

**AUSTERITY, ECONOMIC DECLINE, AND FINANCIAL WEAPONS OF WAR:
A NEW PARADIGM FOR GLOBAL SECURITY**

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Abstract

Since the collapse of the Soviet Union, America has emerged as the preeminent power in a unipolar international system. America's vast economic resources, including the dollar's role as the leading reserve currency and currency of choice for international trade transactions, has allowed for the development of unprecedented military power and diplomatic influence. America has used its influence to extend security guarantees to allies and to determine outcomes in regional disputes that concern America's interests. America can intervene on behalf of states; form coalitions to target a rival; or take unilateral actions it determines are appropriate for national security matters. For most of the twentieth and twenty-first centuries, America's grand strategy has been perceived as benign. Absent are the expansionist goals that defined previous dominant powers like Great Britain, France, and Germany.

However, America's more recent unilateral actions in Iraq and other foreign policy initiatives have challenged traditional norms of sovereignty, and are disconcerting to some states. These perceptions of American power are exacerbated by America's role in the financial crisis of 2008 that led to the collapse of some foreign economies and the near collapse of financial markets worldwide. America's escalating debt crisis has further eroded confidence in the post-war economic order and has raised grave concerns for America's security commitments abroad. America's ability to maintain the status quo is further complicated by the interdependencies resulting from globalization and technological advancement, which expose vulnerabilities that have potential global

security implications. The new global security landscape defies traditional concepts of global security and instruments of war. In the 21st century, economic interests have replaced traditional military objectives and financial leverage is becoming the preferred weapon of choice to effect state behavior.

This thesis uses case study analysis to determine the extent to which economic factors may contribute to global security threats. The research concludes that financial crisis experienced in states that possess weapons of mass destruction can contribute to proliferation risks. The research also supports the finding that reductions in the U.S. defense budget and reduced spending on foreign assistance programs will also produce security concerns in states dependent on this revenue stream to maintain security within their own borders. Lastly, the thesis identifies forms of economic soft balancing likely to be adopted by rival states and used against the United States to counterbalance its power.

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Introduction

The correlations between economics and security are an enduring subject of debate among international relations and national security scholars. The history of war and conflict is profuse with examples of competing economic interests such as trade impasses, disputes over natural resources, and commercial interests, that have led to hostilities between two states. Though the causes of war and conflict have remained relatively constant over time, the degree to which the internal economic conditions of a state contribute to increased security risks in other states has grown increasingly complex. In some situations, the economic challenges of a state can even result in threats to global security. The significant stockpiles of nuclear and biological weapons found vulnerable after the collapse of the Soviet Union highlight the security risks associated with economic challenges. This thesis will explore these sorts of risks.

We are frequently seeing economic instability in a state creating security concerns for another state or multiple states within a region. These security concerns have typically revolved around issues impacting large segments of the population, like forced migration, which can produce large populations of refugees in third-party countries. Armed conflict is another potential consequence of economic instability that can result in violence in neighboring states.

In some cases, with economic challenges as an intervening variable, the absence of government and rule of law has permitted radical political ideologies and religious fanaticism to take root. The examples of Somalia and Sudan illustrate the risks that can arise from prolonged harsh economic conditions. In each of these examples, security concerns arising from challenging economic conditions, weak political institutions, and poor civil-military relations within a state affected the behavior of non-state groups and created threats beyond its borders. The emergence of piracy off the coast of east Africa, which threatened international commercial shipping, and the formation of terrorist safe havens in Sudan serve as cases in point.

The security risks associated with the economic conditions of a state, however, are not confined to those with endemic poverty as the examples above might imply. The Soviet Union, for instance, once a superpower, collapsed from the financial burden of military competition with the United States and the costs of exporting communism around the world. The collapse left thousands of nuclear warheads, many metric tons of fissile material, and other mass causality weapons poorly guarded and maintained.

Additionally, many believe the Arab Spring uprisings, which began in Tunisia in 2010, were as much about economic conditions as they were about oppressive regimes. The demonstrations that spread across the Middle East, resulted in thousands of deaths and heads of state being deposed; and in the case of Syria the crisis resulted in the use of chemical weapons. This ongoing crisis raises serious concerns that these weapons may fall into the wrong hands. Europe is not immune to security threats arising from

economic challenges. Austerity measures, proposed by the Government of Greece resulted in mass demonstrations. Although the unrest in Greece did not pose an immediate threat to neighboring states, some of the demonstrations did escalate into violent exchanges between civilians and the police.

The theme of this thesis focuses on the correlations that exist between the economic conditions of a state and risks to global security. Specifically, the research addresses two primary areas where fiscal uncertainty and security intersect. First, the thesis examines the global security implications that will arise from reduced foreign assistance spending by the United States in developing countries. The implications of reduced aid to strategic partners such as Pakistan and Egypt is discussed. The second area concerns economic instability in developing states that possess weapons of mass destruction. This section will discuss the risks associated with reductions in funds required to secure and safeguard existing weapons stockpiles. Developing states are used for assessment purposes because their economies are much more sensitive to disruptive forces than developed states. The final topic area discusses Balance of Power theory and the potential that states will adopt soft balancing to target the United States. Economic warfare is isolated in this discussion as a preferred weapon of choice by rival states due to the vulnerabilities that exist in financial and currency markets, and due to globalization and technological advancements which allow these vulnerabilities to be exploited by less developed states.

As a result of many of the issues raised in this thesis, it is likely that economic interests may soon displace traditional security concerns. This thesis supports a body of literature that acknowledges a paradigm shift in national security policy that is focused on addressing asymmetric threats to national security. The thesis identifies gaps in the existing literature on the potential threats that could arise as financial resources in some states become fiscally constrained.

The first chapter explores the question “will fiscal constraints in the United States have implications for global security?” Specifically, the research examines how reductions in foreign assistance spending and military deployments by the United States could affect security in other parts of the world. The strategic partnership between South Korea and the United States is used as a case study. The Mutual Defense Treaty and Pivot Strategy are assessed to determine how economic conditions in America could affect those national security strategies. Academic papers, journal articles and U.S. government sources are used to challenge traditional concepts of conflict and highlight the role of economic interdependencies in future conflict. The chapter emphasizes the significant role of the United States in international security matters and demonstrates how America’s growing debt, the financial crisis of 2008, and the 2013 automatic budget reductions, referred to as sequestration, can have implications for security in parts of the world vital to U.S. national security.

The case study on South Korea supports the conclusion that economic challenges in the United States can erode confidence in U.S security guarantees. If allies question the

resolve of the United States to meet aggression with military force, it could lead to greater regional arms build-ups. Similarly, doubt in the United State's ability to make good on its "nuclear umbrella" commitments could lead to the emergence of new nuclear weapons programs. The erosion of confidence in the United States and the weakening of the U.S. economy could also lead to more risk taking by rivals and provocations by rogue states that could result in armed conflict.

Chapter two builds on this theme by examining the global security risks that emanate from developing states that possess mass causality weapons and are experiencing long-term economic and domestic instability. The case studies on Pakistan, Syria, and North Korea explore the question of whether declining economic conditions in those states promote weapons proliferation by reducing their capability to safeguard existing stockpiles, associated materials and technology. Specifically, the chapter will assess the extent to which financial constraints can result in reduced security at weapons making facilities, putting the material and technology at risk for theft, sale, or transfer to other states or non-state groups. The issue of dual-use technologies, nonproliferation agreements, and their links to economic instability are also discussed in this chapter.

