing potential strife in the U.S.-Taiwan security cooperation relationship.

Demographic Considerations

Taiwan's aging population, low birthrate, and personnel recruitment and retention problems collectively reduce the size of its effective defense force and associated defense spending. Since fewer qualified personnel are available and willing to serve in defense capacities, and reversing the all-volunteer transition is not politically feasible, Taiwan's military and defense-related institutions are struggling to attract and retain qualified personnel. According

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²¹¹ Hsu, Jason. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

to Taipei authorities, dwindling defense force size directly limits personnel compensation, operation costs and defense investments, which collectively make up all of Taiwan's defense spending. With personnel compensation absorbing approximately half of the defense budget (46.4 percent for 2020),²¹² reductions in defense personnel strength have obvious implications for the over size of the defense budget. While Taipei is attempting to implement mitigating strategies to reverse personnel shortage problems, the effects of such strategies remain to be seen.

Personnel Scarcity and Consequences

Taipei faces dire personnel scarcity challenges in terms of recruiting and retaining qualified individuals to fill both military ranks and defense related capacities. As a baseline, Taiwan's aging population and low birth rate both reduce the pool of qualified individuals capable of serving. By limiting conscription obligations to Taiwan-born males between the ages of 18 and 36, Taiwan law further reduces the compulsory service pool. The lack of willingness to serve defense capacities within the qualified population exacerbates recruiting shortfalls.

Compounding the personnel problem even more, retaining skilled and experienced personnel continues to prove difficult. The net result is that Taiwan lacks the ability to fulfill defense-related personnel requirements across all defense sectors, including but not limited to combat forces, administrative, and management staffing.

According to Taiwan's National Development Council (NDC), Taiwan is currently in the "aged society" era where at least 10 percent of the population is over 65 years old and is on course to becoming a "super-aged society" in 2026, where more than 20 percent of the nation

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²¹² DeAeth, Duncan, 2019. "Taiwan approves US\$11.4 billion for 2020 defense budget." September 15. *Taiwan News*. Accessed May 20, 2020. https://www.taiwannews.com.tw/en/news/3763524.

will be over 65.²¹³ Taiwan also has one of the world's lowest birthrates. At 8 births per 1,000 population, Taiwan ranks number 223 out of 229 on the CIA's 2020 World Fact Book birthrate rankings.²¹⁴ Taiwan's Ministry of Defense has been well aware of this trend. In its 2011 National Defense Report, MND noted that the number of "draft age men" was projected to drop from 123,465 men in 2010 to 75,338 in 2025.²¹⁵ The outlook has not improved since the publication of those projections either. According to the latest NDC estimates, barring any dramatic changes in the current population growth trajectory, people aged 15 to 26 will drop from around 3.413 million in 2019 to 2.478 million by 2029—a difference of 935,000 persons.²¹⁶ These statistics all point to a significant and worsening demographic challenge for Taiwan's defense force.

The unwillingness to serve in defense capacities among Taiwan's service-aged population further contributes to defense personnel shortages. As discussed in the previous chapter, Taiwan's civilian population has a limited appetite to personally serve in defense capacities, fight in any conflicts, or make personal sacrifices. As a democratic nation undergoing a transition to a completely all-volunteer force, Taiwan encounters significant challenges in fulfilling its defense personnel requirements. With the current conscription period being only 4-months long, recruits have more of a summer camp rather than military conscription experience. According to an active duty Taiwan Army Lieutenant Colonel, most recruits are purposely kept out of exercises and only tasked to stay out of trouble.²¹⁷ From personal observations gained

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²¹³ Strong, Matthew, 2019. "Taiwan will be a super-aged society by 2026." February 12. *Taiwan News*. Accessed March 25, 2020. https://www.taiwannews.com.tw/en/news/3636704, accessed March 25, 2020.

²¹⁴ Central Intelligence Agency Library, 2020. *East Asia/Southeast Asia: Taiwan*. Accessed January 22, 2020. https://www.cia.gov/library/publications/the-world-factbook/geos/print_tw.html.

²¹⁵ Taiwan National Defense Report, 2020. Accessed March 19, 2020. https://www.us-taiwan.org/resources/how-to-find-taiwan-defense-military-and-national-security-information/.

²¹⁶ Hsiao, Russell, 2019. *Fortnightly Review*. Accessed October 23, 2019. http://globaltaiwan.org/wp-content/uploads/2020/03/4.20-PDF-GTB.pdf.

Huang, Paul, 2020. "Taiwan's Military Is a Hollow Shell." February 15. Foreign Policy. Accessed March 11, 2020. https://foreignpolicy.com/2020/02/15/china-threat-invasion-conscription-taiwans-military-is-a-hollow-shell/.

while stationed the American Institute in Taiwan as a Security Cooperation Officer, recruits are assigned menial jobs such as driving shuttles or janitorial duties as to avoid wasting precious training resources on people who are soon separating from the military. This approach to dealing with conscripts often erodes morale and undermines unity among the ranks. Both recruits and career service members simply bide their time and never bother trying to integrate.

Talent bleeds, as in the inability to retain well-trained or experienced personnel, also exacerbates Taiwan's defense personnel shortages. Many former Taiwan military members, especially those who have received training or education in the United States, cite cultural rigidity as a primary reason for separating from military service. Their contention is that Taiwan's military emphasizes seniority, rank, tradition, or position as opposed to merit or innovation. Members that Taiwan's Ministry of Defense send to the United States for training often separate from military service soon after returning to Taiwan because these individuals become frustrated by the inability to effect change within the defense establishments they return to by implementing what they have learned in U.S. training. Many comrades or commanders undermine or disregard the returnees with the attitude of "the Americans broke your head." Using Taiwan's F-16 FMS training case, which sends TAF pilots to train in the United States with USAF instructor fighter pilots for up to 18 months at a time as an example, many returning TAF pilots serve a short duration upon the completion of training before leaving the Taiwan Air Force for a civilian airlines job, completely negating the intent for them to institutionalize the American tactics, techniques and procedures they learned into all facets of daily Taiwan Air Force operations. Most of these members find the intent to inculcate Taiwan's military operations with U.S. training to be impossible. In their experience, changes only occur at the superficial levels at best. One longtime contact who trained in the United States but now flies for

EVA airlines used the concept of callsigns as an example to illustrate the superficiality of Taiwan's mindset shift—While the USAF pilots use callsigns to replace names and rank during flying operations in order to remove hierarchy and personalization of directives and critiques, Taiwan has not been able to achieve the same effect. For TAF pilots, adopting callsigns like USAF counterparts, was only a superficial transition. Rank and seniority still take precedence over all over merit and innovation. Taiwan's military culture, as a subset to its social cultures, is so steeped in hierarchy and seniority that military members reference each other according to graduating class, using terms such as "學長"(institution elder)" or "學弟"(institution junior)." Directing or critiquing someone who is more senior, even if they are wrong, is still seen as taboo. For this reason, officers who are not promoted with their classmates are forced to retire. In Taiwan's military, no one who graduated later will command an "學長(institution elder)." This type of culture relegates practices such as callsigns to nothing more than symbolic adaptations for the Taiwan military. It is this type of inability to make substantive changes that continues to frustrate some capable service members and in turn fuel their desires to separate, causing a talent bleed for Taiwan's military.

Low birthrates and aging population combined with recruiting and retention problems continue to cause hollowed ranks, effectively decreasing the ability to absorb defense spending. Among military ranks, Taiwan is budgeted for 188,000 positions. However, only 153,000 or just over 81 percent of budgeted military positions were filled in 2018.²¹⁸ Furthermore, according to Taiwan media reports, most frontline units, which are the end users of defense equipment, are

²¹⁸羅添斌, 2018. "國防部: 108 年要募兵 2.1 萬人 110 年以後每年減為 1 萬人." October 21. *Liberty Times Net*. Accessed March 26, 2020. https://news.ltn.com.tw/news/politics/breakingnews/2587521.

less than 80 percent manned, which not only undermines Taiwan's combat readiness, but also reduces defense funds usage.²¹⁹

The shortage of administrative and management personnel is also problematic for readiness and facilitating defense spending. Retired Taiwan Navy Rear Admiral David Liu (劉達 明), who spent his final years of active duty military service working acquisition programs for MND's Department of Strategic Planning, highlighted how the lack of qualified personnel in financial, contract, and portfolio management to oversee defense procurement programs limits Taipei's overall defense spending. Liu, who now teaches defense acquisition-related courses as a professor at Taiwan's National Defense University, compared the number of available defense acquisition personnel between the U.S. and Taiwan militaries provide context. Taiwan has about 500 defense acquisition qualified personnel while the United States has approximately 35,000. He reasons that if the active duty force ratio between the United States and Taiwan militaries is 9 to 1 (1.4 million versus 155,000), Taiwan should have approximately 3,900 defense acquisition qualified personnel to fulfill MND's procurement requirements. From Liu's perspective, having only 500 qualified individuals obviously creates a defense spending throughput problem. He maintains that MND needs to inform U.S. counterparts of the truth, which is that Taiwan's current procurement system is not capable of handling any increases in defense procurement funding. Liu also noted that more than 300 personnel were dedicated to bringing Taiwan's F-CK-1 indigenously developed fighter online during the late 1980s and early 1990s. By contrast, there are less than 100 total personnel in all of MND's Armaments Bureau today who are already overwhelmed with managing projects such as Indigenous Developed Submarines (IDS) and

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²¹⁹涂鉅旻, 2019. "戰鬥部隊辛苦 陸軍 7 兵種編現比低於 8 成." October 15. *Liberty Times Net.* Accessed March 26, 2020. https://news.ltn.com.tw/news/politics/breakingnews/2946575.

Advance Trainer Jets (ATJ). Liu also believes that adding more to these management personnel's workload could have disastrous consequences. He cited the Xiongfeng missile firing where a Taiwan Navy corvette accidentally discharged a missile destroying a fishing vessel and killing a fisherman as an example, emphasizing that having overwhelmed and underqualified individuals at the helm is a dangerous endeavor in defense related matters.²²⁰ After having spent years U.S.-Taiwan security cooperation, this is the first time I have heard the line of reasoning presented by Liu. While the ratio of defense to dollars to acquisition personnel for both the United States and Taiwan are both approximately US\$20 million per acquisition management personnel²²¹, Liu's method of calculating active duty to acquisition personnel is worth further consideration.

Beyond ratio calculations, a longtime contact who is a retired Taiwan Navy captain, now working as a defense industry consultant, pointed out how understaffed institutions negatively impact Taiwan's defense procurement and spending. He explained how Taiwan's National Chung-Shan Institute of Science and Technology (NCSIST), which is a state-sponsored organization that develops, manufactures, and sells defense and dual use technologies and weapons, lacked adequately qualified personnel and institutionalized processes to effectively meet Taiwan's defense needs. On the staffing front, NCSIST is scientist and technician-centric but lacked the management capacities to take on the responsibilities intended by the 2019 National Defense Industry Development Act—to be the focal point, acting essentially as the prime contractor for all of MND's defense acquisitions. Administratively, NCSIST lacks processes such as properly vetting individuals to handle classified information. For example, whereas U.S. defense industry representatives undergo thorough security background screening

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²²⁰ Liu, David. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 18, 2019.

²²¹ Calculated using approximate U.S. and Taiwan annual defense budgets of US\$700 and US\$10 billion respectively, divided by corresponding 35,000 and 500 acquisition personnel for the United States and Taiwan.

equivalent to active duty military counterparts before being allowed to interact with classified information, NCSIST primarily uses non-disclosure agreements to allow sub-vendors to access classified information while seeking bids or developing prototypes. According to this source, these staffing and administrative shortcomings collectively demonstrate the lack of basic institutional maturity, which impede Taiwan's defense industry development and in turn spending.²²²

Smaller Force, Smaller Budget

According to observers and insiders familiar with Taiwan's defense situation, smaller defense force and institution sizes logically consume smaller defense budgets. The reasoning is that demands for funding in all three pillars of Taiwan's defense spending—personnel (salaries and pensions), operations (maintenance, logistics, facilities), and investment (procurement, research and development, training, and education), all commensurately decrease along with force size. In this context, as Taiwan's defense force size decreases, so does its defense spending. With a smaller force size, Taipei pays fewer salaries, maintains less equipment and facilities, and purchases fewer pieces of defense equipment. While increasing military salaries may raise the appeal of a military career, leaders do not believe personnel compensation, as a percentage of overall defense spending, should go any higher. Pointing to these dynamics, multiple subjects interviewed argued that Taiwan's defense budget may not be a suitable measure of Taipei's self-defense determination. The real issue is not being able to fill authorized defense-related billets.

Smaller defense budgets are to be expected with decreases in military force size, especially when considered in conjunction with recent pension reforms that slashed benefits for

²²² Source asked not to be identified since he still actively consults with both U.S. and Taiwan defense organizations.

veterans. National Chengchi University professor of political science and Election Study Center research fellow, Eric Chen-hua Yu noted that while the expression of self-defense determination needs to come from the policy level and the two easiest measures are defense budgets and conscription length, increasing either is not politically feasible for Taiwan, which presents Taipei with a dilemma. Increasing overall defense spending is not politically viable against the backdrop of the Tsai's administration's 2018 pension reform that cut retirement benefits for veterans. Yu argued that since pension reform took place under the guise of reducing the strain on national budgets and caused widespread backlash, increasing defense spending would further undermine the administration's shaky credibility. In his view, even if Taiwan's total defense budget remained the same, effective defense spending has increased given that pension benefits, which are a part of personnel spending, has been reapportioned to operations and investments.²²³ Putting it simply, as the 18 percent government-backed preferential annuity interest rate becomes phased out or decreased to 6 percent from 2018-2028 for retirees who take monthly or lump-sum retirement payments respectively, personnel compensation savings can be reallocated to operational or investment spending. Yu also does not believe increasing the conscription period is politically possible. The all-volunteer force transition initiated by the Ma administration simply has too much momentum to change course. Raising military compensation to attract recruits is not viable either. Since military pay is already comparable to civilian sector salaries, boosting force strengths by increasing pay would not seem reasonable to constituents either.

