

OPPORTUNITY COST: WEIGHING ELEMENTS OF NATIONAL POWER
AGAINST PROSPERITY AND SECURITY

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MASTER OF MILITARY ART AND SCIENCE
Strategic Studies

by

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ABSTRACT

OPPORTUNITY COST: WEIGHING ELEMENTS OF NATIONAL POWER
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This thesis shows the relationship between the elements of national power, prosperity, and security using a mixed-methodology approach. The Congressional Budget Office's 2019 projection of the United States federal budget through 2050 shows a gradual and significant decrease in discretionary spending. The decrease in discretionary spending poses a threat to the United States' international primacy and domestic prosperity. This thesis analyzes and uses qualitative analysis of seminal literature concerning hard and soft power. Then, relationships between the elements of national power, diplomacy, information, military, economy, security, and prosperity are calculated using multiple linear regression, statistical analysis, and publicly available indexes. This thesis also considers whether a country's similarity to the United States has a significant impact on the regression model. The findings identified that a country will maximize prosperity and security by investing in the information and diplomacy domains. Meanwhile, the military domain is a detriment to prosperity and security. Furthermore, country similarity did not strengthen the model. Policymakers, decision-makers, and lawmakers should use this data and analysis to change how the United States prioritizes resources to the Department of Defense and divest from the military overall, while shifting priority to soft-power domains like information and diplomacy.

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ACRONYMS

CBO	Congressional Budget Office
CJCS	Chairman of the Joint Chiefs of Staff
D	Diplomacy
DIME	Diplomacy, Information, Military, and Economy
DOD	Department of Defense
DPRK	Democratic People's Republic of Korea
E	Economy
GDP	Gross Domestic Product
I	Information
IEP	Institute for Economics and Peace
KOF SEI	KOF Swiss Economic Institute
LSCO	Large-Scale Combat Operations
M	Military
NATO	North Atlantic Treaty Organization
ROK	Republic of Korea
UK	United Kingdom
US	United States
VEO	Violent Extremist Organization

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CHAPTER 1

INTRODUCTION

The Crisis of the Long-Term US Federal Budget

The United States (US) government budget is unbalanced, and the deficit is growing at a rate that will eventually force the US to cede its position as the world's most influential country. The 2019 federal budget ran a deficit of \$984 billion. Since 2001, the federal debt climbed to \$22.7 trillion and currently shows no signs of slowing down.¹ Spending at this rate, without raising taxes or growing the economy to generate adequate revenue, will limit discretionary spending. In the 1960s, the congressional budget office (CBO) reported that discretionary spending accounted for 64% of the federal budget; in 2019, it accounts for 30%.² In less than 30 years, that figure is projected to decrease to 18%.³ The Department of Defense's (DOD) budget accounted for \$686 billion of the \$1.3 trillion federal budget for discretionary spending in 2019.⁴ All departments of the executive branch that maintain international influence through elements of national power, diplomacy, information, military, and economy, mostly rely on discretionary spending. Compared to the DOD's staggering budget, the State Department (diplomacy and information) and Treasury Department (economy) receive a relatively small amount, only \$54 billion and \$20 billion, respectively.⁵

With the looming threat of an economic crisis, the DOD would likely lose the most funding between the three departments. Assuming that there will not be significant changes to laws curtailing non-discretionary spending (e.g., Medicare) or significant increases to federal revenue to avoid the crisis, the DOD needs to develop a balanced approach to requesting discretionary funding that allows the US to maintain international

primacy to ensure domestic prosperity. If the DOD and US government as a whole fail to make this change, the US could experience the same troubles as other historic superpowers.

The United Kingdom (UK) and the Russian Federation are the best examples of what can happen to a contemporary, world superpower whose budget outpaces its economy. Following World War II, the United Kingdom, while still comparatively powerful, lost much of its influence in post-war world politics. The UK was bankrupt and had to focus on rebuilding its economy.⁶ Much of its ability to wield international influence was blunted, due to the economic crises it experienced at home. The UK eventually recovered from its economic hardships due to sound economic practices and governance. However, the UK has yet to re-establish its position as a superpower and exercise the same influence it once had.

The former Soviet Union was less fortunate than the UK in the aftermath of its complete economic collapse. Soviet Russia once held significant influence throughout the world. Though its influence is usually characterized as coercive, extractive, and authoritative, it nonetheless could leverage its status and perceived might to challenge its adversaries from the end of World War II until 1991.⁷ The successor of the Soviet Union, the Russian Federation, experienced steeper economic hardship by undergoing drastic changes to its economic structure while being subjected to recessions and financial crises.⁸ Today, the Russian Federation has regained portions of its formidable influence; but Russia will be unlikely to regain the international status it once held, despite its military might. Without changing how it spends, the United States may be on the same

path as the UK and Russia and, in the same way, be forced to relinquish its superpower status.

The US's federal spending may be the maker of its own undoing, given its revered leader status and the institutional inertia to take quick, meaningful action to guard itself against ruin. If and when this crisis occurs, the best the United States could hope for is a scenario similar to that of a post-World War II UK: the US retains much of its international power but is relegated to a supporting role on the world stage. While the US government has no desire to assume a lesser role, being at the top is growing too expensive for the US to maintain. In addition to discretionary spending, the US is legally obligated to provide for welfare programs such as Medicare/Medicaid and Social Security, as well as interest payments on public debt: \$2.7 trillion as of 2019.⁹ Unless laws change, funding priorities shift, and revenues increase to lessen or reverse the impact of these obligations, mandatory spending will crowd out the discretionary budget or cause economic ruin. And, despite its modern, globalized economy, the US cannot expect to outgrow this problem in the long run.

The size of the US economy is why it will not be able to grow the economy fast enough to meet the US's spending needs. Because the United States is the world's most developed nation, there is only so much the domestic economy can consistently be expected to grow. By the CBO estimates, nominal gross domestic product (GDP) can only expect to grow at an average of approximately 2% each year for the next decade; and the economy is not expected to grow more rapidly beyond that.¹⁰ Meanwhile, the deficit is expected to grow at 5% of the GDP during that same time period.¹¹ How, then,

can the US retain its international primacy while facing long-term budgetary issues that threaten its well-being and, by extension, its citizens?

The DOD's role of providing security by projecting and employing military power to assure allies, deter adversaries, and defeat enemies is vital to maintaining international primacy. However, when the DOD is the biggest consumer of the discretionary budget, the US must determine how much it is willing to spend on that capability. And, by determining the DOD's most critical and likely roles and risks to domestic prosperity from reducing defense spending, the US may be able to avoid disaster while maintaining primacy.

The US government must prioritize protecting its interests and the good of its citizens above all else. Achieving domestic prosperity, while maintaining global primacy, is a delicate balancing act that is difficult to establish and harder to maintain. Furthermore, outside influences, such as adversarial actors (e.g., Russia and China), pandemics, and climate change, force the US to continually re-evaluate how and why funding is allocated to oppose these threats. A balance between resourcing the elements of national power may be achieved for a time, but it may be lost in the next election cycle. Establishing a means of discerning how funding should be allocated, to achieve the best outcome, is necessary to help policymakers and lawmakers make informed decisions on this matter.

The Problem

The United States is on course to experience an economic crisis based on the CBO's federal budget projections. It can be expected that during such a crisis maintaining international primacy will be challenged by US adversaries or other opportunistic

entities—ensuring that domestic prosperity may be threatened. Policymakers and lawmakers should assume that non-discretionary spending will continue to outpace federal revenue; and that federal departments, agencies, and programs will receive less funding. How can policymakers better understand the relationship between the elements of national power, diplomacy, information, military, and economy, and their subsequent relationship with prosperity and security to allocate discretionary spending and maintain international primacy?

Thesis Question

This thesis will provide a set of questions strategic and national-level leaders should deliberately answer before proposing the annual US defense budget. There are myriad reasons why a given federal department, agency, or program could, or should, receive funding. Each facet of the federal government was created to help the executive branch protect interests, run more efficiently, create transparency, and most importantly, serve US citizens. However, whether or not a department or agency should receive funding for various programs and efforts is a more pressing question to answer. The DOD, Department of State, Department of Treasury, and the other executive departments would serve best by synchronizing their respective expertise to maximize US influence abroad. If policymakers can better understand the relationship of the elements of national power, then prioritizing resources to the government agencies that correspond to those elements of national power should coincide with that understanding, to some degree. This leads to the primary question: How should US policymakers balance discretionary spending in the US federal budget to maintain international primacy and avoid an economic crisis?

Four secondary questions will be explored to answer this question more thoroughly:

1. What is the trajectory of the US federal budget?
2. How do political and defense theorists weigh prosperity and security?
3. Does similarity to the United States improve the relationship of the elements of national power with prosperity or security?
4. What relationship do the elements of national power have with prosperity and security?

This thesis will use a mixed-methodological approach to address research questions. The first and second research questions will be answered using qualitative methods in the literary review and analysis in the next chapter. The primary research question and the third and fourth secondary research questions will be answered using quantitative methods in the data analysis chapter. The quantitative research questions are restated as hypotheses below:

Third Research Question Hypotheses

1. H_1 : Tier 1 countries will improve the relationship of elements of national power with prosperity and security.
2. H_2 : Tier 2 countries will improve the relationship of elements of national power with prosperity and security.
3. H_3 : Tier 3 countries will improve the relationship of elements of national power with prosperity and security.
4. H_0 : Country similarity will not improve the relationship of elements of national power with prosperity and security.

Fourth Research Question Hypotheses

1. H₄: Elements of national power have a significant relationship with prosperity.
2. H₅: Elements of national power have a significant relationship with security.
3. H₀: Elements of national power have no significant relationship with prosperity or security.

Significance

The debate between prioritizing hard or soft power (i.e., taking a coercive or cooperative approach to international influence, respectively) sits at the core of civilian-military economic thought and is a contentious topic for liberal and conservative politicians. At the core of each argument, the critical concern is helping those in positions of governmental power and influence consider questions that assist in appropriating government resources to maximize prosperity and security. One school of thought is to prioritize spending on defense. Defense is the primary means by which the US can exercise and project hard power against adversaries and secure its interests. Therefore, in an ever-more complex world, the United States should spend the preponderance of its discretionary funding on securing its diverse interests, primarily through military power. Alternatively, funding allocated to defense could be redirected to funding diplomatic and economic missions, to create a more stable world. The world could become more interconnected through treaties and trade, which would alleviate the need for high defense spending.

These arguments will be addressed further in the following chapter, but the underlying issue still remains. Each of these arguments have merit; and by leveraging the data associated with each position, those with the power to do so, can make a more

informed decision, regardless of political philosophy. By considering a principled, dispassionate cost-benefit analysis before committing to potentially costly courses of action, government leaders can continue to responsibly protect national interests through more efficient and less disruptive means. This thesis aims to provide the analysis for a more quantitative approach to determine how the US can appreciate the opportunity costs associated with spending on the various elements of national power and the correlative effect on prosperity and security.

Purpose

The purpose of the thesis is to assign numerical values to the different elements of national power and show their relationship to prosperity and security. By establishing these relationships and values, policymakers will be better informed to prioritize resourcing with regards to their effect on the general US welfare. The aim is to provide policymakers with a resource to better understand the relative cost of the various elements of national power and their respective values in relation to national security and prosperity. Policymakers may find this thesis useful when balancing budgets between departments to achieve national policy goals. By achieving this balance, the CBO's prediction of the increasing deficit may eventually be blunted or reversed, without jeopardizing the US's international primacy or position as a world superpower.

The age-old argument between balancing security and prosperity devolves into a chicken-or-the-egg proposition. Does a nation need to prioritize security in order to provide the ability for society to prosper, or vice versa? By leveraging the careful observation, study, and contemplation of social and military experts, and the data collected and calculated from world-leading think tanks, this thesis will show what

relationships exist between countries' preferences between the elements of national power, and how that impacts prosperity and security.

Assumptions

Congressional Budget Office Accuracy

The CBO projections for revenues and expenditures over the next 30 years are accurate. The CBO reports should cause increased concern on the long-term impacts of the growing deficit. The CBO does conduct a regular audit on the accuracy of its economic projections. In the CBO's own words,

After each fiscal year has ended, the Congressional Budget Office reviews its projections of federal revenues, outlays, and deficits and compares them with actual budgetary outcomes for that year. By assessing the quality of its projections and identifying the factors that might have led to under- or overestimates of particular categories of federal revenues and outlays, CBO seeks to improve the accuracy of its work.¹²

The CBO conducted an internal review and published the findings in August 2020. The organization found that the average error for all budget-year projections, since its founding in 1982, was an average of 1.2%.¹³

Prosperity Index Accuracy

The Legatum Institute Prosperity Index's scores are an acceptable measure of prosperity and security. Furthermore, because the Prosperity Index qualifies security as a subcomponent, or "pillar," of prosperity, we can assume that any model based on security scores may be less generalizable.¹⁴

Both prosperity and security are affected by elements of national power in different ways. Diplomacy, information, military, and economy impact prosperity and security. However, the elements of national power impact security and prosperity

differently. By weighing each element against prosperity and security individually, a relationship (or lack thereof) will be discovered and described.

Limitations

This thesis will be a mixed-methodology study. Therefore, the limitations of this thesis will incorporate elements that are objective and subjective.

The formulas derived from this thesis will describe relationships, but it will not prove them. Though the data will show strong correlations between an element of national power and prosperity and security, there can be no definitive measure of how to increase that element's potency; or that prosperity will certainly increase because more money or effort is dedicated to that element.

The second limitation is determining interconnectedness between multiple countries' scores. That is, suppose the US has a higher military score but a lower security score than Finland; this study will not be able to determine if Finland is more secure because of its relationship to the US (i.e., it falls under the US's security umbrella).

This thesis will measure scores in terms of value, not cost. All index scores use or are adjusted to fit a 100-point scale. There is no way to determine if a certain dollar amount or number of weapon systems will increase a country's element of national power domain score by a corresponding point. This thesis' intent is to incorporate the data across a wide range of measurements, to represent an element of national power domain as a whole. These factors are presumably interrelated but cannot be assigned dollar amounts or specific actions that increase or decrease scores.

Data to build a quantitative model is available for 2010-2018. Therefore, the model that this thesis provides will not apply well outside of this timeframe. The model

and the literature are very modern and should not be used to determine what policies world leaders should have pursued earlier than 2000.

A limited number of indices are used to build the model. Ideally, a model would be built to include multiple sources for prosperity and security scores, as well as the elements of national power scores. Including more models that fit the methodology would, in theory, provide a more representative model.

The model will not be able to show changes over time or elasticity of the relationships. There is not enough time or data to ensure the impact of an increase of one score, nor how long it takes for the rest of the model to adjust. For example, assume the model predicts that military score has a coefficient of .50 in the security model. This score would indicate that if a country increases the military score by ten points, a country should also realize a five-point increase in security. The model may describe the correlation but will not be able to say if this effect is immediate or not.

Summary

In the next chapter, the first two secondary research questions are explored and answered. First, the CBO budget predictions are explored further to give a clearer picture of how and why the US government spends its treasure. The trajectory of the US federal budget will be further explored and explained to understand why the issue exists. Next, we will turn to modern social, political, and military theory to better understand the key arguments that shape the US's philosophy on prioritizing resources against the various executive departments, which are responsible for employing specific elements of national power. Having done so, we can prudently undertake a quantitative analysis and present findings and recommendations within the framework.

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² Office of Management and Budget (OMB), “Historical Tables,” The White House, 2020, <https://www.whitehouse.gov/omb/historical-tables/>.

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⁴ Department of Defense (DOD), *FY 2019 Defense Budget* (Washington, DC: DOD, 2018), <https://dod.defense.gov/News/SpecialReports/Budget2019.aspx>.

⁵ US Congress, Senate, “Summary: Department of State, Foreign Operations, and Related Programs, Fiscal Year 2019 Appropriations Bill,” US Senate Committee on Appropriations, 2018, <https://www.appropriations.senate.gov/imo/media/doc/SFOPS%20FY19%20Conf%20Agreement%20Press%20Summary.pdf>.

⁶ Encyclopedia Britannica, “Britain since 1945,” Encyclopædia Britannica, Inc., 2020, <https://www.britannica.com/place/United-Kingdom/Britain-since-1945>.

⁷ Howard Sherman, “Rise and Fall of the Soviet Union,” *International Journal of Political Economy* 24, no. 1 (1994): 5–18, <https://doi.org/10.1080/08911916.1994.11643874>.

⁸ Clifford Poirot, “Financial Integration under Conditions of Chaotic Hysteresis: The Russian Financial Crisis of 1998,” *Journal of Post Keynesian Economics* 23, no. 3 (2001), 485–507, <https://doi.org/10.1080/01603477.2001.11490295>.

⁹ Centers for Medicare and Medicaid Services (CMS), “CMS’ Program History,” last modified January 13, 2020, <https://www.cms.gov/About-CMS/Agency-Information/History>; The Social Security Act, H. Res. 7260, *Congressional Record* (August 14, 1935), <https://www.ssa.gov/history/35act.html>; Payment of Obligations and Interest on the Public Debt, 31 U.S. Code § 3123 (1982).

¹⁰ Congressional Budget Office (CBO), *An Update to the Economic Outlook: 2020 to 2030* (Washington, DC: CBO, July 2020), <https://www.cbo.gov/system/files/2020-07/56442-CBO-update-economic-outlook.pdf>. 3-4.

¹¹ *Ibid.*, 12.

¹² Congressional Budget Office (CBO), *The Accuracy of CBO’s Budget Projections for Fiscal Year 2020* (Washington, DC: CBO, December 14, 2020), <https://www.cbo.gov/publication/56885#:~:text=In%20its%202019%20projections%20for,by%200.5%20percent%20of%20GDP>.

¹³ Congressional Budget Office (CBO), *An Evaluation of CBO's Past Revenue Projections* (Washington, DC: CBO, August 2020), <https://www.cbo.gov/system/files/2020-08/56499-Revenue-Forecasting.pdf>, 1.

¹⁴ The Legatum Institute, *The Legatum Prosperity Index 2020: Pillar and Element Profiles* (London, UK: The Legatum Institute, November 2020), https://docs.prosperity.com/9816/0568/1087/2020_Pillar_and_Element_Profiles.pdf.

CHAPTER 2

LITERATURE REVIEW

Introduction

Building a framework for government leaders must incorporate information, theories, data, historical contexts, and research from a wide array of sources. Fortunately, highly specialized and dedicated academics and organizations have compiled data and synthesized that data into information. To guard against over-analyzing and making the scope of this thesis too broad, sources are deliberately focused on key works that provide the requisite detail and background to inform quantitative analyses later in this thesis, as well as provide a guide for recommendations in the final chapter.

Literature and data in this chapter will address the qualitative secondary questions proposed in the first chapter. “What is the trajectory of the United States (US) federal budget?” will be answered by establishing the value of the Congressional Budget Office (CBO) to this thesis and exploring CBO projections for the trajectory of the US federal budget, while considering the US economy and federal deficit. The second research question (How do political and defense experts weigh prosperity and security?) will be answered by presenting political theorist-experts’ research and opinions, challenging the limitations of their assertions. This chapter will also qualify the data from the Legatum Institute’s Prosperity Index. The Prosperity Index will provide the dependent variables, prosperity and security, that will be used in the quantitative sections of this thesis. Lastly, this chapter will analyze Liberalism, Realism, and US military doctrine to appreciate the different points of view that inform US policymaking and practical use for domestic and international affairs.

The Trajectory of the US Federal Budget

The Purpose of the Congressional Budget Office

The most reliable source of the performance and direction of US economy is the Congressional Budget Office.

Since 1975, CBO has produced independent analyses of budgetary and economic issues to support the Congressional budget process. Each year, the agency's economists and budget analysts produce dozens of reports and hundreds of cost estimates for proposed legislation.

CBO is strictly nonpartisan; conducts objective, impartial analysis; and hires its employees solely on the basis of professional competence without regard to political affiliation. CBO does not make policy recommendations, and each report and cost estimate summarizes the methodology underlying the analysis.¹

The CBO's reputation is not based on its impressive predictive accuracy, but in its ability to offer the best estimates in black-and-white terms for US federal legislators and executives to make critical decisions. The CBO maintains its reputation through its commitment and repeated demonstration of fact-based, nonpartisan analysis.² Non-government economists and policy experts trust CBO publications and frequently use CBO reports and findings in research.³ The CBO will be the primary source for the facts and figures used to determine the trajectory of the US economy, as well as its spending and revenue projections.

Congressional Budget Office Long-Term Projections

For the purpose of this thesis, the 2020 long-term budget projection is used to show the effects of over-spending as far as possible into the future. The CBO's baseline budget projection uses a 10-year model and is presumably more accurate. However, the long-term projection uses a 30-year period to indicate the impact of budgets and policies on the federal discretionary funding.⁴

The CBO's 2019 long-term projection is a bleak forecast of the future of the US federal budget (see figure 1). The increase in net interest spending is expected to increase from 8% in 2019 to 26% in 2050. The corresponding decrease in non-interest spending (i.e. all the funds appropriated for everything else in the annual budget) will decrease from 92% of the federal budget to just 7%. If noninterest spending is broken into subcomponents, consisting of social security, major health care programs, and "other" noninterest spending (i.e., spending on all departments of the executive branch), then the future becomes direr. In 2019, other noninterest spending accounted for almost half (47%) of the noninterest federal spending. By the CBO long-term projection, that number will decrease to 3%. Including some budget numbers for comparison makes this comparison more tacit.⁵

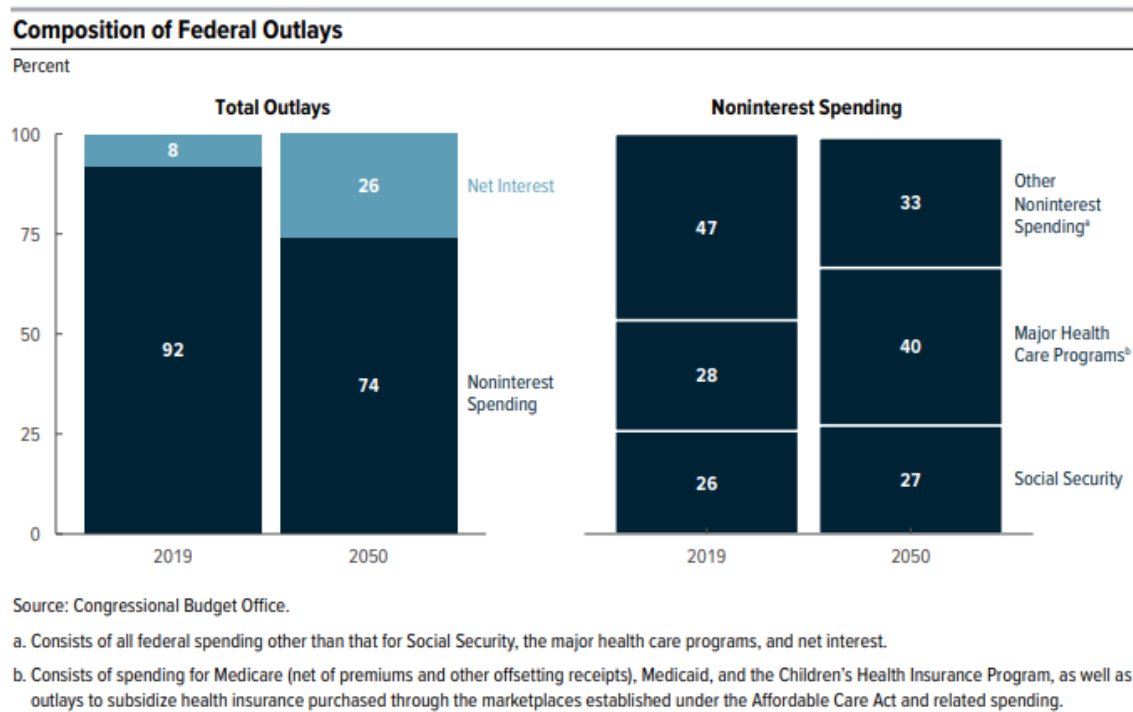


Figure 1. Composition of Federal Outlays

Source: Congressional Budget Office (CBO), *The 2019 Long-Term Budget Outlook* (Washington, DC: CBO, June 25, 2019), <https://www.cbo.gov/publication/55331>, 26.

The 2019 US federal budget was approved by Congress with \$4409B in total outlays (expenditures). Of that total, discretionary spending was approximately \$1337B; and the Department of Defense (DOD) received the most funding from the discretionary spending budget at \$676B, or 50.0%. By applying the 30-year projection in figure 1, we can quickly see how non-discretionary spending can dominate the budget.

Assume that the 30-year CBO projection is used with the same \$4409B in outlays. Spending on net interest increases 305% to \$1146B, discretionary spending decreases by 20.8% to \$1058B, and the Department of Defense budget decreases by 21.0% to \$534B.⁶ Furthermore, there's no indication that the gap between revenue and outlays will reverse to prevent this potential scenario from coming true (see figure 2). The most recent round

of tax legislation signed into law may prove to be a signal that there will be difficulty mending budgetary problems.

Impediments to Growth

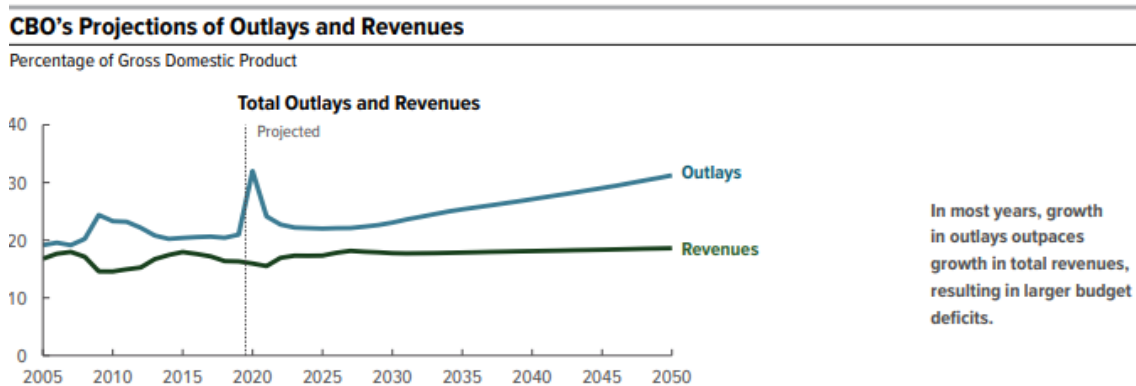


Figure 2. CBO's Projections of Outlays and Revenues

Source: Congressional Budget Office (CBO), *The 2019 Long-Term Budget Outlook* (Washington, DC: CBO, June 25, 2019), <https://www.cbo.gov/publication/55331>, 2.