Academic journal articles and government sources are used to challenge widely held beliefs about the causes of proliferation. The existing literature on this topic contend that states will pursue nuclear weapons when one of three conditions are met: when a state has the technical means to do so; as a result of a state's perceived severity of external threats; and due to domestic determinants like having a democratic form of

government, liberalized government institutions, autonomous domestic elites, and symbolic motivations.¹ The research in this chapter adds to the existing literature on the causes of proliferation by identifying the economic determinants in developing states that can also promote weapons proliferation.

The final chapter addresses the extent to which economic warfare targeting the United States is likely to occur. Realist perspectives on Balance of Power theory, which historically has shaped national security policy and international relations, is used to isolate soft balancing as the most likely method to be chosen by rival states and non-state groups to counter opposed activities of the United States. From this vantage point, a review of classical forms of economic warfare such as military blockades, trade embargoes, and asset seizures illustrate how these strategies have evolved and how they have been used in previous conflicts. The review also intends to demonstrate that such methods are not viable strategies against the United States due to the pervasiveness of American military, economic, and diplomatic power.

The research demonstrates that asymmetric balancing is the most effective means of opposing policies and actions of the United States. Within this category, economic targeting or economic warfare can emerge in three primary forms. The first is terrorism or physical attacks targeting financial infrastructure. The second is cyber attacks on financial institutions or infrastructure, such as those used against the banking system of Estonia in 2007. The third is passive strategies to cause a military and financial over

¹ Singh, Sonali and Way, Christopher R., “The Correlates of Nuclear Proliferation: A Quantitative Test,” *Journal of Conflict Resolution*, Vol. 48, No. 6 (Dec. 2004) pp. 859 – 885.

commitment by the United States. This chapter raises awareness of these emerging threats and provides a basis for policy discussions regarding America's economic vulnerabilities.

Global Security in the Age of American Austerity

Introduction

American influence on matters of international security is unprecedented. Scholars of international relations theory have suggested that the breadth of American political, economic, and military power make it a global hegemon.² Few question the data that proposes America is the dominant state in a unipolar system. Further, the literature on international relations suggests that when a state acquires a preponderance of economic, military, and diplomatic power, the combination of those resources results in an enhanced ability of that state to influence less powerful states. Influence is typically exerted through incentives, or coercion, to cause the targeted state to conform to the interests and ideals that are favorable to the hegemonic power.³ Realists argue that economic power is necessary to build and maintain a strong military from which all other forms of power emanate.⁴ Through this lens it is logical to conclude that because America has the most resilient and pervasive economy in history, it has a “preponderance of power resources.”⁵ Further entrenching the United States as the predominant power in a unipolar system, is the belief that America has no direct or strategic military rival; and existential threats such as those posed by nuclear or biological weapons are considered low probability events. Additionally, liberalist perspectives on trade and war contend that increased trade among rival states diminishes the probability of conflict between nations.

² Denoon, Michael, "Economics and National Security: The Danger of Over commitment," Chapter in R. Kugler and E. Frost, eds., *Globalization: The Impact on National Security*, (Washington, D.C.: NDU Press, 2001).

³ Cohn, Theodore H., *Global Political Economy: Theory and Practice*. 6th ed., New York: Longman (2012), pp. 63 - 67.

⁴ Nye, Joseph, *The Future of Power*, Public Affairs, New York, 2011, p. 52.

⁵ Nye (2011).

They contend that reciprocal gains that result from an interdependent relationship override the potential costs associated with conflict and war.⁶

Because the terms of the current unipolar system benefit the United States, it is often said that America's grand strategy is to maintain the international status quo. To do so, America must continue to lead the world both economically and militarily, because those two forms of national power are inextricably linked. But if America's economic resources were to decline, so would its other forms of national power. Therefore, threats to America's economy are, in fact, threats to American national security and the international status quo. This chapter will assess to what extent reductions in national defense spending will affect global security and threaten the unipolar international system.

To appreciate the linkages between America's economic status and global security, a general understanding of the factors that contribute to American economic prominence is necessary. Leading economist Barry Eichengreen suggests that several factors led to America's economic rise. Among the leading causes is the fact that America was the only economy of the major powers to emerge strengthened from the Second World War.⁷ This allowed the United States to act as a global lender and leading provider of goods during the rebuilding of Europe and Japan in the post-war period that followed.⁸ This role had enormous economic benefits for America and it set the stage for

⁶ Copeland, Dale, "Economic Interdependence and War: A Theory of Trade Expectations," *International Security*, Vol. 20, No. 4 (Spring 1996).

⁷ Eichengreen, Barry, *Exorbitant Privilege*, Oxford University Press, New York (2011), pp. 39-68.

⁸ *Ibid.*

establishing a new international monetary system, with the dollar at its center.⁹ This was a logical outcome considering that in the years following the war, the dollar was the only currency trading internationally and the United States was the leading producer of goods and services sold worldwide.¹⁰

The Bretton Woods Conference¹¹ further established America's economic dominance through the creation of international monetary and banking institutions. In addition to the creation of the World Bank and the International Monetary Fund, gold and currency values were pegged to the dollar, which had the effect of making the dollar the preferred currency used by states to reconcile international financial transactions.¹² OPEC nations also adopted the dollar for pricing oil, which increased demand for large dollar reserves throughout the world.¹³ Today, the dollar accounts for eight-five percent of all foreign exchange transactions and the dollar represents sixty percent of reserve currency holdings.¹⁴

The international monetary system, tilted heavily towards American interests, helps to maintain the status quo. Recent events, such as the global crisis of 2008, however, have caused many to question America's stewardship of the international monetary system and the world's reliance on the dollar as the leading reserve currency. Realists suggest that the rise of China and other developing nations will threaten the

⁹ *Ibid.*

¹⁰ *Ibid.*

¹¹ The Bretton Woods Conference was a series of international meetings that occurred in 1944 in New Hampshire. The purpose of the conference was to establish the post-war international economic order.

¹² Eichengreen (2011)

¹³ Offer (2012).

¹⁴ Eichengreen (2011).

dollar's role in the global economy, and by extension the "exorbitant privilege" that allows the United States to maintain its hegemonic status.¹⁵ In theory, as emerging states balance against the dollar it will undermine the American economy and therefore, its military strength. However, one need not look to foreign influences to find threats to the American economy. A similar undermining of military power is also threatened by America's own domestic fiscal challenges, which can be observed in the ongoing debate in Washington on sequestration and the debt ceiling, which now rest at more than 17 trillion dollars.

Declinists view these fiscal realities as indicators that America's economic primacy is waning. They argue that a hegemonic power will eventually overcommit militarily and economically, and emerging states will challenge the status quo.¹⁶ Fiscal challenges and the potential that America may default on its debt obligations are disconcerting for America's creditors such as China, Japan, the United Kingdom and leading oil exporting nations, and raises grave concerns for the stability of the global economy. However, America's fiscal uncertainty is equally unsettling for those states America protects militarily and those that receive financial assistance for security operations in their own countries such as Pakistan, South Korea, Israel, Saudi Arabia and others.

Some scholars have forecasted a reshuffling of alliances that will occur simultaneously with economic decline in America and diminished global influence. This

¹⁵ Eichengreen, Barry, *Exorbitant Privilege*, Oxford University Press, New York (2011).

¹⁶ Cohn (2012).

could have a rippling effect for global security. The potential outcomes identified by scholars include closer political and military collaboration between Germany, Italy and Russia; Japan and the European Union balancing against China; and Brazil asserting its influence in the southern hemisphere.¹⁷

However, the question of America's decline is not settled. An analysis of federal spending provides some useful insights for assessing the affects of U.S. economic conditions on global security. The data shows a steady increase in total defense spending each year from 2000 to 2010; the decade immediately following the terrorists attacks of September 11th. By the end of the decade, spending had increased by approximately 132 percent, rising from 301 billion dollars in 2000 to 689 billion in 2010.¹⁸ During this period, additional defense spending was authorized through supplemental appropriations to fund the wars in Iraq and Afghanistan. The U.S. Congress passed supplemental bills each year through 2010, with total expenditures exceeding 1 trillion dollars.¹⁹ The first reductions of military spending since 1999 occurred in 2012 and 2013 when sending fell from 711 billion to 640 billion, which represents a 10 percent reduction.²⁰ But despite these reductions, the 620 billion dollars the military is expected to spend in 2014 is more than double pre-September 11th spending levels. This analysis supports claims that reductions in military spending have had only negligible affects on national security.