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²²³ According to the Executive Yuan, "Preferential interest rates on savings deposits have been reduced, while monthly retirement income in excess of that calculated by the new standards will decrease gradually over 10 years." Executive Yuan, 2018. *Public pension reform.* July 10. Accessed May 29, 2020. https://english.ey.gov.tw/News3/9E5540D592A5FECD/7a2c60ea-f734-4be5-a467-968454226042; A Taiwan news article explained that "for retirees who receive a monthly annuity payment, the 18 percent preferential interest rate on saving accounts will be scrapped over a period of 10 years, while it will be lowered by 2 percent every two years until it reaches six percent for retirees who receive a lump sum retirement payment." Central News Agency, 2018. "New pension systems come into force Sunday." June 30. *Taiwan News.* Accessed May 27, 2020. https://www.taiwannews.com.tw/en/news/3470955.

Facing these realities, Taipei has little political latitude to justify increases in defense spending.²²⁴

From the perspective of Taiwan's policymakers, the lack of proper justification for additional defense funding is precisely the reason not to increase defense budgets. According to Dr. Chieh Chung, who is a research fellow at the KMT National Policy Foundation think-tank, Taipei does not have reason to raise defense spending because current defense requirements are already being sufficiently met in terms of personnel compensation and readiness rates. In his understanding, MND determined through rigorous simulations that the minimum force size required to fulfill Taiwan's defense needs is 215,000. This includes billets for 188,000 service members and 27,000 civilian personnel. Since the current defense budget already supports all requirements for these billets, additional defense funding is not needed. From Chieh's perspective, raising defense spending should only occur when MND presents additional threat or strategy-driven defense requirements.

Lin Yu-fang, former Chair of the Legislative Yuan's Diplomacy and National Defense Committee agreed with Chieh's requirements-driven budgeting approach. He insisted that Taiwan's current defense budget was already sufficient. Lin outlined that with shrinking force size, adequate funding for exercises, maintenance and logistics, and weapon system mission-capable rates comparable to the U.S. military, Taipei has nothing to spend more defense dollars on unless Washington decides to sell Taiwan more defense articles such as F-35s. Lin specifically underscored that Taiwan's F-16 have mission-capable rates hovering around 70

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²²⁶ Chieh, Chung. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

²²⁴ Yu, Eric. Interviewed by Steven Li. Personal Interview. Taipei, Taiwan, April 19, 2019.

²²⁵ Huang, Paul, 2020. "Taiwan's Military is a Hollow Shell." February 15. *Foreign Policy*. Accessed May 29, 2020. https://foreignpolicy.com/2020/02/15/china-threat-invasion-conscription-taiwans-military-is-a-hollow-shell/.

percent, which is similar to U.S. F-16 mission capable rates.²²⁷ It was in this context that Lin jested how under the current conditions, there is no way for Taiwan's defense spending to reach 3 percent of GDP, even if MND fed all Taiwan military members American steaks at every meal.²²⁸

Civilian authorities who observe and partake in defense budgeting decisions are not alone in believing smaller force size should lead to lower defense spending. At least some military leaders share the same view. Former Minister of Defense Kent Feng and retired Army General Anson Liao both see logic in Taiwan's sub-3 percent of GDP defense spending. Like his careerlong civilian counterparts, Minister Feng thinks Taiwan's defense budget should be requirements dependent and that the military needs to raise requirements that make sense. From his perspective, U.S. defense expenditures obviously need to be high because America is the world's peacekeeper. Taiwan on the other hand, is a small place with limited requirements and consumptions capabilities that are centered only on defending the homeland. From this position, Feng reasoned that perhaps spending 3 percent of GDP on defense is not the proper measure for Taiwan. After all, not even the United States Department of Defense spends that portion of America's GDP on defending the homeland.²²⁹ To clarify, the United States actually spent 3.4 percent on defense in 2019 according to SIPRI data.²³⁰ Feng intended to make an apples-toapples comparison on the percentage of GDP Washington and Taipei respectively spent solely on defending the homeland. Retired General Liao also thinks Taiwan's spending is sufficient for the current conditions. Agreeing with civilian authorities, he too assessed that defense funding

²²⁷ Mission-capable rates reflect the percentage of the fleet that can either fully or partially perform designated missions as defined by higher-headquarters.

²²⁸ Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

²²⁹ Feng, Kent, Interviewed by Steven Li. Personal interview, Taipei, Taiwan, April 16, 2019.

²³⁰ Stockholm International Peace Research Institute, 2020. *SIPRI Databases*. Accessed May 20, 2020. https://www.sipri.org/databases.

has been enough to properly fulfill MND requirements. Furthermore, Liao did not think raising defense spending alone would improve Taiwan's defense readiness anyway. In his opinion, it is Taiwan's political situation and geographic constraints, not defense spending, that limit MND's ability to expand training opportunities and the scope of military operations.²³¹

Mitigating Strategies

In discussing Taiwan's defense budgets, multiple informants interviewed provided mitigating strategies on how to resolve the military's recruitment and retention problems because they saw small forces size as a significant limiting factor in increasing Taiwan's defense spending. The general consensus is that Taiwan is caught in the worst position possible with the all-volunteer transition currently mandating a 4-month conscription period and needs to shift to either longer conscriptions or a completely all-volunteer force more quickly. Proposed strategies to increase the population's defense-related service rate include bridging the civilian-military divide, making dual-use investments, improving living conditions for military members and families, encouraging patriotism, and walking back the all-volunteer force transition. Some observers have also suggested integrating more women into military service. Furthermore, motivation to serve national defense needs remains a common obstacle for men and women alike. Discussing proposed strategies with interviewed subjects provided two notable observations. First, most proposals are conceptual, falling short of being concrete executable measures. Second, there is no plan to make sweeping cultural changes across defense institutions to dismantle hierarchy and tradition. Together, these observations imply that actual implementable measures along with appreciable results are not expected in the near future.

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²³¹ Liao, Anson. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

From the perspective of the Deputy Secretary General of Taiwan's National Security Council, Dr. York Chen, bridging the civilian-military divide is crucial for the future of Taiwan's defense. Chen reasoned that the population would be more willing to support the military if they see it as an integral and contributing part of society. On the contrary, a population that feels distanced from or distrust towards the military would undermine Taiwan's defense. To illustrate his point, Chen highlighted 2013 anti-government protests where the population took to the streets to express outrage for the death of a conscript at the hands of superiors during disciplinary actions. 24-year-old Corporal Hung Chung-chiu died of a heatstroke just three days short of completing his conscription obligation. He was reportedly performing drills in Taiwan's searing summer heat as punishment for bringing a mobile phone with a camera onto his military base, normally a minor transgression.²³² According to Chen, the civilian protests that ensued were the largest anti-government protests in Taiwan since the White Terror period. By contrast, civilians greatly applaud the government for using the military in humanitarian assistance and disaster relief (HA/DR) roles during events such as typhoon or earthquake recoveries. Chen used the difference between these extremes to underscore the importance of bridging the civilian-military divide. However, he did not outline any deliberate plans that Tsai's administration intends to implement in order to better bridge the civilian-military divide.

As an extension of bridging the civilian-military divide, Secretary General Chen also stressed the importance of making dual-use investments. As discussed in the previous chapter, he believes that constituents would be more supportive of raising the defense budget if they saw expenditures as investments instead of spending. Making dual use investments such as developing indigenous production capacities and instituting education and training that support

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Shadbolt, Peter, 2013. "Taiwan protests throw spotlight on Asia's military service." August 13. *CNN*. Accessed April 1, 2020. https://www.cnn.com/2013/08/07/world/asia/taiwan-military/index.html.

both military and civil requirements would further win popular support. According to Chen, dual-use investments would help people internalize the fact that Taiwan's defense matters are not confined to being only the concern of MND and the Americans. To that extent, citizens would be more supportive of defense-related initiatives if they feel like stakeholders who have vested interests. Chen's opinion is that this is especially true when it comes to education. He believes that since Chinese tradition is so steeped in the importance of education, MND could capitalize on this mentality to boost recruitment and retention by better integrating transferrable education and training opportunities with force development planning.²³³ Legislator Lo Chih-chung, who received his PhD in political science from the University of California in Los Angeles, also sees education and training as important incentivizing tools in military personnel recruitment and retention. He advocated the need to educate and train soldiers as to provide them with a platform for suitable employment or higher education after they separate from service as one of the linchpins to resolving personnel shortage issues.²³⁴ Chen are Lo make astute observations. Recruitment and retention are essential for technical development, continuity, and minimization of personnel training costs. The U.S. military for example, spends vast resources on recruiting and retaining technical or specialized skills related to aviation, nuclear, medical, communications, and special operations. While Chen and Lo appeared to have a similar mindset to leverage education and training in recruitment and retention, neither laid out any planned initiatives such as scholarships or vocational transition programs.

Beyond bridging civilian-military divide and making dual-use investments, improving living conditions for military members and families is a priority for Taipei. This appears appropriate in light of reports that troops are less than satisfied with current standards. For

²³³ Chen, York. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

²³⁴ Lo, Chih-cheng. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 21, 2019.

example, according to Paul Huang's writing in *Foreign Policy*, in addition to personnel shortages causing excessive workloads for military members, most troops complained that food and living conditions within the military "left much to be desired" and splitting time between bases and field exercises reduces time with family, effectively reducing quality family life for front-line soldiers. ²³⁵ Former Minister of Defense Feng offered a more personal story, recounting a base inspection while he was still the Minister where he and President Tsai visited a dilapidated dormitory with no shower facilities or hot water. The entire army unit with over 100 personnel shared only five cold-water spigots for all water usage requirements, including all personal-hygiene needs. He recalled President Tsai being appalled and asking him if he would want his own children serving under such conditions, to which he replied "No." Even former legislator Lin Yu-fang who vehemently insisted that recent defense budgets have sufficiently satisfied all military needs conceded that conditions in some existing facilities are substandard. ²³⁶ Again, neither Feng nor Lin identified any roadmaps for updating substandard military infrastructure.

Sub-standard living conditions are only part of the quality-of-life equation. Family separation also causes dissatisfaction among military members. While MND retains the authority to assign military members to any of Taiwan's bases, including outer islands, the government does not guarantee provisions such as moving or housing allowance for families to accompany members. Consequently, many military members, including officers, live in base dormitories during the week and commute home on weekends and holidays. This experience can become burdensome when military members are assigned to bases located away from their families' home cities. For example, many headquarters staff who work in Taipei commute home to cities

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Huang, Paul, 2020. "Taiwan's Military Is a Hollow Shell." February 15. *Foreign Policy*. Accessed March 11, 2020. https://foreignpolicy.com/2020/02/15/china-threat-invasion-conscription-taiwans-military-is-a-hollow-shell/. Lin, Yu-fang. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 19, 2019.

such as Taichung, Tainan, or Pingtung on weekends. While some service members embrace the stoic attitude that being away from family affords the opportunity to concentrate on work, many see family separation as a significant detractor to quality-of-life. Policymakers acknowledged that quality-of-life was a concern but none addressed plans to remedy the problem.

In addition to bridging the military-civilian gap and improving service conditions, most respondents interviewed cited encouraging patriotism as vital to remedying personnel shortages. As previously stated, interviewees unanimously agree that a four-month conscription period is ineffective in contributing to Taiwan's defense needs. While reinstating longer conscription obligation may help reduce personnel shortage problems, most policymakers concede that doing so is politically impossible. As former legislator Lin Yu-fang lamented during our interview, "Some things, once done, cannot be undone." Lin is not alone in this assessment. Not a single interviewee thought reversing the all-volunteer force transition was politically possible barring some sort of catastrophic national emergency. But even if a national crisis arises, it would be too late to initiate action. This leaves Taipei no option but to try making voluntary military services more appealing.

Taiwan's Ministry of Defense already goes to great lengths to attract recruits but are still falling short of targets. MND advertises a long list of benefits to attract potential recruits. In addition to standard benefits such as competitive salary and vocational training, MND even offers creative incentives such as "Subsidies for getting married, for giving birth to children, and for funerals." Salaries are also competitive. Military salaries for volunteer high school

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²³⁷ Ibid

²³⁸ Recruitment Center of National Armed Forces, 2018. *Military Academy*. July 27. Accessed May 29, 2020. https://rdrc.mnd.gov.tw/EditPage?PageID=d19afef9-6bc9-4b00-96ef-51b0609dc595.

graduates purportedly even exceed expected salaries of university graduates.²³⁹ However, despite these above incentives, military remains a hard sell to Taiwan's youth. 240

From the perspective of longtime observers like retired Rear Admiral David Liu, patriotism is still the essential element to fostering the will to serve. He does not think people currently see military service as a career or pursuit of passion. Instead, "They view it just like another job, such as working as a Seven-Eleven clerk." According to Liu, the fact that no one wants to serve in the military despite competitive compensation indicates that there are greater underlying issues, such as the lack of patriotism, that undermine people's desire to serve.²⁴¹ The irony is that while surveys indicate a consolidation of Taiwanese identity across the board, the consolidation has not translated into a desire to defend it against aggressors. Department of China Affairs Director Johnny Lin also sees this irony as a substantial issue, arguing that this is why the administration makes encouraging patriotism a priority and invested in developing and broadcasting programs on both National Geographic and Discovery channels that promote patriotism and the will to fight (宣傳心戰).242 Of all the mitigation strategies, encouraging patriotism appears to have received the most attention in terms of being supported by executable plans. But even then, a few television programs do not exactly qualify as comprehensive. Taiwan does not have and compulsory patriotic education programs like those that are pervasive across the Strait.