The post-2000 gap between outlays and revenues was an inevitable byproduct of conducting the Global War on Terror. Without finding a way to decrease outlays, increase revenues, or both, the US will continue to spend outside of its means, and a crisis is all but inevitable. Of note, the spike in outlays near the vertical, dotted line in figure 2 is the implementation of the Tax Cuts and Jobs Act of 2017 (TCJA) signed into law by then-President Donald Trump.⁷

President Trump and those who impose measures like the TCJA have many arguments in favor of short-term spikes in outlays to boost the economy. One of the key arguments for the TCJA was to make the US economy and corporate ecosphere more inviting to development and investment, through deregulation and cutting corporate

taxes. Over time, the businesses that do more business in the US will increase revenues through the taxes that companies and citizens pay through a tide-that-raises-all-ships logic. However, the US economy is too advanced to reasonably expect rapid, long-term expansion, typically seen in emerging economies such as India and Brazil.⁸

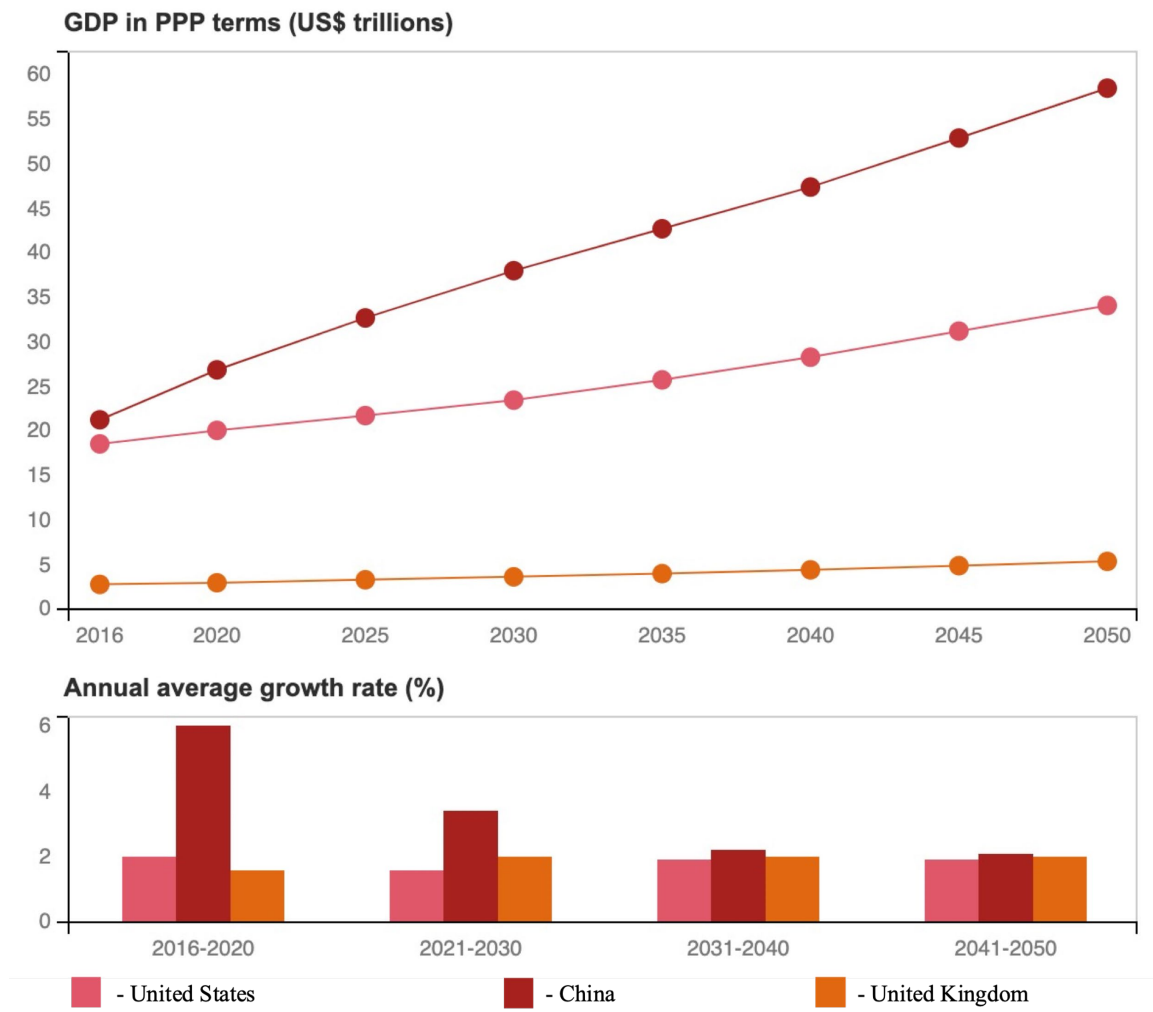


Figure 3. US, UK, China Projected Gross Domestic Product Growth

Source: PricewaterhouseCoopers (PwC), “The World in 2050,” February 2017, <https://www.pwc.com/gx/en/research-insights/economy/the-world-in-2050.html>.

According to PricewaterhouseCoopers, advanced economies, like the US, should average around 2% growth in the long-term. As figure 3 shows, even rapidly growing economies like China will not sustain their expanding economies in the long-term and should expect growth to level out over the coming decades.⁹ Therefore, while it may be good for a business to pay less taxes, policies that hope to grow the economy out of its current spending problem are mostly moot, if not detrimental. Economic plans that do not account for decreasing federal spending exacerbate the CBO long-term projection and may shorten the time before drastic measures need to be taken.

Modern Social, Political, and Military Theory on Prosperity and Security

Prosperity

It is a complicated task to determine how and where a country should spend its resources to increase its prosperity. Individual, local, regional, and national values and priorities will vary and render any cookie-cutter approach invalid. What may be right for the United States and its citizens may not be right for Canada. What may be right for Canada may not be right for the United Kingdom, and so on. However, some institutions painstakingly provide the world with results of each country's efforts and how they translate into overall prosperity. Specifically, the Legatum Institute provides the public with its annual Prosperity Index.¹⁰

The Prosperity Index “[analyzes] the performance of 167 countries . . . on the key characteristics of inclusive societies, open economies, and empowered people.”¹¹ The Legatum Institute's research is the most comprehensive amalgam of statistics available. The Legatum Institute, based in London, UK, is now on its 14th edition and is regularly used by fellow think tanks, as well as print and online media. Like the CBO, the Legatum

Institute is very transparent with its figures and processes. As detailed in the associated methodology report, there are over 80 sources that inform the Index. Notable sources include, but are not limited to, the United Nations, the International Monetary Fund, the World Bank, Freedom House, Gallup, Pew, and Amnesty International.¹² The openness with which it presents information, the thoroughness of its research, and the breadth of its acceptance make the Prosperity Index one of the best comparison tools to see the end result of an individual country's efforts toward building a better society for its citizens.

The Legatum Institute summarizes its pursuit of measuring prosperity:

Prosperity is far more than wealth; it is when all people have the opportunity and freedom to thrive. Prosperity is underpinned by an inclusive society, with a strong contract that protects the fundamental liberties and security of every individual. It is driven by an open economy that harnesses ideas and talent to create sustainable pathways out of poverty. And it is built by empowered people, who contribute and play their part in creating a society that promotes wellbeing.¹³

As proposed in earlier sections, prosperity is related to a country's policies and, presumably, its governmental and political emphasis on hard and soft powers. Before transitioning away from the literature concerning prosperity, hard power, and soft power, we will briefly consider the Department of Defense's role in providing security for the US, and how it perceives and deters threats against its security.

Isaiah Berlin and Liberty

For this thesis, prosperity is defined as the access a citizen can expect to have in positive and negative freedoms and liberty, as provided or maintained by the citizen's government. Isaiah Berlin's definition of negative liberty is the absence of obstacles, barriers, or interference imposed on a person. To Berlin, the question of negative liberty is "What is the area within which the subject—a person or group of persons—is or should

be left to do or be what he is able to do or be, without interference by other persons?” On the other hand, positive liberty is a product of self-determinism. An individual is internally driven to live his or her life as they wish. That is, “What, or who, is the source of control or interference that can determine someone to do, or be, this rather than that?”¹⁴ There are two elements of national welfare that will be used to measure a country’s overall welfare: prosperity and security.

Prosperity is success, or the state of success, especially financial or material success. Prosperity often implies success in terms of wealth, health, and happiness.¹⁵ Prosperity will be primarily used to account for a country’s positive liberties. On the other hand, security is freedom from danger or risk; safety; freedom from care, anxiety, or doubt; well-founded confidence; something that secures or makes safe; protection; defense; precautions taken to guard against crime, attack, sabotage, or espionage.¹⁶ Being able to attain and provide security to its citizens is a critical capability for modern governments. Security will primarily account for a country’s negative liberties.

Prosperity and security manifest domestically and internationally. Every country has some effect on other countries and can increase its welfare by influencing or compelling other countries to cooperate or capitulate. A country can accomplish this by using elements of national power: diplomacy, information, military, and economy (DIME). Each of these elements of national power is employed according to a country’s political philosophy. For example, the Democratic People’s Republic of Korea (DPRK) is an autocratic society that is almost wholly dedicated to the preservation of the government through militarization. To this end, the DPRK places very little emphasis on diplomatic, economic, and informational influence internationally. Conversely, Vatican

City is a widely considered benevolent country that primarily uses its influence as a modern peacemaker to offer even-handedness and gentleness to volatile situations. In national power terms, the Vatican wields its influence through information and diplomacy, while having a relatively small economy and negligible military power.

Eliot Cohen and Hard Power

One of the most reliable and well-renown political scientists of the 21st century is Eliot Cohen. Besides his education at Harvard and positions as an instructor at the US Naval War College and Dean of Johns Hopkins' School of Advanced International Studies, he served as a counselor to Secretary of State, Condoleezza Rice from 2007-2009. Cohen's publication, *The Big Stick: The Limits of Soft Power and the Necessity of Military Force*, provides a relatively concise and pointed argument for the need for governments (specifically the US) to invest in the military and use hard power.

Throughout his book, Cohen demonstrates why, especially in a modern world with dynamic adversaries, hard power is the key to ensuring security for the US and its partners and allies. No matter how much those who oppose hard power argue against its detrimental impacts, there is simply no escaping the possibility that, if the US were to let its guard down, it could be attacked. As a result, the free world could face a truly existential threat. Ensuring that the military, intelligence community, and defensive alliances are robust, strong, and far-reaching allows those fears to assuage.¹⁷ A quote often attributed to Winston Churchill reinforces this point, "We sleep soundly in our beds because rough men stand ready in the night to visit violence on those who would do us harm."¹⁸ Eliot Cohen and Winston Churchill's arguments are cogent, but there are limitations to their points. There are several issues with the hard-power, specifically

military-focused, argument. First, where is the room for détente? Next, how safe is safe enough? Lastly, what is the endgame?

In *The Big Stick*, Eliot Cohen eloquently argues for maintaining a military posture that can meet worldwide threats and adversaries. He explains that soft power is inherently limited; and bad actors, like the DPRK or China, will simply ignore soft power overtures or only engage in soft power tactics as a mere means to self-centered and authoritarian ends.¹⁹ Therefore, the US, the North Atlantic Treaty Organization (NATO), and other allies need to assert hard power tactics against such states, to ensure the security of other nations that may be under threat from these bad actors. However, one of the perennial arguments bad actors make, especially the DPRK, is that the only reason why they act the way they do is that they are under constant threat of invasion from the US and the Republic of Korea (ROK), or South Korea.²⁰ While there are certainly more reasons than this to explain why the DPRK needs to invest so much into maintaining its military, having your own argument used against you by an adversary is a difficult thing to reconcile. This back-and-forth, which encourages all sides to invest continuously in expensive military expansion, is a game that can only be played for so long. Without a way for each country to step away from military investment and seek other ways of competing, arms races—or at least nuclear proliferation—will continue indefinitely, leaving no way to pivot towards investing less in hard power and more in soft power.

The US has the most technologically-advanced, best-trained, best-educated, best-funded, furthest-reaching military in the world.²¹ If the US spent so much time and energy to be at the top, why does it never seem to be enough?

Limits of Hard Power

Cohen's book is masterfully written and considers a plethora of ideas and arguments throughout modern, defense, and political thought. However, there is no off-ramp from conflict in *The Big Stick*. Indeed, any country at any time can and does feel under threat from attack. Especially in the age of terrorism, a crippling attack from within or without can become almost paralyzing when determining what policy can keep the people safe at all times. Consider Cohen's argument for hard power in a city police-centered thought experiment.

A city police chief comes to the city council asking for more money to buy new equipment and hire more officers. The police chief convincingly tells the city council that crime is on the rise, and to protect the public, more police with faster police cruisers and better training facilities are necessary. Understanding the need to keep their fellow citizens safe, the city council approves the police chief's request.

A year goes by, and the police chief returns. Crime in the city fell following the purchase of new equipment, hiring of new police officers, and providing a new training facility. The police chief tells the city council he is grateful for the increased funding, but more is needed. While crime is going down, the criminals are getting smarter and are harder to stop. There are fewer crimes, sure, but the crimes that are occurring still pose a threat to the general public. The city council is mostly swayed by the police chief's request, and while not increasing the budget again this year, they will keep the budget the same as last year's, to presumably maintain the force, training, and equipment.

The following year, the police chief returns to the city council and explains that crime went up from the previous year. If the city council had approved his request for

more funding last year, the increase in crime might not have happened. If this year's budget includes the increase in funding for the police, they can certainly keep crime down. The city council approves the increase, not wanting to see crime continue to rise.

The next year, the police chief returns again and explains that crime is at the same level as the previous year. The police chief is thankful for the increase in funds and is convinced that crime certainly would have increased over the past year without the extra resources. He then asks for a modest increase to retain the current police force, recruitment, training, and equipment. The city council approves the funding to ensure the police chief can at least make some advancements against crime in the city without significantly increasing the strain on the budget.

With this story in mind, the question becomes, when is the police force big enough? The police chief requested and received three out of four increases in funds, and crime increased and decreased equally. It would be naïve to believe that there would be a point where crime dropped low enough, and the police chief would advocate against the police department receiving more funding. Moreover, imagine the police chief telling the council that the department needs less money, because it has too many officers, too good equipment, or too much training.

Eliot Cohen's arguments leave room for a version of the same trap. If the US has the best and most capable military in the world, with the most partners and support, how much is enough? The uncomfortable reality is that hard power advocates will find it difficult to refuse increased or at least stable funding regardless of the threat level. Alternatively, few would argue to dissolve the police force and go without it completely. But, a measured application of hard power to achieve short-term goals in concert with

other soft power policy measures is a vital combination to realize long-term security, as well as prosperity.

Joseph Nye and Soft Power

Political scientist and former Dean of the John F. Kennedy School of Government at Harvard University, Joseph Nye, will serve as the lens by which this thesis will consider soft power. Soft power is conceptualized and described by Joseph Nye in the late 1980s and further developed in his subsequent publications in the following decades.²² In his books, *Bound to Lead: The Changing Nature of American Power*, *Power in the Global Information Age: From Realism to Globalism*, and *Soft Power: The Means to Success in World Politics*, Nye reinforces the notion that soft power politics is the means of creating lasting and meaningful relationships in a modern and increasingly globalized world.

According to Nye, hard power has its limits. The best means a country has to create stability for itself, and for its allies to endure and thrive, is to co-opt other countries into its ways of thinking and conducting international relations.²³ This argument goes well beyond mere participation in the international organizations that already exist. Countries seeking to use soft power need to focus on projecting culture and ways of thinking that will influence whole populations of countries, not just the leader thereof. Increasing soft power is accomplished through means wholly different than hard power.

When a nation's leader wishes to employ hard power tactics, some of the most omnipresent options are economic sanctions and military deterrence. In the latter and most provocative of these options, military capability is key to its credibility. Therefore, an outdated, ill-equipped, and poorly-trained military does not pose a capable means of

detering adversaries and blunts that hard-power option. To remain credible, a country's government must spend inordinate time, money, and resources maintaining its military. On the other hand, soft power relies less on direct emphasis from the government to be credible.

Soft power countries and their governments spend more of their energies on ensuring freedoms, allowing their citizens to maximize their individual utility and create opportunity in a self-determined way. Joseph Nye argues that freedom in the US and western world was the best means of destabilizing the Soviet Union during the Cold War for that exact reason. He explains that there was essentially no desire from other countries to seek out Soviet-made music, books, television programs, or movies.²⁴ All these things seem to be made best by free and open societies, drawing others to their cause or, at least, culture. American film, television, and music were secretly popular—even when censored and banned in the Soviet Union, it inspired those within the country to desire and support the West, more than the bulk of the West would ever support the Soviet Union. This indirect means of influencing and co-opting another country's citizens is far-reaching and is accomplished through a symbiotic relationship with economics and diplomacy. However, there are certainly limitations to soft power.

Limits of Soft Power

The ever-present threat of war—or at least large-scale combat operations (LSCO), such as the Persian Gulf War in 1990-1991—should limit a country's desire to divest completely from the ability to credibly project hard power. Even though a country may desire to invest resources in building soft power through engaging peacefully in the international commons, once a belligerent country, Country A, seizes a presumably

peaceful and apolitical cargo ship from Country B, Country B (without hard power options) is nearly powerless to compel Country A to return the free ship and its crew. Furthermore, if such a country should act in a way that requires LSCO, the now-attacking country will be at a tactical, operational, and possibly strategic disadvantage from not emphasizing investment in defense. This point is not lost on proponents of soft power.

Assume the ship that was seized in the example was Swedish. Though it is not a superpower or a member of NATO, Sweden's role as a soft-power heavyweight will likely co-opt others in the international community to collectively pressure the belligerent country to return the ship and the crew, or face further globalized diplomatic and economic opposition and ostracism. Though opposition and ostracism are not as instantly or emotionally satisfying as a retaliatory drone strike, multilateral adherence to established, well-mannered norms among nations provides prolonged security, and more broadly, prosperity. Sweden can and should maintain its defensive capabilities, so if such a belligerent does threaten Swedish citizens and resources, it has military options as an operational safety net.

Optimism, Realism, and US Joint Doctrine

The US government bestows upon the Department of Defense (DOD) a specified mandate: "The mission of the Department of Defense is to provide a lethal Joint Force to defend the security of our country and sustain American influence abroad."²⁵ The concise nature of that mission statement underscores the broad scope, through which the DOD views and understands its role in the government and the rest of the world. Devising a strategy that will effectively impact the world on a day-to-day basis is a tremendous task. It will be vital to take stock of international threats to determine and shape a strategy for

defending America's security. This thesis will look at the nature of conflict in the 21st century, and how the DOD should account for those conflicts as it organizes and shapes itself to confront those threats.

Gen. Joseph Dunford, the 18th Chairman of the Joint Chiefs of Staff (CJCS), names the most significant threats to the United States—which are Iran, North Korea, China, and Russia—as Violent Extremist Organizations (VEO). Subsequently, the National Defense Strategy and National Military Strategy name each of these actors as chief concerns, which the United States must confront to protect its citizens.²⁶ Gen. Dunford explicitly names four adversarial nation-states in that list compared to only one category with no overt state affiliation (i.e., VEOs). However, the list may obscure the preponderance of where and how the DOD's efforts will be partitioned.

According to former Deputy Assistant Secretary of Defense, Dr. Brad Roberts, Russia, China, and North Korea are most likely to challenge the US where it is most vulnerable. That means that the preponderance of attacks will be against the US and US allies, testing the combined resolve at the threshold below the point of armed conflict.²⁷ Because it is not a nuclear state, Iran will most likely use proxy militias to execute clandestine and deniable attacks against the United States; but due to its lack of sophisticated cyberspace capabilities, infrastructure, and access, it will not be a bigger threat to partners—like Saudi Arabia and Israel—than the United States. In his book, *The Big Stick*, Eliot Cohen's analysis agrees with Dr. Roberts' explanation that the four nation-state adversaries will continue to challenge the US short of large-scale conflict or war. A credible response to these threats is not found in the employment of tanks, cannons, and rifles. The most useful response will be a combination of reinforcing

alliances and partnerships, while bolstering the most vulnerable military domains—space and cyber.²⁸ By focusing on these three key aspects of military operations, the US government has the opportunity to get the most out of a budget that will be more and more constrained. Those three areas where the US military is likely to compete with adversaries, short of large-scale combat, are security cooperation, cyberspace security, and managing the outer-space commons. The budget allocations between these efforts and combat units have not caught up to post-global war on terror defense priorities. Security cooperation accounts for \$7.8 billion out of the 2021 DOD budget. Meanwhile, the budget for US Cyber Command and US Space Force is \$12.0 billion and \$15.3 billion, respectively.²⁹ Compare the \$35.1 billion for those three efforts to the approximately \$2.7 billion each for the 31 brigade combat teams' cost per year.³⁰ Albeit that funding is allocated to counter key state and non-state actors will account for the majority of kinetic fighting for conventional forces in the 21st century.

The volatile, uncertain, complex, and ambiguous (VUCA) environment in which non-state VEOs thrive will challenge the US and its allies well after operations in Afghanistan, Iraq, Syria, and Yemen are complete. In 2016, the United Nations published a report from The World Bank Group that shows that since World War II, the preponderance of combat-related deaths is comprised of non-combatants and informal combatants.³¹ Furthermore, the Uppsala University Department of Peace and Conflict Research documents the near-quadrupling of conflicts versus the slow-but-steady drop in wars since 1946.³² Like the evolution of modern military competition with adversarial state-affiliated actors, countering VEOs who prosper in VUCA environments cannot be easily accomplished through purely conventional means.

A fundamental and widely used piece of strategic doctrine breaks elements of national power into four basic domains: diplomacy, information, military, and economy (DIME).³³ The Department of Defense's Joint Publication (JP) 1-18 explains that DIME is possibly too narrow of a list to appropriately understand the array of options a government has at its disposal.³⁴ Regardless of the number of categories explicitly acknowledged, what is clear is that all elements must be used synchronously to exercise national power and maximize international influence. JP 1-18 agrees that "[e]ach [element] of national power works most effectively when it is supported by and operates harmoniously with, the other [elements] of national power."³⁵ While the joint publication does not propose to what extent one element should be valued over another, military and political theorists describe how the political and military aspects of national power interact. Clausewitz provides the most thorough and widely accepted theory.

Carl von Clausewitz's treatise, *On War*, is the quintessential work that provides a strategic thinker a holistic understanding of the world of political-military relations. Furthermore, *On War* explains the interaction between politics and the military as part of the Peace-War Continuum.³⁶ JP 1-18 explains, "[t]he military professional who believes politics has no place in strategy does not understand the fundamentals of strategy."³⁷ A potent military leader must understand and ensure harmony between the elements of power. In reality, it is not the primary responsibility of a military leader to advocate for other elements of power; quite the opposite is expected and required.

By law, the senior-most military officer, the CJCS, is an advisor to the National Security Council, the Secretary of Defense, and the President of the United States. However, the statute makes the CJCS a military advisor, too.³⁸ While the CJCS is not

inherently excluded from offering advice concerning other elements of power, by the principles laid down in doctrine, he or she has a duty to make adroit recommendations that consider or even include the other elements. Therefore, military leaders must take great care to consider what the opportunity cost will be to the other agencies of the executive branch when asking for one more destroyer or fielding the next generation of combat rifles.

Achieving harmony between the elements of national power should have far-reaching effects in achieving a nation's interests, not only abroad but domestically as well. After all, what good is having a powerful military, good international relations, and a strong economy if the general welfare of the state's citizens receive meager benefits therefrom?

Summary

Formulating the framework needed to help US defense and military leaders determine if and how it should request and use resources will require answering the three basic questions. Determining how much money the US government can expect to have at its disposal will allow leaders to anticipate future funding. Determining which elements of national power most likely corresponds to influence and prosperity will lead to a better understanding of how to allocate finite resources. Determining what the role of the "M" (in DIME) will have in a future world, will allow the leaders therein to get the most out of each dollar spent to achieve effects against the most likely future courses of action, while striving to achieve synergy with the other elements to mitigate against the most dangerous. Gaining this understanding will require synthesizing and distilling data, and

presenting it in such a way that government leaders can appreciate these complex relationships.

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³⁰ Congressional Budget Office (CBO), *The U.S. Military's Force Structure: a Primer* (Washington, DC: Congress of the United States, 2016), 18, 22, 28, 32.

³¹ Alexandre Marc, *Conflict and Violence in the 21st Century: Current Trends as Observed in Empirical Research and Statistics* (Washington, DC: World Bank Group, 2016), <https://www.un.org/pga/70/wp-content/uploads/sites/10/2016/01/Conflict-and-violence-in-the-21st-century-Current-trends-as-observed-in-empirical-research-and-statistics-Mr.-Alexandre-Marc-Chief-Specialist-Fragility-Conflict-and-Violence-World-Bank-Group.pdf>, 5.

³² Therése Pettersson and Magnus Öberg, “Organized Violence, 1989–2019,” *Journal of Peace Research* 57, no. 4 (July 1, 2020): 597–613, <https://doi.org/10.1177/0022343320934986>.

³³ Joint Chiefs of Staff (JCS), Joint Doctrine Note (JDN) 1-18, *Strategy* (Washington, DC: JCS, 2018), vii.

³⁴ *Ibid.*, viii.

³⁵ *Ibid.*, viii.

³⁶ John Krenson, “On Strategy: Integration of DIME in the Twenty-First Century,” (Research Project, US Army War College, Carlisle Barracks, PA, February 12, 2012), 6.

³⁷ JCS, JDN 1-18, I-3.