¹⁷ Brzezinski, Zbigniew, "After America," *Foreign Policy*, January 2012, pp. 1-4.

¹⁸ Stockholm International Peace Research Institute (SIPRI), *Military Expenditure Database* (2014), accessed on April 23, 2014 at http://www.sipri.org/research/armaments/milex/milex_database

¹⁹ Belasco, Amy "The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11," Congressional Research Service, March 29, 2011.

²⁰ SIPRI Database (2014).

Similarly, reductions in military spending between 1992 -1999 did not result in major changes in the geopolitical world order as many predicted.

A comparison of military spending over time, however, does not account for differences in military output for this time period. In other words, increased spending does not necessarily equate to increase capability. Additionally, America is not unique in making substantial military investments. Between 2004 and 2013, 23 other countries increased their military spending by 100 percent or more, including Russia and China.²¹ This further complicates efforts to associate enhanced military capability to increased military spending.

Yet, some scholars believe that predictions of the end of America's primacy are overstated. They cite the increase in reserve dollar holdings globally, following the financial crisis of 2008 as evidence of the expansion of dollar hegemony.²² Several economists have argued that despite America's growing debt problem and its declining share of international trade there are no viable alternatives to the dollar as a reserve currency. In fact, economists contend that the current international system incentivizes states to continue the status quo in order to ensure their own economic well-being.²³ In dissecting the potential for the continued global dominance of the dollar, Zoffer argues that ongoing global demand for the dollar "will allow the United States to run up deficits,

²¹ SIPRI Database (2014).

²² Doug Stokes, Review of International Political Economy (2013): Achilles' deal: Dollar decline and US grand strategy after the crisis, Review of International Political Economy, pp. 1 -24.

²³ Zoffer, Josh. "The Future of Dollar Hegemony." *Harvard International Review* 34, no. 1 (Summer 2012): 26 - 29.

fund its military supremacy, and maintain an international order premised on a western dominate economic system.”²⁴ Liberalist and realist perspectives may not agree on when and how hegemonic transition will occur, but as Joseph Nye accurately states in *The Future of Power* “it would be counterintuitive and ahistorical to believe that the United States will have a preponderant share of power resources forever.”²⁵

As part of the exploration of the effects of perceived American economic decline on global security, I argue that going from a unipolar international system to a multipolar system has global security implications that are directly related to the strength or weakness of the American economy. I show that financial constraints in America affect global security in two primary areas; regional instability caused by reductions in foreign aid, and reduced allied confidence in America’s security guarantees due to reduced military spending.

Literature Review

A change in international power dynamics will not occur without costs to global security. Similarly, the decline of American economic power will have direct implications for international security. Ruhle provides some insights that support this argument. He claims that the displacement of military interests with economic interests will lead to instability by “invalidating traditional national and multinational security concepts” and by “compromising the ability of international organizations to act

²⁴ Offer (2012).

²⁵ Nye, Joseph, *The Future of Power*, Public Affairs, New York, 2011, pp. 154-157.

coherently or in concert” toward a common objective.²⁶ An additional implication, the potential that fiscal constraints will strain traditional alliances causing regional instability, is central to the themes discussed in this paper. To build on this last point, it has been further suggested that financial constraints in the United States will limit its ability to project military force. With a reduced capacity to intervene in regional conflicts and meet treaty obligations requiring the use of force, states under America’s security umbrella may seek to acquire advanced weapons including chemical, nuclear and biological weapons to balance against regional threats.²⁷ This action could trigger a similar build up by states initially perceived as threats. This potential outcome is consistent with realist theory that suggests that increases in the military of one state can cause insecurity in another, which could lead to an arms race between the two countries.²⁸

Reductions in foreign assistance aid could also lead to security instability. In *A New Era for U.S Security Assistance*, Shapiro makes a compelling case for sustaining funding levels for foreign aid programs to ensure global security. He argues that security assistance in areas such as foreign military sales, training, education and joint military exercises, are crucial for maintaining global and regional security.²⁹ The benefits to global security from U.S. security assistance and partnerships include enhancement of military and security capabilities of allied nations, increased interoperability to address common security concerns, and improved diplomatic relationships.³⁰ Fewer resources

²⁶ Ruhle, Michael, *The Economization of Security: A Challenge to Transatlantic Cohesion*, American Foreign Policy Interests: The Journal of the National Committee on American Foreign Policy, 35:1, 15-20.

²⁷ Khalilzad, Zalmay, “The Economy and National Security,” National Review, February 8, 2011.

²⁸ Cohn (2012).

²⁹ Shapiro, Andrew. "New Era for U.S. Security Assistance." *Washington Quarterly* 35, no. 4 (2012): 23-35.

³⁰ Shapiro (2012).

dedicated to these endeavors could diminish efforts to establish international military coalitions and cooperation intended to further the interests of the United States.

The literature also shows that fiscal challenges brought on by economic decline would not be limited to the Department of Defense. Johnson and Wirtz, for instance, argue that the resources of the U.S. intelligence community are already constrained, particularly for high costs collection platforms such as imagery.³¹ The limitations of the intelligence community are further aggravated by the fiscal crisis that is ongoing in Washington. According to unclassified reports, as much as seventy percent of the intelligence community's civilian work force was furloughed when the United States Congress failed to pass spending legislation for fiscal year 2014.³² James Clapper, reflecting on similar cuts to the intelligence budget that took place in the 1990s before a Senate panel, recalled how the cuts resulted in the closure of intelligence-posts over seas, fewer human intelligence operations, and reduced analytical capabilities.³³ As Clapper noted, current budget figures would require cuts to all intelligence functions.³⁴

The costs of intelligence operations are also being driven by external influences. Recent scholarship on the changing nature of security threats finds that as threats become

³¹ Wirtz, Loch Johnson and James. *Intelligence and Nation Security: The Secret World of Spies*. New York, NY: University of Chicago, 2008.

³² Shaun Waterman, "Shutdown Furloughs 70 Percent of U.S. Intelligence Community Workers," Washington Times, October 2, 2013 at <http://www.washingtontimes.com/news/2013/oct/2/shutdown-shuts-down-70-percent-us-intelligence/?page=all>

³³ Roulo, Claudette, "Cuts Make Intelligence Failures Likely, Top Intel Official Says," American Forces Press, U.S. Department of Defense, April 18, 2013 accessed on April 29, 2014 at <http://www.defense.gov/news/newsarticle.aspx?id=119809>

³⁴ Roulo (2013).

more dispersed and asymmetric, the demand for intelligence resources will grow.³⁵ Intelligence activities are now directed at traditional state threats, non-state threats such as terrorism, geopolitical and economic concerns. Similar to intelligence community officials, leading defense officials have stated that the current spending cuts mandated by the Budget Control Act of 2011, have diminished America's military capabilities, placing the nation at risk.³⁶ Defense budget reductions would also affect the private sector and have a negative impact on the national security industrial base. O'Hanlon discusses the cascading effect that steep budget cuts would have on the private sector by emphasizing how the private sector is increasingly relied upon by the military for technological innovation and to fulfill critical human capital requirements³⁷ O'Hanlon argues that the national security industrial base is not only a key component of military power, but also a significant contributor to the American economy.³⁸ He concludes that a concerted effort to reduce federal spending and reduce debt could avert an economic crisis, but to avoid economic worst-case scenarios, the defense budget would need to be reduced.³⁹

Foreign Assistance Funding

America has contributed to global security and stability through foreign aid and military assistance funding since World War II. The most well known programs are the Lend Lease Program and the Marshall Plan. Both of these efforts promoted international

³⁵ Wirzt (2008).