²³⁹ Tsai, Yi-chu and Frances Huang, 2018. "Anticipated starting salaries for new graduate NT\$33,053: survey." March 2. Focus Taiwan. Accessed May 29, 2020. https://focustaiwan.tw/business/201803020018.

²⁴⁰ Lee, Yimou, 2018. "For Taiwan youth, military service is a hard sell despite China tension." October 28. *Reuter*. Accessed 29, 2020. https://www.reuters.com/article/us-taiwan-military/for-taiwan-youth-military-service-is-a-hard-<u>sell-despite-china-tension-idUSKCN1N20U3</u>.

²⁴¹ Liu, David. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 18, 2019.

²⁴² Lin, Johnny. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 11, 2019.

The fact that observers and policymakers did not mention any need for comprehensive cultural change within Taiwan's defense enterprise in order to better attract and retain personnel is an interesting point. While contacts reported leaving military service based on their displeasure with cultural rigidity across defense organizations and institutions, leaders and policymakers did not discuss this point during interviews. This suggest a few possibilities. First, authorities are not aware of the issue. Second, they are aware of the dynamic but do not think it is a problem. Or third, they are aware but are unwilling or unable to fix it. Regardless of why this issue was not addressed by interviewees, career dissatisfaction resulting from cultural rigidity is probably a worthwhile inquiry in the effort to boost recruitment and retention rates.

Demographical Considerations Summary

Taiwan's demographics limit defense spending because the number of people qualified and willing to serve in defense capacities is shrinking. Aging population, low birthrate along with personnel recruitment, and retention issues against the backdrop of transitioning to an all-volunteer force collectively undermine Taipei's ability to fill its military ranks and defense institutions with qualified and experienced personnel. According to Taipei authorities, dwindling defense force size directly reduces defense spending by limiting all three pillars of defense spending—personnel compensation, operation costs, and defense investments. While Taipei is attempting to overcome personnel shortage issues through mitigating strategies aimed to nurture national cohesion and solidarity, translating strategies into concrete measures and evaluating the effectiveness of these measures still needs to be accomplished.

Practical Analysis Conclusion

The intent of this chapter was to show that Taipei faces somewhat deterministic practical constraints in formulating defense budgets, which in turn limits defense procurements from the United States. These practical constraints are rooted in financial, geospatial, and demographical considerations. Financially, fully preparing the whole-of-society for extended kinetic conflict is cost prohibitive, which forces Taipei to make practical assessments, dedicate resources towards guarding against the most imminent threats, accept calculated risks, and pursue favorable strategic outcomes. Geospatially, limited useful land-space, population density, and proximity to China collectively undercut Taiwan's ability to arm the island sufficiently as to completely satisfy self-defense requirements. Demographically, Taiwan's ability to raise defense spending is limited by its force size, which is constrained by the number of people qualified and willing to serve in defense capacities. The range of the limitations that Taiwan faces in building its defense capacity is daunting. And while a PLA military invasion is still unlikely, China's ability to coerce a reunification by force is becoming stronger. Better understanding how Taiwan's practical limitations constrict Taipei's defense preparations would enhance common understanding, in turn reducing the misalignment of visions between Washington and Taipei. This would perhaps reduce sentiments, like the one held by Ambassador Moriarty that "morale arguments are bullshit," and that "instead of spending defense dollars on big-ticket items that the population can see, Taipei needs to build morale by building useful capacity."²⁴³

²⁴³ Moriarty, James. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 20, 2019.

CHAPTER THREE

Procedural Analysis

This chapter examines how procedural impediments influence Taiwan's defense spending and argues that Washington's "exceptionalism without exceptions" approach to dealing with Taiwan along with Taipei's bureaucratic rigidity together undermine the effectiveness of U.S.-Taiwan security cooperation. This ultimately results in the lowering of Taiwan's overall defense expenditures by decreasing the amount funds Taiwan spends on purchasing defense articles from the United States through foreign military sales (FMS). On the U.S. side, "exceptionalism without exceptions" marginalizes Taipei's ability to procure defense articles. One the one hand, Washington treats Taipei with exceptionalism, as in subjecting Taipei to restrictive procedural practices, based on Taiwan's unique international political status. On the other, Washington relegates Taiwan to one-size-fits-all bureaucratic processes and management without any exceptions that would mitigate the side-effects of exceptionalism. On the Taiwan side, rigid internal bureaucratic processes along with excessive deference towards their American counterparts sap the potency of Taipei's efforts to bolster self-defense. While Taipei formulates defense procurement requirements through elaborate processes before attempting to politely deliver requests to Washington, both formulation and delivery processes end up limiting the flexibility of Taiwan's FMS options. In linking the U.S. and Taiwan defense establishments together through security cooperation interactions, a design versus function disconnect arises. That is to say, U.S. and Taiwan security cooperation mechanisms are functionally mismatched because of how respective defense establishments are designed, and that ultimately restricts Taiwan's FMS activities and limits Taiwan's defense spending.

Washington's Exceptionalism Without Exceptions

Washington currently takes an "exceptionalism without exceptions" approach to engaging with Taipei in security cooperation activities. "Exceptionalism" refers to Washington's imposition of restrictions on how the U.S. defense establishment interacts with Taiwan based on its unique international political status. Washington infuses additional layers of restrictiveness and scrutiny in dealings with Taipei on security matters. Military uniform guidance and the handling of FMS requests provide clear examples that demonstrate this tendency. "Without exceptions" refers to the fact that despite subjecting Taipei to unique scrutiny and restrictions, Washington maintains status quo administrative practices in dealings with Taiwan, without giving due consideration to mitigating the effects stemming from exceptionalism. Washington does not tailor personnel management, administrative priority, or official communications to suit Taiwan's unique situation. Together, Washington's "exceptionalism" and "without exceptions" is a combination that undermines Taipei's ability to effectively procure weapons from the United States through FMS, ultimately limiting Taipei's overall defense spending.

Exceptionalism

Evidence of Washington's exceptionalism toward Taiwan is ubiquitous. Deviating from standard military uniform protocols and FMS procedures provide clear indications of Washington's enhanced restrictiveness and scrutiny towards Taipei. With regard to uniform protocols, Washington places special restrictions on how U.S. and Taiwan military members dress while participating in U.S.-Taiwan security cooperation related activities. As for FMS interactions, Washington limits Taiwan's ability to initiate procurement requests, utilize standard procedures, and access high-level officials.

Deviating from normal military uniform standards during U.S.-Taiwan security cooperation activities sets the tone for exceptionalism towards Taiwan. In the effort to maintain the appearance of having only unofficial relations with Taiwan, the United States continues to adhere to a set of self-imposed restrictions. One of these restrictions is refraining from wearing military uniforms during military-to-military interactions. U.S. military members are prohibited from wearing uniforms in Taiwan, unless mission requirements deem uniforms absolutely essential for safety reasons. The same uniform restriction applies to Taiwan military members visiting or training in the United States. While this practice does not by any measure successfully create a plausible illusion that U.S.-Taiwan interactions are only limited to unofficial capacities, the symbolic gesture continues as the status quo mainly to avoid backlash from Beijing.

For U.S. military members visiting Taiwan, coat and tie or business casual is the standard attire for high-level or headquarters engagements. The picture below (Figure 1) was taken at the presidential palace in April 2012 after the Han-Kuang exercise out-briefing with President Ma Ying-jeou, cabinet members, and the military general staff. All U.S. active-duty military members (first three from left), including an Army Colonel from the Pacific Command (now Indo-Pacific Command) and two officers stationed at the American Institute in Taiwan, were dressed in civilian attire, while the Taiwan general staff were all in uniform.



Figure 7: Presidential palace in April 2012

The next picture (Figure 2), also from 2012, was taken during a Taiwan Air Force delegation visit to the Pentagon. General Yen Ming (at the head of the table), then Commanding General of the Taiwan Air Force and his Chief Master Sergeant Pan (on left side of picture), can be seen in civilian attire while the U.S. Air Force Chief of Staff General Norman Schwartz, the Chief Master Sergeant of the Air Force, along with other U.S.A.F members are in uniform. Worth noting is that the author who participated in both the out-brief pictured above and this visit, dressed differently for the two official engagements based on where the event took place. In the first picture taken in Taiwan's presidential palace, the author, first from left, dressed in civilian attire, to debrief President Ma and his staff. In the second picture taken at the Pentagon, the author was in his U.S. Air Force uniform while sitting between General Schwartz and General Yen to serve as an interpreter.



Figure 8: Taiwan Air Force delegation visit to the Pentagon, 2012

For U.S. military members engaging at working levels, utility or tactical casual (such as REI or 5.11 tactical clothing) is the norm. Uniform restrictions are only waived on case-by-case basis for safety reasons. For instance, during U.S. assistance with Typhoon Morakot recovery operations in 2009, U.S. military members wore utility uniforms to perform flight and ground duties. Figure 3 shows a U.S. Marines aircrew wearing tan (desert) fire retardant flight-suits while off-loading a pallet of relief supplies from the back of a Marine Corps KC-130, based out

of Okinawa Japan, on to a to Taiwan Air Force "k-loader."



Figure 9: U.S. Marines aircrew off-loading a pallet of relief supplies

The current uniform policy for U.S. Marine Corps guards at the new AIT compound is a prominent example of Washington's exceptionalism. Although Marine guards normally wear uniforms for duty, those posted at AIT perform duty in civilian attire. According to the official United States Marine Corps Embassy Security Group website, "The United States Marine Corps has participated in the internal security and protection of U.S. Embassies and Consulates on a formal basis with the Department of State since 1948...Marine Security Guards have and continue to defend diplomacy in over 150 countries during dangerous scenarios including

revolutions, attacks, and natural disasters."²⁴⁴ Marine guards have not been posted in Taiwan since the United States severed official relations with Taiwan in 1979 and transitioned embassy functions under AIT. Since AIT has served as Washington's de-facto embassy on the island, it has been guarded by locally hired security. However, in April 2019, AIT officially confirmed plans for the US Marines to be posted at AIT's brand-new compound in Taipei's Neihu district.²⁴⁵ While some interpret the opening of the new AIT compound and posting of Marine guards as indication of Washington's increased support for Taiwan, the fact remains that Taiwan remains an exception because the Marines posted there are not in uniform.

Military uniform restrictions are significant because these Washington mandated guidelines set the tone for the whole of U.S. government to normalize exceptionalism towards Taiwan. Based on this sense of exceptionalism, individuals and institutions at various levels then develop the perceptions that there is a professional responsibility to be restrictive towards Taiwan. To illustrate the tendency, an active duty U.S. Marine Corps Lieutenant Colonel who gave a presentation on amphibious warfare at the 2018 U.S.-Taiwan Defense Industry Conference that was held in Annapolis, Maryland, donned civilian attire instead of his uniform for the presentation and the entire 3-day event. Another active duty officer, the Taiwan desk officer for the Secretary of the Air Force's (SECAF) International Affairs Department and supposedly the SECAF's Taiwan expert, also attended the event in civilian attire. He only changed into his Air Force uniform after active duty members stationed at AIT corrected his interpretation of uniform guidelines for interacting with Taiwan. Incidents such as these, which demonstrate exceptionalism at Individual levels, are only a small representation of the extensive

²⁴⁴ Marine Corps Embassy Security, 2020. *Group Discipline, Vigilance, Professionalism*. Accessed May 1, 2020. https://www.mcesg.marines.mil/Become-a-MSG/What-is-MSG-Duty/.

²⁴⁵ Asia Times, 2019. "Marines to guard new US compound in Taiwan." April 4. *Asia Times*. Accessed April 24, 2020. https://asiatimes.com/2019/04/marines-to-guard-new-us-compound-in-taiwan/.

institutionalized exceptionalism that Taiwan faces in U.S.-Taiwan security cooperation interactions.

Specific to the FMS-related interactions, Taiwan's ability to make purchase requests, benefit from standard procedure, and elevate grievances are all undercut by Washington's institutionalized practices. At each step, the U.S. defense enterprise treats Taiwan differently.

As a starting point, Washington subjects Taiwan to a non-standard process for initiating FMS procurement requests. Whereas the standard process is to initiate any FMS requests by submitting a letter of requests (LOR) to the Defense Security Cooperation Agency (DSCA), Taiwan has to pre-coordinate its requests with Washington, in what AIT's Chief of the Security Cooperation Section described as "mother may I" in order to receive informal U.S. interagency consent before formally submitting requests via LORs. 246 To initiate FMS procurement requests, potential buyers would normally have two standard options. The first option is to submit a LOR for price and availability (P&A), which requests that the U.S. government provide data breaking down what specific items and associated services are available and how much line items will cost. If the P&A data is acceptable, potential buyers can then submit a LOR for letter of offer and acceptance (LOA), which essentially asks the U.S. government to draft a purchase contract. Once the contract (LOA) is finalized and signed by both parties, the procurement case becomes official and actions can begin toward the eventual delivery of items or services. In the second option, potential purchases can bypass the LOR for P&A and go directly to submitting a LOR for a LOA. This option provides a tradeoff by forgoing opportunities to extensively explore and negotiate the details of a purchase and instead expediting the timeline to contract execution. In

²⁴⁶ Donohue, Luke. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

theory, either option one or two should be available to any potential buyer at any time.