³⁸ Goldwater-Nichols Department of Defense Reorganization Act, H. Res. 3622, *Congressional Record* (October 1, 1986), <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg992.pdf>.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

This chapter will set the framework by which the primary research question will be answered. Of chief concern is establishing how the dependent variables (prosperity and security scores) and the independent variables (diplomacy, information, military, and economy scores) will be measured for quantitative analysis. Furthermore, the likeness methodology will be introduced and explained to help answer the third secondary research questions, “How does similarity to the United States (US) change the relationship of the elements of national power with prosperity and security?” Data is accumulated from multiple publicly available sources and will provide the base from which this thesis will present findings in the following chapters.

Defining and Measuring Likeness, Prosperity, and Elements of National Power

Index Categorization

Indices are assigned to categories by how they measure and interpret data, and how they are designed to inform readers. Table 1 provides an overview of the process for determining values for each category within this study.

Table 1. Index Source List

Category	Source	Index	Website
Prosperity	Legatum Index	Prosperity Index	prosperity.org
Diplomacy	KOF Swiss Economic Institute	Political Globalization Index	kof.ethz.ch
Information	Elcano Royal Institute	Global Soft Presence Index	realinstitutoelcano.org
	KOF Swiss Economic Institute	Social Globalization Index	kof.ethz.ch
Military	Elcano Royal Institute	Global Military Presence Index	realinstitutoelcano.org
	Institute for Economics and Peace	Global Peace Index	visionofhumanity.org
Economy	Elcano Royal Institute	Global Economic Presence Index	realinstitutoelcano.org
	KOF Swiss Economic Institute	Economic Globalization Index	kof.ethz.ch

Source: Created by Author.

Prosperity

The Legatum Institute's Prosperity Index is used to determine a country's prosperity score. The Prosperity Index is based on contributing indices' relation to demonstrating the well-being of the population and insights into human progress within a country. Common categories for indices used to compute the prosperity scores are personal freedom, social capital, investment environment, health, and education.¹ The Legatum Institute summarizes its view of prosperity as such:

Prosperity is far more than wealth; it is when all people have the opportunity and freedom to thrive. Prosperity is underpinned by an inclusive society, with a strong contract that protects the fundamental liberties and security of every individual. It is driven by an open economy that harnesses ideas and talent to create sustainable pathways out of poverty. And it is built by empowered people, who contribute and play their part in creating a society that promotes wellbeing.²

The Prosperity Index parses through the various indices that exist and distills various datum into a score representing different domains of a prosperous society, such as inclusive societies and open economies. The Legatum Institute's Prosperity Index comprises three domains divided into 12 pillars and subdivided into 66 elements of

domestic policy (see figure 4). The Legatum Institute presents its findings and methodology as a means to allow policymakers, academics, and interested readers the ability to quickly determine how a given country is performing across all domains, elements, and pillars, and each facet can be easily identified in specific policy realms to assist in decision-making and performance assessment of previous decisions.

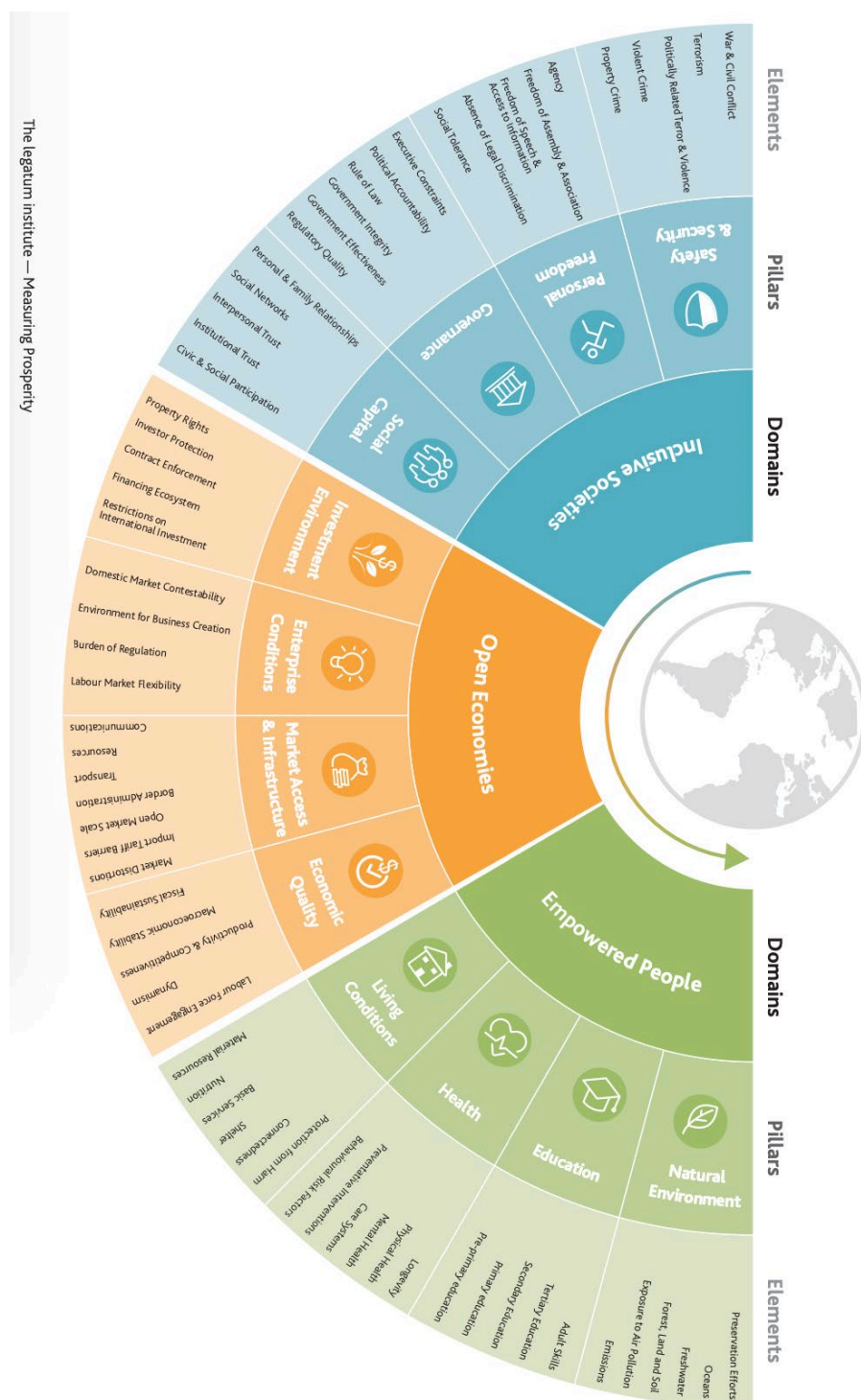


Figure 4. The Domains, Elements, and Pillars of the Prosperity Index

Source: The Legatum Prosperity, *The Legatum Prosperity Index 2020: Pillar and Element Profiles* (London, UK: The Legatum Institute, November 2020), https://docs.prosperity.com/9816/0568/1087/2020_Pillar_and_Element_Profiles.pdf.

Security

Soft power advocates like Joseph Nye will regularly find themselves in an ongoing argument with hard power advocates over whether policymakers should prioritize security over prosperity or vice versa. Neither side would seriously argue that hard or soft power should be completely ignored. If nothing else, a country should be able to protect itself from threats, either internal or external. After all, being safe and secure is one of the intangible things most citizens expect from their government. Since security is an unavoidable topic to consider when considering elements of national power, this pillar of the Prosperity Index will be considered alongside prosperity as a whole.

As shown in figure 4, the Safety & Security Pillar is a subcomponent of the Inclusive Societies Domain. The Prosperity Index's describes safety and security:

Safety and Security measures the degree to which individuals and communities are free from war and civil conflict, terrorism, political terror and violence, violent crime, and property crime. The lives of individuals, their freedoms, and the security of their property are at risk in a society where these activities are present, both through their current prevalence, and long-lasting effects. In short, a nation, community, or society can prosper only in an environment of security and safety for its citizens.³

With this description of safety and security, the Legatum Institute appears to encapsulate Joseph Nye, Eliot Cohen, and Isaiah Berlin's general view of security and how it relates to prosperity.

Countries' security scores are collected from the Prosperity Index's annual reports and data sets. The security score is used as a second dependent variable after the prosperity score. No alteration or recalculation will be required for use in this thesis.

Diplomacy

Diplomacy indices indicate the global influence a particular country has on others. This score demonstrates how much outreach a country has to gain international consensus, build coalitions or gain and maintain allies. Diplomatic indicators include the number of embassies and permanent missions a country has, the number of treaties signed between two or more nations, and the number of UN peacekeeping missions a country supports. The KOF Swiss Economic Institute (KOF SEI) Political Globalization Index is the most reliable form of measuring diplomatic power for this thesis. The KOF SEI measures the multiple facets of diplomatic power through what it calls either “de facto” or “de jure” indicators. The de facto and de jure indicators are then collected, normalized, and combined to create the overall score for countries each year. KOF SEI calculates the combined scores of de facto and de jure values and presents the scores on their website.⁴ (see figure 2).

Table 2. KOF SEI Political Globalization Index Structure

Structure	Variable
Political Globalisation, de facto	Embassies
	UN Peace Keeping Missions
	International Nongovernment Organisations
Political Globalisation, de jure	International Organisations
	International Treaties
	Treaty Party Diversity

Source: KOF Swiss Economic Institute, *2020 Globalisation Index: Structure, Variables and Weights* (Zurich, Switzerland: KOF Swiss Economic Institute, 2020), https://ethz.ch/content/dam/ethz/special-interest/dual/kof-dam/documents/Medienmitteilungen/Globalisierungsindex/KOFGI_2020_structure.pdf.

Information

Information indices leverage the amount of outreach a country's citizens have and how dispersed its culture is. Information indicators include tourism, internet and telephone connectivity, number of iconic international corporations (e.g., McDonald's and Ikea), and cultural significance on the international stage.⁵ These indicators are means by which a country is able to connect itself to another through facilitation of informal communication. Pointedly, Joseph Nye demonstrates in his book, *Soft Power*, that for foreigners stepping into a McDonald's fast-food restaurant in an otherwise starkly different culture is like stepping into America and sharing in its values and ideas.⁶ Two indices that comprise the information scores are the KOF SEI Cultural Globalisation Index and Elcano Royal Institute Soft Power Global Presence Index.

The KOF SEI Cultural Globalisation Index is used to determine how interconnected a country's social capital is to other countries by facilitating communication through digital, telephonic, or interpersonal means. KOF SEI uses a wide array of inputs to determine each country's final cultural globalization score (see figure 3).

Table 3. KOF SEI Social Globalization Index Structure

Structure	Variable	Sub-variable
Social Globalisation, de facto	Interpersonal Globalisation, de facto	International voice traffic
		Transfers
		International tourism
		International students
	Informational Globalisation, de facto	Migration
		Used internet bandwidth
		International patents
	Cultural Globalisation, de facto	High technology exports
		Trade in cultural goods
		Trade in personal services
		International trademarks
Social Globalisation, de jure	Interpersonal Globalisation, de jure	McDonald's restaurants
		IKEA stores
		Telephone subscriptions
	Informational Globalisation, de jure	Freedom to visit
		International airports
		Television access
		Internet access
	Cultural Globalisation, de jure	Press Freedom
		Gender parity
		Human capital
		Civil liberties

Source: KOF Swiss Economic Institute, *2020 Globalisation Index: Structure, Variables and Weights* (Zurich, Switzerland: KOF Swiss Economic Institute, 2020), https://ethz.ch/content/dam/ethz/special-interest/dual/kof-dam/documents/Medienmitteilungen/Globalisierungsindex/KOFGI_2020_structure.pdf.

The Elcano Royal Institute's index measures the size of the country's international presence while accounting for population and national gross domestic product.⁷ The categories used by the Elcano Royal Institute's Global Soft Presence Index are tourism; migration; international sports presence; cultural media exports; information (i.e., news mentions in the international press); technology (i.e., External income for the use of intellectual property and number of foreign-oriented patents); the number of

articles, notes, and reviews published in the fields of the arts and humanities, social sciences, and sciences; the number of international students in university; and development cooperation. These factors are combined to create the country score and scaled for population and national gross domestic product. The country scores are retrieved from Elcano Royal Institute and normalized on a 0-100-point scale.

The KOF SEI Cultural Globalisation Index and Elcano Royal Institute Soft Presence Global Presence Index measure two parts of the same genre, global cultural reach and international presence, respectively. The scores for the included years, 2010-2018, are collected for each of the included 124 countries. Those scores are then averaged. The average of the scores allows for combining the breadth of the KOF SEI index variables to be weighed against the Elcano Royal Institute index variables.

Military

Military indices score countries' defense projection capabilities. These indices weigh the number of machines of war (e.g., fighter jets and tanks) by generation, the size of a nation's defense budget, and the development of the domestic defense industrial base. There are two indices that are averaged to create the final military country score for use in the multiple linear regression model during data analysis.

The Institute for Economics and Peace's (IEP) Global Peace Index and the Elcano Royal Institute's Global Military Presence Index are the proponents for this data. The Global Peace Index contains a Militarisation [sic] Domain that combines seven variables to create country scores: military expenditure, the number of armed service members per 100,000 citizens, the volume of transfers of major conventional weapons imports per 100,000 citizens, the volume of transfers of major conventional weapons exports per

100,000 citizens, financial contribution to UN peacekeeping missions, nuclear and heavy weapons capabilities, and ease of access to small arms and light weapons.⁸ Data from 2012 is not available from the IEP, so each country's score is calculated by taking the average of 2011 and 2013. The original scores from the Global Peace Index are given on a four-point scale, values between one and five. This point system was normalized on a 100-point scale using the following formula:

$$y = \left(\frac{x - 1}{5 - 1} \right) * 100$$

Here, x is the original score and y is the normalized score.

The Elcano Royal Institute's Global Military Presence Index measures the number of military personnel deployed in international missions and bases overseas and the weighted sum of aircraft carriers, big ships, destroyers, frigates, nuclear-powered submarines, amphibious ships, medium and heavy strategic airplanes, and air tankers.⁹ Again, the scores for the Elcano Royal Institute's Global Military Presence Index are normalized to a 0–100-point scale. Military scores are created by taking the average of the Global Peace Index's Militarisation Domain scores and the scores from the Elcano Royal Institute's Global Military Index.

The scores differ in that the Global Military Presence Index measures the scale of difference between countries' global militarization. IEP's Global Peace Index measures the breadth of country's global military power better than Elcano Royal Institute. Thus, the scores of each index are averaged for the final military score for this thesis.

Economy

Economy indices measure how interconnected a country's economy is to foreign markets. Economy domain indicators include foreign direct investment and capital controls. There are two indices that are used to determine the final country score used in the multiple linear regression for this thesis. The two indices are KOF SEI's Economic Globalisation Index and the Elcano Royal Institute's Global Economic Presence Index.

The KOF SEI Economic Globalisation Index measures how much a country's economy is open to international markets and may exert pressure through economic might (see figure 4). Governments do exercise various levels of control on their respective economies. For example, the US has very few state-controlled businesses. However, during the Trump administration, the US exerted broad economic pressure on the People's Republic of China through a so-called "Trade War," by unilaterally imposing tariffs on imported goods that disrupted whole markets..¹⁰ KOF SEI Economic Globalisation accounts for this power through the following de facto and de jure measurements.

Table 4. KOF SEI Economic Globalization Index Structure

Structure	Variable	Sub-Variable
Economic Globalisation, de facto	Trade Globalisation, de facto	Trade in goods
		Trade in services
		Trade partner diversity
	Financial Globalisation, de facto	Foreign direct investment
		Portfolio management
		International debt
Economic Globalisation, de jure	Cultural Globalisation, de facto	International reserves
		International income payments
		Trade regulations
	Trade Globalisation, de jure	Trade taxes
		Tariffs
		Trade agreements
	Financial Globalisation, de jure	Investment restrictions
		Capital account openness
		International investment agreements

Source: KOF Swiss Economic Institute, *2020 Globalisation Index: Structure, Variables and Weights* (Zurich, Switzerland: KOF Swiss Economic Institute, 2020), https://ethz.ch/content/dam/ethz/special-interest/dual/kof-dam/documents/Medienmitteilungen/Globalisierungsindex/KOFGI_2020_structure.pdf.

Country Selection

This thesis' intent is to include as many countries as possible to provide policymakers with as many comparisons as possible to appreciate US power and prosperity. For a country to be included in the analysis, it had to have complete data for all years (2010-2018) across all indices. Furthermore, territories, commonwealths, and protectorates (e.g., Taiwan) are also excluded from individual inclusion in the model. To expand the data set to create more-representative scores, 124 countries are included based on not only data availability and accessibility in the various indices, but also in their ability to be compared to the US through using the likeness index.

Each country is comparable to the US, as shown by the Country Similarity Index score (United States). Scores on the Country Similarity Index are based on evenly weighted criteria of politics, culture, geography, demography, and technology. Higher scores represent higher similarity to the US.¹¹ Countries are compared to the US on a 100-point scale, where a higher score corresponds to a higher likeness to the US. Countries are then divided into tiers to understand groups of countries that share common qualities with the US better.¹ Statistical description of the index and tier calculations is found in figure 5.

Table 5. Likeness Index Descriptive Statistics

Mean	53.74
Standard Error	0.94
Median	53.9
Mode	62.7
Standard Deviation	10.52
Sample Variance	110.59
Kurtosis	1.70
Skewness	0.62
Range	64.9
Minimum	35.1
Maximum	100
Sum	6663.6
Count	124

Source: Created by author using data from Jeff Jones, “Country Similarity Index,” *OBJECTIVE LISTS* (blog), May 30, 2020, <https://objectivelists.com/2020/05/30/country-similarity-index/>.

¹ According to the source website, Country Similarity is established by scoring countries across multiple categories: demographics, culture, politics, technology, and geography.

Tier 1 countries score higher than one standard deviation above the average

Tier 2 countries score within one standard deviation of the average

Tier 3 countries score lower than one standard deviation below the average

Or:

Tier	Min Score	Max Score
1	60.96	100
2	41.33	60.95
3	0	41.32

The complete country list with tier value and likeness scores is at figure 6.

Table 6. Country Similarity Index (US)

Country	Score	Rank	Tier
United States of America*	100	1	1
Canada	79.4	2	1
Australia	70.6	3	1
United Kingdom	70.4	4	1
New Zealand	68.9	5	1
Ireland	68.2	6	1
France	67.8	7	1
Germany	67.8	8	1
Austria	67	9	1
Norway	66.4	10	1
Netherlands	66.2	11	1
Belgium	65.7	12	1
Switzerland	65.7	13	1
Italy	64.9	14	1
Spain	64.9	15	1
Sweden	64.8	16	1
Denmark	64.7	17	1
Mexico	64.3	18	1
Czechia	64.1	19	1
Slovenia	64	20	1
Poland	63.7	21	1

Trinidad and Tobago	63.6	22	1
Portugal	63.5	23	1
Chile	62.7	24	1
Croatia	62.7	25	1
Iceland	62.7	26	1
Lithuania	62.7	27	1
Argentina	62.6	28	1
Hungary	62.6	29	1
Slovakia	62.5	30	1
Uruguay	62.4	31	1
Latvia	62.3	32	1
Romania	61.6	33	1
Finland	60.8	34	2
Panama	60.6	35	2
Bulgaria	60.4	36	2
Costa Rica	60.2	37	2
Greece	60.2	38	2
Estonia	60	39	2
Brazil	59.5	40	2
Dominican Republic	59.5	41	2
Jamaica	59.3	43	2
Serbia	59.2	44	2
Israel	58.9	45	2
Ukraine	58.7	46	2
Colombia	58.6	47	2
Russia	58.2	48	2
South Korea	57.6	49	2
Cuba	57.5	50	2
South Africa	57	51	2
Cyprus	56.7	52	2
Venezuela	56.5	53	2
North Macedonia	56.4	54	2
El Salvador	56.3	55	2
Albania	56.2	56	2
Belarus	56.1	57	2
Ecuador	56.1	58	2
Bosnia and Herzegovina	55.9	59	2
Turkey	55.9	60	2
Peru	55.6	61	2

Honduras	54.5	64	2
Nicaragua	54	66	2
Japan	53.8	67	2
Georgia	53.7	68	2
Paraguay	53.5	69	2
Guatemala	53.2	70	2
Bolivia	52.3	71	2
Azerbaijan	52.1	72	2
Kazakhstan	51.6	73	2
Philippines	51	74	2
Namibia	50.6	75	2
Mauritius	50.3	76	2
Botswana	50	77	2
United Arab Emirates	49.8	78	2
Lebanon	49.5	79	2
Tunisia	49.4	80	2
Ghana	49.3	81	2
Jordan	48.8	82	2
Uzbekistan	48.4	83	2
Saudi Arabia	48.3	84	2
Qatar	48	86	2
Morocco	47.8	87	2
Turkmenistan	47.8	88	2
Malaysia	47.3	90	2
Kuwait	47.2	91	2
Algeria	47.1	92	2
China	47.1	93	2
Kenya	47	94	2
Zimbabwe	47	95	2
Iran	46.7	96	2
Gabon	46.3	97	2
Iraq	46.1	98	2
Nigeria	46	99	2
Thailand	45.8	101	2
Egypt	44.9	105	2
Oman	44.9	106	2
Syria	44.5	107	2
Vietnam	44.3	109	2
Cameroon	43.9	110	2

Libya	43.9	111	2
Sri Lanka	43.7	113	2
Angola	43	114	2
Tanzania	43	115	2
India	42.4	117	2
Madagascar	42.3	119	2
Indonesia	42.2	120	2
Pakistan	42.1	121	2
Uganda	41.7	124	2
Equatorial Guinea	41.6	125	2
Côte d'Ivoire	41.4	126	2
Mozambique	40.7	129	3
Senegal	40.4	130	3
Democratic Republic of the Congo	40.1	133	3
Myanmar	39.9	134	3
Burkina Faso	39.5	135	3
Afghanistan	39	137	3
Ethiopia	38.7	138	3
Mali	38.4	141	3
Nepal	38	143	3
Yemen	36.4	147	3
Laos	36.3	148	3
Bangladesh	35.4	150	3
Sudan	35.3	151	3
Cambodia	35.1	152	3

*The United States' score is not provided in the original index.

Source: Created by author using data from Jeff Jones, "Country Similarity Index," *OBJECTIVE LISTS* (blog), May 30, 2020, <https://objectivelists.com/2020/05/30/country-similarity-index/>.

Data Aggregation and Requirements

The Prosperity Index provides the prosperity and security scores used as the dependent variables throughout the model. Elements of national power combine respective indices to create category scores for each country by year. Therefore, each

country for each year has a score for diplomacy (D), information (I), military (M), and economy (E). Elements of National Power scores are normalized on a 100-point scale and calculated to determine their weight (i.e., effect) on each element of national welfare.

Relationships between elements of national power and elements of national welfare will also be graphically represented. Each element of national power score will be categorically aggregated. Relationships between each element of national welfare and each element of national power will be determined using generalized linear regression—where P is a function of D, I, M, and E; and S is a function of D, I, M, and E; or

$$P = B_0 + B_1D + B_2I + B_3M + B_4E$$

and

$$S = B_0 + B_1D + B_2I + B_3M + B_4E^2$$

The regression model will also consider prosperity and security models as it relates to similarity to the US. Similarity will be split by tier 1, tier 2, and tier 3, in accordance with the scores and methods described in the County Similarity Index section. The outcome of these tier-oriented subcategories will be demonstrated as follows:

$$P_{\text{Tier 1}} = B_0 + B_1D + B_2I + B_3M + B_4E$$

$$P_{\text{Tier 2}} = B_0 + B_1D + B_2I + B_3M + B_4E$$

$$P_{\text{Tier 3}} = B_0 + B_1D + B_2I + B_3M + B_4E$$

and

² B_n represents a base number that a country can expect to possess without any other input. For example, if the final regression formula was $P = 10 + .30D + .40I + .50M + .60E$ a country could expect to have 10 points in the Prosperity Index for no other reason than it is a recognized country and for each 10 points a country scored in each category of DIME, its score would increase by 3, 4, 5, and 6 points respectively.

$$S_{\text{Tier } 1} = B_0 + B_1D + B_2I + B_3M + B_4E$$

$$S_{\text{Tier } 2} = B_0 + B_1D + B_2I + B_3M + B_4E$$

$$S_{\text{Tier } 3} = B_0 + B_1D + B_2I + B_3M + B_4E$$

It can be assumed that these models will not perform as well as the model that combines all country scores. There are significantly fewer countries included in the separate tiers, and as a result, the models may provide a model that does not generalize well or cannot determine a practical value for the elements of national power.

Data Saturation

Country prosperity scores are then compared to determine which element of national power has the most effect on increasing the prosperity or security score. The intent of the data thresholds is to include enough countries similar to and different from the United States to achieve comparison, enough years to span different policy cycles in the post-9/11 world, and at least one index per element of national power plus the dependent variables, prosperity and security.

Table 7. Data Point Tabulation (Minimum)

Factor	Count
Country Range	70
Year Range	7
Product of Data Points	490

Source: Created by Author.

Data saturation will be reached above 490 observations (see figure 7). Data points are a product of the number of countries included across all indices, number of indices,

and number of years shared across all indices. A minimum of 70 countries are desired for inclusion with at least seven consecutive years-worth of data. The statistical significance will be set at $p < .05$.

Information Overlap

There are a few areas where data overlaps from one index to another.

1. Prosperity Index shares common data with the Economic Globalization Index, as it relates to market openness, productivity and competitiveness, and restrictions on international investment.
2. Prosperity Index shares common data with the Social Globalization Index, as it relates to communications.
3. Global Peace Index measures the financial contribution to UN peacekeeping missions, while the Political Globalization Index measures personnel contribution to UN peacekeeping missions. These are two different measurements but could be closely related enough to each other to have an artificial impact on the output data.

Though these interactions are relatively insignificant, The Prosperity Index's 293 indicators reduce significant issues shared data may cause.¹² However, it is expected that the common data between the affected index elements will be somewhat inflated due to this interaction. A root of mean square error (RMSE) will be used against a practice set and a predicted set to ensure the regression model generalizes well, and the data set has selection issues. The practice set will use 20% of the total observations to compare to the predicted set. If the practice and predicted set fall within 10% of each other, the model will qualify as generalizable for other countries.