³⁶ "Impacts of Sequester and/or Full-Year Continuing Resolution on the Department of Defense," Statement of General Martin Dempsey, Chairman, Joint Chiefs of Staff, before the Senate Armed Services Committee, February 12, 2013.

³⁷ Ibid.

³⁸ O'Hanlon, Michael. "The National Security Industrial Base: A Crucial Asset of the U.S., Whose Future May be in Jeopardy." *21st Century Defense Initiative at Brookings*, February 2011.

³⁹ O'Hanlon (2011).

security and reduced threats to the United States. Neither program, however, would have been possible without a thriving economy. The Lend Lease Program or “*The Act to Promote the Defense of the United States*,” was signed into law in 1941 and authorized the provision of materials to allied nations to enhance their military capabilities during World War II. The program cost an estimated 50 billion dollars.⁴⁰ Following the war, the Marshall Plan, which cost approximately 120 billion dollars⁴¹, helped to rebuild worn torn Europe and accelerated the restructuring of major European economies.⁴² These programs met both economic and national security objectives. The European debt payments helped to fuel the American economy. The projects also aided efforts by the United States to contain the spread of communism, a key national security priority.⁴³

However, today’s global security concerns are in many ways more complex than those that existed after World War II. The dismantling of the Soviet Union and the diffusion of security threats has increased demand for U.S. military and economic assistance worldwide. Based on current estimates, various foreign policy and national security objectives require the United States to provide aid to more than one hundred fifty states.⁴⁴ These financial commitments serve both diplomatic and national security purposes, and many of the recipients use the funding for both external and internal security purposes. As a result of these dual purposes, a variety of funding vehicles are used primarily through the State Department and Department of Defense, including the

⁴⁰ Lend Lease and Military Aid to Allies in the Early Years of World War II,” U.S. State Department, accessed on April 22, 2014 at <https://history.state.gov/milestones/1937-1945/lend-lease>

⁴¹ Duigan, Peter and Gann, Lewis, “The Marshall Plan,” Hoover Institution Stanford University, October 30, 1997 accessed on April 22, 2014 at <http://www.hoover.org/publications/hoover-digest/article/7689>

⁴² Nye (2011).

⁴³ Ibid.

⁴⁴ U.S. Foreign Assistance by Country, last modified October 15, 2013, <http://foreignassistance.gov/CountryIntro.aspx>

Foreign Military Financing Fund; the International Military Education and Training Fund; International Narcotics Control and Law Enforcement; Peacekeeping Operations; and the Security and Stabilization Fund.⁴⁵

Foreign aid is also directed at economic development in recipient countries. Though these funds are not used for military enhancements, economic stability is believed to promote safety and security. Official Development Assistance programs (ODA) are often touted as one of the best means to promote stability and economic growth within the recipient state. However, critics of foreign assistance programs argue that they can have unintended consequences. Cohn outlines a few of the potential outcomes, which include the “perpetuation of dependent relationships,” the failure to address pressing domestic issues in the recipient state, and integration of the recipient state into a global market place in which it is not prepared to compete.⁴⁶

The criticality of the assistance provided by America varies from state to state. Reductions in military assistance funding for Equatorial Guinea may not have immediate consequences for global security, whereas reductions in funding for Afghanistan or Pakistan could lead to instability in the region and/or an increase in threats to American assets and allies. Funds at this priority level include the Iraq Security Force Fund, the Afghanistan Security Forces Fund, the Pakistan Counterinsurgency Fund and the Pakistan Counterinsurgency Capabilities Fund. In 2008, the United States authorized

⁴⁵ Adams, Gordon and Williams, Rebecca, “A New Way Forward: Rebalancing Security Assistance Programs and Authorities, Stimson Center, Washington D.C. (2011),pp. 15 – 17.

⁴⁶ Cohn (2012), p. 297.

more the forty-four billion dollars towards foreign security and military assistance programs.⁴⁷

The financial issues faced by the United States have already begun to affect the funding levels of assistance programs. Egypt and Pakistan both are considered to be critical allies for America's counterterrorism activities. Additionally, these states are key to advancing American foreign policy initiatives aimed at maintaining stability in their respective regions. But despite their importance to American foreign policy objectives, both countries will receive less funding in fiscal year 2014 than in the previous year.⁴⁸ As these states attempt to address internal security issues within their own countries with limited resources, their governments could be faced with the dilemma of advancing American interests or reallocating funds to address domestic issues.

Yemen, which serves as a base of operations for Al Qaeda in Arabian Peninsula (AQAP), saw its foreign assistance funding reduced by almost fifty-percent in fiscal year 2013.⁴⁹ Perhaps a more telling example of the risks associated with less spending for security is observed in Libya, where U.S. foreign assistance was reduced from \$30 million in fiscal year 2011 to \$5 million in fiscal year 2012.⁵⁰ The operational budget of the Department of State was also reduced by as much as \$8 billion during this same period.⁵¹ These reductions correspond with the attack on the U.S. Special Mission in

⁴⁷ Nye (2011) p. 78.

⁴⁸ U.S. Foreign Assistance by Country (2013).

⁴⁹ U.S. Foreign Assistance by Country, last modified October 15, 2013, <http://foreignassistance.gov/CountryIntro.aspx>.

⁵⁰ U.S. Foreign Assistance by Country (2013).

⁵¹ Josh Rogin "Appropriators Cut 8 Billion from State Department Programs," Foreign Policy, last modified February 12, 2012, <http://thecable.foreignpolicy.com>.

Benghazi, which led to the death of the U.S Ambassador and three other government employees. Though no links have been established between reduced funding levels and security vulnerabilities at the facility, the potential that fewer resources may have played a role in the security breach will require closer examination.

Military Deployments

The ongoing fiscal crisis in America may have lasting effects on U.S. national security. As evidence, Kagan points to a reduced force projection capability, which was bought on by defense budget reductions mandated by the Budget Control Act of 2011. The cuts were required by all federal agencies, including the Department of Defense and the intelligence community. Kagan asserts that the reductions have “caused material harm to U.S. national security.”⁵² To support this argument Kagan points to a number of Department of Defense projects that have either been canceled, activities curtailed, or existing capabilities reduced. Some of the projects identified by Kagan are associated with overall military readiness, such as the Navy’s cancelation of a carrier group deployment destined for the Persian Gulf and the grounding of seventeen combat squadrons of the United States Air Force.⁵³ Such overt changes in defense posture can be interpreted by rival states as a potential strategic opening, which may embolden them to take military actions against U.S. interests that during stronger economic times would not be considered a viable option.⁵⁴

⁵² Kagan, Frederick, “Perils of Sequestration,” *National Review*, May 6, 2013 65:8, pp. 42 – 46.

⁵³ Kagan (2013).

⁵⁴ Zoffer, Josh. "The Future of Dollar Hegemony." *Harvard International Review* 34, no. 1 (Summer 2012): 26 - 29.

International Institutions

There are two leading schools of thought regarding hegemonic powers and international institutions. Some view them as benevolent organizations that promote the collective economic interests of its member states.⁵⁵ Others suggest that hegemonic powers use international institutions to promote national interests relative to security, including its relative power in the international system.⁵⁶ The two views are not mutually exclusive, since economic interest and national security interests are interdependent. Because of the significant role the United States played in creating the World Bank and the International Monetary Fund, and the manner in which it has exercised its influence in these organizations, it is likely these institutions will be affected by American economic decline and reduced influence within those organizations.