Procedurally, there is no reason to deny any buyer's ability to submit a LOR because

Washington retains ability to disregard or deny any official requests. Even as such, Taiwan is an exception to this normally straightforward process.

Washington regularly rebuffs Taipei's ability to submit LORs for both P&A or LOA, convoluting Taiwan's process for initiating an FMS procurement. The common understanding among defense insiders familiar with this dynamic is that Washington rebuffs LORs from Taiwan based on some combination of political sensitivity and Taiwan Relations Act considerations. In terms of political sensitivity considerations, Washington tries to account for Beijing's potential reactions and how such reactions would impact U.S.-China relations. For instance, selling Taiwan F-35s, which are the latest generation of U.S.-produced fighter jets, might have drawn excessive adverse reactions from Beijing. Approving the sale of F-16V, which are an older generation of fighters, manages to support Taiwan's defense needs while avoiding seeming provocative. However, this is not to say that F-35s may not become a viable option for Taiwan in the future if relations between Washington and Beijing continue to deteriorate.

As for the Taiwan Relations Act, the U.S. defense enterprise toils with the guidance "to provide Taiwan with arms of a defensive character" and often tends to interpret the phrase as providing weapons only capable of defense.²⁴⁷ As an example, selling Taiwan a billion-dollar phased array radar system was an easier decision than selling Taiwan Harpoon missiles. Whereas the land-based radar is used for surveillance and has no offensive capability, the Harpoon missile is an all-weather, over-the-horizon, anti-ship missile that can be employed to initiate attacks.

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²⁴⁷ Liao, Anson. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

Given the above considerations, Taiwan regularly encounters additional hurdles while attempting to initiate FMS requests.

Former AIT Director Bill Stanton used the F-16 procurement request to illustrate that "Taiwan faces an uphill battle at every turn" when it comes to security cooperation, claiming that the United States repeatedly refused to even accept a LOR from Taiwan to purchase an additional 66 F-16s. He recalled a U.S.-Taiwan discussion during Monterey Talks where Evan Medeiros, who was the Director for China, Taiwan, and Mongolia on the National Security Council, commented to Taiwan's then Deputy Defense Minister Andrew Yang, "You keep on talking about how you need F-16s but I don't hear you presenting a strategic case about how they would be employed and what effects they would have." According to Stanton, a Taiwan general who was also present at the discussion, smartly retorted "Sir, when the Japanese, Koreans, or other friends of yours ask to buy weapons, do you first ask them to justify requests by outlining their employment strategy for these weapons?" Regardless of how the rest of the conversation progressed, Washington did not accept a LOR for the F-16s until early 2019, twelve years after Taiwan initially budgeted for and expressed interest to buy more F-16 fighter jets in 2007.²⁴⁹

Former Taiwan Army general Anson Liao expressed frustration with another uphill battle—Washington's narrow interpretation of the TRA. Liao maintains that Washington often chooses to interpret the TRA's guidance "to provide Taiwan with arms of a defensive character" as only providing Taiwan with "weapons that cannot reach China." Under this interpretation, fighter jets, submarines, and surface-to-surface missiles would not meet the TRA's intent but M1A1 tanks and anti-tank missiles would. For Liao, this type of thinking is a "tactical joke."

²⁴⁸ Stanton, Bill. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

²⁴⁹ Global Security, 2020. *F-16 Fighting Falcon*. Accessed March 9, 2020. https://www.globalsecurity.org/military/world/taiwan/f-16.htm.

From his perspective as a former military general, it would be tactically absurd to just stand idle while watching the enemy stage for an invasion. In his words, "There must be something wrong with my head if I do not try to stop the enemy on his shores when I know he is about to attack." Clearly, Washington is not ready to integrate Taiwan into its Joint Concept for Access and Maneuver in the Global Commons (JAM-GC), which emphasizes defeating adversaries "attempting to deny freedom of action to U.S. and allied forces" by maneuvering and projecting power. ²⁵¹

In addition to pre-screening initial requests, Washington also limits Taipei's ability to utilize standard FMS procedure. Army Colonel Luke Donohue, the Chief of the Security Cooperation Section at the time of this writing, who is not only the highest-ranking active duty military official stationed in Taiwan but is also Washington's principle in-country security cooperation specialist, provided an example. Donohue describes how the Defense Security Cooperation Agency (DSCA) has not allowed Taiwan to use the Pre-Letter of Request Assessment Requests (PAR) procedures to help compress FMS approval timelines. PAR is a standard procedure that is, in theory, available to any security partner. According to DSCA's Security Assistance and Management Manual, security cooperation organizations (SCO) such as Colonel Donohue's Security Cooperation section, upon becoming "aware of credible demand signals" from security partners, can generate a PAR, which is a document with relevant information that prompts the inter-agency (IA) to make technology security and foreign disclosure (TSFD) release determinations that are required for transferring potentially classified

²⁵⁰ Liao, Anson. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

²⁵¹ Hutchens, Michael, William D. Dries, Jason C. Perdew, Vincent D. Bryant, and Kerry E. Moores, 2017. "Joint Concept for Access and Maneuver in the Global Commons: A New Joint Operational Concept." January 27. *National Defense University Press.* Accessed June 1, 2020.

https://ndupress.ndu.edu/Media/News/Article/1038867/joint-concept-for-access-and-maneuver-in-the-global-commons-a-new-joint-operati/.

information or technologies.²⁵² TSFD release determinations are normally triggered by LORs for P&A and can take lengthy periods to complete (depending on the technology and the number of agencies that the approvals have to staffed through). Given that Washington often delays Taipei's ability to submit LORs, the PAR process can at least compress the FMS timeline by putting release permissions in place to facilitate prompt transfers once Washington gives Taipei permission to formally initiate FMS requests via LORs. PAR can potentially reduce Taiwan's FMS time by months, or even years, if Taiwan bypasses LOR for P&A and goes straight to LOR for LOA. Allowing Taiwan to utilize standard processes such as PAR would facilitate FMS flow rate and therefore potentially help increase the amount of funds Taiwan spends on U.S. defense hardware.

Besides limiting Taipei's ability to initiate FMS requests and utilize standard procedure, Washington also restricts Taiwan's access to higher level U.S. officials, undercutting Taipei's ability to engage in strategic dialogue or elevate grievances. Former AIT Director Bill Stanton pointed out that the annual Monterey Talks, purportedly the highest level of defense-focused strategic dialogue between Washington and Taipei, take place in Monterey, California instead of Washington, D.C. He believes, however, that holding the talks in California does not support the ultimate goal of the Talks, which should be to maximize the interaction between high-level U.S. and Taiwan defense decision makers. When key-players do not have the ability to leave their offices in Washington for a few hours to convene with the Taiwan delegation and instead have to deliberately journey to the West coast, attending meetings becomes much less feasible. With the

²⁵² Defense Security Cooperation Agency, 2020. *Security Assistance Management Manual. C3.1.2.* Accessed April 11, 2020. https://www.samm.dsca.mil/chapter/chapter-3.

current arrangement, Stanton estimates that at best, key-players in D.C. probably just skim the meeting minutes before filing it away somewhere.²⁵³

A separate contact who has worked in the Office of the Secretary of Defense, and did not wish to be named, agreed that Taipei's access to high-level U.S. defense officials has traditionally compared unfavorably to other security partners. Reflecting on his experience, he pointed out that while other security partners, such as Israel or Singapore, would elevate grievances directly to the SECDEF when security cooperation mechanisms were not responsive enough, Taiwan usually just remained polite and patient while staying engaged with lower-level staff officers. If the SECDEF received a complaint directly from a security partner, he normally issued "red cards" to staff officers or agencies responsible for that country's portfolio, essentially directing them to stop working on everything else and prioritize responding to the issue being queried. While there was not specific guidance prohibiting Taiwan from exercising this option, the source believed that Taipei representatives did not do so because they felt like Taiwan was at America's mercy and could not risk irritating anyone in the U.S. defense enterprise.

Without Exceptions

"Without exceptions," or subjecting Taiwan to status quo bureaucratic processes, compounds the detrimental effects caused by the exceptionalism tendencies discussed above. Although Washington's exceptionalism towards Taiwan in certain areas demonstrates that the U.S. government is aware of Taiwan's uniqueness as a security partner, this awareness has not translated into making special accommodations for Taiwan to actively improve U.S.-Taiwan security cooperation. Specifically, Washington does not dedicate any additional consideration

²⁵³ Stanton, Bill. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

towards managing the U.S. personnel involved in U.S.-Taiwan's security cooperation, extending Taiwan administrative priority in FMS, and streamlining official communications from the United States government.

Personnel Management

Indiscriminate personnel selection along with excessive turnovers undermine effective engagement and continuity. Because the pool of U.S. practitioners working on Taiwan-related defense issues full-time is small and the issues are complicated, personnel selection and turnover can have exaggerated impacts to U.S.-Taiwan security cooperation efforts. In the Office of the Secretary of Defense, there is normally only one or two desk-officers who are fully dedicated to Taiwan issues. Within the individual military service headquarters, there is usually only one officer to focus on Taiwan issues full-time. At the Defense Security Cooperation Agency, only a single civilian desk officer oversees all Taiwan FMS cases. At the American Institute in Taiwan, there are two desk officers (one active duty and one civilian) to fulfill the security cooperation needs from each of Taiwan's branches of services. The end result is that throughout all of the different U.S. organizations involved in U.S.-Taiwan security cooperation, only a dozen or so people are engaged full-time with any specific Taiwan-related defense issue. Having so few in numbers means that each person's contribution makes a substantial difference on Taiwan-related defense issues. In addition to personality traits, competencies such as professional expertise, language competency and tour length all have a tremendous effect when the pool of practitioners dedicated to Taiwan is so small.

Individual personalities can also have a significant impact to security cooperation outcomes with Taiwan. As an example, OSD's lead representative on Taiwan issues, who

stubbornly insisted on conducting a comprehensive assessment of Taiwan's defense readiness in the late 2000s, left effects that still traumatize Taiwan today. This civilian OSD representative, who was dedicated full-time to Taiwan issues, traveled from Washington to Taiwan on forty-four separate Taiwan-funded trips in order to assess all of Taiwan's defense capabilities. Seeing that this OSD representative was a conduit into the high echelons of the U.S. defense establishment, Taiwan rolled out the red carpet to welcome each visit.

During the interviews conducted for this research project, most of the respondents still recoiled at the fact that the number of total visits and the resulting superficial assessments and recommendations. According to sources the mainstay of the assessment report was that Taiwan has an inherently robust defense infrastructure because everything was built to withstand natural disasters and that Taiwan should boost asymmetrical capabilities by procuring more hardware such as sea mines. Unfortunately, Taiwan's defense planners did not think being able to resist natural disasters equated having better civil defense capacity. Also to their dismay, the United States Navy did not sell sea mines, which eliminated the option to fulfill an OSD recommendation by procuring American hardware.

Taiwan remains scarred by this assessment experience, which primarily resulted from the eccentric personality and decisions of one individual. Multiple interviewees who were all high-ranking defense leaders when this assessment took place still sigh and shake their heads at the mere mentioning of this experience. One can certainly infer from the head-shaking and sighs that arose while discussing this matter that the experience caused a loss of confidence in OSD. The trauma is so extensive that "assessment" is now likened to a four-lettered word for these individuals. In this vein, better scrutinizing personnel selection and preventing similar

occurrences in the future would go a long way in ensuring strong defense-related interactions with Taiwan.

In addition to personalities having big effects in U.S-Taiwan defense interactions, excessive turnovers often cause havoc. For example, during the author's 2009-20012 assignment as the Air Force Security Cooperation Officer posted in the American Institute in Taiwan's Security Cooperation Section, there were three different Secretary of the U.S. Air Force Taiwan desk officers, three different Pacific Air Forces Taiwan desk officers, and two different DSCA Taiwan desk officers. These dizzying rotations certainly challenged continuity. Each time a new desk officer assumed a position, that individual would travel out to Taiwan on a "familiarization trip" in order to better understand the issues and meet the individuals involved with all aspects of U.S.-Taiwan security cooperation. Desk officers usually took months to become familiar with all Taiwan-related defense issues and even longer to actually become proficient or savvy.

The Taiwan Air Force along with Ministry of Defense contacts often complained that it was impossible to keep U.S. personnel well-informed on all the issues and initiatives when desk officer turnovers occur so rapidly. In their eyes, every time a desk officer finally becomes knowledgeable enough to be useful, they leave. The truth of the matter is that U.S. desk officer positions are often used as career holding patterns or stepping stones instead of positions that deliberately prioritize security partner needs. Desk officers are often assigned to country desks to await opportunities such as professional military education (PME) or command positions. This is evident from the fact that officers often spend far less time in these positions than the programmed three-year assignment.

Beyond eccentric personalities and rapid rotations being inhibitors to effective interactions, the lack of foreign language proficiency continues to be a problem among desk

officers responsible for the portfolios of U.S. security partners. The U.S. military often refers to language proficiency as a "force multiplier," meaning that language proficiency allows military members to accomplish more with fewer resources. According to this logic, the ability to communicate in a foreign language further enhances the effectiveness of professional expertise. With DoD's increased emphasis on foreign languages in the last two decades, many military members have become language-enabled. Hence, matching a language enabled member who has the professional expertise to support the designated phase should be Washington's ultimate goal. Unfortunately, many organizations do not "language code" a billet, meaning they do not strictly require language capability in filling a position. Fearing the potential that assignment authorities who match people to positions would use the lack of fully qualified individuals as a reason not to fill a position, leaders often take the "having a less qualified somebody is better than having nobody at all" approach. The problem is that if leaders of organizations do not code billets to demonstrate actual demand, the education, training, and development pipeline will never receive the proper impetus to produce fully-qualified individuals. Left unchecked, this effect can have the potential to develop into a vicious cycle.