Summary

The purpose of this thesis is to provide policymakers a tool to determine the cost-benefit of prioritizing one element of national power over another, and the effect on overall national welfare. While this thesis is relatively limited due to the constraints of time and resources, the ability to objectively demonstrate a relationship between improving one element of national power over another should be sought and continually improved to inform national policy and grand strategy better.

¹ The Legatum Institute, “Methodology.”

² The Legatum Institute, “Summary.”

³ The Legatum Institute, *The Legatum Prosperity Index Pillar, and Element Profiles 2020*, 7.

⁴ KOF SEI, *2020 Globalisation Index: Structure, Variables and Weights*.

⁵ Elcano Royal Institute, “Elcano Global Presence Index – Methodology,” accessed April 26, 2021, <https://www.globalpresence.realinstitutoelcano.org/en/methodologic>; KOF SEI, *2020 Globalisation Index: Structure, Variables and Weights*.

⁶ Nye. “Soft Power and Higher Education | Forum for the Future of Higher Education,” 47.

⁷ Elcano Royal Institute, “Elcano Global Presence Index – Methodology.”

⁸ Visions of Humanity, *Global Peace Index 2020: Measuring Peace in a Complex World* (Sydney, Australia: Institute for Economics and Peace, June 2020). <http://visionofhumanity.org/reports>, 85.

⁹ Elcano Royal Institute, “Elcano Global Presence Index – Methodology.”

¹⁰ Ryan Hass and Abraham Denmark, “More Pain than Gain: How the US-China Trade War Hurt America,” *Brookings* (blog), *The Brookings Institution*, August 8, 2020, <https://www.brookings.edu/blog/order-from-chaos/2020/08/07/more-pain-than-gain-how-the-us-china-trade-war-hurt-america/>.

¹¹ Jones, “Country Similarity Index,”

¹² The Legatum Institute, *The Legatum Prosperity Index 2019 Methodology Report*, 41-84.

CHAPTER 4

ANALYSIS

Introduction

This chapter will describe and interpret the compiled and calculated data detailed in the methodology.³ First, we will detail if the data threshold was reached to ensure data saturation was achieved. Next, the multiple linear regression model for all countries and Tier 1, Tier 2, and Tier 3 countries are analyzed. As shown in the methodology, Tier 1, 2, and 3 countries are most, somewhat, and least like the United States (US), respectively.⁴ Furthermore, there will be two models for prosperity and security followed by an analysis thereof. This chapter will then include an analysis of the Pearson correlation followed by an analysis of all data and its implications. Then the best-performing prosperity and security models are applied to a sample of three countries to compare real and predicted scores. After the data analysis, we will find which model(s) is most/least valuable, what trends exist, and which elements of national power domain(s) have the most significant impact on the others to maximize prosperity and inform decision-making.

Data Saturation Threshold

In the previous chapter, it was stated that seven years' worth of data from a minimum of 70 countries is necessary to reach data saturation. These thresholds are

³ See Appendix A for all prosperity, security, diplomacy, information, military, and economy domain scores by year, by country.

⁴ See figure 3, Methodology, for an explanation of country tier determination and list.

assumed to provide a relatively long enough time to represent multiple significant domestic and international events and policy shifts, as well as a large enough number of countries to represent an array of government systems, norms, and agendas.⁵ This chapter will begin by establishing that it met the required number of data points, 490, calculated using inclusion and exclusion parameters from the methodology. A total of 124 countries over nine years were included in the final data set for a total of 1116 data points (see figure 8).

Table 8. Data Point Tabulation

Factor	Count
Country Range	124
Year Range	9
Product of Data Points	1116

Source: Created by Author.

Multiple Linear Regression Results

The data below represents the results of the multiple linear regression as described by the parameters detailed in the methodology. Each model will present a table showing the findings, followed by a brief explanation of the results and a summarized comparison of the elements of national power, as well as their opportunity costs related to the prosperity and security scores (see figure 9).

⁵ See figure 3, Methodology, for an explanation of data saturation.

All-Countries Prosperity Model

Table 9. Elements of National Power Influence on Prosperity

Predictors	Coefficient	
	Estimate	<i>p</i> -value
(Intercept)	22.60	.000
Diplomacy	.05	.000
Information	.98	.000
Military	-.47	.000
Economy	.16	.000
Observations	892	
Adjusted R^2	.880	

Source: Created by Author.

Multiple linear regression analysis was used to develop a model for predicting countries' prosperity scores from their diplomatic, informational, military, and economic scores. Regression coefficients are shown in figure 9 above. Each of the predictor variables had a significant ($p < .05$) confidence interval and estimated predicted value. The model was able to account for 88% of the variance in a country's prosperity, $p < .001$, $R^2 = .88$, RMSE (Training Test) = 4.42, RMSE (Predicted) = 4.55.

The outcome of this analysis shows strong relationships across all domains: prosperity, diplomacy, information, military, and economy. The p -value of $<.001$ is better than the required value from the methodology ($p < .05$). It shows that this model can reject the null hypothesis, and that there is no relationship among the variables. Furthermore, the R^2 value of .88 signifies that this model can generally account for most (88%) of the variance of the scores for elements of national power as predictors of a

country's prosperity score. Furthermore, the RMSE training test/predicted comparison produced very close values with less than 3% (Training Test = 4.42, Predicted = 4.55) variance. With these results, we can use this model to predict scores for any country.

The elements of national power do have a large amount of variance between their respective impacts on prosperity scores.

1. A country can expect to start with 22.6 points towards its prosperity score.
2. For every one point that the diplomacy scores increases, a country's prosperity score can expect to increase an estimated .05 points.
3. For every one point that the information scores increases, a country's prosperity score can expect to increase an estimated .98 points.
4. For every one point that the military score increases, a country's prosperity score can expect to decrease an estimated .47 points.
5. For every one point that the economy score increases, a country's prosperity score can expect to increase an estimated .16 points.

Multiple Linear Regression Results for Prosperity with Likeness Tiers

Table 10. Elements of National Power's Influence on Prosperity by Tier

Predictors	Tier 1		Tier 2		Tier 3	
	Coefficient		Coefficient		Coefficient	
	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
(Intercept)	26.42	.000	22.16	.000	33.82	.000
Diplomacy	.10	.009	.00	.925	-.05	.089
Information	.78	.003	.00	.000	.82	.000
Military	-.55	.000	-.21	.000	-.63	.000
Economy	.22	.000	.13	.000	.10	.064
Observations	237		554		100	
Adjusted R^2	.510		.818		0.734	

Source: Created by Author.

Multiple linear regression analysis was used to develop a model for predicting countries' prosperity scores for each tier from their diplomacy, information, military, and economy scores (see figure 10). All predictor variables have significant confidence intervals ($p < .05$) except for the Tier 2 diplomacy and Tier 3 diplomacy and economy scores. The Tier 2 model accounted for the most variance at 82%, followed by Tier 3 countries with 73%, then Tier 1 countries with 51%, $p < .001$.⁶

The elements of national power's influence on prosperity by tier give a different view than the picture as a whole. It is important to note that the R^2 for each tier is less than the R^2 for all of the countries combined together. This difference indicates the best model is the model that combines all countries, and we cannot get as reliable of a model

⁶ See Appendix B for descriptive statistics

to predict scores by trying to separate countries by their likeness to the US. Despite not being as robust of a model, there are some key observations from the different tiers. First, Tier 2 and Tier 3 likeness countries still have a relatively high R^2 at .82 and .73, respectively; while Tier 1 likeness is only .51. Also, despite having only 100 observations, Tier 3 countries have a relatively high value for R^2 . Lastly, military and information coefficient estimates are the most influential predictors of prosperity scores. Each of these results provides a broader interpretation not available in the model that includes all 124 countries.

The R^2 values for Tier 2 and Tier 3 countries, .82 and .73 respectively, remain relatively high even though there are significantly fewer observations for each of those tiers: 554 observations, or data points, for Tier 2 and 100 observations for Tier 3. Compare those values to the Tier 1 countries with an R^2 value of 31% lower than Tier 3 countries (.51 for Tier 1 versus .73 for Tier 3), while Tier 1 countries had 137% more observations (247 for Tier 1 versus 100 for Tier 3). That implies that being less like the US that a country is, it could apply a more specific, yet limited, model. That specific Tier 3 model could be applied and adapted to guide policy for those countries more effectively. However, for Tier 1 countries, it would be best to consider making policy decisions using the all-countries model to predict prosperity scores and guide policy decisions. It is still important to consider the individual elements of national power coefficient estimates and p-values before committing to specific tier models.

As in the all-countries model, the military and information domains are the most impactful predictors across Tiers 1, 2, and 3. Information domain coefficients remain the highest overall with scores of .78, 1.00, and .82 for Tiers 1, 2, and 3, respectively. The

military domain coefficients are -.55, -.21, and -.63, respectively. Furthermore, all predictors are significant at $p < .001$ except for the information domain at .003 for Tier 1, so it is still useful to the model. The higher values for the military and information domains for the individual tiers imply that when a country considers policy based on how similar it is to the US, the two most impactful elements of national power on prosperity will most likely be the information and military domain. Depending on political strategy and goals, that relationship should be well understood before taking decisive action.

Overall, the elements of national power's relationship with prosperity by tier are useful for countries reprioritizing national resource allocations, regarding maximizing power projection and prosperity at the same time. It is almost impossible for countries to refrain from comparing themselves to other nations in this process. However, the models indicate comparing one country to another is not as useful when prioritizing resources to the different elements of national power.

Results of Multiple Linear Regression for Security

Table 11. Elements of National Power's Influence on Security

Predictors	Coefficient	
	Estimate	<i>p</i> -value
(Intercept)	43.31	.000
Diplomacy	-.17	.000
Information	1.16	.000
Military	-.73	.000
Economy	.20	.005
Observations	892	
Adjusted R^2	.573	

Source: Created by Author.

Multiple linear regression analysis was used to develop a model for predicting security scores from diplomatic, informational, military, and economic domain scores. Each of the variables was a significant predictor of security ($p < .05$) (see figure 11). The model was able to account for 57% of the variance in a country's prosperity, $p < .001$, $R^2 = .57$.⁷

The outcome of this analysis shows strong relationships across all domains: diplomacy, information, military, and economy were all significant predictors of security. The p -value of $<.001$ is better than the required value from the methodology ($p < .05$). This shows that this model can reject the null hypotheses that there is no relationship among the variables. Furthermore, this model can generally account for 57% of the

⁷ See Appendix B for descriptive statistics

variance of the scores for elements of national power as predictors of a country's security score.

The elements of national power do have a large amount of variance between their respective impacts on security scores.

1. A country can expect to start with 43.1 points towards its security score.
2. For every one point that the diplomacy scores increases, a country's security score can expect to decrease an estimated .17 points.
3. For every one point that the information scores increases, a country's security score can expect to increase an estimated 1.16 points.
4. For every one point that the military score increases, a country's security score can expect to decrease an estimated .73 points.
5. For every one point that the economy score increases, a country's security score can expect to increase an estimated .20 points.

At first glance, the elements of national power's influence on security have a much more direct relationship with every domain than prosperity. However, the impact of those departures is blunted by the lower R^2 value, .57. So, even though information is much higher in the security model when compared with prosperity model, 1.16 and .98 respectively, that higher value only accounts for 57% of the variance in the model. In the all-countries prosperity model, we calculated the model accounting for 88% of the variance. Therefore, we can be sure that the relationship between elements of national power and security is strong, but the model can certainly be improved before utilizing it as a more definite means of providing useful information for decision-making.

It is crucial to consider the broader implications of all of the models of elements of national power as it relates to security. Security is most often associated with hard power and military might. As argued by hard-power advocates, security is best increased, or at least preserved, by maintaining a large, capable, and powerful military. However better the security model may be made in the future, the data contradicts Cohen's assertions outright. Individual tier and the all-countries models describe relationships between security and the elements of national power as increasing, by divesting from the military and investing in the information domain.

Multiple Linear Regression Results for Security with Likeness Tiers

Table 12. Elements of National Power's Influence on Security by Tier

Predictors	Tier 1		Tier 2		Tier 3	
	Coefficient		Coefficient		Coefficient	
	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
(Intercept)	50.24	.000	53.88	.000	32.33	.002
Diplomacy	-.00	.962	-.29	.000	.09	.357
Information	.56	.001	1.19	.000	.80	.013
Military	-.21	.041	-.74	.000	-.73	.000
Economy	.27	.037	.05	.602	.20	.000
Observations	230		554		100	
Adjusted R^2	.272		.425		0.525	

Source: Created by Author.

Multiple linear regression analysis was used to develop a model for predicting countries' security scores for each tier from their diplomacy, information, military, and economy scores, for each likeness tier (see figure 12). Each variable was a significant (*p*

< .05) predictor except for Tier 1 and 3 diplomacy, and Tier 2 economy scores. The Tier 2 model was able to account for the most variance at 53%, followed by Tier 3 countries with 43%, then Tier 1 countries with 27%.⁸

The elements of national power's influence on security by tier are similar to the prosperity model, in that there is a different view than the all-countries security model. The R^2 for each tier is less than the R^2 for all of the countries combined; so it is better not to try and group countries by likeness to determine where the best investment is for elements of national power domains. There are the same domain-specific indicators, as well. Tier 3 and Tier 2 countries have R^2 close to the all-countries security model (.57) at .53 and .43. Unlike the other model, the Tier 1 model accounts for very little error with an R^2 of .27.

As expected from the lower R^2 value in the all-countries model, the elements of national power's influence on security by tier did not perform as well. Generally, p -values remained low enough for the majority of the coefficients to be acceptable; it is apparent that the model becomes less useful when attempting to compare countries' policies to inform decision-making. Notably, the Tier 3 model is the most representative tier model with an R^2 of .53, instead of the all-countries model, .57. Despite the lower R^2 values for the tier model, the same trends are found in the all-countries model. Information and military domains remain dominant factors when predicting security. The two domains' high and inverse relationship to each other continues to imply that a

⁸ See Appendix B for descriptive statistics

country, regardless of tier, should divest from the military and invest in information to increase security.

Correlations Between the Elements of National Power

Table 13. Elements of National Power Domain Correlations

Domain	Correlations		
Diplomacy			
Information	.582*		
Military	.113*	.351*	
Economy	.436*	.879*	.290*

Notes: 1114 Total Observations; * $p < .001$

Source: Created by Author.

The correlation between the elements of national power provides the final piece that will allow countries to determine a semblance of causality within the scope of this thesis (see figure 3). Using the correlations will provide a complete formula, of which this thesis can offer help to US policymakers when determining how to allocate resources to maximize prosperity. Though the prosperity model seems somewhat counterintuitive, the correlations describe the compounding benefits from investing in specific domains.

The Pearson correlations show high significance for each domain pair; all calculated a two-tailed significance of .000. The highest correlation between information and economy domains ($R^2 = .88$) shows that not only can a country expect higher prosperity from investing in information, but that the economy will also improve as a result, or vice versa. Moreover, the economy domain's low coefficient value in the prosperity model is greatly overshadowed by its correlation with the most influential

domain, information. The next highest correlation is between the information and diplomacy domains. The diplomacy and information domains have a significantly high correlation that can imply compounding jumps in prosperity by investing resources in either of these domains ($R^2 = .58$). While identifying individually high values, it is also important to consider individual domains and their impact across all other elements of national power as well. This will allow policymakers to determine which domain effects all the others the most.

To determine which elements of national power has the most effect on the others, we will need to take a single domain and assume that a country experiences a 1-point gain in that domain, calculates the change in the other domains, and recalculates the predicted prosperity score using the prosperity model. The US's 2020 scores for the elements of national power are being used as a baseline. The all-countries prosperity model will be used to predict the US's 2020 score.

Table 14. Predicted Prosperity Score Change from One-Point Increase

Domain	US DIME Scores (2020)	Diplomacy + 1	Information +1	Military +1	Economy +1
Diplomacy	92.6	93.6	93.2	92.7	93
Information	93.3	93.9	94.3	93.4	94.2
Military	75.6	75.7	76.0	76.6	75.9
Economy	83.8	84.2	84.7	84.4	84.8
Predicted Prosperity*	96.54	97.2	97.5	96.3	97.5
Predicted Change		.7	1.0	-.3	.9

* The Prosperity Score for the US in 2020 is actually 77.5. The predicted prosperity score is calculated using the linear regression equation $P = B_0 + B_1D + B_2I + B_3M + B_4E$

Source: Created by Author.

The Predicted Prosperity table indicates that combining the correlation of the elements of national power and the all-countries prosperity model will produce generally positive results (see figure 14). Investing in the information or economy domains by one point, essentially has the same result as a one-point increase in the prosperity score. The diplomacy domain is still quite valuable, as investing in diplomacy will still see a compounded increase by .7 points in prosperity. The military domain is the only domain with a negative impact on prosperity at -.3 points. This further suggests that despite the positive correlation that the military domain has with the other elements of national power, that correlation is not strong enough to offset the negative relationship in the regression model.

Applying the Models

To get a sense of how well the models perform, three example countries, the US, Turkey, and Myanmar, are compared. It is important to remember that predictions are theoretical and are inherently limited in how well each model can predict on a case-by-case basis and divorced the variables not included in the model. Taking those limitations into account, the tables below will show each country's domain scores for each element of national power and each country's prosperity and security score using the all-countries models. The year range will be from 2010 to 2018. Domain drivers are selected based on the country's policymaker's emphasis and are used as the independent correlative value (shown in gray in the table below). As a case in point, President Barack Obama emphasized the information domain in the national security strategy and in broad policy decisions. The emphasized domain will act as the dependent variable for that year. Each subsequent predicted domain score is calculated based on the elements of national power

correlation coefficients. Then, the security and prosperity models are used to calculate the expected changes based on the predicted domain scores. The difference between the predicted scores and actual scores is then calculated. A negative value for difference indicates the model over-predicted, and a positive value indicates the model under-predicted the change. The prosperity and security models, both, are effective at predicting change. In general, the application seems to indicate that the prosperity model is more accurate than the security model, and the correlations between elements of national power can assist in determining prosperity and security scores (see figure 15).

Table 15. Predicted Score Comparison

USA																			
Year Domain Driver	2010		2011, Information		2012, Information		2013, Information		2014, Information		2015, Information		2016, Information		2017, Information		2018, Military		
	Actual	Predicted	Actual	Difference	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	
Prosperity	770	772	778	-0.5	774	768	770	779	772	774	774	774	773	774	772	775	775	77.5	0.1
Security	743	745	751	-0.7	756	740	743	763	745	748	746	746	754	757	718	756	68.5	72.3	-3.8
Diplomacy	927	931	929	0.2	935	933	934	934	933	933	934	934	936	935	936	936	92.6	93.6	-1.0
Information	915	922	922	0.0	917	917	922	922	923	923	927	927	928	928	929	929	93.3	93.0	0.3
Military	758	756	757	-0.1	755	756	753	754	751	752	752	752	755	754	756	755	75.6	75.6	0.0
Economy	824	826	826	0.0	828	827	828	828	835	834	831	837	836	836	841	840	83.8	84.1	-0.2
Turkey																			
Year Domain Driver	2010		2011, Information		2012, Information		2013, Military		2014, Military		2015, Military		2016, Military		2017, Military		2018, Military		
	Actual	Predicted	Actual	Difference	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	
Prosperity	557	563	567	-0.4	565	567	568	573	579	583	577	577	572	570	567	576	567	564	-0.7
Security	511	512	513	-0.1	512	517	508	551	507	529	526	524	522	527	504	518	43.7	44.2	-0.5
Diplomacy	919	920	919	0.0	928	914	927	928	924	926	924	924	926	927	925	926	92.7	92.4	0.3
Information	340	350	350	0.0	348	348	358	348	366	364	366	366	365	366	366	365	363	366	-0.3
Military	166	166	166	0.0	168	166	169	169	159	159	159	159	160	160	161	161	156	156	0.0
Economy	279	279	279	0.0	285	284	278	285	295	275	295	295	280	286	292	280	286	29.0	-0.5
Myanmar																			
Year Domain Driver	2010		2011, Military		2012, Diplomacy		2013, Information		2014, Information		2015, Information		2016, Information		2017, Information		2018, Information		
	Actual	Predicted	Actual	Difference	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	
Prosperity	387	403	393	1.0	409	430	415	428	421	432	432	449	440	434	446	411	45.3	46.7	-0.4
Security	456	484	458	2.6	470	511	485	491	446	504	444	461	463	449	445	423	44.1	45.2	-1.1
Diplomacy	394	401	396	0.5	431	431	444	439	465	449	473	473	463	458	453	447	52.5	55.1	-2.6
Information	125	141	132	0.9	161	158	172	172	180	180	193	193	192	192	184	184	19.7	19.7	0.0
Military	100	121	121	0.0	110	124	99	106	80	92	85	85	54	59	30	70	10.1	10.0	0.1
Economy	170	172	176	-0.4	176	185	188	187	185	185	194	193	192	192	198	197	19.7	19.7	0.0
Key																			
Prediction Accuracy	Within 0.5 Points Within 1 Point More Than 1 Point																		
Independent Covariate Value	0.0																		

Source: Created by Author.

The predictive modeling, retroactively applied to the US, Turkey, and Myanmar, show promising results overall, though each country scored differently. Again, the US's key driver from 2011-2017 was the information domain. This is a subjective assessment, and it could be argued that either the diplomacy or economy domain could be the primary driver for those years. However, for this test, information seems to be the best fit given President Obama's priorities in the 2010 and 2014 National Security Strategy.¹ Under the Trump administration, the military domain is selected as the key driver primarily due to President Trump's fiscal year 2018 budget request. The US maintained the information domain as the national security strategy driver through 2017 with 2018, switching to the military domain as the driver.² The model seems very well-suited when compared with US scores. The security score prediction was less accurate, but it still showed relatively close results to the actual scores. Given that the security model accounted for approximately 50% of the error variance, the inaccuracy is understandable. The models performed well for the US, but the less stable a country was, the more difficulty the model had at predicting the changes.

Applying the model to Turkey yielded fewer accurate predictions than for the US, but still performed well overall. The driving domain score for Turkey was determined to be the information domain for 2011 to 2012, given Turkey's peaceful outreach to its Kurdish population and increased connectivity to the EU and global commons. However, from 2013 to 2018, President Erdogan's more active use of the military in day-to-day Turkish lives and cracking down on dissent through security forces changed the driving domain to military.³ Seven out of the nine years' prosperity scores were decently accurate, but security scores were less predictive overall. Diplomacy domain scores were

the most accurately predicted, followed closely by information. However, economy score predictions were the least accurate.

Myanmar was the most dynamic of all the countries in terms of domain drivers during the test years. In 2011, Myanmar was primarily ruled by a military-backed party; the military domain is the driver domain for this year. However, in 2012, open elections were held, and international sanctions were lifted, allowing Myanmar to participate in the international sphere; this promotes diplomacy as a key driver for this year. Following the 2012 elections, the information domain seemed to be the driving domain each year, given the Burmese government's progress and increase of opening itself up to the world.⁴ Myanmar's predicted prosperity, security, and domain score performed worst out of all three test countries. The domain drivers were not able to predict other scores very well and only came relatively close several times. The prosperity and security scores were not very accurate throughout the tested years. It is obvious that the models and correlations had a higher amount of error when applied to Myanmar's scores, but it is beyond the scope of this thesis to determine that it is an unusable model for Myanmar specifically.

Overall, the model seems to perform well. The example countries demonstrate the limitations of the models and correlations. The models should inform decision-making by governing officials, but iterative, pinpoint accuracy should not be assumed. Individual country's milieus will always play a role in creating more errors in the model. It is likely that higher instability within a country's government can negatively affect the model's ability to predict changes; that possibility cannot be determined within the scope of this thesis and should be studied further. However, in the formation of long-term policy and strategy, countries should be reasonably sure that prioritizing the information or military

domains will result in a respective increase or decrease in both prosperity and security. As always, more development and testing of the models will improve results in the future, but we can be confident that the model can assist policymakers to estimate the effect of changes appropriating resources to the various elements of national power on prosperity and security.

Analysis

Though every other model does not perform as well, or is less informative overall, the third secondary question of “does similarity to the US impact the relationship between prosperity and elements of national power,” is answered conclusively. The all-countries prosperity model performs the best and will serve as the basis for answering the fourth secondary research question, “how to describe the relationship between prosperity and the elements of national power.” Despite each model’s statistical differences, there are apparent trends.

By far, the information domain stands out as the element of national power with the most influence on prosperity. The military domain is the next most influential element of national power on prosperity scores, but inversely. While not insignificant, the economy and diplomacy domains have a much smaller relationship with prosperity. This finding seems to fall in line with what soft power advocates argue; but this is not quite the whole picture.

When we consider the correlation between the elements of national power, we can discern a deeper understanding of how to maximize prosperity. The high correlational values between diplomacy, information, and economy domains mean that any time each of those domains increases, the other can expect to increase as well, compounding the

effort and further increasing prosperity. The negative correlation the military domain has with the rest of the elements of national power demonstrates the breadth of the opportunity cost that comes with such investments. This is not necessarily the slam-dunk case that shows military spending is overtly detrimental and harmful to a country's prosperity. Instead, it merely shows the two-way nature of the relationship: if a country wants to increase military investment, it will come at a cost to the other elements, and vice versa.

¹ Karen DeYoung, "Obama Redefines National Security Strategy, Looks beyond Military Might," *The Washington Post*, May 27, 2010, <https://www.washingtonpost.com/wp-dyn/content/article/2010/05/27/AR2010052701044.html?hpid=sec-politics>; Office of the Press Secretary, "Fact Sheet: The 2015 National Security Strategy," The White House, February 6, 2015, <https://obamawhitehouse.archives.gov/the-press-office/2015/02/06/fact-sheet-2015-national-security-strategy>, 3-5.

² Congressional Budget Office (CBO), *An Analysis of the President's 2018 Budget* (Washington, DC: CBO, July 2017), <https://www.cbo.gov/publication/52846>, 11.

³ Berk Esen and Gumuscu Sebnem. "Rising Competitive Authoritarianism in Turkey." *Third World Quarterly* 37, no. 9 (February 19, 2016): 1581–1606.