In 1944, the Bretton Woods Conference established the International Monetary Fund (IMF) to manage international exchange rates and financials transactions between states.⁵⁷ The purpose of the organization is to insulate the global economy from the volatility of monetary practices such as currency devaluation, which was blamed for the Great Depression. Since its inception America has been its most influential member, contributing the most currency, in dollars, and as result retaining the largest share of votes in the IMF decision-making process. Though the IMF has had some success in stabilizing the international monetary system, some developing states believe its policies are counterproductive. Critics of the IMF contend the U.S. led organization has promoted

⁵⁵ Cohn, Theodore H., *Global Political Economy: Theory and Practice*. 6th ed., New York: Longman (2012), pp. 57- 58.

⁵⁶ Cohn (2012).

⁵⁷ Cohn (2012).

fiscal and monetary policies to developing nations that have effectively worsened financial stability in those states. This belief has resulted in a buildup of resentment among developing nations towards the IMF. If America's voting shares were to shrink as a result of its own domestic fiscal constraints, resulting in reduced deposits, it is likely that a redistribution of the voting shares among the G5 countries would occur.⁵⁸ This could lead to increased advocacy and support among G5 nations for IMF policies that are not aligned with American interests. This potential could further undermine the American economy, and by extension the ability to fund the military at levels necessary for maintaining the international status quo.

Methodology

This paper uses counterfactual case study analysis to examine the effects of economic decline in America on global security. I discuss how fiscal constraints in the United States can contribute to regional instability in various parts of the world and could threaten the international status quo. Particular emphasis is placed on reductions of foreign assistance funding and how reduced revenue flows from the United States to other countries can undermine strategic relationships and in some cases could lead to increased acquisitions of advanced weapon systems or other military build ups. Emphasis is also placed on how a diminished capability to project military power could have ramifications for global security. The paper also demonstrates how economic decline in America can weaken the international institutions that have furthered America's interests through the international monetary system.

⁵⁸ G5 countries are the financial ministers and central bank governors of the largest developed economies, Germany, Japan, Britain, France and the United States.

Case Selection

South Korea is chosen for this case study because of the role America's military plays in its national defense strategy. The security tensions arising between South and North Korea and the potential changes in international power dynamics that could occur as a result of diminished American influence in the Asia-Pacific were also considered in the choice of South Korea

Case Study

The potential effects of reduced American influence on matters of international security due to fiscal constraints can be observed in the case of South Korea. An American ally since the communists backed invasion by the North in 1950, the American - South Korean relationship has been one based initially on financial assistance aid provided by the United States after the Korean War, a Mutual Defense Treaty ratified in 1953, and the Nuclear Cooperation Agreement.

South Korea is often heralded as the foreign aid success story. Once one of the poorest states in the world, South Korea has moved from a top foreign aid recipient of the United States, to a member of the Organization for Economic Co-operation and Development (OECD), providing aid to other countries.⁵⁹ In 1952, the United States

⁵⁹ "60 Years of Partnership and Shared Prosperity – South Korea: From Aid Recipient to Donor" U.S. Embassy, Seoul – Korea, accessed on 27 April 14 at http://seoul.usembassy.gov/p_rok_60th_econ_18.html

began foreign aid assistance for economic development and security.⁶⁰ The purpose of the grants and loans were to rebuild the war torn nation, but also to strengthen it's military to protect South Korea from invasion and to prevent communists China or North Korea from exerting their influence over the South Korea government.⁶¹ Between 1953 and 1960, South Korea received more than 8.7 billion in military aid; additional funds for military training, equipment, and other security needs continued through the 1990's.⁶² Today, South Korea maintains a formidable, modern, military.

Despite the economic success of South Korea and the growth of its military, the country still has a mutual defense treaty with the United States. The Treaty holds that if a state attacks either party, the other will intervene with military force if necessary. The treaty, is for the most part, a means to deter the North from invading the South, since the United States is primarily responsible for South Korea's defense. The American commitment to defend South Korea has served as a deterrent of North Korean aggression for six decades. More than twenty-eight thousand American troops are stationed in South Korea to fortify defenses along the 38th parallel, the line of demarcation between North and South Korea.⁶³

The relationship between America and South Korea, which international relation's scholars assess as "one of the most important and strategic," is also held

⁶⁰ Congressional Budget Office (CBO), "The Role of Foreign Aid in Development: South Korea and the Philippines, September 1997.

⁶¹ CBO (1997).

⁶² CBO (1997).

⁶³ Manyin, Mark E., Mary Beth Nikitin, Emma Chanlett-Avery, Ian E. Rinehart, and William H. Cooper. 2013. "U.S.-South Korea Relations." *Congressional Research Service: Report 1-34. I* (Manyin 2013) *International Security & Counter Terrorism Reference Center*, EBSCO host (accessed November 11, 2013).

together by South Korea's compliance with the Nuclear Cooperation Agreement.

Although the agreement allows for collaboration between the United States and South Korea on matters related to nuclear energy production, Section X of the agreement prohibits the transfer of nuclear material, technology or data for the purposes of designing or building a nuclear weapon.⁶⁴ The agreement does allow for the production of atomic energy for civilian uses, which yields approximately thirty-percent of South Korean electricity.⁶⁵

However, a faction within the South Korean government is now contesting some provisions of the Nuclear Cooperation Agreement, which was set to expire in 2014.⁶⁶ The South Korean government's official stance is that it wants to reprocess spent reactor fuel provided by the United States to reduce stockpiles of nuclear waste material and increase efficiencies in energy production.⁶⁷ Although President Park Geun-Hye has not said she wants to develop nuclear weapons, representatives of the South Korean government are calling for establishing their own nuclear weapons program. In light of a number of threats made by North Korean leaders Kim Jong-il and his predecessor Kim Jong-un, these officials claim that a South Korean nuclear weapon capability would serve as a deterrent against the belligerent North. Public support for this option is growing. According to some reports as many as two-thirds of the South Korean population support

⁶⁴ Agreement for Cooperation between the Government of the United States of America and the Government of the Republic of Korea Concerning Uses of Atomic Energy, National Nuclear Security Agency, November 11, 2013 at http://nnsa.energy.gov/sites/default/files/nnsa/inlinefiles/Korea_South_123.pdf.

⁶⁵ Ibid.

⁶⁶ Hibbs, Mark "Will South Korea Go Nuclear – What the North's Provocations Mean for Washington's Relations with Seoul," *Foreign Policy*, March 15, 2013 at http://www.foreignpolicy.com/articles/2013/03/15/will_south_korea_go_nuclear?page=0,1

⁶⁷ Hibbs (2013).

establishing a nuclear weapons program.⁶⁸ Although the South Koreans agreed to extend the Nuclear Cooperation Agreement in April, 2013, support for nuclear energy independence and justifications for establishing its own nuclear deterrent capability are likely to grow as South Koreans continue to question America's commitment to the Mutual Defense Treaty; concern that is based on America's economic circumstances and perceptions that America's military is overextended.

The justification for developing nuclear weapons, on one level, is based on concern for America's fiscal uncertainty. Some suspect that America's financial woes have weakened South Korean confidence in America's ability to uphold their security guarantees should North Korea launch a military strike against them; a commitment which includes the so called U.S. "nuclear umbrella." The views of some scholars who argue that America's commitments abroad "exceed the resources available to support them" are growing perceptions within the international community.⁶⁹ America's recent efforts to "strengthen alliances" and increase the contributions of international partners toward common national security interests are viewed by some as evidence that America has overcommitted militarily.⁷⁰

Scholars also suggest the recent military spending cuts jeopardize America's "pivot strategy," which involves the repositioning of sixty-percent of U.S. naval assets to

⁶⁸ Hibbs (2013).