Administrative Priority

Expanding the aperture beyond personnel management, not affording Taiwan's FMS cases any administrative priority to compensate for subjecting Taipei to previously discussed delays in initiating procurement requests, extends the entire request to delivery timeline for Taiwan. The U.S. defense establishment does not proactively advance Taiwan's FMS cases to the front of the administrative queue, provide Taiwan with any pre-coordinated and approved

menu of procurement options, or conduct internal feasibility assessments prior to making all procurement recommendations to Taiwan.

U.S. Army Colonel Donohue, AIT's Chief of the Security Cooperation Section, pointed out that FMS cases involving Taiwan currently do not receive any priority handling at the Defense Security Cooperation Agency. Taiwan's cases go into a generic queue along with cases from all other U.S. security partners and are handled on first-in, first-out bases. In his opinion, this lack of prioritization is inconsistent with DoD interests. According to Donohue, Taiwan is a vital link in the first island chain to contain China. This assessment is affirmed by the fact that the commander of U.S. Indo-Pacific Command referred to Taiwan as the "spine of the first island Chain." Against this backdrop, any risk to Taiwan's security is also a direct risk to U.S. security interests. As such, Washington has good reason to prioritize Taiwan's FMS cases. Extrapolating on this logic, Donohue believes that assisting Taiwan should be backstopped by appropriate risk-mitigation measures that include proportional prioritization. Ultimately, helping Taiwan is also about managing risk to the United States because in the event of a conflict with China, any shortfalls in Taiwan's self-defense capabilities would have to be supplemented by U.S. military assets. 254

In addition to queueing like all other security partners, DSCA also treats Taiwan with standard procedural passivity in terms of not disclosing what systems are available for purchase at any given time. This unknown keeps Taipei in constant uncertainty, speculating on both what systems are be available and when. Being in suspense certainly complicates Taiwan's defense planning and budgeting processes. For example, Taipei has repeatedly budgeted for procurements such as F-16 C/Ds and submarines only to have unspent funds returned to the

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²⁵⁴ Donohue, Luke. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019. "Spine of first island chain" comment from Donohue meeting with COMUSINDOPACOM.

treasury. As former Minister of Defense Feng explained, money that is purposed for one thing, cannot be spent on another. These rules exist for oversight reason and serve to prevent MND misspending. The problem is that given the whole-pie concept of defense budgeting where allocation for one system often comes at the cost of neglecting another, each time a portion of the defense budget is allocated but not spent, some part of Taiwan's defense apparatus suffers for the lost opportunity to receive defense funds for that particular year.²⁵⁵ While this funding dynamic can be categorized as an internal issue for Taipei, Washington certain exacerbates anxieties.

Another instance of administrative passivity is that the U.S. defense establishment does not always fully vet all procurement recommendations to Taiwan. This lack of internal vetting can lead to awkward situations where U.S. recommendations to Taiwan are actually not available for sale to Taiwan. Such was the case with OSD's recommendation for Taiwan to purchase sea mines around 2012-2013. Although one of the U.S. recommendations that emerged from OSD's comprehensive assessment was for Taiwan to enhance its asymmetric warfighting capabilities by boosting its inventory of sea mines, the U.S. Navy International Programs Office (NIPO), which is the organization that oversees all navy-related FMS programs, denied the sale of sea mines to Taiwan after citing both releasability and availability issues. Taiwan eventually augmented its sea mine inventory through domestic production. In Colonel Donohue's opinion, instances such as these reinforce the fact that U.S. recommendations are meaningless if Washington is not ready to provide Taiwan with the hardware or assistance needed to actualize recommended capabilities.

²⁵⁵ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

²⁵⁶ According to a DSCA source familiar with the incident who did not wish to be named.

²⁵⁷ Donohue, Luke. Interviewed by Steven Li. Personal interview, Taipei, Taiwan, April 22, 2019.

Official Communication

In addition to personnel management and administrative priority shortcomings, Washington obfuscates official communications with Taiwan. Former Director Stanton and Colonel Donohue both emphasized the importance of achieving unified and consistent messaging. For these veteran practitioners, this is essential not only for effective security cooperation but also for U.S. credibility.

Stanton provided two examples to illuminate how the unofficial nature of U.S.-Taiwan relations necessitates extra efforts to streamline official communications. First, the American Institute in Taiwan (AIT) has an additional layer of bureaucracy, a headquarters in Virginia, which can complicate unified messaging by usurping AIT in Taipei. Second, unofficial relations with Taiwan reduces the number of official meetings at the strategic level, which ushers in the opportunity for different individuals and organizations in the U.S. defense establishment to inject diverging recommendations. Both of these circumstances undermine unified and consistent messaging.

AIT headquarters, with its confusing use of position titles, complicates the official communication process between the United States and Taiwan by adding a layer of bureaucracy. According to the official AIT webpage, "AIT – Washington Headquarters, located in Arlington, Virginia, is the headquarters office of the American Institute in Taiwan. It serves as a liaison with its counterpart organization, the Taipei Economic and Cultural Representative Office (TECRO), as well as with U.S. government agencies."²⁵⁸ AIT's headquarters, commonly knowns as AIT-W, has a Chairman who "participates in policy level discussions on Taiwan. He represents the Administration in periodic visits to Taiwan and in meetings with Taiwan

²⁵⁸ American Institute in Taiwan, 2020. AIT – Washington Headquarters. Accessed April 17, 2020. https://www.ait.org.tw/offices/ait-washington-headquarters/.

representatives in the United States."²⁵⁹ Furthermore, AIT-W has a small staff including a Director for Political Military Affairs.²⁶⁰ Having a Chairman of AIT along with Director of Political Military Affairs in Virginia and a Director of AIT along with Chief of Security Cooperation in Taipei can obviously cause some confusion. The titles of these four positions can project a notion that the that the Director of AIT and Chief of Security Cooperation who are posted in Taipei are subordinate to the Chairman of AIT and Director of Political Military Affairs in Virginia. In practice however, the Director of AIT is a de facto ambassador who shoulders the State Department's chief of mission responsibilities in leading the country team to advance all U.S. interests in Taiwan. Unfortunately, the lines of responsibility between these positions are often so blurred that leaders and practitioners on both the U.S. and Taiwan sides become confused.

According to Stanton, there were certainly occasions during his time as AIT's Director that AIT-W appeared to have usurped AIT-T in U.S.-Taiwan security cooperation interactions.²⁶¹ Stanton's assessment is supported by the 2012 Inspection of the American Institute in Taiwan/Washington conducted by the United States Department of State and the Broadcasting Board of Governors Office of Inspector General, which found that in terms of representation and execution, AIT-W has overextended its intended liaison role. These overextensions, primarily caused by non-standard practices as compared to security relationships with other U.S. partners, lead to unnecessary confusion.²⁶²

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²⁵⁹ American Institute in Taiwan, 2020. *Chairman James F. Moriarty*. Accessed April 17, 2020. https://www.ait.org.tw/offices/ait-washington-headquarters/chairman-james-f-moriarty/.

²⁶⁰ U.S. Department of State, 2012. *Inspection of the American Institute in Taiwan*. Accessed April 17, 2020. https://www.stateoig.gov/system/files/187093.pdf.

²⁶¹ Stanton, Bill. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

²⁶² See Conducting or Carrying Out Unofficial Relations section for details. U.S. Department of State, 2012. *Inspection of the American Institute in Taiwan*. Accessed April 17, 2020. https://www.stateoig.gov/system/files/187093.pdf.

Being subjected to the AIT-W versus AIT-T confusion requires Taipei to communicate separately through both Washington and Taipei channels and fulfill protocol obligations with both entities. When the Chairman of AIT or the Director of Political and Military Affairs visits Taiwan for example, Taipei holds separate meetings with these individuals to emphasizes the same messages that have already been delivered to the Director and Chief of Security Cooperation Section. This presents an obvious challenge to officials on both sides to maintain synchronized messaging.

Involving AIT-W can also project inaccurate perceptions. For example, if an AIT-W member delivers a FMS approval or an invitation to visit the United States, the gesture, can perpetuate the inaccurate perception that AIT-W is an approving or issuing authority. In reality, AIT-W only serves a liaison or coordinating function. This was a specific concern highlighted by the IG report.²⁶³

In addition to causing complications with the AIT-Taipei and AIT-Washington structure, unofficial relations reduce the number of strategic level official meetings between Washington and Taiwan, which ushers in the opportunity for different individuals and organizations in the U.S. defense enterprise to inject diverging recommendations. Although the Taiwan Travel Act of 2018 has encouraged higher level engagements, only a handful of U.S. officials, limited to the deputy assistant secretary level, have visited Taiwan. The United States and Taiwan still have limited direct communications on the executive level (recall the uproar caused by the phone call between President Trump and President Tsai) and still rarely communicate at the cabinet level.

Minimum high-level communications effectively eliminate the opportunity to synchronize security cooperation initiatives from the top down, allowing mid-level practitioners

154

²⁶³ Ibid

and industry representatives to have an exaggerated ability to shape defense initiatives. For example, Stanton recalled that various parts of the U.S. government gave Taiwan a myriad of suggestions on how to meet fighter aircraft shortfalls. One U.S. official recommended that Taiwan establish an FMS case to conduct a 3-year feasibility assessment on procuring F-35s. Another DoD representative suggested leasing F-15s or F-18s. At the same time, Lockheed Martin pushed F-16 acquisition by touting potential price increases if Taiwan's orders are not submitted before production lines shut-down. From Stanton's perspective, these contrasting recommendations were really detrimental to security cooperation because they pull Taiwan in so many different directions. As he sees it, the United States really needs to learn to "sing off of the same page." 264

Colonel Donohue shares former Director Stanton's sentiment. For Donohue, unified messaging is essential to ensuring continued U.S. credibility. There needs to be a continuity in the assurances provided by all American officials. Unfortunately, this has not been the case. According to Donohue, some U.S. officials have informed Taiwan that previously purchased U.S. systems can no longer be supported, which requires Taiwan to buy new replacement systems from the United States. The problem is that along with the original purchase, previous U.S. officials assured Taiwan that the United States would provide enduring logistical support for the purchased items. By defaulting on previous assurances, the United States has no credibility to provide Taiwan with any new assurances.²⁶⁵

Although Donohue did not cite any specific examples, the conversation reflected Taiwan's experience with the F-5 fighters purchased from the United States. For at least the last decade, Taiwan has struggled to find various replacement parts to keep its F-5s operational. The

²⁶⁴ Stanton, Bill. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

²⁶⁵ Donohue, Luke. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

problem stems from the fact that the United States Air Force no longer produces replacement parts for F-5s, which puts Taiwan's operational readiness in a precarious situation, especially when Washington has for so long refused to sell new fighter aircraft to Taiwan. Around 2010, a Taiwan Air Force deputy commanding general even personally visited the 309th Aerospace Maintenance and Regeneration Group, often called "The Boneyard" for storing mostly likely obsolete aircraft, located on Davis–Monthan Air Force Base in Tucson, Arizona, in the attempt to secure salvageable spare parts for Taiwan's F-5 fleet. According to a May, 2019 FlightGlobal article, Proven Aircraft Office of the U.S. Air Force Materiel Command has issued a global search list of 37 separate F-5 parts, ranging from windshield panels and fuel tanks to air data computers, in the attempt to help locate required parts for Taiwan. Instances such as the above can certainly degrade the credibility of any U.S. assurances to Taipei that systems purchased in the future will be supported for the entirety of its operational life span.

Exceptionalism Without Exceptions Summary

Washington's procedural approach to defense relations with Taipei, which can be described as exceptionalism without exceptions, limits the extent to which Taiwan can enhance its own defenses through U.S.-Taiwan security cooperation. On one hand Washington subjects

²⁶⁶ See Shirley Kan's "Taiwan: Major Arm Sales Since 1990" for detailed timelines on U.S. refusal to sell additional F-16s. Kan, Shirley A. "Taiwan: Major U.S. Arms Sales since 1990." Congressional Research Service (CRS) Reports and Issue Briefs, 2015.

²⁶⁷ The author personally drove the General along with his aid from Luke AFB in Phoenix, where USAF-TAF meetings were being held, to DM AFB in Tucson during a one-day out-and-back trip. Even though the driving time was 5 hours round-trip, the General insisted on making the trip in the attempt to locate desperately needed parts. Unfortunately, even after touring the storage facility and speaking to the 309 ARMARG commander, Taiwan was still unable to secure the desired spare parts.

²⁶⁸ Waldron, Greg, 2019. "USAF looks to help Taiwan with F-5 spares." May 1. *Flight Global*. Accessed June 1, 2020. https://www.flightglobal.com/usaf-looks-to-help-taiwan-with-f-5-spares/132509.article.

Taipei to exceptionalism by applying different standards to security cooperation interactions with Taiwan. Non-standard military uniform protocols and FMS procedures offer clear evidence of Washington's special restrictions. On the other hand, Washington handles Taiwan-related defense needs with a condition of status quo without affording Taiwan any special consideration. The lack of any special attention towards personnel management, administrative priority, or official communication all exacerbate the effects of exceptionalism. Consequently, the combination of exceptionalism and without exceptions weakens Taiwan's ability to enhance its self-defense by cooperating with the United States.