⁴ Lindsay Murdoch, "ASEAN Leaders Call for Sanctions on Burma to Be Lifted," *The Age*, April 5, 2012, <https://www.theage.com.au/world/asean-leaders-call-for-sanctions-on-burma-to-be-lifted-20120404-1wd6p.html>.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The literature review explored the trajectory of the United States (US) federal budget and its impact on discretionary funding. The Congressional Budget Office (CBO) analysis is reliable enough to demonstrate that over the next 30 years, executive departments can expect to have suppressed budgets due to inflating non-discretionary budget items such as net interest spending and Medicare/Medicaid.¹ Also, the different schools of thought from modern defense, political, and social theorists were audited. Hard and soft power advocates present opposing views where countries, specifically the US, prioritize investing in either more coercive (hard power) or cooperative (soft power) elements of national power.² In the methodology and data analysis, it was found that the element of national power that was most influential at maximizing prosperity and security was the information domain; and the most detrimental domain was military. Furthermore, the model indicated how much a country was like the US (i.e., economically developed and democratic) did not significantly alter the models' trends. Having presented these findings throughout the course of this thesis, the primary research question can be answered, and subsequent recommendations presented.

The primary research question was: How should US policymakers reduce discretionary spending in the US federal budget while maintaining international primacy? The qualitative and quantitative analyses demonstrate that policymakers should reduce spending on the military. According to the models in the previous chapter, the data showed that across all models, the element of national power that had the most negative

impact on prosperity and security is the military domain. On the other hand, prioritizing spending in the information domain over the other domains creates a compounding effect that increases every domain and prosperity and security. Therefore, divesting from the military and prioritizing soft power-oriented domains will maintain the US's international primacy.

Pairing the most-predictive model with the correlations between the elements of national power provides a powerful tool for policymakers to synchronize efforts between the principal agents (e.g., Department of Defense). In turn, the US can reduce discretionary spending while maintaining or, potentially, increasing international primacy. The recommendations detailed in this chapter reflect the findings from previous chapters. The Department of Defense (DOD) receives the most funding out of all recipients of discretionary funding and, therefore, is the focus of the recommendations. It would be impractical to recommend that the US quickly and drastically reduce military spending given how intertwined defense spending is to domestic and international economies and partnerships. However, the near-certainty of a shrinking budget and the results in the previous chapters provide the impetus and path to prudent change. The proposed changes below are conceptual by design. Each topic is meant to reinforce an existing facet of the DOD that capitalizes on modern adversarial interactions or proposes new or renewed ways of synchronizing DOD priorities with other executive departments to increase effectiveness.

Recommendations for Policymakers

Striking a Balance

As shown in the police chief thought experiment, the mere mention of safety and offering a reasonable, logical argument for more spending on personnel, training, and equipment to increase the capability of the force that is on the front lines is an easy idea for policymakers to acquiesce to, if not encourage. However, the all-countries prosperity model draws an unambiguous conclusion that investing time, energy, and resources in the military domain is detrimental to prosperity and security. The information domain is the most beneficial to prosperity and security, and each element of national power shares a positive relationship with each of the others, except for the military domain. The findings paint a very stark picture. So, if the military domain is presumably necessary yet inordinately costly, how can policymakers apply the model to the real world?

Not up for discussion, because it is beyond the scope of this thesis, is the necessity of a country to maintain a military. The model shows that a country should minimize investing in the military. However, if we follow the model to its logical conclusion, there should be no investment in the military by any country in a 21st-century world. Reality makes this presumption a non-starter. Threats, conflict, and bad actors will not go away any time soon and will pose a persistent, dynamic problem where military force is a part of the solution. However, the necessity of military investment must be heavily tempered by understanding the opportunity cost it imposes on prosperity, security, and the other elements of national power.

The reason for the over-emphasis on military investment in the US is an undue focus on existential threats. The US and allies spent nearly half a century, following

World War II, focusing on violent communist expansionism and regularly fought across the globe to check the red tide. Whether or not the Cold War era threats were existential, the US and its citizens thought it was, for the most part, and perception was reality. After trying to divest from the military under President Clinton in the 1990s, 9/11 shocked the US back into a military focus as existential threats seemed to loom everywhere. Fear-mongering and the premonitions of another 9/11, occurring without maintaining a force advanced and capable enough to confront an enemy as nebulous as terrorism, became commonplace. Furthermore, a resurgent, belligerent Russia and a growing China gave policymakers ever more reason to sound the alarm and support increased defense spending while dismissing the long-term impacts.

Regardless of whether a policymaker concurs or dissents with the findings of this thesis, the reality of decreased spending on the executive departments of government is all but inevitable. It cannot be wished away or continually punted to a new congress. The approach the US currently takes to determine spending needs to change well before the crisis occurs, and it should be assumed that US adversaries are aware of this trajectory and are patiently counting on it.

Orient on Most Likely Threats

Best Military Advice (BMA) is a recommendation and guidance senior military leaders are expected to give to civilian decision-makers in the US government. BMA is often focused on trying to mitigate against the worst possible threats at home and abroad. Generals and admirals are respected and sought after for their BMA, to keep America safe while forming and executing planning and policy. However, there is a fundamental flaw in BMA. It must assume the worst. Decades of post-Cold War and post-9/11

conditions senior officers to think this way. However, continually preparing for the worst-case scenario is unrealistic and irresponsible.

It is impossible to ignore the visceral threat of annihilation, especially when there is so much imperfect knowledge about one's adversaries. An adversary's intentions, capabilities, and internal and external support can never be fully understood. But, failing to temper emotion with reason, creates many more problems than mere uncertainty. If the US perpetually plans to engage in large-scale combat operations with two near-peer/peer adversaries simultaneously and without ally support, spending itself into ruin is a foregone conclusion.³ In doing so, the US will never be satisfied with not having the biggest, best, and most of everything related to the military. It will prepare for extremely unlikely, improbable, or implausible scenarios. Furthermore, that mindset ignores the strengths that make it the best military in the world.

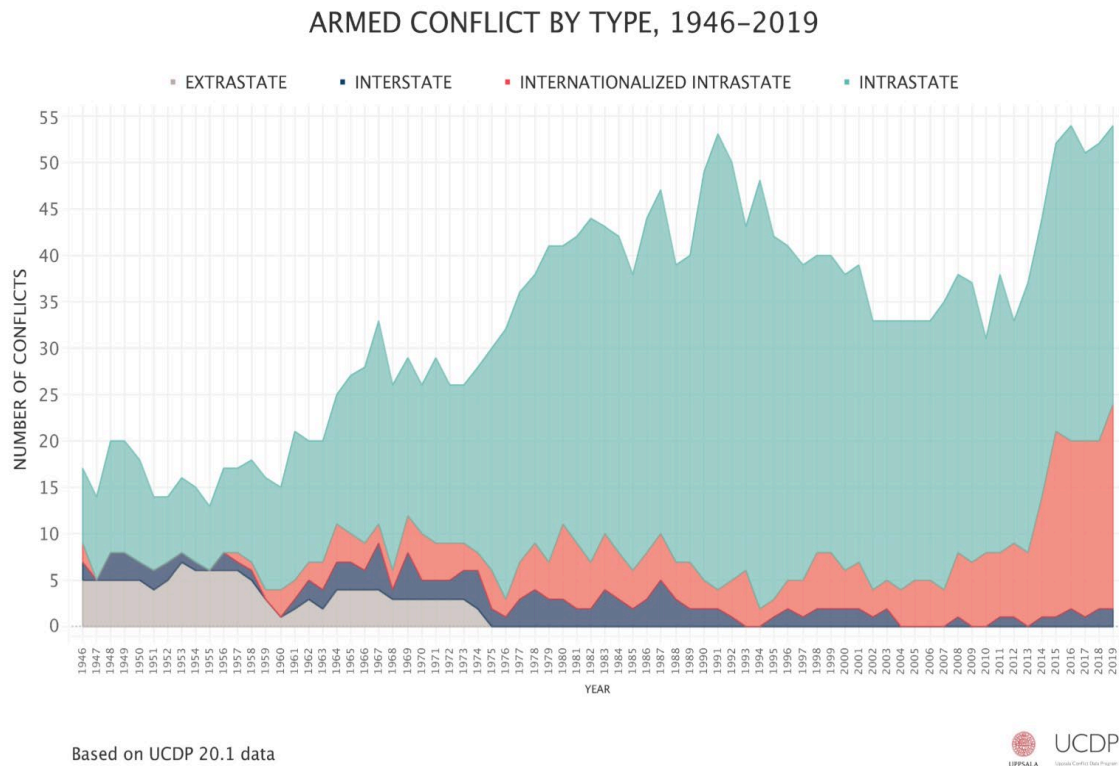


Figure 5. Armed Conflict by Type, 1946-2019

Source: Uppsala Conflict Data Program, “Charts, Graphs and Maps,” Department of Peace and Conflict Research, Uppsala University, Uppsala, Sweden, 2020, <https://www.pcr.uu.se/research/ucdp/charts-graphs-and-maps/>.

Sweden’s Uppsala University collects, tracks, and analyzes conflict throughout the world through the Uppsala Conflict Data Program (UCDP). The UCDP data shows that the most likely threat the world faces is not from great powers but from intrastate and internationalized intrastate conflict (see figure 5). Moreover, extrastate armed conflict is essentially non-existent. No state can or should completely ignore the possibility of extrastate or interstate conflict, but to commit so much energy and so many resources to the detriment of presumably helpful elements of national power in case of an unlikely scenario is unjustifiable. Taking the soft power advocates argument and using the

prosperity and security models, one could argue that the continued prioritization of the military is the very thing that is causing harm and strife. Moreover, maintaining a large, sophisticated, ubiquitous, and capable military to deter near-peer/peer adversaries is not possible indefinitely.

History demonstrates that when peer adversaries fight each other in combat, there will always be significant, avoidable losses to the side that cedes the initiative.

Adversaries watch the US too closely not to consider its capabilities, well before a single bullet is expended. No number of battleships, tanks, satellites, or intelligence can defend the US perfectly and indefinitely. In World War II, the US and allies suffered terrible and consistent initial losses; eventually, with synergized improvements in training, tactics, experience, and technology, the Allies won. Despite having many World War II veterans still in the ranks after a reduction-in-force, the Korean War saw the same initial losses before the US and allies could mount an effective counteroffensive. In the age of nuclear proliferation, conducting large-scale combat operations (LSCO) against an adversary who owns a nuclear arsenal is effectively a non-starter; the other elements of national power become the key influencers. Demonstrations, saber-rattling, clandestine operations, intelligence collection, and multinational training exercises are the only viable options when coercing a nuclear-capable adversary in the 21st century. As unfulfilling as these indirect confrontations are, this is the norm in the 21st century great-power struggle, and reality cannot be ignored.

Mincing Measurements

This thesis' purpose is to use the impending US budget crisis as a catalyst to find a new approach to spend responsibly without sacrificing citizens' welfare. While none of

the models measure how much money it takes to increase elements of national power domain scores, it does show how a country should effectively align its policies and strategies with the elements of national power. Effectively, national budgets and national policy and strategy are two sides of the same coin. More ambiguous is the cost of a capability versus its value.

According to the 2018 Congressional Budget Office's (CBO) Interactive Force Structure Tool, an aircraft carrier costs \$1.6B annually and requires approximately 6,000 personnel to operate the ship and support the crew.⁴ What is not captured in the report is the value of that aircraft carrier. The Ford-Class aircraft carrier is the most advanced ship on the ocean. It symbolizes the US's reach and commitment to global security and freedom in international waters. It is the manifestation of the US defense umbrella. The value of demonstrating US resolve, reassuring allies and partners, and deterring adversaries is a capability that defies quantification. However, the cost is quantifiable. The \$1.6B required each year to ensure the amorphous and incalculable impact of that aircraft carrier is overt and demonstrable in the annual National Defense Authorization Act.

Aircraft carriers are just one of many options to assure allies, deter adversaries, and project hard power through the military domain. They are also one of the most expensive. Cheaper and arguably more effective alternatives exist that can alleviate the presumed necessity of maintaining a fleet or army that must counter all threats everywhere and always. DOD Joint Publication 1-18 agrees and explains that the elements of national power must be synchronized and balanced.⁵ Of all the other non-

kinetic yet military-oriented options, US allegiances and defense treaties are the most cost-effective and far-reaching asset the US possesses.

Leveraging Treaties and Partnerships

The US should invest time, energy, and resources in its military. But how much? Unfortunately, that question is beyond the scope of this thesis, and there is no tacit way to tell how many dollars, people, tanks, ships, or planes are needed to maximize prosperity—let alone security. However, using the proposed model as a guide to inform decisions like this will tell us what we can expect from policy changes, which changes the element of national power status quo.

Hard Power advocates may have to temper their arguments for confronting as many threats, in as many places as possible. Though the US leverages its partners and allies to buttress its current worldwide military efforts, simply supplementing US-military dominant enterprises with small multinational forces will not curtail the real demand that the US military places on the federal budget. Consistent with the matte veneer of diplomacy, steady relationship cultivation, maintenance, and acquiescence and coalition building are the most beneficial measures to deter and counter long-term threats like China, Iran, and violent extremism. The North Atlantic Treaty Organization (NATO) is a key asset to accomplish this task, yet according to the all-countries prosperity model, the calculus should change what the US expects from fellow NATO members.

One of the requirements of NATO membership is that a country spends at least 2% of national gross domestic product (GDP) on defense..⁶ This is somewhat of an arbitrary number as it does not guarantee any specific contribution. Eliot Cohen succinctly argues that the 2%-target, in fact, does not mean much, but it does quantify the

member's commitment to maintaining a minimum amount of defense that, if called on, it can commit to defending the collective.⁷ Cohen's point is well taken and makes sense. If a country wants to benefit from a defense alliance, it should be able to consistently contribute a minimum, easily-measured amount to the organization. However, being in a modern world, the US can probably do better.

Different member countries of NATO can contribute in different ways according to their defensive comparative advantage. Comparative advantage is a term used in economics to describe the ease or difficulty by which a person, company, or country can produce a good or service compared to another person, company, or country, respectively.⁸ By focusing on what a country can produce or provide services for most efficiently, NATO can demand less in terms of money and more in terms of capability. Keep Italy and the UK focused on aircraft carriers. Have Germany, Poland, and the Baltic States provide tanks and mechanized infantry. All the while, the US will facilitate logistics and increase economic output. Assuredly, this already happens to some degree, but by conducting regular surveys of most likely and most dangerous threats to NATO, current capabilities and force requirements, and national production rates by product or service, the US can create synergistic defense spending without having to wag its finger at allies who fail to spend their quota.

When the data says spending on the military should be minimized whenever possible, we should work with allies so everyone can have their cake and eat it too. According to the all-countries prosperity model, the countries with the biggest detriment to prosperity and security from military are Tier 2 and Tier 3 countries. NATO members such as Estonia, North Macedonia, Turkey, and Bosnia and Herzegovina are such

countries and suffer substantial opportunity costs from investing in the military domain instead of the information domain. Taking an individual country's needs into account is pivotal when calculating collective defense necessity.

Undoubtedly, the US and fellow NATO members will have their priorities to consider when determining the size, composition, and disposition of forces. Again, this is where the careful cultivation of relationships becomes useful. By leveraging the diplomatic and economic domains, we can co-opt allies to balance domestic and NATO requirements while increasing overall defensive capability. NATO consists of enough personnel, equipment, and, most importantly, logistics to confront Russian, Chinese, Iranian, and North Korean threats.⁹ Aircraft carriers and B-52 bombers are combat multipliers, but their value pales in comparison to combined, unified operations. It is impossible to say what exactly brought the United Nations ultimate victory during World War II, but it was certainly not won because of the equipment alone. Perhaps, it was the undaunted commitment of free nations to stopping evil forces that brought about the end to that long and terribly costly struggle. That example of cooperation should be brought forward through time to act as the pinnacle of preparedness against omnipresent and existential threats.

Prudent Divestment

The defense budget, or any portion of the US federal budget should not operate like a light switch. It cannot be eviscerated even in times of crisis. Erratic and unpredictable budgeting is just as disruptive as debt crises. Careful, informed, and steady reallocation of resources should be the mantra of policymakers as they, hopefully, divest from defense spending per the findings of this thesis. Gradual transitions from

unnecessary systems and expenditures (first) to balance the federal budget to get the deficit under control, and (distantly second) invest in elements of national power other than the military domain to increase prosperity while maintaining international primacy.

The sheer magnitude of the DOD cannot be understated. The millions of service members and employees, and uncountable pieces of equipment, is an incredible product of a decades-long effort and careful crafting of the defense apparatus. Despite the detrimental effects of that investment on the economy, the heavy equipment therein has a durable value. That is, once an aircraft carrier is no longer funded, it does not cease to exist. Ships and other heavy equipment can be mothballed and stored for future use. Albeit, a stored and presumably outdated ship does not have an infinite shelf life, nor can it be manned and ready for battle at a moment's notice. But, World War II and the Korean War showed that the US can leverage its vast population and economy to achieve long-term success, in a relatively short amount of time. Adversaries practice this same philosophy. Russia has an immense stockpile of Soviet-era tanks that no general would discount when wargaming large-scale combat operations with Russian-style belligerents.

Prudent Investment

Apart from leveraging regional partners and allies to maintain international primacy, the US should continue to invest in portions of the military domain that are the most likely day-to-day defensive capabilities. This reapportionment would align the most likely threats, with the most effective and far-reaching response. Special operations, military intelligence, cybersecurity, and logistics are the most useful and practically employed elements of the DOD. Not one of these capabilities and associated units is cheap or simple, but they are continuously used to provide strategic leaders and

policymakers information and breathing room to make decisions and take decisive, kinetic action, short of the threshold of large-scale conflict.

Conventional maneuver units like the US Army Brigade Combat Teams (BCTs) and Marine Expeditionary Units (MEUs) are also capable of projecting power. They each bring immense capability and myriad options for use, but they are cumbersome, lumbering, and expensive. Special Operations Forces, on the other hand, are highly specialized and specifically trained to deploy quickly, and in small teams, to build relationships with indigenous forces and support and co-opt those in non-permissive (i.e., dangerous) environments to achieve results well before any BCT or MEU is needed.

Intelligence is vital to mission success at any level. The more we understand what an adversary or enemy is capable of or doing, the better the DOD can use hard and soft power to blunt, stop, or counter the belligerent's efforts. Moreover, intelligence allows soft power advocates to demonstrate bad actors' motives and actions on the world stage, where refuting demonstrable facts is a predictable, feeble, and only tactic available to the adversary. A case-in-point is the presentation of open-source intelligence collection that showed that Russia was undeniably responsible for destroying a civilian airline in 2014 over Ukraine, killing 298 non-combatants.¹⁰ Granted, not all intelligence is available or sharable with the world, let alone allies. However, developing intelligence systems to share information with allies and reinforce international relationships and systems can help ensure that bad actors cannot operate free of consequence, and that we can counter imminent threats in a timely and decisive fashion.

Further Research

More research is undoubtedly needed. This thesis' potential impact on national policy and strategy demands a more robust model that can provide a clearer picture for decision-makers. By strengthening the model with more and carefully weighed data, predictions can be made with more data-reinforced confidence. Determining how much and what kind of resources are needed to change domain scores would go a long way to put action behind the policy. Determining the point of diminishing returns would also help policymakers understand when more time, people, and money will not likely change prosperity. Lastly, more research should be done to determine how much lag exists between a change in the elements of national power and prosperity or security. These topics will build on the model presented in this thesis and make it more applicable in the real world.

Strengthen the Model

The all-countries prosperity model accounted for over 88% of the variance in the data. Though 88% is very high, the model is still in need of improvement to predict prosperity. Furthermore, a better model is needed to explain security. Since the all-country security model accounted for significantly less variance, 5%. Since policy is managed by those with political power, it may be useful to include government policy and mechanisms to describe or predict prosperity and security better. Furthermore, there may be a better way of weighing the elements of national power against prosperity and security. Using different indices that include more years of data-collection would be useful.

Perception vs. Reality

There is a glaring issue with the model. As applicable as it may be in real terms, policymakers, lawmakers, and leaders everywhere must always consider perception and reality together. If the all-countries prosperity model can be applied to any government on earth, why should it not be used? Groups, subgroups, cultural pockets, and individual perceptions of safety and prosperity are relative. A person not only has to be prosperous; they must feel prosperous as well. This disconnect is well-studied and documented. Using the US as a case-in-point, the Federal Bureau of Investigation's annual uniform crime report tracks and analyzes crime across the country. It clearly shows that crime steadily decreased by over 17% between 2008 and 2015.¹¹ However, Pew research polls show that only 57% of Americans felt safer in 2015 versus 2008.¹² A model that includes measuring perceptions through surveys would further help leaders adjust policy and resource allocations faster by helping constituencies feel more prosperous and secure, instead of being told that they are. Similar to differentiating between perception and reality, cost and value dictate individual and collective utility.

Cost vs. Value

Having data that demonstrates which elements of national power best increase or decrease prosperity is an excellent tool for decision-making. However, governments manifest policy through both legislation and appropriation. The best model in this thesis does not necessarily tell the policymaker or lawmaker how to synchronize these actions to increase, decrease, or maintain funding further.

Parabolic Curve

The models are limited in that they are linear. It stands to reason that the military should not be completely divested from, given the presence of violent threats to prosperity from adversarial countries and non-state actors. Research should be conducted to find where the point of diminishing returns is for investment in each element of national power.

Elasticity

There should be an expected lag between changes in investment and changes in prosperity or security. Policymakers should expect and get a timeframe on when a change in prosperity or security should be realized, after an investment change. Calculating elasticity will also help other government agencies predict blowback in times of crisis, when significant changes in all domain scores can be expected.

Conclusion

The way the US spends is unsustainable. Unless there are drastic cuts to spending and increases to revenue without any crises over the next 30 years, the US must brace itself for the reality the CBO presents. The US economy is too mature; and 20 years of overspending will exact a toll. Taking measured, informed action is the best way to blunt or avoid disaster altogether. Hard power and soft power advocates agree that there are many ways to co-opt, coerce, and influence. Intelligently employing each of those ways to maximize prosperity and safeguard positive and negative liberties must be coordinated and synchronized, lest the US be stripped of its title, leader of the free world. Those

policymakers, with the determination to do so, can use the prosperity model to increase the welfare of US citizens and, potentially, the welfare of partners and allies.

¹ CBO, *The 2020 Long-Term Budget Outlook*, 26.

² Nye, *Soft Power*, 7-10; Cohen, *The Big Stick*, 174.

³ Aaron Mehta, “The Pentagon Is Planning for War with China and Russia — Can It Handle Both?” *The Defense News*, January 30, 2018, <https://www.defensenews.com/pentagon/2018/01/30/the-pentagon-is-planning-for-war-with-china-and-russia-can-it-handle-both/>.

⁴ Congressional Budget Office (CBO), “CBO’s Interactive Force Structure Tool,” accessed April 15, 2018, <https://www.cbo.gov/publication/54351>.

⁵ JCS, JDN 1-18, I-3.

⁶ North Atlantic Treaty Organization (NATO), “Funding NATO,” January 24, 2021, http://www.nato.int/cps/en/natohq/topics_67655.htm.

⁷ Cohen. *The Big Stick*, 207-209.

⁸ Avinash Dixit and Victor Norman, *Theory of International Trade: A Dual, General Equilibrium Approach* (United Kingdom: Cambridge University Press, 1980), 2.

⁹ Global Firepower, “Global Firepower - 2021 World Military Strength Rankings,” accessed April 26, 2021, <https://www.globalfirepower.com/countries-comparison.php>.

¹⁰ BBC, “MH17 Ukraine Plane Crash: What We Know,” *BBC News*, February 26, 2020, <https://www.bbc.com/news/world-europe-28357880>.

¹¹ Federal Bureau of Investigation (FBI), “Crime Data Explorer,” accessed September 28, 2020, <https://crime-data-explorer.app.cloud.gov/explorer/national/united-states/crime>.

¹² Patrik Jonsson, “Behind the ‘Paradox of Fear’: Crime Is down, but Many Americans Don’t Feel Safe,” *Christian Science Monitor*, September 29, 2017, <https://www.csmonitor.com/USA/Justice/2017/0929/Behind-the-paradox-of-fear-Crime-is-down-but-many-Americans-don-t-feel-safe>.