⁶⁹ Brooks, Stephen G., Ikenberry, G. John, Wohlforth, William C. "Lean Forward," *Foreign Affairs*, 92:1, January – February 2013, pp. 130-142.

⁷⁰ Hwang, Jihwan, "The Two Koreas after U.S. Unipolarity: In search of a New North Korea Policy," *Journal of International and Area Studies*, 20:1, 2013, pp. 77-88.

the Asia-Pacific by 2020.⁷¹ The proposed elimination of seven Aegis missile defense ships to protect Japan from North Korean missile strikes; the proposed elimination of eight Army combat brigades; and the elimination of one Marine regiment lend credibility to these concerns.⁷² Remote options for projecting military power in the region, such as the use of drones, also come at considerable costs that are said to be too expensive to under current budget restrictions.⁷³

The strategy, if implemented, would further insulate South Korea from the North and curb China's growing influence in the region. The perceptions of some South Koreans, that America may not be able to implement this strategy due to spending reductions were serious enough to prompt President Obama and senior U.S. government officials to reassure the South Korean government that America is capable of meeting its commitments despite the steep reductions in military spending.⁷⁴ The costs of the pivot strategy extend beyond those associated with the repositioning and reallocation of resources to the Asia Pacific. Additional expenses will be required to modernize and develop new technologies to meet the growing naval and air projection capabilities of major countries in the region.⁷⁵ The construction of new land based facilities in South

⁷¹ Evans, Michael "American Defense Policy and the Challenge of Austerity – Some Implications for Southeast Asia," *Journal of Southeast Asian Economics*, Vol. 30, No.2 (2013), pp. 164-78. (Evans 2013)

⁷² Price, Williams A, "An Affordable Pivot," *the National Strategy Forum Review*, website, accessed on April 26 at

<http://www.nationalstrategy.com/Portals/0/documents/Spring%202013%20NSFR/An%20Affordable%20Pivot%20-%20Price.pdf>

⁷³ Bauf, Peter, "Wishful Thinking Behind America's Pivot to Asia Foreign Policy," *Foreign Policy Journal*, June 10, 2013 access on April 26 at <http://www.foreignpolicyjournal.com/2013/06/10/wishful-thinking-behind-americas-pivot-to-asia-foreign-policy/>

⁷⁴ Manyin (2013).

⁷⁵ Campbell, Kurt, Assistant Secretary of State, Department of State, Interview, The Brookings Institution and Foreign Policy Initiative, December 13, 2011.

Korea will place additional pressures on the defense budget.⁷⁶ This substantial investment by the United States comes at a time of increased scrutiny of the defense budget.

Perceptions of declining confidence in U.S. military capabilities are aggravated, in part, due to the rhetoric advanced by American officials to generate domestic support for increase spending.⁷⁷ Chappel focuses on the U.S. – Japan relationship to illustrate this point. The author contends that the statements of lawmakers who exaggerate the effect of defense budget cuts on America’s global commitments, can affect the views held by Japanese military leaders concerning American military capability. Chappel believes these perceptions are without merit because the cuts have “limited effects” on U.S. military operations. Nonetheless, Japanese officials question America’s ability to provide security guarantees.⁷⁸ Michael Chertoff, former U.S. Homeland Security Secretary, advances similar concerns, by suggesting that the limited U.S. responses to crises in Libya, Syria and the Ukraine undermine allied confidence in U.S. security guarantees.⁷⁹

Decreasing levels of confidence in the United States may also contribute to an increase in provocations by the North. Since 2010 there have been several acts of aggression towards South Korea, including the 2010 sinking of a South Korean naval vessel, a missile attack launched against the island of Yeonpyeong, the restarting of one

⁷⁶ Manyin, Mark E., “Pivot to the Pacific? The Obama Administration’s “Rebalancing” Toward Asia, Congressional Research Service, March 28, 2012.

⁷⁷ Chappel, John, “Scaring the Allies: The Overseas Implications of Budget Rhetoric, Stimson, accessed on April 18, 2014 at <http://www.stimson.org/spotlight/scaring-the-allies-the-overseas-implications-of-budget-rhetoric/>

⁷⁸ Chappel (2014).

⁷⁹ Chertoff, Michael, “Danger in a U.S. Retreat,” Washington Post, April 20, 2014.

of its nuclear reactors, and a nuclear weapons test in February 2012.⁸⁰ Some argue that these demonstrations are nothing more than an effort to extract concessions from the international community, but the potential that North Korea's aggressions are timed to correlate with international perceptions that America is over extended, and therefore less inclined to make further military commitments, cannot be dismissed without some consideration.

South Korea's confidence in America's security guarantee also figures prominently into their potential security calculations concerning China. Although China has become South Korea's largest trading partner in recent years, the rise of China is also the source of concern for the South Korean government.⁸¹ The Council for Foreign Relations notes that South Korea's economic dependence on China and the modernization of the Chinese military has led some South Koreans to conclude that China's increasing influence will lead to instability in the Asia-Pacific region.⁸² Potential security concerns revolve around the perceptions held by some South Koreans that China favors North Korea on security matters involving the two countries. Han Suk-Hee also points out the security dilemma that confronts the South Korean government by concluding that that nation is dependent on China for economic security and the United States for national security, and therefore it must balance relations between the two.⁸³ The security implications resulting from a waning American security presence in that part of the world due to fiscal constraints include the potential that South Korea could

⁸⁰ The Economist, Bad or Mad?, October 26, 2013.

⁸¹ Han Suk-Hee, "South Korea Seeks to Balance Relations with China and the United States," Council on Foreign Relations, November 2012.

⁸² Suk-Hee (2012).

⁸³ Suk-Hee (2012).

“bandwagon” with China.⁸⁴ Additionally, perceptions of waning South Korean confidence in U.S security guarantees extend from the contentious negotiations of the nuclear cooperative agreement in 2013, and calls by U.S. officials for South Korea to assume more responsibility for it’s own security.⁸⁵

Conclusion

In summary, the issues impacting global security are growing increasingly complex during a time when financial resources are becoming scarcer. The rise of the developing world and the economic interdependence between states has accelerated the displacement of traditional national security interests with economic objectives.⁸⁶ Also, the absence of an existential threat and the emergence of new threats, to include international terrorism and cyber crime, have limited the effectiveness of the U.S. military to mitigate security threats.⁸⁷ Many have argued that an American led unipolar system, supported by an unparalleled military, is necessary to maintain stability in this complex melding of economic and national security priorities. Others have advocated that a transition to a multipolar international system is inevitable, and can be peaceful. However, with only the American and British hegemonic periods to study, opportunities for academics and theorists to extract lessons learned from history are limited.⁸⁸ Nonetheless, if we were to be informed by the limited data that exist on the most recent

⁸⁴ Evans (2013).

⁸⁵ Cha, Victor and Kim, Ellen, “U.S.-Korea Relations: Political Change and a Rocket Launch,” Comparative Connections – A Tri-annual E-Journal on East Asian Bilateral Relations, Center for Strategic and International Studies, January 2013, pp. 4-5.

⁸⁶ Nye (2011), Ruhle (2013).

⁸⁷ Ruhle (2013), (Hibbs 2013).

⁸⁸ Cohn (2012).

approach to multipolarity, the evidence would suggest that there is a real potential for conflict related to the economic challenges faced by states.