Taipei's Bureaucratic Rigidity

Taiwan's platform-specific (such as F-16C/D) FMS request and budget management procedures deprive Taipei of the flexibility to respond to the dynamic conditions that impact FMS. Taipei uses three documents corresponding roughly to three phases in order to generate and vet FMS requests. The three documents and phases collectively identify defense capability shortfalls and then match specific platforms to the shortfalls. Once a desired platform has been identified, Taipei persistently conveys its desire to purchase the platform to Washington. This bureaucratic process, averaging at least a year and a half to two years long to generate a procurement request, is both time consuming and ineffective. To put it simply, Taipei's bureaucratic rigidity is not suitable for keeping up with the governing conditions of its everevolving security environment. Hence, the current procedures have a stifling effect on the Island's ability to enable its self-defense through a security cooperation relationship with the United States. This section will briefly introduce the documents, phases before arguing that Taipei's bureaucratic rigidity lacks responsiveness.

Documents

Taiwan uses three governing documents to generate system-specific FMS procurement requests. These documents are the operations requirements document (ORD), systems analysis report (SAR), and investment plan (IP). The timeline from initiation to completion, where MND will take the complete package to the Legislative Yuan to request supporting funding, is usually one and a half to two years.²⁶⁹ In Figure 4, obtained from Taiwan's 2017 National Defense Report, the three documents are used solely for Step 1, "Armaments requirements formulated according to operational needs."²⁷⁰

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Liao, Anson; and Liu, David. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April, 2019.
 Feng, Kent, 2017. "Taiwan National Defense Report." U.S.- Taiwan Business Council. Accessed March 19,
 https://www.us-taiwan.org/resources/how-to-find-taiwan-defense-military-and-national-security-information/.

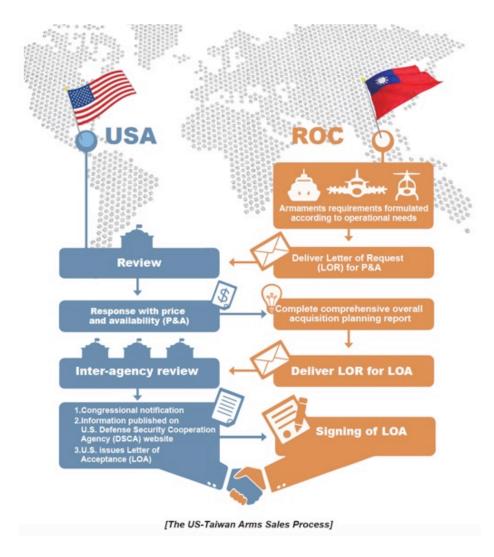


Figure 10: Flow chart from Taiwan's National Defense Report, 2017

The operational requirements document is used to define the details. This document starts with a conceptual defense requirement in specific parameters and applies concepts of operations against the backdrop of existing capabilities in order to identify explicit capability shortfall that a new system needs to fulfill. According to Liu, NDU professor of acquisitions, MND's operations directorate (J3) is responsible for completing the ORD and takes approximately six months to complete.²⁷¹

²⁷¹ Liu, David. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 18, 2019.

After the ORD identifies the explicit shortfall, the system analysis report determines how to best fulfill the shortfall. Professor Liu describes the SAR as a very complicated and sophisticated process that conducts both quality and quantity analyses in order to answer the questions "how many" and "why" on which systems to acquire. The Integrated Assessment Office, which reports to Vice MINDEF, writes this report if the procurement is expected to be higher than NT\$1 billion (approximately US\$33 million). For lower amounts, the individual service requesting the system completes the report.

Once the SAR determines the appropriate system type and number, the Armament Bureau authors the investment plan to support the specific acquisition. The investment plan outlines the procurement methods, sources, dollar amounts, and financing timeline for the proposed system acquisition. Methods can include foreign military sales, direct commercial sales, co-production and domestic production. Source decisions can involve single source, multisource, and various prime contractor, sub-contractor, or integrator decisions. Dollar amounts and timelines involve what specific systems to buy and when. In laymen's terms, the investment plan determines how to buy what from whom, when, and at what prices.

Phases

The four phases to Taiwan's FMS initiation process—requirement development, validating, budgeting, and requesting—collectively limit procurement options. According to both former Defense Minister Feng and former CNO Chen, Taiwan thoroughly researches the political feasibility, credibility, capability, availability, supportability, sustainability, survivability, and affordability of various systems before deciding on a particular system to

²⁷² Liu, David. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 18, 2019.

pursue and making formal requests.²⁷³ Although these procedural phases are intended to deliberately help Taiwan to procure the proper weapons systems, the tradeoff is that they inflict associated limitations.

Adhering to these four phases extends timelines to initiate procurement and limits platform options. First, the requirements development phase relinquishes procurement flexibility by aligning defense needs with specific platforms. Second, the validation phase solidifies platform choice by verifying requirements and estimating availability and feasibility. Next, the budgeting phase attempts to match funding to procurement timelines based on certain assumptions. Finally, Taipei formulates and attempts to formally request a specific weapon system, such as the F-16. According to former Defense Minister Feng and retired General Liao, the intent of this entire process is to develop scrutinized requests before delivering them to Washington via consistent messaging. In Feng view, "FMS is not a pick-up game." He believes that Taipei needs to adhere to a steadfast decision-making process and stick with decisions once they are made.²⁷⁴ General Liao shares the same sentiment and thinks that Taipei needs to be predictable, which entails demonstrating persisting needs by avoiding vacillating requests.²⁷⁵ Judging by Taipei's history of persistent messaging toward Washington, even ministers of defense who may be influenced by service loyalties appear to sideline their own biases, at least externally.

²⁷³ Feng, Kent; and Chen, Richard. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 18, 2019.

²⁷⁴ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

²⁷⁵ Liao, Anson. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

Lack of Responsiveness

Taiwan's proactiveness in deliberately researching, validating, budgeting, and requesting weapon systems undermines the ability for the FMS process to respond to its defense requirements. The elaborate four-phase process outlined above is not only complex and time consuming but also contingent upon best-guessed assumptions such as who will pay production startup costs, what the exchange rate will be during contract signing, and what supporting subsystems will be authorized for release with the procurement. In this context, when Washington does not even agree to accept a formal procurement request for the particular system Taiwan desires, even after Taipei spends a year and a half to two years developing the request, Taiwan might be better off shortening or bypassing the current documents and phases processes that generates platform-specific requests in favor of making capability-based requests. Whereas system-specific requests ask the U.S. government to agree to sell a particular platform, capability-based requests seek any weapon system that can fulfill a desired purpose. Furthermore, making capability-based requests allows Taipei to continue demonstrating predictability and persistent needs without limiting the flexibility of security cooperation options and incurring readiness drawbacks.

Tethering defense needs to specific weapon systems in the requirements development phase has inherent drawbacks. System-specific policies limit procurement options, potentially undermines readiness, and allows Washington to rebuff requests more easily. Taiwan may be better off making capability-based requests instead of asking to purchase specific weapon systems.

From a FMS perspective, insisting on a specific weapon system limits procurement opportunity. The availability of U.S. weapon systems is often determined by factors such as

political considerations, DoD needs, production cycles, supply chains, and the state of cooperation between Washington and its security partners. By insisting on a specific weapon system, Taipei risks miscalculating any one of the above dynamic factors during the process of matching its requirements to a particular weapon system. Moreover, insisting on a particular specific weapon system relinquishes the opportunity for Taiwan to capitalize on deals that sputter between Washington and another security partner. Although this is not a regular occurrence, political or economic changes among U.S. security partners can occasionally cause shifts in procurement deals.

Insisting on a specific weapon system could also undermine defense readiness. Taiwan's Ministry of Defense representatives often cite streamlining maintenance and logistics as a main reason to make system-specific requests without fully acknowledging the potential negative impacts. Such was the case with the requests to buy an additional 66 F-16 C/Ds. For over a decade, Taiwan Air Force argued that moving towards "pure-fleeting" or having only one type of fighter aircraft in its inventory would make maintaining the fleet easier. The logic was that Taiwan would only have to manage one supply chain for parts and train maintenance personnel to fix only one weapon system. What this reasoning underappreciated was that "pure-fleeting" can endanger readiness if the entire fighter fleet becomes grounded. Safety concerns, often resulting from mishaps or observed system failures, are common cause for aircraft to be grounded while the issue of concern is being investigated or resolved. For Taiwan, a pure-fleet grounding of F-16s could completely eliminate its first-line air-to-air defense capability. In this regard, requesting a specific weapon system in the effort to evolve towards pure-fleeting may not be the most prudent choice.

Requesting specific weapon systems also affords Washington the latitude to rebuff requests more easily. For example, NIPO denied the release of the model of sea mine that OSD recommended to Taiwan because of system-specificity. Framing the OSD recommendation as a general area anti-access/area denial (A2/AD) requirement might have led to a different outcome. The U.S. Navy has a multitude of land, sea and air based weapons systems that are capable of supporting the A2/AD function. From this standpoint, while making system-specific requests invites yes or no answers, making capability-based requests afford more options.

Just like the requirement development phase, Taiwan's validation phase is also needlessly constricting. Validating that a particular weapon system is appropriate for Taiwan before Washington even signals any willingness to sell consumes precious resources. This step also extends the overall time required to formulate and convey vetted requests. Instead of deepening the commitment to the procurement of specific weapon systems in this phase. Taipei may be better off diverting resources towards exploring capability-specific collaboration opportunities instead.

Former Defense Minister Feng saw the value of expanding procurement opportunities when he suggested that Taipei should develop a menu of flexible options that seek to better integrate Taiwan into international defense cooperation activities. Instead of only purchasing defense articles directly from the United States via FMS, Taiwan could seek Washington's assistance in establishing relationships with security partners through coproduction, technology transfer, and supply chain integration opportunities. From Feng's perspective, the average politician or citizen underappreciates the fact that security cooperation can be conducted through a wide-spectrum of options.²⁷⁶ While Beijing may punish countries for activities such as selling

²⁷⁶ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

Taiwan defense articles, buying parts that are produced by Taiwan under licensing from the United States or contracting Taiwan to perform depot level maintenance on ships or aircraft may be viable alternatives for cooperation.

Retired General Liao shares Feng's sentiments that Taiwan's approach to FMS needs to be more flexible. As he sees it, Washington and the U.S. defense industry play the prevailing role in Taiwan's defense procurement, investment, and research and development opportunities, thereby determining the availability of parts and system selection. In addition, FMS contracting, production, and logistics are geared toward larger-scaled clients who deal in bulk. According to list compiled by USA Today using 2008-2018 using SIPRI data, Taiwan ranked number ten on having received the most defense articles from the United States. Saudi Arabia, Australia, UAE, South Korea, Iraq, Japan, Singapore, Turkey, and the United Kingdom were the nine countries ahead of Taiwan.²⁷⁷ From this perspective, Taiwan, as a smaller client, is better off dedicating resources towards figuring out how best to maximize efficiencies by cooperating with Washington and the U.S. defense instead of focusing primarily on validating specific desired systems.²⁷⁸

Developing detailed investment plans and formulating budgets accordingly prior to solidifying purchase contracts are procedures that systemically increase Taiwan's FMS rigidity even further. Once MND crafts Investment Plans based on notional procurement items, which are contingent upon many fluid circumstances, the LY approves (or denies) funding and payment schedules for the specific systems. However, the approved sums of funding and the payment

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²⁷⁷ Frohlich, Thomas, 2019. "Saudi Arabia buys the most weapons from the US government. See what other countries top list." March 26. *USA Today*. Accessed June 2, 2020. https://www.usatoday.com/story/money/2019/03/26/us-arms-sales-these-countries-buy-most-weapons-

government/39208809/. 278 Liao, Anson. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 8, 2019.

schedules rarely align with actual contracting timelines or transferring defense articles. The misalignment of allocations with actual schedules often causes apportioned funds to go unspent and returned to the treasury.

Unspent defense dollars are frequently returned to the treasury because apportioned expenditures that are not spent on the designated purpose and within the specified timeframe, cannot be repurposed without supplemental approval. That is to say funds intended for one system in a particular funding period have to be spent in that period and only on that item. Repurposing any apportioned defense funds requires reengaging the LY for approval. While this procedure provides civilian authorities with appropriate oversight of military spending, the tradeoff is that defense funding becomes slower to react to fluid procurement processes and dynamic defense environments. Former Minister of Defense Feng noted that when he was in charge of MND, a portion of the funds intended for personnel use, such as compensation and recruitment, was usually returned. However, sustainment costs, which pays for things such as maintenance and daily operations, never seemed to be enough. Also, FMS cost estimations were rarely accurate and FMS procurement opportunities and payment schedules hardly ever matched projections.²⁷⁹ In most cases, remediation measures were used to satisfy evolving defense needs.

Remediation actions such as special budgets, supplemental budgets, or budget amendments are tedious, time-consuming, and unreliable. Partisan politics can derail these stopgap measures funding efforts at key moments and create long-lasting effects. Former congressional researcher Shirley Kan outlines how partisan politics affected both diesel-electric submarine and F-16 C/D funding attempts over the last two decades.²⁸⁰ Taipei's partisan-politics

²⁷⁹ Feng, Kent. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 16, 2019.

²⁸⁰ See history of weapon system-specific timeline in Kan's report for details. Kan, Shirley A. "Taiwan: Major U.S. Arms Sales since 1990." Congressional Research Service (CRS) Reports and Issue Briefs, 2015.

funding issues is a significant contributing factor to the why Taiwan still does not have submarines or new F-16s.