APPENDIX A

SOURCE DATA TABLES

Table 16. Prosperity Index Data

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Afghanistan	34.18	34.02	33.53	34.85	35.46	33.88	34.12	34.70	33.23
Albania	56.35	57.10	57.35	57.16	57.10	57.41	57.70	57.86	59.18
Algeria	49.33	50.21	48.91	48.40	49.66	49.94	50.03	49.88	50.92
Angola	38.02	38.02	38.57	37.81	38.53	37.70	37.49	37.56	38.03
Argentina	58.64	58.43	58.69	58.46	58.32	57.71	58.15	58.74	60.24
Australia	78.67	78.68	78.90	78.52	78.37	78.02	78.57	78.44	78.66
Austria	79.13	79.30	79.47	79.57	79.83	79.45	79.89	79.65	79.67
Azerbaijan	52.35	51.83	52.23	52.72	53.23	53.70	53.21	53.27	54.39
Bangladesh	43.45	44.31	45.03	45.18	45.27	44.97	44.92	45.90	46.70
Belarus	55.11	55.93	55.45	56.02	56.97	56.63	57.00	57.41	58.68
Belgium	76.09	75.63	75.84	75.72	76.34	76.60	76.59	76.52	76.97
Bolivia	49.65	49.98	50.41	51.68	52.07	52.12	52.00	52.33	52.36
Bosnia and Herzegovina	55.61	55.31	55.56	55.86	56.80	57.21	56.77	57.38	57.26
Botswana	55.81	55.85	56.48	56.93	57.17	57.82	56.84	57.06	56.71
Brazil	59.63	59.83	60.38	60.20	61.04	60.85	59.89	59.12	58.65
Bulgaria	61.90	61.56	61.63	62.15	62.35	62.68	62.53	62.87	63.83
Burkina Faso	42.16	42.63	43.27	43.31	44.33	44.27	44.48	44.65	44.93
Cambodia	46.93	47.14	47.98	47.41	47.48	47.16	47.23	47.90	48.15
Cameroon	40.97	42.00	42.27	42.94	43.25	42.12	41.21	40.74	41.56
Canada	78.98	79.44	79.00	79.40	79.53	79.66	80.01	80.04	80.50
Chile	67.23	67.79	67.64	67.96	67.83	68.46	68.06	67.97	69.02
China	56.80	57.23	57.39	57.92	58.18	58.62	58.58	58.83	59.60
Colombia	55.32	55.54	56.19	56.59	57.21	57.19	57.46	57.71	58.01
Costa Rica	66.71	66.38	66.55	67.12	67.76	67.94	67.52	67.66	67.76
Côte d'Ivoire	40.45	40.31	39.70	39.73	42.77	43.65	44.28	45.31	45.99
Croatia	64.35	64.28	63.60	64.21	65.06	65.45	65.60	65.32	66.42
Cuba	52.96	52.94	52.85	52.91	53.09	52.80	53.05	53.11	53.38
Cyprus	69.65	69.82	69.57	68.78	67.91	67.58	67.73	68.14	69.54
Czechia	71.12	70.94	71.35	70.87	70.74	71.12	71.99	73.03	73.47
Democratic Republic of the Congo	33.41	33.31	33.37	33.77	33.51	34.13	34.11	34.72	34.69
Denmark	83.20	82.62	83.20	82.93	82.57	82.37	83.11	83.47	83.88

Dominican Republic	55.49	55.18	56.05	56.11	56.28	56.39	56.63	57.36	57.11
Ecuador	51.37	51.92	52.69	53.41	54.41	55.50	55.45	55.34	55.93
Egypt	47.71	47.47	47.70	46.85	46.19	45.76	45.80	46.00	45.56
El Salvador	54.26	54.25	54.67	54.72	54.89	54.91	54.70	53.64	54.08
Equatorial Guinea	44.85	45.01	44.56	44.98	44.50	44.76	44.56	44.68	45.46
Estonia	72.82	72.81	73.99	74.04	74.11	74.70	75.08	75.86	76.38
Ethiopia	39.10	39.57	39.69	39.91	39.66	39.38	39.94	40.14	40.56
Finland	81.81	81.53	81.92	82.05	82.05	82.45	82.02	82.29	83.29
France	75.72	76.12	76.30	76.05	75.94	76.11	75.88	76.08	76.61
Gabon	47.47	47.69	48.33	48.33	48.92	48.75	48.23	48.34	47.85
Georgia	56.91	57.63	57.64	58.19	59.08	59.60	59.41	59.30	60.97
Germany	79.89	79.85	80.04	79.99	80.04	80.27	80.65	80.69	81.01
Ghana	52.68	53.44	53.04	53.02	52.97	52.32	52.42	52.69	53.59
Greece	66.02	65.40	64.73	64.02	63.90	65.31	64.95	64.84	65.31
Guatemala	52.92	52.82	52.35	52.75	53.47	53.95	53.40	53.61	53.91
Honduras	50.80	49.49	50.57	51.01	51.04	50.88	51.31	52.44	51.98
Hungary	67.01	66.48	66.32	66.15	66.38	65.70	65.13	64.95	65.26
Iceland	78.90	78.33	78.36	78.03	78.64	78.83	78.94	79.67	80.17
India	48.91	48.57	49.10	48.90	49.92	49.59	50.01	50.93	52.93
Indonesia	55.52	55.71	56.66	56.83	57.43	57.90	57.86	58.69	59.67
Iran	45.48	45.57	46.76	46.76	46.67	46.98	47.34	47.79	49.13
Iraq	41.57	42.22	42.25	42.60	43.34	43.95	42.54	43.00	43.07
Ireland	78.21	78.19	78.11	78.00	78.48	79.20	79.68	80.32	80.60
Israel	68.51	67.97	69.00	68.93	69.32	68.92	69.49	70.02	71.49
Italy	70.68	69.56	70.46	70.28	70.01	69.54	69.52	70.04	70.98
Jamaica	57.49	57.53	57.01	57.55	57.72	58.17	58.44	59.07	59.31
Japan	75.64	76.03	75.80	75.49	75.57	76.18	76.22	76.86	77.32
Jordan	56.26	56.60	55.72	55.20	56.22	56.09	56.23	56.62	56.72
Kazakhstan	54.88	54.97	55.77	55.96	56.48	57.15	58.08	59.02	59.48
Kenya	46.03	46.69	47.78	48.25	48.42	48.74	49.50	49.38	50.65
Kuwait	60.82	60.83	61.49	61.10	60.46	60.59	59.95	60.01	60.57
Laos	47.30	47.45	48.60	47.43	47.77	48.14	48.26	48.95	48.54
Latvia	67.28	66.91	67.60	68.06	68.69	68.88	69.17	69.92	69.77
Lebanon	53.66	54.17	54.60	53.91	54.34	53.61	52.75	53.27	53.66
Libya	45.54	45.47	44.66	44.70	44.65	43.17	41.12	41.19	41.03
Lithuania	66.06	65.70	66.26	66.80	67.08	67.50	68.21	68.69	70.31
Madagascar	43.26	42.37	42.21	42.00	42.92	43.30	43.71	43.72	43.88
Malaysia	63.66	63.62	64.46	64.33	64.84	65.80	65.35	65.48	65.70

Mali	43.45	44.01	44.85	43.30	42.41	41.76	42.24	41.93	41.58
Mauritius	64.04	64.28	64.67	65.25	65.41	65.18	65.25	64.69	66.19
Mexico	58.35	58.27	57.82	58.53	58.45	59.21	57.58	58.81	58.88
Morocco	51.61	51.89	52.19	52.09	53.55	53.65	53.54	54.20	54.57
Mozambique	42.57	42.78	42.62	42.89	43.27	43.24	42.77	42.40	42.33
Myanmar	38.69	40.29	40.88	41.47	42.13	43.15	44.02	44.63	45.30
Namibia	54.73	54.95	54.47	54.16	54.86	55.19	55.32	56.32	56.74
Nepal	44.04	44.61	45.14	46.87	47.82	48.49	48.62	48.99	49.64
Netherlands	80.77	80.56	80.68	81.06	81.14	81.69	81.76	82.07	82.41
New Zealand	80.37	80.70	80.70	80.73	81.19	81.45	81.83	81.76	82.06
Nicaragua	50.76	50.81	50.83	51.75	52.65	52.63	52.45	52.13	53.17
Nigeria	41.87	41.85	41.86	42.00	41.12	41.47	41.22	42.14	42.73
North Macedonia	58.91	59.01	59.20	58.58	60.59	61.30	60.47	60.65	60.88
Norway	82.06	82.20	81.71	82.19	82.25	82.48	82.94	83.91	84.48
Oman	58.89	59.47	59.41	58.88	58.99	58.99	58.31	58.85	59.23
Pakistan	39.54	39.74	39.44	39.87	40.17	40.05	40.10	41.10	42.28
Panama	62.27	62.69	62.00	63.06	63.18	63.62	64.41	64.27	64.74
Paraguay	53.70	55.01	56.21	56.35	55.68	54.61	55.63	56.45	57.14
Peru	57.22	57.77	58.24	58.56	58.38	58.68	59.14	60.02	60.46
Philippines	53.94	54.20	54.47	55.42	56.24	56.73	56.47	56.39	56.19
Poland	67.44	68.14	68.20	68.64	68.59	69.58	69.44	69.66	69.48
Portugal	71.93	71.68	71.28	71.64	72.13	72.40	72.67	73.24	73.98
Qatar	63.70	64.09	64.77	64.77	65.92	65.82	65.65	65.62	65.68
Romania	62.72	62.17	62.32	62.39	62.37	63.36	64.40	64.50	65.18
Russia	54.12	54.26	55.06	54.68	55.26	56.64	56.18	56.21	56.97
Saudi Arabia	54.13	54.97	55.61	55.98	56.71	57.00	56.37	57.13	57.29
Senegal	47.56	47.61	46.80	47.83	48.32	49.33	49.90	50.52	51.00
Serbia	57.70	57.96	57.98	57.84	58.22	59.05	59.29	60.61	61.80
Slovakia	68.00	67.91	67.93	67.50	67.49	67.87	67.85	68.28	69.53
Slovenia	72.89	73.27	72.40	72.52	71.85	71.67	72.15	72.64	73.67
South Africa	55.93	56.12	56.44	56.72	57.16	57.97	58.37	57.71	57.15
South Korea	72.50	72.51	72.38	72.33	72.35	72.01	71.06	71.95	72.16
Spain	72.80	73.03	73.33	73.19	73.36	73.62	73.77	74.40	74.88
Sri Lanka	52.13	52.19	53.47	54.46	55.17	55.97	56.88	57.83	57.21
Sudan	37.78	37.89	37.61	37.34	37.00	36.37	36.06	36.16	36.21
Sweden	83.24	83.53	83.52	83.41	82.54	82.73	82.71	83.00	83.67
Switzerland	81.83	81.91	82.03	82.44	82.42	82.41	82.66	82.73	83.35
Syria	44.01	43.74	42.67	40.16	37.24	37.24	36.60	36.52	36.37

Tanzania	46.00	46.39	46.57	46.00	46.17	46.54	47.06	47.47	47.62
Thailand	60.08	60.58	59.68	59.59	59.59	59.25	58.44	58.75	59.15
Trinidad and Tobago	59.66	60.14	60.87	60.80	60.60	60.75	60.48	60.34	60.52
Tunisia	55.94	56.33	55.98	55.10	55.74	54.44	54.35	54.54	53.98
Turkey	55.67	56.26	56.50	56.76	57.89	59.16	57.25	56.66	55.71
Turkmenistan	49.71	49.74	50.37	49.32	49.04	49.74	49.61	49.71	49.57
Uganda	43.12	43.59	44.38	44.56	45.06	45.13	45.40	45.78	45.44
Ukraine	53.18	52.95	53.19	53.26	54.39	53.45	52.08	52.31	53.60
United Arab Emirates	63.60	64.23	64.22	64.72	65.87	66.14	66.47	66.59	67.42
United Kingdom	78.46	78.61	79.50	79.53	79.59	79.58	80.16	80.62	80.81
United States of America	77.49	77.07	76.92	76.98	77.21	77.41	77.32	77.23	77.55
Uruguay	66.50	65.86	66.64	67.39	67.39	67.85	68.18	67.72	68.18
Uzbekistan	48.99	49.07	50.13	49.93	50.80	51.39	52.00	52.08	52.91
Venezuela	47.12	47.73	47.60	47.88	45.88	45.61	44.30	43.54	43.51
Vietnam	52.97	53.24	53.92	53.41	54.01	54.10	55.61	55.56	56.11
Yemen	35.77	35.24	34.12	34.06	34.27	34.58	32.40	31.82	31.24
Zimbabwe	36.59	38.27	40.25	40.77	42.16	42.11	41.84	42.02	41.71

Source: Created by author using data from The Legatum Institute, *Legatum Prosperity Index: Full 2020 Data Set* (London, UK: Legatum Prosperity Index 2020), <https://www.prosperity.com/about/resources>.

Table 17. Security Index Data

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Afghanistan	29.23	28.16	28.02	29.16	32.46	22.54	26.10	23.68	21.68
Albania	74.88	75.41	76.52	71.67	72.97	72.70	73.78	67.56	71.62
Algeria	62.25	66.53	63.02	60.82	64.47	62.77	62.30	63.21	71.15
Angola	60.56	58.01	62.61	62.60	65.89	60.48	60.20	64.45	64.03
Argentina	70.22	67.92	68.53	68.35	69.06	66.99	63.90	67.73	68.44
Australia	87.88	85.27	86.79	88.29	88.35	87.66	86.93	85.96	86.14
Austria	90.25	89.23	90.80	91.45	94.00	94.10	94.82	92.16	90.28
Azerbaijan	65.03	65.46	64.22	63.70	64.49	66.27	63.92	63.45	62.82
Bangladesh	53.86	53.45	54.98	56.97	57.00	55.22	50.82	52.96	49.18
Belarus	66.78	66.51	63.19	68.65	67.68	66.28	67.36	70.32	74.44
Belgium	85.36	85.69	85.66	88.80	88.81	89.12	88.67	85.88	85.52
Bolivia	63.87	69.76	66.97	65.05	67.61	66.17	65.40	68.26	68.84
Bosnia and Herzegovina	71.57	68.75	68.16	70.00	74.38	72.93	72.40	74.14	71.86
Botswana	69.12	68.15	74.29	73.57	67.09	71.65	68.98	71.35	67.11
Brazil	59.13	58.01	59.93	57.25	62.10	63.43	61.57	58.48	55.67
Bulgaria	77.64	76.22	74.90	74.39	80.52	78.07	78.50	75.65	78.25
Burkina Faso	71.60	73.41	70.52	69.69	72.41	68.80	67.15	64.00	68.48
Cambodia	61.85	62.19	64.26	64.15	64.43	64.87	61.52	68.64	69.63
Cameroon	56.32	63.52	60.90	63.43	61.79	51.64	43.97	41.39	45.50
Canada	82.27	88.84	83.70	86.74	88.68	89.06	89.89	90.09	89.84
Chile	73.06	73.66	76.38	71.10	71.27	70.52	69.92	70.89	74.36
China	64.03	61.24	60.59	61.11	61.60	61.65	61.45	58.97	62.90
Colombia	27.72	30.22	30.87	32.28	32.12	30.65	31.77	33.18	33.05
Costa Rica	73.66	72.43	74.46	71.51	73.40	73.41	74.31	73.80	70.82
Croatia	78.37	78.31	75.67	82.63	83.36	82.64	84.26	81.86	83.59
Cuba	65.80	65.98	65.78	66.06	67.24	65.66	65.55	65.88	66.68
Cyprus	80.16	80.27	79.54	80.29	78.83	80.09	77.40	77.37	81.97
Czechia	83.76	83.60	86.54	85.98	86.92	85.95	85.11	85.64	88.29
Côte d'Ivoire	51.84	52.82	48.83	44.69	50.71	53.36	48.99	55.08	59.18
Democratic Republic of the Congo	36.28	36.22	33.32	33.56	32.20	30.46	34.80	33.60	36.75
Denmark	93.52	90.76	94.48	94.38	93.70	93.66	93.71	93.45	93.66
Dominican Republic	58.06	55.40	58.99	59.26	61.17	58.46	60.22	59.44	58.14
Ecuador	61.87	61.83	65.93	62.61	64.79	66.94	66.81	65.16	68.32
Egypt	64.19	65.00	64.80	53.53	60.08	51.72	45.20	44.03	41.89
El Salvador	61.11	60.08	59.20	59.24	59.74	57.43	57.39	55.05	60.17
Equatorial Guinea	62.36	64.93	62.52	68.85	63.94	67.47	65.90	67.62	69.74

Estonia	79.46	81.14	81.12	81.15	80.21	80.13	79.95	81.98	81.83
Ethiopia	55.05	57.81	55.73	56.82	58.05	57.69	58.05	55.01	51.23
Finland	89.24	89.07	89.60	91.43	91.97	91.95	91.21	90.17	90.38
France	83.76	86.49	86.35	86.63	86.46	86.73	83.63	83.11	83.66
Gabon	68.80	68.76	71.24	72.86	71.12	73.72	70.95	72.59	65.99
Georgia	58.61	65.22	58.02	60.74	65.05	69.40	68.73	69.76	72.13
Germany	89.23	91.90	90.37	89.15	90.02	87.16	86.60	86.51	86.09
Ghana	71.28	69.94	68.08	67.71	69.71	70.27	70.39	69.47	67.15
Greece	73.15	74.15	75.93	74.49	76.09	80.03	71.42	71.27	75.42
Guatemala	60.50	59.61	60.02	59.59	59.16	60.70	57.57	57.18	59.06
Honduras	60.29	52.03	54.39	55.86	59.68	53.02	52.90	55.53	53.27
Hungary	81.41	80.81	78.58	79.00	80.53	78.44	81.24	81.29	75.67
Iceland	92.23	93.53	94.10	93.18	92.86	93.66	94.29	93.90	92.47
India	47.13	45.48	45.00	43.89	43.69	42.46	44.41	46.02	52.08
Indonesia	67.01	65.15	66.87	66.83	66.12	66.68	64.60	67.38	67.48
Iran	50.43	49.90	51.15	50.77	49.73	51.76	54.76	53.88	55.81
Iraq	27.81	33.99	35.47	34.95	35.78	29.58	21.22	21.36	19.93
Ireland	84.53	88.06	88.03	85.21	89.99	89.44	90.14	90.50	88.49
Israel	54.94	52.45	56.53	56.19	58.56	56.86	56.10	57.52	61.08
Italy	83.37	77.47	82.90	80.99	80.39	78.40	78.70	80.78	81.67
Jamaica	57.95	57.85	55.69	58.34	60.00	59.93	59.22	59.45	57.47
Japan	90.07	89.70	86.33	88.07	86.59	92.81	88.91	90.61	93.32
Jordan	64.71	69.18	70.56	66.93	71.72	70.87	71.04	67.48	68.10
Kazakhstan	66.78	67.57	65.63	60.41	66.18	66.54	67.87	69.58	68.75
Kenya	43.15	45.84	51.92	52.96	45.50	44.88	45.48	44.00	48.42
Kuwait	78.91	79.00	78.59	75.71	79.57	79.38	71.47	72.24	73.58
Laos	74.43	71.94	75.83	71.89	70.25	72.80	70.37	72.39	75.65
Latvia	74.89	75.84	75.64	76.31	76.47	77.78	78.21	80.64	81.06
Lebanon	48.38	53.23	54.21	51.17	55.30	51.19	45.76	50.37	51.34
Libya	58.08	58.02	49.55	32.20	33.66	29.61	23.47	24.53	27.47
Lithuania	77.27	76.99	77.09	78.02	78.07	79.20	78.64	83.40	83.40
Madagascar	72.26	63.52	63.15	65.89	63.43	65.32	65.53	61.75	65.55
Malaysia	75.59	76.48	76.88	71.42	67.22	72.48	69.47	68.29	72.11
Mali	70.47	71.87	70.74	64.75	56.16	48.57	46.30	44.08	41.16
Mauritius	78.16	79.03	79.36	80.82	80.56	81.32	80.91	76.59	79.01
Mexico	47.55	47.21	45.27	45.31	43.46	50.65	41.73	41.40	42.28
Morocco	69.48	72.64	69.68	66.94	71.26	69.91	70.98	75.15	74.46
Mozambique	65.99	65.67	62.66	64.09	67.64	65.33	63.85	61.63	61.91

Myanmar	45.58	48.44	46.98	48.49	44.62	44.37	46.25	43.49	44.12
Namibia	70.72	71.89	69.18	65.96	65.81	65.38	65.49	69.34	73.23
Nepal	47.20	49.63	53.67	57.63	60.84	64.45	65.32	62.25	67.04
Netherlands	88.78	88.56	89.56	89.96	90.38	90.83	91.21	91.45	88.90
New Zealand	89.47	89.38	89.19	89.88	90.49	90.53	90.36	90.49	90.42
Nicaragua	68.03	66.67	64.27	64.93	65.41	63.23	65.58	64.79	67.83
Nigeria	50.40	45.37	43.86	41.78	38.11	35.03	29.62	29.94	34.93
North Macedonia	70.87	71.34	70.27	63.97	72.05	72.75	69.81	68.78	71.58
Norway	91.14	93.33	88.67	88.61	86.53	86.01	88.48	93.80	94.36
Oman	86.23	86.38	85.21	76.46	76.95	76.85	76.63	81.26	80.65
Pakistan	33.36	29.97	28.14	27.28	27.51	25.86	27.88	31.00	35.26
Panama	74.97	76.42	65.84	74.70	68.56	67.73	76.18	73.36	77.57
Paraguay	65.94	69.49	69.31	69.70	67.27	60.52	70.27	71.78	70.88
Peru	60.57	60.62	61.10	61.20	56.24	56.61	57.89	60.02	63.00
Philippines	48.12	48.02	45.96	48.91	51.05	52.74	43.08	44.04	41.20
Poland	83.74	83.67	84.86	84.10	85.47	86.00	86.83	87.14	85.31
Portugal	84.46	85.28	83.45	84.58	86.56	85.14	86.72	89.33	87.96
Qatar	85.07	86.39	88.13	85.19	86.48	83.58	81.45	83.83	86.46
Romania	70.80	71.89	73.03	75.31	75.82	76.59	76.59	77.81	81.11
Russia	50.93	48.01	49.87	44.95	46.15	49.05	45.38	48.16	51.20
Saudi Arabia	68.56	65.36	69.48	64.41	68.10	72.71	62.27	64.79	65.34
Senegal	63.89	63.65	59.87	59.85	60.60	62.85	62.95	65.45	65.03
Serbia	73.68	73.87	76.04	75.26	76.08	77.74	79.55	81.22	85.89
Slovakia	79.95	80.50	80.79	80.41	81.46	81.96	82.72	79.68	84.47
Slovenia	89.19	90.76	87.84	90.26	88.30	88.12	88.54	89.80	89.54
South Africa	54.16	56.71	55.69	57.23	54.65	55.52	57.27	52.17	51.27
South Korea	82.34	83.66	84.35	82.95	84.78	85.62	75.47	78.71	75.39
Spain	75.10	78.01	81.37	82.62	87.42	89.99	88.70	87.09	84.97
Sri Lanka	27.58	25.24	37.27	41.68	51.44	60.85	56.21	61.44	62.10
Sudan	31.60	34.07	33.96	33.52	33.67	32.07	31.21	30.56	33.20
Sweden	90.25	90.53	91.15	91.19	88.55	90.95	90.71	91.10	92.29
Switzerland	89.05	90.37	91.50	91.17	90.97	91.17	91.57	92.11	90.65
Syria	53.33	55.32	48.31	25.02	20.42	19.73	19.84	19.71	20.12
Tanzania	62.36	67.05	66.11	62.69	64.66	64.84	67.01	66.45	62.48
Thailand	55.32	56.60	49.84	50.82	54.42	59.55	54.32	55.52	58.70
Trinidad and Tobago	64.80	65.27	67.97	67.99	66.40	66.08	65.85	65.96	68.08
Tunisia	69.09	71.86	66.30	63.69	67.55	65.13	63.93	62.25	62.57
Turkey	51.06	52.18	54.22	50.84	59.69	57.64	47.28	44.49	43.71

Turkmenistan	69.28	69.30	68.08	64.62	68.95	67.42	67.07	69.88	71.28
Uganda	50.15	48.91	48.42	48.44	51.19	52.51	53.53	52.82	50.94
Ukraine	65.21	66.99	67.35	66.35	67.20	54.73	38.76	35.39	43.00
United Arab Emirates	83.97	85.68	84.05	83.80	83.76	79.57	79.37	74.83	83.47
United Kingdom	82.35	82.38	87.37	87.59	90.12	90.03	90.04	90.39	88.48
United States	74.78	73.60	74.89	74.29	74.48	75.61	75.40	71.77	68.46
Uruguay	79.89	77.16	75.75	77.97	80.43	79.57	79.83	77.62	80.33
Uzbekistan	69.18	67.05	69.79	67.83	70.57	70.71	67.19	69.23	72.54
Venezuela	51.94	52.39	51.33	53.17	49.78	50.97	47.70	43.45	44.25
Vietnam	66.99	71.72	68.64	69.51	65.13	64.67	65.17	63.98	67.65
Yemen	50.90	46.82	39.45	35.03	39.19	33.85	28.29	24.31	30.96
Zimbabwe	46.47	49.30	50.80	56.43	59.09	62.47	60.62	58.98	59.39

Source: Created by author using data from The Legatum Institute, *Legatum Prosperity Index: Full 2020 Data Set* (London, UK: Legatum Prosperity Index 2020), <https://www.prosperity.com/about/resources>.