Liberalist theories on international relations suggest that trade dependencies would reduce war. Nye, however, challenges this theory by concluding that the trade interdependence that existed between Britain and Germany did not prevent the First World War.⁸⁹ The transition of international power that occurred between Britain and the United States after the Second World War is equally prognostic. Though some scholars have suggested that the Britain – American transition occurred without conflict,⁹⁰ it is probably more accurate to state that conflict did not occur between Britain and America, specifically. The transition did, however, give rise to the Cold War, America's protracted conflict with the Soviet Union.

The interdependent relationship that exists between America and China is somewhat analogous to Britain and Germany in the early 1900s. Popular debate, however, suggest the relationship is more akin to the Cold War.⁹¹ But in this case, the threat to both nations is economic. Not from the physical destruction of one's means to produce goods and services, but from a rapid fall in the value of the dollar. Economists contend the damage to both China and America's economies would be significant. Some scholars assess that because China would incur substantial financial losses if the dollar were to collapse, the probability of a deliberate sell-off of American debt held by China is a low. But just as the probability of nuclear war with the Soviet Union was considered

⁸⁹ Nye (2011).

⁹⁰ Nye (2011).

⁹¹ Nye (2011).

extreme, the threat was real and America prepared for that threat militarily and economically. Similarly, America must prepare for the challenges that will emerge as a result of economic decline and the redistribution of state power that will result.

Economic Considerations for WMD Proliferation

Introduction

The risk to global security posed by weapons proliferation has been a concern since the first multilateral agreement banned the use of chemical agents in war in 1925.⁹² Since that time, nonproliferation efforts have grown more complex with the development of biological and nuclear weapons. Collectively, this class of weapon is referred to as Weapons of Mass Destruction (WMD). The spread of WMD and their potential lethal and destabilizing effects has been a constant concern among national security academics and practitioners throughout most of the twentieth century.⁹³ Historically, non-nuclear proliferation regimes have focused on the deliberate transfer of weapons, technology and material to states without nuclear weapons. Recent attention has been given to the potential deliberate or unintentional transfer of a weapon to a non-state group, such as a terrorist organization, and the potential motivating factors associated with proliferation of this sort.

This chapter examines to what extent do economic challenges contribute to WMD proliferation by undermining a state's capability to protect existing stockpiles. Economic challenges and domestic instability in states that possess WMD is emerging as a primary concern for global security. The costs associated with maintaining nuclear

⁹² Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases and of Bacteriological Methods of Warfare (Geneva Protocol), Signed at Geneva, June 17, 1925. Accessed on March 1, 2013 at <http://www.state.gov/t/isn/4784.htm#treaty>

⁹³ Weitz, Richard. "Syria Crisis Highlights Gaps in Chemical Weapons Convention." *World Politics Review* (July 24, 2012): p. 1.; Slocombe, Walter, and Daniel Gerstein. "THE DAY BEFORE." *U.S. Naval Institute Proceedings* 136, no. 10 (October 2010): pp. 40-45; Smith, Gerard, and George Rathjens. 1e19. *Reassessing Nuclear Nonproliferation Policy. Foreign Affairs*. 59, no. 4: 875-894.

weapons are substantial, and many countries would find the investment difficult to sustain. For instance, the United States, which has the largest and most advanced weapons arsenal, allocated more than 52 billion dollars to maintain its nuclear weapons arsenal in fiscal year 2008.⁹⁴ 29 billion dollars of this total was used for operating, upgrading and maintaining the arsenal, and 3.1 billion was spent on proliferation prevention and security.⁹⁵ By comparison, France, which maintains an estimated 300 nuclear weapons, spends roughly 4 billion dollars a year on its nuclear program, and the United Kingdom spends an estimated 3 billion dollars per year.⁹⁶ Although the security costs for the foreign nuclear programs discussed in this chapter are not available, they are assumed to be much less. However, given the size of some developing economies the importance of studying the economic contributors to proliferation is evident as financial resources around the world contract and governments cope with fiscal austerity measures.

The primary international instruments used to prevent the proliferation of WMD are multilateral agreements (MLAs) signed by states who agree not to provide weapons, weapons technology, or weapons material, to other states or non-state actors. These nonproliferation treaties are based on broadly accepted theories about the determinants that lead to a state's decision to acquire WMD. Singh and Way find that states pursue nuclear weapons for three reasons. The authors claim that states pursue nuclear weapons when they have the technical means to do so, and that technology advancements are

⁹⁴ Schwartz, Stephen, "Nuclear Security Spending – Assessing Costs, Examining Priorities," Carnegie Endowment, January 12, 2009, pp. 6-14.

⁹⁵ Schwartz (2009).

⁹⁶ Taylor, Claire, "French Nuclear Deterrent," House of Commons, Library, International Affairs and Defense Section, June 30, 2010, pp. 2-11.

closely aligned with the level of economic achievement obtained by the state.⁹⁷ Secondly, they hold that states will pursue nuclear weapons because of the perceived “severity of external threats;”⁹⁸ and lastly the authors claim that states choose to pursue nuclear weapons due to domestic determinants, which include having a democratic form of government, the liberalization of government institutions, autonomous domestic elites, and symbolic motivations.⁹⁹ These determinants are focused on internal activities initiated by a state to procure or develop WMD. As a result, the emphasis of the MLAs is to prevent the diversion of weapons or weapons technology and material, or the development of new weapons by non-nuclear states. Far less emphasis is placed on a state providing the weapons to non-state groups or the theft of a weapon from a poorly secured facility. Even less consideration is given to the unintended consequences caused by economic challenges associated with WMD security.

Potential reductions in military budgets, foreign security assistance, economic aid, and gross domestic product (GDP) are particularly disconcerting when applied to Pakistan, Syria and North Korea. This is so, because not only do these states have fragile government institutions and weak economies, but also because collectively they possess substantial arsenals of chemical, biological, or nuclear weapons. These weapons may become vulnerable as fiscal resources for security become increasingly scarce. Economic crisis in these countries could lead to reduced security at weapons facilities, which would

⁹⁷ Singh, Sonali and Way, Christopher R. “The Correlates of Nuclear Proliferation: A Quantitative Test,” *Journal of Conflict Resolution*, Vol. 48, No. 6 (Dec. 2004) pp. 859 – 885.

⁹⁸ Singh and Way (2004), pp. 859-885

⁹⁹ Ibid.

make weapons and weapons material vulnerable to theft, transfer, or technology proliferation.¹⁰⁰

This paper will examine the economic factors that lead to increased risk of WMD proliferation from Pakistan, Syria and North Korea. First, I will discuss the correlations that exist between economic conditions and increase internal security risk to demonstrate how these two variables could lead to increased risk to existing WMD arsenals. Then the case study on Pakistan, Syria and North Korea will assess economic factors that could contribute to reduce security or the proliferation of weapons, weapons material and technology. Issues concerning dual-use technologies are examined for their susceptibility to economic challenges. The chapter concludes with a discussion on the shortcomings in current international instruments and a potential counter-argument to the position that economic challenges can increase risks of WMD proliferation. I conclude that economic conditions are also a determinant of weapons proliferation, equal to the perceived severity of a threat, prestige, and other traditional determinants. Therefore, empirical studies examining the linkages of economics and weapons proliferation are necessary to formulate meaningful nonproliferation norms. This paper will offer a new perspective on weapons proliferation that builds on existing research on this emerging global security issue.