Taiwan's persistent requests for the same specific weapon systems is the final inhibitor of FMS responsiveness and flexibility in the U.S.-Taiwan security relationship. While Taipei's intension is to deliver well-researched and pre-coordinated requests that demonstrate deliberate planning and persistent needs, repeating the same requests at every engagement has two potential downfalls over time; The messages can become trite and Taipei may start to increasingly lean on deference for delivery.

Repeating the same message undermines the potency of the content. Repetition must be leveraged diligently because there is a tipping point between reinforcing and diminishing.

Taipei's intention to demonstrate persistent need through consistent and specific requests to the entire U.S. defense establishment has logic and is commendable. However, focusing on consistent messaging without providing appropriate context such as changes in PLA capabilities makes conversations become predictable and trite and interactions lose impact.

Awkwardly trite encounters have occurred on multiple occasions. One memorable example was the meeting between the Taiwan Air Force Commanding General and Indo-PACOM's Deputy Commander. During this meeting that was scheduled for thirty minutes, the TAF general essentially started reading from the list of talking points asking the Deputy Indo-PACOM commander to support Taiwan's vetted list of requests. This went on for almost the entire time before the U.S. general expressed some perfunctory pleasantries and excused himself to get to his next appointment.²⁸¹ This meeting, which could have been an opportunity for meaningful dialogue, ended up being a missed opportunity due to Taiwan's attempt to deliver

²⁸¹ The author was the Taiwan Air Force delegation escort and an observer in this meeting. The visit to Indo-PACOM Headquarters was a part of Taiwan's 2012 visit to the United States.

consistent messaging. Having overserved undesirable outcomes similar to this occasion,

Taiwan's leaders have incentive to inject novelty into encounters in order to retain the attention
of U.S. leaders.

Deference can insidiously become the crutch to breathe novelty into trite dialogues. There is a straightforward explanation for this tendency. All U.S.-Taiwan security cooperation engagements have elements of who, what, when, why, where, and how. Of these elements, "how" is the only element Taipei can truly affect if it deliberately chooses to keep the messaging consistent. Taipei does not have much latitude in affecting the "who" element because Taiwan's representation is based on formality and reciprocity—the level of engagement along with the consistency of the U.S. delegation determines who Taipei sends. The "what" element is the content of the messaging, but as already noted above, Taipei's intent for consistent messaging eliminates flexibility. Next, the "when" and "where" elements are collectively determined by Taipei and Washington, which means Taiwan has no independent control. Finally, the "why" element remains consistent, that is, to boost deterrence and defense by perpetuating and routinizing U.S.-Taiwan security cooperation. This means "how" is the only element that Taiwan actively controls. As such, it is logical for Taiwan to habitually intensify acts of deference during U.S.-Taiwan encounters. Deference is often expressed through comments of reverence, exaggerated politeness, lavish receptions, and gift-giving.

Taiwan's deferential approach, however, can be misinterpreted and cause vicious cycles. Some U.S. defense officials may come to interpret Taiwan's deferential treatment as an affirmation of their own personal contributions to Taiwan's security. Within this context, some U.S. defense officials may develop a sense of infallibility and start to place excessive credence in their own ideas, gradually losing sight of Taiwan's perspective. The OSD representative who

visited Taiwan 44 times to conduct comprehensive assessments that offered Taiwan little value provides a good example of dynamic. Although Taiwan does not want to alienate or offend U.S. defense officials, ratcheting up the deferential treatment in the attempt to gain U.S. support is potentially counterproductive as doing so perpetuates a vicious cycle that gradually amplifies the marginalization of Taiwan's defense perspectives.

Taipei's Bureaucratic Rigidity Summary

Taiwan's FMS request and budget management procedures, which are system-specific, deprive Taipei of the useful flexibility that capability-specific procedures would afford. While the current regimented process can provide regularity in a security environment filled with uncertainty, the tradeoff is forgoing responsiveness. For Taiwan, using three documents and four phases to generate and deliver FMS requests is excessively deliberate. Shifting towards capability-specific or purpose-based procedures would enhance flexibility and improve Taipei's ability to respond to FMS opportunities. Taiwan should also be cognizant of the fact that basing request on a platform of deference can have potential drawbacks.

Procedural Analysis Summary

While Taiwan appears to be receiving U.S. assistance through regularized defense articles transfers, the types and rates of transfers are not exactly consistent with Taipei's desires. Moreover, U.S.-Taiwan security cooperation has been less deliberate and predictable than what a well-functioning cohesive and cooperative relationship should yield. This chapter argued that procedural impediments is making the U.S.-Taiwan defense relationship is more tumultuous than

necessary. Washington's "exceptionalism without exceptions" and Taiwan's bureaucratic rigidity intrinsically do not function well with each other.

On the U.S. side, "exceptionalism without exceptions" diminishes normalized defense interactions with Taipei. Washington sets the tone for exceptionalism starting with policies that govern the wearing of military uniforms. The fact that active duty military members are only authorized to wear their uniforms in their own respective countries during U.S.-Taiwan security cooperation activities is an enduring reminder to all that Taiwan is different. Besides deviating from standard uniform protocols, Washington also subjects Taiwan to additional administrative hurdles including requiring prior coordination before formally submitting FMS requests, precluding Taiwan from utilizing standard methods to expedite FMS approvals, and isolating Taiwan from high-level U.S. defense officials. Concurrently, Washington handles Taiwan-related defense needs without affording Taiwan any special consideration. The lack of any special attention towards personnel management, administrative priority, or official communications exacerbates the effects of exceptionalism.

On the Taiwan side, bureaucratic rigidity undermines Taipei's ability to respond to security requirements by cooperating with the United States. Elaborate and time-consuming processes along with excessive deference towards their American counterparts, thwarts Taipei's responsiveness in aligning FMS needs with the dynamic conditions in its security environment. The crux of Taipei's rigidity mainly stems from making its requirements platform- specific as opposed to general purpose-specific.

CHAPTER FOUR

Conclusion

This dissertation research project set out to discover why Taiwan continues to fall short of its goal to spend 3 percent of its GDP on defense despite facing what appears to be an increasingly existential threat from PRC, and pressure from Washington to its increase defense spending. The goal was to contextualize U.S.-Taiwan security cooperation and examine how conditions specific to Taiwan's security environment shape Taipei's decision-making. The main thrust of the effort was to gain insights to the perspectives of Taiwan's decision makers.

Perspectives gained through elite interviews were cross-referenced with rhetoric, actions, and outcomes in U.S.-Taiwan defense-related activities for analysis.

The primary aim of this research was to illuminate friction points in the U.S.-Taiwan defense relationship. I used Taiwan's defense spending as an entry point to examine U.S.-Taiwan security cooperation by pealing back the layers of factors that lead Taiwan to spend less than 3 percent of GDP on defense. I selected defense spending as the entry point because it has been an enduring point of contention in U.S.-Taiwan defense dialogues for at least the last decade. What I discovered is that for Taiwan, security cooperation is more than solely a military endeavor. Therefore, discussions of Taiwan's defense preparations need to expand beyond how much Taipei spends on defense and how Taiwan should prepare for a full-scaled PLA invasion. In this regard, using matrixes such as 3 percent of GDP for defense spending to measure of Taiwan's commitment to self-defense, without analyzing the comprehensive factors that determine Taipei's defense behavior, misses the mark.

Leveraging insights gained from elite interviews, this dissertation argued that Taiwan's defense decisions are constrained by political, practical, and procedural considerations. The most

significant of these affecting Taipei's defense decisions is political. Practical and procedural factors also have effects but remain subordinate to political considerations.

In the geopolitical realm, isolation and the lack of sufficient indigenous defense production capabilities force Taipei to continue depending on a tacit relationship with the United States to fulfill its security needs. The main issue is that the lack of explicit U.S. security guarantees, asymmetrical mutual dependence, and Washington's conduct history, continue to perpetuate Taipei's fear of being abandoned by its de facto sole security guarantor. The facts remain that there is no formalized security treaty between the United States and Taiwan, U.S. support is more critical for Taiwan security than Taipei's support for U.S. security interests, and that Washington has had a history of prioritizing its own interests over its relationship with Taipei. All this is to say that even though Washington's willingness to support Taiwan is increasing against the backdrop of intensifying U.S.-China competition, Taipei's anxieties of abandonment still linger and continue to affect its defense decisions. This context is what leads to contrasting threat perception and mitigation prescriptions between Washington and Taipei that ultimately cause diverging priorities and undermine effective security cooperation. While Washington continues to focus on Taiwan's security challenges predominantly as a military problem, Taiwan seeks integrated solutions to what it sees as multivalent security requirements grounded in unwavering U.S. support, economic development, and information management.

In addition to international relations considerations, domestic politics also affect Taipei's defense decisions. The lack of decision-making centrality and cohesion undermine Taipei's ability to significantly raise defense spending. Based on the lack of adequate threat perception and confidence in the military ability to defend the homeland, Taiwan's constituents favor spending on social benefits instead of defense requirements. As such, Taipei's defense decisions

must extend beyond strictly fulfilling defense requirements. Defense decisions must also consolidate public support and bolster public confidence that Taiwan can defend itself, until US. Assistance arrives.

The lack of intragovernmental cooperation also hinders Taipei's defense budgeting process. Within the ministry of defense, weapons system or service-based nepotism, and shifting defense strategies lead to infighting and discontinuity. Among legislators, contrasting political approaches lead to different funding priorities. And, across different agencies, schisms undermine effective defense budget formulation.

Individual political leadership only had marginal effects on Taiwan's defense spending.

Although executive leadership favored dramatically different approaches to enhancing Taiwan's security, defense budgets largely remained consistent despite differences in political party affiliation, rhetoric, and priorities.

The *Practical Analysis* chapter illuminated how Taiwan's financial, geospatial, and demographic limitations constrain Taipei's ability to embrace Washington's suggestions to spend more on defense preparations. Financially, Taiwan's limited resources force authorities to make investment tradeoffs in the effort to maximize the island's security. Taipei chooses to purchase smaller numbers of big-ticket items because it makes the most sense for guarding against a low probability of an all-out PRC invasion, consolidating U.S. and domestic political support, and highlighting U.S.-Taiwan defense ties. Geospatially, Taiwan's size and location limits the island's ability to stage, test, operate, store, maintain, expend, and dispose military hardware. The island's ability to absorb defense articles essentially becomes saturated, negating the ability to buy more. Demographically, Taiwan's aging population, low birth-rate, talent retention, and waning interest in military service, all challenge Taipei's ability to build a defense force that can

consume a larger defense budget. In this context, justifying higher defense spending for Taiwan's shrinking defense force is becoming increasing difficult.

The *Procedural Analysis* chapter examined how administrative impediments on both the U.S. and Taiwan sides limit Taiwan's defense spending. The chapter characterized Washington's treatment of Taiwan as "exceptionalism without exceptions," where the combination of enhanced scrutiny and status quo priority combine to hinder Taiwan's self-defense aspirations. Procedural analysis also suggested that Taipei's bureaucratic rigidity are too time-consuming, which diminishes Taipei's flexibility in responding to dynamic political and security environments. Ultimately, the chapter argued that the U.S and Taiwan defense engagement mechanisms, as currently designed, do not function well together.

After my analyses, I humbly propose that Taiwan's defense choices are shaped by the political, practical, and procedural constraints that Taipei must contend with. Therefore, understanding these constraints is imperative for facilitating effective U.S.-Taiwan defense relations in the future. In addition to the importance of supporting Taiwan based on ideological principles, security cooperation with Taiwan is also about mitigating security risks to the United States. As Washington and Beijing's relationship becomes increasingly tumultuous, cooperating with Taiwan, as "the spine of the first island chain," becomes more crucial and therefore worthy of attention. Although the U.S.-Taiwan security cooperation apparatus is currently functioning, as evidenced by the continued defense article transfers, my research was intended to identify the friction points in this cooperation machine that can benefit from a little lubrication.

Recommendations

The research conducted for this dissertation identified friction points in the U.S.-Taiwan security relationship, and consequently, also highlighted the opportunities to improve U.S.-Taiwan defense interactions. This study hopes to help moderate the existing frustrations by providing some prescriptions. The recommendations below are formulated after assessing the relative weight of frustration-causing factors and considering how effectual versus actionable each prescription is. The overarching recommendation for the U.S. and Taiwan defense establishments is to prioritize and synchronize security cooperation-enhancing political, practical, and procedural measures across the short, intermediate, and long-term timeframes.

While geo-political, practical, and procedural factors all contribute to the sub-optimal defense relationship between Washington and Taipei, geo-political factors clearly hold the most weight in causing frustrations. As a veteran DSCA officer astutely noted during a phone interview, politics ultimately defines the limits for U.S.-Taiwan security interactions. ²⁸² If Taipei could source defense articles freely from a multitude of international partners, fulfill all of its own defense needs through domestic production, solidify security guarantees from Washington, or eliminate domestic obstacles to raising defense spending, the existing frustrations in the U.S.-Taiwan security relationship would cease to exist for the most part. However, the likelihood of one or more of the above coming to fruition in the near future is low. Hence, U.S.-Taiwan security cooperation has to continue carrying on as the mainstay for Taiwan's security, and, both Washington and Taipei have to collaborate to affect long-term change.

Second to geo-political factors, practical limitations have the biggest effect. Financial, geospatial, and demographic resource constraints indeed present Taipei with daunting challenges

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²⁸² Personal interview with veteran DSCA officer (who did not wish to be cited) familiar with Taiwan's FMS cases. June 6, 2020.

to its efforts to raise defense spending and enhance national defense. Fortunately, decisive measures can help mitigate the effects of resource shortages. Depending on how quickly the measures are implemented, Taipei can potentially start seeing returns on its investments in the intermediate term.