Table 18. Diplomacy Index Data

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Afghanistan	42.23	42.85	44.4	45.2	43.5	46.8	47.04	47.43	45.61
Albania	75.12	68.95	61.22	69.3	71.23	72.96	63.89	64.12	63.28
Algeria	81.55	80.64	78.51	76.37	78.9	80.17	80.18	80.36	79.88
Angola	47.07	48.12	48.43	48.53	49.36	50.7	51.13	51.17	51.44
Argentina	92.28	92.11	92.47	92.34	92.17	92.09	91.71	91.66	90.97
Australia	89.15	89.53	90.08	89.71	89.42	89.81	89.88	90.21	88.81
Austria	96.02	96.03	96.35	96.08	95.71	96.07	96.08	95.96	95.45
Azerbaijan	59.03	60.19	61.6	62.62	62.03	64.11	64.34	64.74	73.03
Bangladesh	73.6	74.28	74.06	74.24	74.05	75.05	75.11	75.1	73.98
Belarus	62.43	72.69	73.72	73.97	72.74	74.89	75.23	75.22	74.19
Belgium	97.46	97.21	97.41	97.44	97.02	95.72	96	96.27	96.62
Bolivia	74.95	75.33	74.58	74.43	74.25	73.87	73.18	73.54	72.28
Bosnia and Herzegovina	73.72	74.38	75.07	75.49	74.37	76.37	76.21	76.55	74.97
Botswana	42.98	42.52	43.33	43.41	44.37	44.25	44.64	45.03	46.19
Brazil	78.86	79.32	79.35	79.21	79.57	79.49	79.4	79.17	89.83
Bulgaria	85.01	85.57	86.45	86.66	86.19	86.7	86.89	87.02	86.75
Burkina Faso	70.52	70.98	71.95	71.99	72.4	72.46	72.77	72.74	71.09
Cambodia	55.28	56.62	56.86	56.95	58.19	59.34	59.84	60.21	60.16
Cameroon	69.78	70.13	71.12	70.98	72.25	73.59	73.47	73.63	72.82
Canada	92.09	92.25	92.01	92.06	92.11	92.47	92.36	92.41	92.32
Chile	87.88	87.86	87.88	87.87	88.04	88.08	88.24	87.73	86.51
China	89.29	89.51	89.43	89.66	89.3	90.35	90.54	90.61	90.29
Colombia	77.35	76.85	77.21	77.97	78.45	78.88	79.51	79.64	79.16
Costa Rica	64.21	63.96	64.27	64.56	64.48	65.46	74.11	74.97	74.23
Côte d'Ivoire	70.46	70.42	71.31	71.97	73.31	73.07	71.92	73.99	73.04
Croatia	85.78	85.57	85.9	85.21	84.84	85.31	85.3	85.47	85.79
Cuba	68.31	68.48	68.82	68.99	68.76	69.77	70.02	79.43	78.49
Cyprus	77.36	77.7	79.09	79.07	79.41	66.3	66.49	66.69	78.11
Czechia	88.3	88.33	88.72	88.66	89.02	89.72	90.22	90.16	89.54
Democratic Republic of the Congo	65.08	65.17	65.75	65.47	68.64	69.76	68.63	68.36	68.54
Denmark	94.04	93.9	92.69	93.02	93.27	93.33	93.77	93.77	92.63
Dominican Republic	61.25	61.55	62.2	71	71.13	63.24	72.37	73.37	71.11
Ecuador	77.66	77.62	77.75	77.71	77.91	77.91	77.25	77.12	77.22
Egypt	91.96	92.15	92.06	91.92	91.46	91.52	91.83	91.83	91.47
El Salvador	74.42	74.58	74.69	74.61	74.74	75.8	75.9	75.38	73.35
Equatorial Guinea	30.74	30.98	31.41	31.47	30.99	32.12	33.06	34	34.71

Estonia	74.52	76.36	76.87	77.17	77.67	79.3	79.9	80.05	78.63
Ethiopia	74.82	75.63	76.22	76.32	76.46	77.16	77.7	78.04	77.06
Finland	91.73	91.05	92.39	92.64	93.08	93.25	93.46	93.82	93.65
France	98.59	98.47	98.35	98.24	98.27	98.28	98.17	98.17	97.98
Gabon	60.4	50.87	51.33	51.43	64.03	64.4	64.52	64.49	63.13
Georgia	55.26	55.85	56.17	56.29	56.39	67.41	69	69.41	59.49
Germany	97.06	96.96	97	97.04	96.77	97.03	97.56	97.96	97.9
Ghana	78.08	78	78.87	78.81	79.66	80.17	80.68	81.39	81.82
Greece	91.63	91.69	91.54	92.04	91.56	91.75	91.95	91.95	92.04
Guatemala	78.33	78.82	79.32	79.26	78.86	79.23	79.08	78.75	76.85
Honduras	66.89	67.15	67.49	67.42	67.76	69.34	69.63	69.02	66.27
Hungary	91.26	91.64	91.65	91.48	91.49	91.85	91.85	91.85	90.81
Iceland	71.72	60.59	61.04	60.94	61.57	61.8	61.65	61.68	60.16
India	91.83	92.24	92.29	92.5	92.17	92.73	92.79	92.96	92.13
Indonesia	84.53	85.04	86.13	86.18	86.2	86.51	87.21	87.28	87.6
Iran	78.44	78.12	78.53	78.72	77.67	78.77	79.16	79.52	78.96
Iraq	49.74	49.84	50.49	50.59	51.88	52.67	53.28	53.51	54.91
Ireland	76.1	75.38	76.53	76.47	76.29	76.43	76.62	76.94	81.52
Israel	82.33	73.04	73.04	73.21	72.29	74.39	74.62	74.68	74.33
Italy	98.21	98.09	98.01	98.03	97.87	98.06	98.07	98.26	97.8
Jamaica	67.2	68.51	68.04	69.07	68.51	68.11	66.43	65.67	55.87
Japan	87.42	87.77	88.22	87.86	88.14	89.39	89.22	88.73	87.51
Jordan	81.24	81.38	81.34	81.48	82.33	82.5	82.22	82.06	81.21
Kazakhstan	65.95	65.88	67.64	58.98	68.19	70.33	71.08	71.61	70.76
Kenya	78.03	77.69	78.58	78.56	79.63	80.27	80.58	79.62	79.19
Kuwait	62.79	63.78	64.31	64.62	65.63	65.74	66.35	66.56	66.26
Laos	40.39	41.17	41.61	41.7	41.6	42.18	42.38	42.94	41.25
Latvia	65.87	65.62	66.66	66.96	67.61	68.42	77.99	78.31	77.27
Lebanon	67.33	67.32	67.48	67.63	67.04	67.85	67.92	67.96	67.74
Libya	69.96	61.14	61.85	62	61.75	62.02	62.08	61.94	62.18
Lithuania	76.86	77.33	77.28	77.67	78.59	78.86	78.84	79.2	78.67
Madagascar	60.96	60.01	61.61	61.62	61.18	61.53	62.16	62.4	59.75
Malaysia	84.39	84.57	84.4	84.44	85.03	85.07	85.11	85.28	84.88
Mali	67.13	68.09	68.29	68.1	68.57	68.66	68.37	68.64	69.18
Mauritius	53.26	53.13	53.75	54.15	54.95	55.53	56.09	56.09	55.78
Mexico	77.73	78.24	78.43	78.6	78.4	88.26	88.41	88.61	87.76
Morocco	85.72	85.53	86.36	86.51	86.44	86.97	87	87.06	87.02
Mozambique	62.83	63.04	64.28	64.44	64.4	56.1	65.48	65.69	56.92

Myanmar	39.35	40.69	43.05	44.42	46.46	55.91	55.18	54.25	52.48
Namibia	60.75	60.71	61.62	62.08	63.01	63.5	63.38	63.26	62.38
Nepal	63.81	65.06	65.68	65.96	65.9	66.15	66.71	66.69	64.86
Netherlands	95.19	94.77	95.31	95.48	97.03	97.53	97.27	97.33	96.59
New Zealand	76.8	76.3	76.3	76.14	76.36	76.7	77.47	77.85	77.56
Nicaragua	59.14	59.06	60.06	60.13	58.97	59.92	59.97	59.64	58.38
Nigeria	84.81	85.34	85.85	85.7	85.74	86.6	86.09	85.72	85.24
North Macedonia	68.75	69.42	70.63	70.77	70.88	71.97	72.5	72.24	70.88
Norway	89.96	89.57	90.06	90.05	90.36	90.48	90.61	90.23	89.28
Oman	47.36	47.83	49.05	49.17	50.17	50.44	50.85	51.07	50.13
Pakistan	85.39	85.55	85.4	85.41	84.5	85.02	85.05	85.05	84.76
Panama	64.56	64.67	65.17	65.1	64.84	65.85	66.27	66.68	65.67
Paraguay	73.95	74.12	74.71	74.26	74.67	75.57	75.54	75.02	72.56
Peru	83.87	83.98	85.08	85.01	85.22	85.44	85.79	85.9	84.07
Philippines	84.17	84.36	84.35	84.21	82.86	82.61	82.85	82.96	81.88
Poland	91.4	91.26	91	91.39	91.07	91.64	91.72	91.61	90.78
Portugal	93.56	93.71	92.94	90.3	91.25	91.76	91.73	93.84	93.18
Qatar	65.58	65.42	66.38	66.38	66.54	67.99	68.94	69.68	70.02
Romania	90.6	90.48	90.5	90.52	90.55	91.23	91.24	91.11	90.6
Russia	92.61	92.74	92.2	92.57	92.44	92.88	93.04	93.05	92.69
Saudi Arabia	64.52	64.83	65.56	66.09	65.88	66.54	66.98	67.03	66.41
Senegal	80.26	80.5	81.55	81.5	82.48	82.45	82.98	83.34	82.81
Serbia	79.28	80.63	82.12	82.91	83.66	85.36	86.86	87.02	85.68
Slovakia	85.37	85.66	85.68	85.65	84.7	85.25	85.23	85.19	84.48
Slovenia	83.25	83.58	84.04	84.02	83.32	83.35	83.33	83.45	82.74
South Africa	87.78	87.6	88.16	88.01	87.8	87.97	87.72	87.6	89.18
South Korea	89.08	89.46	89.82	89.88	89.85	90.57	90.99	91.16	90.6
Spain	96.9	96.89	97.08	96.85	96.71	97.57	97.45	97.46	91.49
Sri Lanka	76.32	77.3	77.29	77.24	77.33	78.12	77.88	78.03	77
Sudan	56.14	56.64	57.32	57.63	57.74	58.19	58.63	59.02	59.48
Sweden	95.38	95.63	95.97	96	96.41	97.25	97.13	97.26	96.43
Switzerland	94.77	94.49	95.21	95.25	95.59	95.97	96.17	96.37	95.62
Syria	60.58	58.24	57.66	57.95	58.42	58.86	58.91	58.94	58.09
Tanzania	73.5	73.6	74.67	75.64	76.47	76.8	77.15	77.19	76
Thailand	80.42	82.24	82.09	80.65	80.99	81.89	81.78	82.14	81.29
Trinidad and Tobago	53.79	54.77	56.65	56.74	57.19	57.61	57.66	57.7	55.73
Tunisia	82.66	81.3	81.96	82.88	83.09	83.38	83.49	83.65	83.22
Turkey	91.92	91.95	92.82	92.71	92.39	92.69	92.58	92.47	92.7

Turkmenistan	38.15	38.59	38.51	38.24	38.49	39.82	40.02	39.87	39.08
Uganda	69.32	68.42	68.47	68.44	68.3	68.85	71.24	71.59	71.24
Ukraine	86.59	86.77	87.06	87.19	87.2	89.15	89.37	89.24	88.32
United Arab Emirates	58.72	59.59	60.86	61.38	62.42	62.9	63.7	63.75	64.98
United Kingdom	97.01	97.05	97.27	97.31	96.98	97.36	97.38	97.9	97.08
United States of America	92.71	93.08	93.46	93.38	93.26	93.53	93.56	93.62	92.59
Uruguay	81.39	81.33	81.77	81.7	81.64	82.68	82.63	82.8	81.47
Uzbekistan	47.75	49.12	49.97	50.1	50.76	51.4	51.62	51.48	49.89
Venezuela	72.22	72.01	72.19	72.16	72.12	72.4	72.48	72.51	71.11
Vietnam	60.54	61.23	63	63.16	73.12	73.29	73.83	74.39	73.76
Yemen	65.74	66.71	67.46	67.27	66.72	67.36	67.07	66.4	64.41
Zimbabwe	68.72	67.71	68.13	68.22	68.57	69.96	69.4	68.49	69.16

Source: Created by author using data from KOF Swiss Economic Institute (SEI), *KOF Globalisation Index* (Zürich, Switzerland: KOF SEI, 2020), <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>.

Table 19. Information Index Data

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Afghanistan	15.22	15.66	16.17	16.88	17.26	18.35	18.14	17.58	17.71
Albania	35.30	34.50	34.26	34.47	34.25	34.49	34.38	34.28	34.08
Algeria	25.08	25.55	25.86	26.49	27.10	26.83	26.40	26.57	25.36
Angola	17.53	18.49	19.60	19.17	19.15	18.83	18.25	18.12	17.51
Argentina	36.49	37.05	36.98	37.47	37.53	37.54	37.63	37.64	37.61
Australia	47.87	47.99	48.02	48.12	47.90	47.85	48.01	47.74	47.94
Austria	45.83	46.02	46.27	46.24	46.49	46.06	46.12	45.98	45.45
Azerbaijan	30.08	29.98	30.33	30.09	30.76	29.84	29.50	30.09	29.01
Bangladesh	22.81	23.39	23.49	23.54	24.73	24.77	24.74	24.71	23.57
Belarus	32.02	33.06	34.02	34.35	34.20	33.63	33.89	34.02	33.66
Belgium	45.20	45.45	45.53	45.92	45.92	45.79	45.71	45.77	45.46
Bolivia	28.56	29.06	29.04	29.67	29.96	29.72	29.33	29.66	29.68
Bosnia and Herzegovina	33.33	35.01	35.14	35.41	35.15	35.09	34.86	35.27	35.34
Botswana	31.38	32.33	32.69	33.54	34.03	33.76	33.54	33.50	32.35
Brazil	31.31	31.97	32.64	33.35	33.63	33.17	33.52	33.64	33.05
Bulgaria	37.33	37.71	38.92	39.08	39.29	38.92	38.89	39.08	39.09
Burkina Faso	19.03	19.51	20.01	20.58	20.78	20.92	21.44	21.53	21.49
Cambodia	20.78	21.67	22.50	23.20	24.32	24.55	24.72	24.79	25.25
Cameroon	16.96	18.12	18.60	20.91	21.20	21.23	21.32	21.28	20.25
Canada	50.98	51.04	51.15	51.23	50.91	50.75	50.61	50.38	50.17
Chile	36.78	37.28	37.33	37.47	37.86	38.04	38.08	38.31	38.17
China	35.28	36.59	38.78	40.46	41.07	40.95	41.81	41.99	44.83
Colombia	31.06	30.95	31.53	32.19	32.29	32.38	32.82	32.72	32.33
Costa Rica	36.96	37.80	37.91	38.35	38.93	38.77	38.91	39.14	38.27
Côte d'Ivoire	19.24	19.30	20.35	21.73	22.23	22.54	22.55	22.79	22.49
Croatia	39.84	39.94	40.12	40.33	41.54	41.65	42.02	41.83	41.89
Cuba	24.68	24.90	23.94	24.57	24.24	24.80	25.35	25.42	24.78
Cyprus	43.59	43.68	43.75	43.35	43.59	43.20	43.24	43.55	42.92
Czechia	42.36	42.64	43.21	43.34	43.18	43.15	43.22	43.27	43.20
Democratic Republic of the Congo	12.55	13.68	14.36	14.80	14.98	16.95	17.02	17.19	15.27
Denmark	45.93	46.19	46.23	46.20	46.12	46.31	46.40	46.25	44.92
Dominican Republic	34.47	34.89	35.05	35.16	35.13	35.27	35.78	35.95	36.92
Ecuador	33.54	33.53	33.90	33.95	34.27	34.21	33.59	33.42	32.09
Egypt	28.98	29.50	30.17	31.62	31.88	31.67	31.83	32.03	31.92
El Salvador	30.28	31.06	31.67	32.01	31.90	32.35	31.97	32.25	32.04
Equatorial Guinea	20.41	21.21	21.06	21.05	20.98	21.07	21.09	21.03	21.22

Estonia	41.27	42.29	42.56	42.89	42.84	43.09	42.60	42.82	42.39
Ethiopia	12.65	13.38	13.86	14.43	14.84	15.31	14.95	14.83	14.34
Finland	43.82	44.16	44.25	44.44	44.43	44.17	43.93	43.96	44.07
France	55.60	55.67	55.97	55.78	54.44	53.69	53.20	52.46	52.81
Gabon	27.52	27.22	28.30	28.56	28.82	28.58	28.56	28.65	28.58
Georgia	35.74	36.78	37.07	37.48	37.74	37.86	37.76	37.99	37.40
Germany	58.15	57.37	57.35	57.21	56.45	55.86	56.78	56.89	58.04
Ghana	23.31	24.23	25.45	26.06	26.37	26.81	26.83	26.56	25.82
Greece	40.96	41.34	41.25	41.19	41.43	41.47	41.86	42.19	42.39
Guatemala	28.60	28.49	28.71	29.07	29.21	29.24	28.96	29.51	29.20
Honduras	29.97	29.92	29.95	29.85	30.00	30.00	30.10	30.15	30.21
Hungary	41.14	40.91	41.32	41.53	41.67	41.46	41.39	41.31	40.33
Iceland	43.49	43.64	43.21	43.40	43.36	43.30	42.99	43.32	43.16
India	28.85	28.36	29.54	30.44	29.57	29.74	29.73	30.04	29.99
Indonesia	26.33	26.84	27.06	26.89	27.60	27.91	28.24	28.39	27.08
Iran	25.24	27.38	27.78	28.90	29.00	29.25	29.58	29.92	29.37
Iraq	16.49	16.85	17.08	17.31	17.61	18.04	17.51	17.77	20.30
Ireland	45.52	45.73	45.67	45.45	45.49	45.97	45.47	45.32	44.59
Israel	43.66	43.42	43.57	44.16	44.04	43.99	44.40	44.43	43.84
Italy	45.35	46.01	46.31	46.28	45.88	45.41	45.83	45.88	45.18
Jamaica	35.45	35.26	35.08	35.27	35.65	35.43	35.30	35.34	34.77
Japan	51.97	52.00	51.85	52.63	52.39	51.97	52.60	52.32	52.22
Jordan	35.02	35.02	34.73	34.86	35.49	35.61	35.94	35.68	35.44
Kazakhstan	32.70	33.73	33.81	34.34	34.51	34.44	35.30	35.57	35.00
Kenya	23.34	24.35	24.26	23.97	24.00	23.80	24.06	23.99	23.92
Kuwait	36.97	37.74	38.28	38.56	38.41	38.75	38.25	37.82	38.64
Laos	20.54	21.04	21.18	22.22	22.98	22.61	22.79	22.68	22.68
Latvia	38.53	39.16	39.35	40.08	40.09	40.01	40.64	40.40	40.39
Lebanon	34.87	34.82	34.52	34.34	34.46	34.25	34.30	34.29	33.68
Libya	23.55	24.76	25.46	25.60	24.76	24.91	24.68	24.28	23.91
Lithuania	39.30	40.08	40.66	42.34	42.62	42.32	42.85	42.88	42.87
Madagascar	17.16	17.64	17.52	17.96	18.89	18.96	19.08	19.17	18.98
Malaysia	41.03	41.07	41.35	41.28	41.70	42.37	42.79	42.89	43.43
Mali	19.13	19.78	18.74	19.78	20.10	19.73	19.55	19.46	19.22
Mauritius	37.69	38.16	38.14	38.53	38.82	39.32	39.73	39.59	39.22
Mexico	33.63	34.20	34.53	35.01	35.28	35.27	34.79	34.95	35.15
Morocco	28.76	29.22	29.62	29.89	30.17	31.38	32.72	33.29	33.03
Mozambique	15.60	16.89	18.85	19.06	19.39	17.18	18.10	17.80	17.38

Myanmar	12.48	14.10	16.16	17.19	17.98	19.31	19.23	18.94	19.70
Namibia	30.42	30.60	31.29	30.52	30.86	30.62	30.64	30.85	30.07
Nepal	21.77	22.21	22.25	22.85	23.35	23.64	23.78	24.13	23.43
Netherlands	46.23	46.74	47.13	47.61	47.47	47.41	47.60	47.36	46.96
New Zealand	44.28	44.35	44.51	44.25	44.39	44.24	44.27	44.21	44.12
Nicaragua	28.45	28.73	28.94	29.36	29.60	29.92	30.05	30.09	29.69
Nigeria	21.29	21.57	21.84	22.16	22.32	21.86	21.05	21.38	19.14
North Macedonia	35.89	36.31	36.27	35.29	35.19	35.01	34.83	34.87	34.17
Norway	46.79	46.83	46.85	46.70	46.48	46.37	46.48	46.46	45.72
Oman	32.56	34.25	35.55	36.06	36.17	36.55	36.09	35.90	36.72
Pakistan	21.30	21.41	21.54	21.75	21.73	21.76	21.82	21.71	21.67
Panama	35.72	37.28	37.20	37.34	38.01	37.98	38.21	38.15	37.96
Paraguay	31.21	31.93	32.07	32.38	32.38	32.58	32.66	32.67	31.61
Peru	30.94	31.66	31.52	31.62	31.76	31.93	32.05	32.06	30.98
Philippines	28.54	28.61	29.20	29.60	29.74	29.78	30.08	31.28	31.08
Poland	39.64	40.29	40.93	41.06	41.17	41.49	41.28	41.25	39.41
Portugal	40.20	40.66	40.38	40.54	40.42	40.41	40.89	41.10	41.31
Qatar	34.72	36.19	36.08	39.93	39.68	39.64	39.07	38.89	40.06
Romania	37.65	38.16	38.45	38.49	38.73	38.99	39.04	39.16	38.35
Russia	38.83	39.51	40.21	40.75	40.66	39.94	39.61	40.00	39.31
Saudi Arabia	35.80	36.48	37.38	36.62	37.32	38.59	38.92	37.97	39.16
Senegal	25.67	25.82	25.91	27.05	27.22	27.14	26.95	27.24	26.72
Serbia	36.37	36.97	36.85	37.08	36.71	36.54	36.72	38.00	38.45
Slovakia	41.30	41.53	41.49	41.24	41.55	41.53	41.33	41.73	40.83
Slovenia	41.16	41.57	41.44	41.93	41.93	41.98	41.99	41.53	41.94
South Africa	33.28	33.93	34.22	35.02	35.37	35.32	35.43	35.55	35.46
South Korea	44.09	44.24	44.55	44.93	45.15	45.97	46.05	45.94	45.49
Spain	46.17	46.11	45.75	45.97	46.10	46.02	46.29	46.41	45.91
Sri Lanka	25.99	26.47	27.02	27.23	27.62	28.23	28.65	29.14	29.16
Sudan	17.29	17.08	16.85	17.55	17.31	16.97	16.70	17.13	16.77
Sweden	46.73	47.02	46.94	47.49	47.63	47.34	47.05	47.01	46.31
Switzerland	47.49	47.58	48.26	48.17	48.03	47.75	47.45	47.43	47.30
Syria	25.43	25.57	25.71	25.55	25.13	25.19	25.29	25.56	25.51
Tanzania	18.47	19.20	18.98	19.48	19.78	19.58	18.78	18.72	17.63
Thailand	32.11	33.59	34.97	35.36	35.59	34.48	35.99	35.86	36.50
Trinidad and Tobago	36.94	37.70	37.95	37.59	36.49	36.54	36.42	36.37	37.69
Tunisia	30.53	31.84	32.16	32.68	33.04	32.72	32.51	32.70	32.75
Turkey	33.99	35.04	34.78	35.78	36.58	36.51	36.52	36.78	36.31

Turkmenistan	19.47	20.08	21.13	21.47	21.15	21.80	21.82	21.86	21.98
Uganda	21.02	21.98	22.25	22.20	21.73	21.57	21.84	21.46	20.75
Ukraine	35.06	36.92	37.08	37.57	37.31	36.50	36.55	36.53	36.50
United Arab Emirates	38.51	37.58	40.25	40.30	40.51	40.16	39.18	39.27	40.17
United Kingdom	59.18	58.96	59.88	59.46	59.37	59.08	60.32	59.53	59.32
United States of America	91.50	92.18	91.68	92.15	92.33	92.72	92.81	92.94	93.28
Uruguay	36.54	37.01	37.88	38.40	38.55	38.25	38.25	38.35	37.91
Uzbekistan	23.05	23.44	23.57	23.86	24.06	24.20	24.56	24.69	25.83
Venezuela	30.32	30.51	30.88	31.40	30.14	30.29	29.63	29.24	27.30
Vietnam	25.22	25.93	27.43	26.58	28.43	28.80	29.68	29.82	31.28
Yemen	18.74	18.33	19.24	19.56	19.76	19.30	19.27	19.03	18.40
Zimbabwe	22.93	23.96	24.21	24.79	24.85	25.41	24.72	24.66	24.12

Source: Created by author using data from The Legatum Institute, *Legatum Prosperity Index: Full 2020 Data Set* (London, UK: Legatum Prosperity Index 2020), <https://www.prosperity.com/about/resources>; Elcano Royal Institute, *Elcano Global Presence Index* (Madrid, Spain: Elcano Royal Institute, 2020), <https://www.globalpresence.realinstitutoelcano.org/en/>.