Finally, procedural factors constrict defense cooperation effectiveness and flexibility. As indicated in the *Procedural Analysis* chapter, even though FMS transactions are still occurring, the quality of these transactions in terms of building cohesive defense relations and providing effective defense articles, still leave much to be desired. Administrative barriers, however, are the simplest to dismantle, and therefore, harbor the best opportunities to improve U.S.-Taiwan defense relations in the short-term.

The following table provides a snapshot of the recommendations that follow. Domains are on the left vertical column and associated timelines to act are across the top row.

	Short-term	Intermediate	Long-term
Political	Engage in Candid Dialogues	Reduce Contradictions	Normalize Relations
Practical	Explore Options	Develop Plans	Implement Changes
Procedural	Overhaul Policies	Normalize Processes	Enhance Interactions

Figure 11 - Recommendation Summary

Politically, Washington and Taipei would benefit from collectively engaging in candid dialogues, reducing contradictions between rhetoric and actions, and normalizing security cooperation relations as short, intermediate, and long-term goals.

In the short-term, engaging in candid dialogues provides the best opportunity for resolving the fundamental disjuncture between Washington's military-oriented assistance and Taipei's pursuit of integrated solutions. As the interviews with leaders on both sides indicate, there is currently a blatant strategic disconnect. At the same time that leaders like Taiwan's former Chief of Naval Operations described U.S.-Taiwan defense dialogues as "意思意思,點綴 (showmanship, embellishment, or decoration)," the Chairman of AIT expressed frustration that Taiwan is not buying all the defense articles Washington is offering. Only candid discussions of Taipei's real defense requirements and Washington's honest political priorities can help the U.S.-Taiwan defense relationship move past using asymmetry and defense budgets as default substances to stay engaged.

After engaging in candid dialogues to better align strategic intent, Washington and Taipei can aim to respectively reduce the contradictions between their rhetoric and actions as the political goal for intermediate timeframe. For Washington, this means exercising the full latitude

²⁸³ Chen, Richard; and Moriarty, James. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April, 2019

allowed by the multitude of U.S. legislation governing relations with Taiwan in order to support Taipei, and, assisting Taiwan with multifaceted defense requirements as Taipei sees fit. For example, actually sending incumbent U.S. cabinet members and active duty flag or general officers to Taiwan as allowed by legislation would better assure Taipei that Washington intends to live up to its rhetoric that Taiwan is a valuable security partner. Integrating various U.S. agencies into assisting Taiwan's defense needs, as opposed to relying predominantly on DoD, would also help convince Taipei that Washington fully understands Taiwan's needs. For Taipei, reducing contradictions may entail openly conveying to Washington that Taiwan's defense problem is more of a political rather than military challenge. In this context, there may not be much value in retaining 3 percent of GDP as a measure of Taiwan's commitment to self-defense. Instead, Taipei can help recalibrate the U.S.-Taiwan security cooperation focus by revealing how it conceptualizes words such as "art" and "asymmetry." 284

Over the long-term, Washington and Taipei would enhance defense relations with each other by incrementally normalizing security cooperation activities. Normalization would primarily be a function of extricating China from being a principal driving factor in the U.S.-Taiwan relationship. This is obviously easier said than done, hence, will take time. However, political finesse and gradual desensitization are tools that both Washington and Taipei should leverage persistently.

In the practical domain, Washington and Taipei should assess Taiwan's financial, geospatial, and demographic challenges to collectively explore options, develop plans, and implement changes that would help mitigate the effects of these challenges. During the short-

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²⁸⁴ Reference to Deputy Secretary General York Chen's remark that "we can learn from your science but you do not understand our art" and Retired Chief of Naval Operations Richard Chen's comment of "your understanding of asymmetry is not the same as ours. You are still thinking of asymmetrical warfare in WWII framework." Both comments cited in *Political Analysis* discussions.

term, identify and explore all defense-enhancing options that may help expand the economy, make better use of limited space, and integrate the entire population into national defense preparations. Financial options may include maximizing dual-use technologies, technology transfers, coproduction, depot-level maintenance, and supply-chain integration. Geo-spatial options may include integrated civil-defense urban planning, building dual-use spaces, and facilitating third-party (non-U.S.) consulting or collaboration. Options to alleviate demographic challenges may include expanding the role of women in the military, revising age restrictions, realigning incentive structures, reversing conscription incrementally, encouraging immigration, allowing virtual citizenship, and transforming to a merit-based (as opposed to seniority-based) defense culture. Once the potential options have be carefully assessed, courses of actions can be mapped out in the intermediate phase so they can be implemented in the long-term.

The procedural domain is the most opportunity-rich in terms of being actionable. Washington and Taipei can initiate policy overhauls in the short-term and normalize processes in the intermediate-term, in order to enhance defense interactions in the long-term. The most obvious step is to phase out uniform restrictions for U.S. and Taiwan military members. This would certainly serve to assure Taipei that defense interactions are becoming more normalized. In addition, Washington can improve the management of U.S. personnel who deal with Taiwan's security needs, the administrative priority for Taiwan's FMS cases, and the flow of U.S. official communications to Taiwan. Taipei can facilitate procedural effectiveness by shifting its FMS request formulation and budget management processes from platform-specific towards capability-based.

Washington can enhance personnel management by paying more attention to personalities during personnel selection, and, deliberately planning and matching tour lengths

and professional expertise with Taiwan's requirements. Washington can inject substantial value into Taiwan's defense development by synchronizing defense-development priorities and phases with security assistance initiatives. To accomplish this, DoD would assign individuals with the appropriate professional expertise to "controlled tours" to support established defense priorities. For instance, Washington and Taipei could agree on four-year phase periods with the defense-development priorities for the next three phases being air superiority, special operations, or joint force integration.

Four-year phase periods are ideal because they only add one additional year to the standard three-year tour lengths for military members with dependents. The military normally adheres to three-year tours to balance depth and breadth in professional development, allowing members to gain experience without stagnating. Because Taiwan-specific defense issues are so nuanced, extending the standard three-year tour length by a year for members assigned to positions that deal with Taiwan enhances continuity without incurring excessive professional stagnation. Whatever the preferred phase period, Washington, more specifically, the Department of Defense, can then match members with specific professional expertise to the defense-development priorities of each phase.

For the example reference above, fighter and attack helicopter pilots along with air battle managers would be ideal individuals to be assigned to the air superiority phase; Navy SEALs, Army green berets, Marine reconnaissance, and Air Force special tactics officers would be appropriate for supporting the special operations phase; and Joint Combined Warfighting School graduates and joint-staff officer qualified individuals would best serve the joint force integration phase. The phased and supported approach would certainly moderate Taipei's frustrations with

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²⁸⁵ A controlled tour means a member will stay in place to serve the entire duration of the programed tour length without being redirected or reassigned for other duty before the intended tour length is complete.

U.S. personnel management. Matching appropriate expertise with phased emphases and controlling assignment cycles to ensure regularized personnel changes would also better synchronize U.S.-Taiwan security cooperation efforts. If controlling the assignment cycles of active-duty personnel is too difficult, Washington can better leverage the DoD civilian positions that are already present at AIT to provide better continuity.

Once personnel shortcomings are remedied, Washington has many options to elevate Taiwan's administrative priority. As a baseline, the U.S. defense establishment can normalize administrative interactions with Taipei by allowing Taiwan to submit FMS requests without prior socialization (i.e. "mother may I"), and, ensuring Taiwan has open access to top U.S. defense officials. Although there is no de jure administrative discrimination against Taiwan, the security cooperation conditions that Taipei has to operate under, as described in the *Procedural Analysis* chapter, certainly limits the FMS opportunities available to Taiwan as a defense partner.

Beyond normalizing the baseline, Washington can also prioritize the handling of Taiwan's FMS cases. This can be done by advancing Taiwan's FMS cases to the front of the administrative queue, to providing Taiwan with a pre-coordinated and approved menu of procurement options, and responding to unfeasible requests with viable alternatives.

The Defense Security Cooperation Agency could expedite the handling of Taiwan's FMS cases by elevating Taiwan's priority as a security partner. In addition to the Pre-Letter of Request Assessment Requests (PAR) procedures discussed in the *Procedural Analysis* chapter, DSCA has various mechanism to expedite the handling to FMS cases. For example, DSCA can raise a security partner's Force Activity Designator (FAD). According to the Security Assistance Management Manual (SAMM), "FADs are ranked with FAD I being the highest and FAD V being the lowest priority...FAD assignment to a specific country or foreign force, unit, or

activity may be released only to the recipient country and to U.S. forces or agencies with the need to know and on an unclassified For Official Use Only basis. FAD assignments to a specific country are not released to other foreign countries. Compilations of foreign FAD assignments, combining two or more foreign countries or territories, are classified SECRET."²⁸⁶ DSCA also has other procedures such as "improved FMS processes," requesting Letter of Offer and Acceptance (LOA) Document Prioritization²⁸⁷, and Compressed, Rapid Acquisition, Fielding and Training (CRAFT) to accelerate special security assistance needs.²⁸⁸

Proactively offering a menu of preapproved systems or precleared technologies is another way to afford Taiwan administrative priority. The current Chief of the AIT's Security Cooperation Section, U.S. Army Colonel Luke Donohue made this suggestion. From his perspective, U.S.-Taiwan security cooperation would be better served if Washington would simply provide Taipei with a menu of available procurement options instead of having Taipei make individual requests for items based on estimations of what Washington can or will sell.

Consistent with the logic above, Washington could also suggest viable alternatives when responding to unfeasible procurement requests. While DSCA currently does not have procedures for doing so, a veteran DSCA officer indicated that it is certainly possible for implementing agencies within the DoD to help Taiwan identify feasible substitutes during the procurement process.²⁹⁰

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²⁸⁶ Defense Security Cooperation Agency, 2020. *Security Assistance Management Manual, Chapter 6 - Foreign Military Sales Case Implementation and Execution*. Accessed June 2, 2020. https://samm.dsca.mil/chapter/chapter-6.

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²⁸⁸ Defense Security Cooperation Agency, 2013. DSCA Policy 12-38. July 31. Accessed June 2, 2020. https://samm.dsca.mil/policy-memoranda/dsca-12-38.

²⁸⁹ Donohue, Luke. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 22, 2019.

²⁹⁰ Personal interview with veteran DSCA officer (who did not wish to be cited) familiar with Taiwan's FMS cases. June 6, 2020.

In addition to enhancing personnel management and extending administrative priority, Washington can better streamline official communications with Taiwan. AIT-W versus AIT-T, Chairman of AIT versus Director of AIT, and Director of Political-Military Affairs versus Chief of Security Cooperation Section dynamics continue to obfuscate the lines of communication in U.S.-Taiwan defense interactions. While AIT-W was originally set up to provide a liaison function in order to bolster the appearance of unofficial relations, the façade that AIT is not a U.S. government-affiliated institution has long become transparent. Washington should seriously consider normalizing AIT's operations by reducing and eventually eliminating AIT-W so that AIT would function more like a regular embassy.²⁹¹

Finally, the U.S. defense establishment should implement all of the above recommendations quietly as to minimize backlash from Beijing. As former AIT Director Bill Stanton put it, "There's no need to telegraph our punches." Washington can take a page from Stanton's playbook for how reduce self-imposed restrictions without drawing rebuke. Stanton started flying the U.S. flag at the AIT-T compound as standard practice and also redesigned the AIT logo to include an aspect of the U.S. flag after assuming the Director position in 2009 without causing any uproar from across the Strait. Previous to his leadership, AIT did not fly a U.S. flag and the AIT crest had no reference to the U.S. flag.

For Taiwan's part in the procedural domain, the biggest recommendation is for Taipei to start shifting its FMS request formulation and budget management processes from being platform-specific towards being purpose-based. Shifting towards purpose-based procurement and budget management would allow both Taipei and Washington more flexibility to respond to

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²⁹¹ Stanton, Williams, 2019. "Time to bury AIT Washington: William Stanton." May 28. *Taiwan News*. Accessed June 16, 2020. https://www.taiwannews.com.tw/en/news/3712467.

²⁹² Stanton, Bill. Interviewed by Steven Li. Personal interview. Taipei, Taiwan, April 10, 2019.

Taiwan's defense needs. In the request process, platform-specific requests pigeonhole Taiwan's requests and limits Washington's ability to fulfil a desired capability. Practitioners, myself included, have long been imploring Taiwan to "Please do not tell us (DoD) what tool you want to buy. Instead, tell us what you need the tool to do and let us help you determine what is the best tool."²⁹³

With regards to budgeting, replacing standard budgeting procedures that tie funding into specific weapon platforms and timelines with purpose-based conditional budget approvals would increase Taipei's flexibility in responding to FMS demands. Purpose-based budgets would eliminate the requirement to reengage the LY for funding approvals with every procurement deviation. While required amounts for different purposes may not match, putting conditional approvals in place to allow funding to be repurposed and diverted to pre-approved alternate defense requirements would certainly enable financial flexibility. For example, when the LY approves the annual defense budget, a conditional clause that any remaining personnel funding can be repurposed for air-to-air defense needs can be included. With this conditional clause in place, defense funds can be repurposed quickly, transparently, and painlessly.

I will close by acknowledging that while I have spent countless hours researching and thinking about U.S.-Taiwan security cooperation, my efforts are sure to fall short in some respects. My sincere hope is that this dissertation provides enough insights to at least energize some new conversations between Washington and Taipei. After all, a conversation between a chicken and a duck can only go so far.

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²⁹³ This was often a point of frustration during my time as a Security Cooperation Officer. Taiwan seemed to always insist on specific platforms.

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