Table 20. Military Index Data

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Afghanistan	15.84	14.95	17.22	19.48	18.72	18.13	17.47	17.76	18.35
Albania	10.00	11.47	11.44	11.38	10.32	10.70	9.60	9.47	9.08
Algeria	14.89	14.77	14.83	14.91	13.82	13.88	14.23	15.04	15.29
Angola	9.30	9.75	10.69	11.50	13.57	11.67	13.05	10.04	10.99
Argentina	5.96	5.29	6.40	7.54	8.56	9.60	8.28	8.05	10.26
Australia	9.04	9.73	10.65	10.99	10.43	10.63	10.29	10.07	10.80
Austria	7.94	8.34	7.68	6.98	6.26	5.31	4.70	5.01	5.11
Azerbaijan	12.81	13.37	13.46	13.55	14.99	16.72	16.18	16.21	16.01
Bangladesh	12.89	13.15	13.22	12.97	11.04	10.04	9.69	8.95	8.31
Belarus	11.96	12.34	12.43	12.50	13.33	14.49	13.26	12.98	13.01
Belgium	10.43	9.10	9.14	9.09	7.40	6.39	6.00	7.60	7.47
Bolivia	12.04	10.31	11.03	11.78	12.65	13.23	11.80	12.76	14.28
Bosnia and Herzegovina	7.56	7.15	7.65	8.13	7.09	8.23	7.28	6.87	6.66
Botswana	8.45	8.83	9.38	9.93	12.70	9.97	8.65	8.95	8.22
Brazil	14.17	14.20	14.87	15.58	13.53	15.30	16.53	17.68	16.10
Bulgaria	12.02	9.34	9.89	10.42	8.75	9.33	9.03	9.15	9.96
Burkina Faso	7.93	8.05	8.08	8.11	8.20	9.33	11.95	12.14	10.80
Cambodia	12.29	12.40	12.62	12.83	15.10	15.86	15.16	13.24	14.51
Cameroon	10.43	10.67	8.94	7.25	7.47	9.86	7.65	9.84	10.98
Canada	10.24	10.23	9.52	9.34	8.93	8.87	9.03	8.53	8.23
Chile	15.78	17.11	14.56	11.81	10.64	10.14	9.30	8.26	10.08
China	20.49	19.30	19.14	20.46	20.90	22.22	20.87	21.74	22.83
Colombia	13.09	12.86	11.64	10.43	10.53	11.76	12.15	14.26	15.73
Costa Rica	8.56	9.09	8.51	7.94	7.24	7.30	7.28	8.80	8.88
Côte d'Ivoire	10.79	12.52	12.76	13.00	9.76	8.91	11.73	12.95	10.19
Croatia	10.38	10.59	9.25	7.89	6.98	8.45	9.02	8.15	8.22
Cuba	8.34	7.34	8.08	8.81	7.71	6.96	6.96	6.95	6.95
Cyprus	8.67	8.39	7.86	7.33	8.00	8.56	7.27	6.67	7.57
Czechia	4.97	3.72	3.37	2.84	2.38	2.54	3.14	3.67	4.34
Democratic Republic of the Congo	13.94	12.39	11.40	10.39	14.38	15.29	13.47	14.92	15.71
Denmark	7.94	5.59	5.32	5.21	4.43	4.81	4.78	5.13	4.78
Dominican Republic	11.89	11.41	10.18	8.95	10.71	10.69	11.21	11.09	9.19
Ecuador	11.13	11.00	10.04	9.09	7.77	8.52	8.08	7.37	9.15
Egypt	16.70	15.72	15.14	14.98	14.58	14.36	14.38	15.32	18.07
El Salvador	8.13	8.00	8.59	9.18	8.41	10.09	9.43	9.67	9.36
Equatorial Guinea	13.81	13.50	13.24	12.96	13.10	11.29	9.54	8.80	9.98
Estonia	13.25	12.09	10.12	8.14	8.87	10.09	11.17	9.84	10.96
Ethiopia	15.07	15.07	14.84	14.64	15.15	14.57	12.39	13.15	13.15

Finland	11.77	11.80	10.95	10.12	10.55	11.45	11.91	12.69	12.22
France	32.98	31.80	30.65	29.90	29.95	29.81	28.85	30.00	30.23
Gabon	9.52	11.61	11.54	11.39	11.44	8.48	9.99	10.57	11.10
Georgia	17.36	14.25	12.49	10.72	10.32	10.15	9.97	9.88	9.94
Germany	21.12	20.02	19.17	17.73	15.01	13.45	11.92	12.96	13.64
Ghana	10.28	8.96	8.61	7.87	9.59	10.74	10.79	9.60	9.36
Greece	21.83	20.45	20.35	20.09	17.05	14.70	14.68	15.21	16.17
Guatemala	8.11	8.10	9.01	9.92	8.36	8.91	8.65	9.15	8.46
Honduras	13.39	13.50	11.89	10.28	9.33	9.58	8.97	8.49	10.89
Hungary	3.53	5.77	4.56	3.40	1.91	1.76	1.84	1.88	2.06
Iceland	0.48	0.53	2.36	4.19	3.60	3.30	3.25	0.11	0.60
India	24.84	24.14	23.25	22.89	23.26	24.48	24.02	23.38	22.85
Indonesia	6.75	7.18	7.60	7.76	8.91	9.25	8.12	7.83	9.30
Iran	15.94	13.45	14.76	15.97	15.16	15.00	13.25	13.63	14.27
Iraq	19.53	18.73	18.72	18.78	19.11	19.96	21.52	20.55	21.40
Ireland	5.69	5.85	5.49	4.98	4.63	4.56	4.32	4.40	4.11
Israel	39.40	38.69	37.55	36.31	33.56	34.76	35.75	36.91	36.89
Italy	19.62	17.75	18.11	18.49	17.97	17.86	17.38	17.05	17.52
Jamaica	7.96	9.33	10.34	11.35	12.56	11.76	11.08	10.05	8.88
Japan	10.59	10.28	11.72	11.68	11.80	12.73	11.87	12.17	14.22
Jordan	16.76	15.20	15.46	15.76	13.72	13.89	12.94	13.08	13.30
Kazakhstan	11.41	10.56	10.31	10.07	9.26	9.20	9.69	9.63	9.81
Kenya	13.70	14.81	14.56	14.35	12.15	10.41	10.61	10.46	9.49
Kuwait	10.19	10.56	9.02	7.47	7.90	12.15	12.45	12.61	13.25
Laos	10.85	10.73	11.38	12.03	10.01	9.95	8.81	8.46	9.50
Latvia	6.07	5.27	4.91	4.51	4.16	4.16	4.00	4.45	4.86
Lebanon	16.39	18.10	16.64	15.18	14.99	15.59	13.56	16.08	15.16
Libya	16.12	19.22	18.20	17.39	14.15	18.88	19.56	20.69	20.44
Lithuania	7.23	9.84	8.83	7.82	5.98	4.80	4.99	8.00	8.74
Madagascar	11.56	9.56	10.48	11.39	13.11	10.63	11.73	9.89	9.21
Malaysia	6.56	6.40	7.51	8.52	7.01	8.44	7.27	7.79	7.43
Mali	7.54	7.98	8.00	8.02	5.24	4.34	3.61	4.38	5.75
Mauritius	13.29	13.61	13.22	12.83	12.19	13.13	12.71	13.69	12.58
Mexico	4.56	4.06	3.87	3.75	3.29	4.87	6.22	5.80	5.47
Morocco	9.73	9.22	10.05	10.73	9.73	9.42	9.77	9.90	10.80
Mozambique	9.05	8.90	10.13	11.36	12.23	12.25	11.88	9.69	8.42
Myanmar	10.03	12.05	10.95	9.93	7.98	6.09	5.42	9.95	10.13
Namibia	14.17	10.77	10.27	9.78	8.87	10.82	9.38	8.64	8.40
Nepal	15.29	12.75	11.87	11.24	10.23	10.76	10.81	10.41	9.54
Netherlands	13.30	11.31	11.19	11.24	10.90	9.06	11.33	12.06	11.94

New Zealand	17.25	16.35	15.66	14.94	14.77	14.40	14.15	14.12	13.74
Nicaragua	3.09	2.90	3.29	3.68	3.54	3.75	3.69	3.70	2.49
Nigeria	10.94	9.50	10.59	11.87	11.43	9.53	8.84	9.53	8.97
North Macedonia	10.18	8.16	8.11	8.07	12.14	10.42	8.91	9.71	11.79
Norway	15.00	18.21	19.28	20.16	19.99	18.11	18.01	16.29	17.04
Oman	21.34	19.78	19.48	19.24	21.31	23.05	21.90	21.59	22.97
Pakistan	23.83	22.10	22.61	23.52	22.83	22.49	21.88	22.21	22.34
Panama	10.33	7.76	6.71	5.65	6.13	7.69	6.63	6.29	7.81
Paraguay	10.28	8.89	8.48	8.05	9.61	10.19	9.29	8.66	11.03
Peru	13.70	11.93	11.80	11.75	9.27	10.88	9.46	9.10	8.39
Philippines	8.80	8.35	9.12	9.90	8.62	8.02	8.27	8.46	8.52
Poland	9.14	8.98	8.45	8.94	6.95	6.80	7.54	7.13	8.85
Portugal	5.98	7.42	7.88	8.25	6.68	5.34	3.12	3.57	4.35
Qatar	14.11	11.53	12.56	13.63	11.69	13.71	13.10	12.55	14.22
Romania	9.38	8.76	9.64	10.44	9.52	10.44	12.26	10.99	9.23
Russia	42.39	45.01	50.28	50.69	50.44	51.19	51.39	50.85	51.06
Saudi Arabia	20.48	19.85	21.05	22.12	22.02	22.21	22.16	23.01	23.09
Senegal	11.49	8.72	7.53	6.31	8.27	7.66	6.89	6.60	6.77
Serbia	9.42	8.26	9.26	10.24	9.25	8.26	7.95	9.03	8.24
Slovakia	3.13	5.54	5.70	5.90	4.53	4.17	6.65	5.86	4.76
Slovenia	2.42	3.19	4.21	5.23	5.11	4.71	3.26	2.40	3.32
South Africa	11.21	11.68	11.21	10.75	10.46	10.29	9.85	9.51	9.35
South Korea	17.94	18.31	18.37	17.78	17.48	17.33	16.06	16.70	17.28
Spain	15.95	14.85	15.11	15.41	13.06	12.97	14.17	12.90	13.32
Sri Lanka	17.37	17.08	15.22	13.32	12.52	14.53	14.92	13.69	12.20
Sudan	16.70	17.37	17.42	17.47	18.71	18.29	18.47	15.89	16.27
Sweden	14.90	14.99	15.02	15.03	14.26	14.16	14.74	14.55	13.01
Switzerland	14.59	14.47	14.06	13.66	13.38	13.15	12.90	12.91	12.96
Syria	16.17	16.45	19.24	22.04	24.68	25.66	25.41	26.08	23.29
Tanzania	6.33	6.31	6.08	5.79	6.03	6.53	6.21	6.28	5.94
Thailand	7.88	8.11	8.18	8.02	7.64	7.76	7.80	7.82	8.95
Trinidad and Tobago	10.88	10.06	10.30	10.54	9.96	10.44	10.13	10.91	12.09
Tunisia	5.90	4.99	7.36	9.67	7.61	7.02	7.59	7.59	7.33
Turkey	16.62	16.58	16.75	16.92	15.90	15.88	16.04	16.11	15.56
Turkmenistan	11.15	11.10	12.10	13.10	13.09	12.04	13.38	13.74	14.49
Uganda	11.61	10.49	10.68	11.05	13.60	13.74	11.43	12.17	11.40
Ukraine	14.82	16.15	16.32	16.54	14.87	18.91	22.81	19.47	16.12
United Arab Emirates	16.18	14.94	14.88	14.96	16.48	16.08	15.87	18.64	18.01
United Kingdom	29.69	29.88	28.26	28.24	28.27	28.61	28.01	26.84	27.51
United States of America	75.75	75.64	75.48	75.33	75.09	75.38	75.54	75.56	75.61

Uruguay	9.21	8.79	8.99	9.20	9.56	9.70	8.69	7.86	10.16
Uzbekistan	11.95	14.44	15.07	15.70	14.60	15.26	12.49	10.86	13.92
Venezuela	13.68	14.89	15.47	16.03	16.73	17.36	16.49	15.90	13.51
Vietnam	16.17	15.45	15.01	14.57	11.03	13.13	12.97	13.56	14.62
Yemen	20.07	16.81	17.05	17.28	19.06	17.73	17.77	18.04	17.99
Zimbabwe	19.98	19.68	16.85	14.03	12.99	10.51	12.92	13.43	13.12

Source: Created by author using data from Elcano Royal Institute, *Elcano Global Presence Index* (Madrid, Spain: Elcano Royal Institute, 2020), <https://www.globalpresence.realinstitutoelcano.org/en/>; Visions of Humanity, *Global Peace Index* (Sydney, Australia: Institute for Economics and Peace, 2020), <https://www.visionofhumanity.org/maps/>.

Table 21. Economy Index Data

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018
Afghanistan	17.88	20.71	19.22	17.35	17.47	17.05	14.94	14.70	16.33
Albania	32.39	31.56	30.97	30.75	33.33	33.34	34.15	35.00	34.39
Algeria	22.21	21.35	21.23	21.07	19.77	19.75	19.07	18.85	19.34
Angola	26.29	25.88	24.07	23.68	21.95	20.81	20.04	18.65	21.27
Argentina	20.86	19.33	16.89	16.97	17.30	16.43	18.19	20.22	25.75
Australia	38.86	39.46	39.12	37.74	38.11	37.73	37.99	38.19	37.91
Austria	43.51	43.32	43.56	42.85	44.45	43.76	43.61	43.77	43.61
Azerbaijan	29.71	30.46	32.45	31.66	33.17	33.26	35.58	35.68	36.23
Bangladesh	16.99	17.36	17.24	17.44	16.94	15.54	15.27	15.08	15.07
Belarus	27.80	28.66	29.16	29.51	29.02	30.19	32.09	31.68	31.08
Belgium	50.01	49.55	49.70	49.22	50.83	49.76	49.22	49.44	48.82
Bolivia	24.15	24.29	24.89	24.93	23.90	23.21	22.15	22.44	22.32
Bosnia and Herzegovina	32.84	32.93	31.97	30.69	32.26	31.29	29.59	30.54	30.56
Botswana	29.61	27.63	26.99	28.79	30.62	29.89	30.10	28.89	28.02
Brazil	24.40	23.64	23.78	22.80	22.61	20.04	20.44	22.24	23.20
Bulgaria	36.51	36.19	36.51	37.53	38.71	38.73	38.91	39.13	37.82
Burkina Faso	17.81	20.15	20.09	22.38	21.79	22.43	22.43	22.85	21.11
Cambodia	33.18	33.82	35.11	34.80	34.11	33.83	33.96	34.07	33.74
Cameroon	17.17	18.73	19.24	18.20	19.73	18.88	18.58	18.81	18.91
Canada	44.49	44.50	44.38	43.75	44.88	44.53	44.75	45.71	45.18
Chile	37.88	37.88	37.09	36.38	37.22	35.61	35.51	36.24	34.38
China	36.20	37.87	40.36	40.41	40.32	40.55	42.55	43.07	41.68
Colombia	22.99	24.55	25.05	26.01	25.64	26.45	26.23	26.51	24.98
Costa Rica	31.86	32.05	31.59	32.32	33.25	31.69	31.90	32.21	32.10
Côte d'Ivoire	24.41	24.09	24.01	22.96	21.63	21.20	23.21	23.67	21.48
Croatia	33.88	33.82	34.60	34.91	36.77	36.75	37.72	38.07	37.63
Cuba	0.13	0.15	0.17	0.17	0.15	0.14	0.12	0.11	0.10
Cyprus	40.46	40.12	39.44	39.12	41.77	41.08	41.95	42.25	43.09
Czechia	40.34	40.20	40.90	40.58	42.43	42.41	42.45	43.09	42.42
Democratic Republic of the Congo	19.64	19.59	17.73	19.22	17.50	16.82	15.76	16.00	16.90
Denmark	43.77	43.65	43.67	43.64	44.24	44.12	43.98	44.25	44.10
Dominican Republic	28.45	28.72	28.52	28.94	29.52	28.90	28.39	28.25	25.86
Ecuador	19.87	19.47	19.39	20.67	17.80	17.94	17.92	20.92	19.63
Egypt	28.70	27.16	25.36	22.35	22.62	19.63	19.12	23.12	25.81
El Salvador	30.26	29.65	29.23	30.07	32.96	30.61	30.67	31.03	28.96
Equatorial Guinea	30.78	30.63	31.15	31.23	30.74	31.71	30.97	30.78	31.84
Estonia	42.88	42.99	43.23	42.99	43.16	43.16	43.23	43.29	42.96
Ethiopia	15.15	15.83	14.57	14.26	15.06	14.14	13.54	13.34	15.58

Finland	42.01	42.11	42.41	41.79	42.71	42.29	42.14	42.61	42.63
France	53.11	51.77	53.34	51.48	51.48	51.14	51.13	51.04	50.94
Gabon	24.44	21.97	23.00	23.42	21.07	20.43	19.50	19.93	20.23
Georgia	35.49	35.39	37.37	37.87	39.79	40.11	40.23	41.06	40.57
Germany	60.15	59.04	61.32	59.39	57.38	56.64	56.78	56.53	56.12
Ghana	21.71	22.84	23.41	18.84	20.33	22.07	23.99	25.02	25.24
Greece	35.01	35.00	35.45	35.84	37.42	36.68	36.15	36.99	37.43
Guatemala	27.27	27.39	27.41	27.62	28.09	27.53	26.69	26.21	24.98
Honduras	29.33	29.75	29.48	30.78	31.08	31.06	29.74	29.78	27.53
Hungary	43.60	42.63	42.44	42.23	43.75	42.14	42.15	42.18	41.79
Iceland	34.36	34.68	35.37	35.00	34.97	34.54	35.59	34.38	34.80
India	25.11	25.76	26.77	25.88	25.44	24.16	23.76	24.48	24.91
Indonesia	27.16	26.63	27.47	27.04	27.66	25.82	25.31	25.38	26.13
Iran	15.93	15.98	15.05	14.72	13.88	13.85	14.07	14.58	13.31
Iraq	21.63	20.70	20.75	20.66	20.84	22.83	21.53	22.18	22.83
Ireland	48.15	47.77	47.87	47.57	47.82	47.34	47.09	47.36	47.30
Israel	37.91	37.74	37.75	36.66	36.64	36.41	36.49	36.17	36.53
Italy	41.24	40.38	40.96	39.92	40.53	40.76	40.29	40.83	41.06
Jamaica	31.95	31.87	32.05	31.61	32.21	32.41	32.42	32.41	30.74
Japan	40.00	40.58	42.93	42.90	41.54	43.70	44.33	45.22	45.09
Jordan	37.89	37.32	36.88	37.03	37.97	35.25	34.58	34.61	34.74
Kazakhstan	26.79	25.28	26.59	24.82	25.44	24.79	26.83	26.69	26.86
Kenya	22.14	22.08	21.49	21.44	22.16	21.16	20.51	20.58	20.65
Kuwait	37.65	36.73	36.53	36.29	36.10	36.81	36.85	36.69	36.95
Laos	22.69	22.46	23.72	23.37	23.65	23.99	23.21	24.66	24.82
Latvia	39.08	39.72	40.45	40.43	40.53	40.81	40.89	41.15	40.88
Lebanon	37.34	37.36	36.57	36.65	35.87	35.05	34.92	34.74	34.52
Libya	25.68	28.20	26.60	28.50	30.08	30.11	27.29	27.70	27.71
Lithuania	37.80	37.96	37.81	37.67	37.72	39.19	39.29	39.89	39.99
Madagascar	22.86	23.00	26.92	27.05	26.77	26.44	25.34	24.73	24.44
Malaysia	38.91	39.35	39.92	40.22	40.84	40.55	40.00	40.36	40.02
Mali	19.02	17.52	18.52	19.70	19.85	19.72	19.35	19.36	19.16
Mauritius	41.47	41.33	42.32	41.98	42.64	41.37	41.28	41.12	41.36
Mexico	30.82	31.54	32.28	32.16	32.82	33.17	32.45	33.72	32.67
Morocco	28.05	29.52	30.64	29.82	28.06	28.53	28.99	29.74	30.01
Mozambique	27.88	28.65	30.22	30.26	29.61	29.51	30.94	31.51	31.43
Myanmar	16.97	17.22	17.57	18.88	18.45	19.42	19.17	19.83	19.71
Namibia	26.90	26.05	25.82	25.32	27.40	26.21	26.99	26.34	26.98
Nepal	13.65	13.67	13.81	14.40	15.77	15.23	16.05	16.05	16.26
Netherlands	55.61	54.60	55.47	54.34	54.33	53.56	52.51	52.93	52.87

New Zealand	36.50	36.75	36.12	35.53	36.25	35.84	35.51	35.58	34.12
Nicaragua	32.07	32.47	32.63	33.80	32.21	32.35	32.82	32.50	31.10
Nigeria	22.25	23.00	23.04	22.50	20.50	20.24	20.04	20.93	22.83
North Macedonia	32.56	34.45	35.20	35.13	34.72	35.65	35.62	35.69	35.17
Norway	40.55	39.96	40.70	40.52	39.22	41.34	40.84	40.75	40.43
Oman	35.75	36.44	36.70	36.41	35.86	33.89	33.37	33.86	34.83
Pakistan	19.77	18.80	18.98	18.73	18.40	16.95	17.29	17.16	17.53
Panama	38.69	39.24	39.50	39.26	39.31	38.95	38.46	38.23	36.07
Paraguay	23.13	22.52	22.85	22.60	21.50	23.43	23.29	24.67	25.03
Peru	31.64	32.41	31.96	31.52	31.82	30.62	30.68	31.05	30.90
Philippines	27.70	27.42	27.22	27.17	28.34	28.77	28.67	29.54	29.40
Poland	35.14	34.89	36.15	36.37	37.46	37.90	38.07	38.32	37.92
Portugal	38.34	38.48	38.42	38.55	40.14	40.35	40.55	40.94	41.00
Qatar	38.55	38.54	39.79	39.59	41.08	39.59	39.15	38.74	38.96
Romania	33.13	32.93	33.67	34.36	35.70	35.88	35.68	35.99	36.31
Russia	30.04	29.72	30.86	31.30	30.28	31.86	31.27	30.71	31.10
Saudi Arabia	37.16	35.69	33.82	34.76	33.92	32.57	31.12	31.94	33.52
Senegal	22.29	23.29	24.46	23.75	23.62	22.75	22.59	22.98	24.49
Serbia	32.10	32.24	33.55	33.66	35.33	35.81	36.38	36.86	36.48
Slovakia	39.93	39.72	39.44	39.67	41.65	41.01	41.27	41.99	41.68
Slovenia	36.69	36.81	36.21	36.12	38.28	38.20	38.67	38.86	38.96
South Africa	28.42	29.60	30.22	30.20	29.93	29.67	29.40	29.19	29.46
South Korea	35.65	37.34	38.42	37.68	38.41	36.80	36.94	37.03	36.15
Spain	44.11	44.03	44.69	42.91	43.39	43.11	43.16	43.73	43.83
Sri Lanka	23.58	24.81	24.31	22.48	22.29	21.62	21.47	21.34	22.18
Sudan	18.59	18.81	18.22	19.22	18.35	17.99	17.55	16.82	23.14
Sweden	46.69	45.61	45.60	44.52	45.98	45.57	44.81	45.04	44.85
Switzerland	47.64	46.17	48.40	48.99	49.61	48.36	48.99	49.19	48.40
Syria	23.99	25.00	24.56	22.66	22.28	22.51	22.66	22.25	21.79
Tanzania	21.97	22.74	21.78	21.20	20.87	20.07	20.09	19.72	19.08
Thailand	34.16	34.59	35.64	35.21	35.24	34.60	35.04	35.70	35.33
Trinidad and Tobago	31.95	35.07	35.54	35.19	34.90	33.24	33.70	33.43	31.05
Tunisia	30.72	30.50	29.76	28.91	30.33	26.90	27.28	27.87	29.04
Turkey	27.92	27.86	28.47	27.77	29.53	28.54	28.02	29.16	28.55
Turkmenistan	24.39	24.53	24.72	24.29	23.15	22.19	20.40	19.73	19.46
Uganda	23.56	25.17	24.84	24.44	24.09	23.19	23.84	24.28	24.06
Ukraine	31.35	31.38	31.92	31.62	31.45	32.00	32.41	32.84	33.36
United Arab Emirates	43.69	44.10	45.57	45.90	45.14	46.28	46.27	45.83	46.03
United Kingdom	59.88	58.78	59.71	57.46	56.31	55.46	55.56	54.38	54.08
United States of America	82.37	82.65	82.75	82.81	83.47	83.03	83.72	84.07	83.84

Uruguay	30.82	30.61	33.09	32.25	31.24	30.92	30.09	30.65	30.93
Uzbekistan	20.65	21.10	19.72	18.79	17.85	16.85	16.39	20.21	28.54
Venezuela	14.54	17.29	16.58	16.42	14.50	14.44	13.78	15.15	15.75
Vietnam	30.29	30.34	31.08	31.57	31.36	30.38	31.24	31.21	31.55
Yemen	26.90	26.70	25.30	24.93	24.09	19.89	20.25	22.02	21.25
Zimbabwe	18.64	19.43	18.70	16.25	16.95	18.32	17.82	17.46	19.07

Source: Created by author using data from KOF Swiss Economic Institute (SEI), *KOF Globalisation Index* (Zürich, Switzerland: KOF SEI, 2020), <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>; Elcano Royal Institute, *Elcano Global Presence Index* (Madrid, Spain: Elcano Royal Institute, 2020), <https://www.globalpresence.realinstitutoelcano.org/en/>.

APPENDIX B

DESCRIPTIVE STATISTICS

Table 22. Prosperity Index Descriptive Statistics

Mean	58.46
Standard Error	0.38
Median	57.00
Mode	N/A
Standard Deviation	12.74
Sample Variance	162.41
Kurtosis	-0.75
Skewness	0.23
Range	53.24
Minimum	31.24
Maximum	84.48
Count	1116

Source: Created by author using data from The Legatum Institute, *Legatum Prosperity Index: Full 2020 Data Set* (London, UK: Legatum Prosperity Index, 2020), <https://www.prosperity.com/about/resources>.

Table 23. Security Index Descriptive Statistics

Mean	66.90
Standard Error	0.50
Median	67.69
Mode	N/A
Standard Deviation	16.60
Sample Variance	275.40
Kurtosis	-0.08
Skewness	-0.55
Range	75.11
Minimum	19.71
Maximum	94.82
Count	1116

Source: Created by author using data from The Legatum Institute, *Legatum Prosperity Index: Full 2020 Data Set* (London, UK: Legatum Prosperity Index, 2020), <https://www.prosperity.com/about/resources>.

Table 24. Diplomacy Index Descriptive Statistics

Mean	75.88
Standard Error	0.44
Median	77.32
Mode	78.86
Standard Deviation	14.65
Sample Variance	214.73
Kurtosis	-0.18
Skewness	-0.57
Range	67.85
Minimum	30.74
Maximum	98.59
Count	1116

Source: Created by author using data from KOF Swiss Economic Institute (SEI), *KOF Globalisation Index* (Zürich, Switzerland: KOF SEI, 2020), <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>.

Table 25. Information Index Descriptive Statistics

Mean	34.23
Standard Error	0.33
Median	34.62
Mode	N/A
Standard Deviation	11.08
Sample Variance	122.85
Kurtosis	4.65
Skewness	1.11
Range	80.80
Minimum	12.48
Maximum	93.28
Count	1116

Source: Created by author using data from KOF Swiss Economic Institute (SEI), *KOF Globalisation Index* (Zürich, Switzerland: KOF SEI, 2020), <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>.; Elcano Royal Institute, *Elcano Global Presence Index* (Madrid, Spain: Elcano Royal Institute, 2020), <https://www.globalpresence.realinstitutoelcano.org/en/>.

Table 26. Military Index Descriptive Statistics

Mean	12.83
Standard Error	0.26
Median	11.00
Mode	8.81
Standard Deviation	8.61
Sample Variance	74.10
Kurtosis	23.50
Skewness	3.98
Range	75.64
Minimum	0.11
Maximum	75.75
Count	1116

Source: Created by author using data from Elcano Royal Institute, *Elcano Global Presence Index* (Madrid, Spain: Elcano Royal Institute, 2020), <https://www.globalpresence.realinstitutoelcano.org/en/>; Visions of Humanity, *Global Peace Index* (Sydney, Australia: Institute for Economics and Peace, 2020), <https://www.visionofhumanity.org/maps/>.

Table 27. Economy Index Descriptive Statistics

Mean	31.78
Standard Error	0.33
Median	31.45
Mode	N/A
Standard Deviation	11.07
Sample Variance	122.55
Kurtosis	2.85
Skewness	0.79
Range	83.96
Minimum	0.10
Maximum	84.07
Count	1116

Source: Created by author using data from KOF Swiss Economic Institute (SEI), *KOF Globalisation Index* (Zürich, Switzerland: KOF SEI, 2020), <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>; Elcano Royal Institute, *Elcano Global Presence Index* (Madrid, Spain: Elcano Royal Institute, 2020), <https://www.globalpresence.realinstitutoelcano.org/en/>.

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