¹⁰⁰ Golberg, Jeffrey and Ambinder, Marc, "The Pentagon's Secret Plans to Secure Pakistan's Nuclear Arsenal," The National Journal, November 5, 2011 accessed on March 3, 2013 at http://www.nationaljournal.com/magazine/the-pentagon-s-secret-plans-to-secure-pakistan-s-nuclear-arsenal-20111104?mrefid=site_search&page=1

Literature Review

Recent scholarship on the causes of internal conflict in developing countries shows the linkages between economic distress and violent conflict.¹⁰¹ Kahl and Krasner, find that poor economic conditions allow fringe or sectarian groups, such as the Taliban, to become established as an alternative to a government that has been weakened by economic decline. As Kahl asserts, when a government can no longer provide basic services and security for its people, the population will lose confidence in government institutions and seek alternative sources of income and security.¹⁰²

Krasner adds to the this argument by finding that internal conflict is often the result of “poverty”, high income inequality, recent decolonization, and weak institutions.”¹⁰³ With the exception of those influences that are due to recent decolonization, Krasner’s determinants of internal conflict are all directly related to the economic health of a nation. Kahl shows evidence of these linkages in East Africa where the collapse of the Somalia government produced lawlessness, piracy, and provided an environment where sectarian ideology could thrive.¹⁰⁴ In Southeast Asia, weak economic conditions in the Philippines allowed communism to establish a base of support. Albeit corrupt, the democratically elected government of Ferdinand Marcos was eventually threatened by the Communist Party of the Philippines.¹⁰⁵ Though Somalia and the Philippines do not possess WMD, the implications for global security due to economic

¹⁰¹ Kahl (2006).

¹⁰² Kahl (2006), p. 211.

¹⁰³ Krasner, Stephen and Pascual, Carlos, “ Addressing State Failure,” *Foreign Affairs*, Vol. 84, No. 4 (Jul.-Aug. 2005), pp. 153-163.

¹⁰⁴ Colin Kahl, *States, Scarcity, and Civil Strife in the Developing World* (Princeton University Press: July 2008).

¹⁰⁵ Kahl (2008).

stress is evident. Also relevant to this chapter are the economic factors that contributed to the series of uprisings in the Middle East referred to as the “Arab Spring.” Consistent complaints among persons and groups involved in the uprisings are unemployment, wages, and poverty.

Although the majority of empirical studies on the causes of conflict focus on economic and demographic influences, the works of Shapiro and Krasner are most relevant to the argument that economic challenges can increase the risk of WMD proliferation. Shapiro states that economic crisis can negatively impact a state’s ability to safeguard its weapons arsenals.¹⁰⁶ Similarly, Krasner argues “When chaos prevails, terrorism, narcotics trade, weapons proliferation and other forms of organized crime can flourish.”¹⁰⁷ Therefore, the potential exists for these conditions to contribute to WMD proliferation through the theft or transfer of a weapon or by undermining the authority of government institutions responsible for WMD security.

A review of the literature on nonproliferation efforts reveals persuasive arguments that MLAs have had some successes in reducing the number of banned weapons that exist globally. For instance, the Chemical Weapons Convention is credited with the elimination of most “known” chemical weapons that were held throughout the world.¹⁰⁸ Also, during the 2011 Nuclear Security Summit held in Seoul, Korea, the Nuclear Nonproliferation Treaty was credited with the disposal of 530 kilograms of highly

¹⁰⁶ Shapiro.

¹⁰⁷ Krasner.

¹⁰⁸ Weitz, Richard

enriched uranium (HEU) and plutonium over the previous two years.¹⁰⁹ Also, in remarks made during the 7th Biological and Toxin Weapons Convention Review Conference, Secretary of State Hillary Clinton affirmed that much progress had been made in reducing the numbers of chemical and biological weapons maintained by states.¹¹⁰

However, the existence of banned weapons in Pakistan, North Korea, and Syria prove that MLAs have not deterred all states from acquiring WMD.¹¹¹ Ongoing events in Iran indicate that they too, are not deterred by international norms regarding the production of highly enriched uranium.¹¹² George Bunn argues that states that are not party to these agreements are free to proliferate weapons technology and aid states with developing nuclear weapons.¹¹³ Bunn also suggests that the dual-use potential of nuclear fusion, chemical, and biological technologies have allowed other states to disguise their weapons programs or established clandestine weapon production programs.¹¹⁴

These events have fueled concerns that the threat from these weapons is growing. In fact, the Commission on the Prevention of Weapons of Mass Destruction (WMD) Proliferation and Terrorism assessed in 2008 that an act of terror using WMD “was more likely than not, to occur by the end of 2013.”¹¹⁵ The authors of the report cite nuclear

¹⁰⁹ Nuclear Security Summit Seoul 2012, Key Facts (2012).

¹¹⁰ Clinton, Hillary, Secretary of State, Remarks at the 7th Biological and Toxin Weapons Convention Review Conference, December 7, 2011.

¹¹¹ Bunn, George “The Nuclear Nonproliferation Treaty: History and Current Problems,” Arms Control Association, Washington, D.C. (December 2003) accessed on March 1, 2013 at http://www.armscontrol.org/act/2003_12/Bunn

¹¹² “The Global Nuclear Nonproliferation Regime.” 21 May 2012. Council on Foreign Relations. Mar 2013.

¹¹³ Bunn (December 2003).

¹¹⁴ Bunn (December 2003).

¹¹⁵ Graham, Bob, Chairman, “World at Risk, The Report of the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism,” Vintage Books, NY (December 2008), p. 15.

rivalries, the spread of biotechnology, and poor security of weapons material as instigating factors. Though this alarming prediction failed to materialize, the vulnerabilities identified by the Commission concerning safeguarding weapons and the potential for illicit transfers of weapons material are likely to be aggravated by poor economic conditions.

In response to increased concern from the threat posed from these weapons, the following year the Obama Administration released the *National Strategy for Countering Biological Threats*.¹¹⁶ The strategy acknowledges the increasing complexities associated with biological threats. The administration identifies technological advancement and the decreasing monetary costs of exploitation as key challenges;¹¹⁷ both of which are influenced by economic factors. In order to reduce the risks associated with biological pathogens, the strategy promotes objectives that are based on enhanced coordination between stakeholders, public-private partnerships, and increased international collaboration. These precautions are not without merit. Andrew Bast, writing for the Center for Strategic and International Studies, cites a series of security lapses in Pakistan that call into question Pakistan's ability to safeguard its nuclear weapons arsenal.¹¹⁸ Additionally, the ongoing civil war in Syria has raised similar concerns for the security of their chemical weapons.¹¹⁹ In fact, on March 13th, 2013, the United Nations initiated an

¹¹⁶ National Security Council, "National Strategy for Countering Biological Threats," November 2009.

¹¹⁷ National Strategy (2009).

¹¹⁸ Bast, Andrew, "Pakistan's Nuclear Calculus," Center for Strategic and International Studies, the Washington Quarterly 34:4 pp. 73-86 (Fall 2011).

¹¹⁹ House Committee on Foreign Affairs, *When Regimes Fall: The Challenge of Security Lethal Weapons, hearing before the Subcommittee on Terrorism, Nonproliferation, and Trade of the Committee on Foreign Affairs*, 112th Congress, July 19, 2012.

investigation into the alleged use of chemical weapons in the current conflict.¹²⁰ The report issued in August 2013 found convincing evidence that chemical weapons were used in Syria; however, the report stopped short of saying who was responsible for the attack.¹²¹ Questions concerning whether or not chemical weapons stockpiles in Syria were compromised by external forces remain. Also, the February 2013 detonation of nuclear device by North Korea drew international condemnation and stoked long existing concerns that North Korea may engage in nuclear proliferation.¹²²

As previously discussed, states party to the WMD agreements such as NPT, including the United States, argue that nonproliferation activities have been effective for deterring weapons transfers and detecting illegal weapons programs. Members of the nonproliferation regime contend these efforts have led to a reduction in the number of WMD maintained by states.¹²³ The agreements are also credited with having dissuaded other states from seeking a WMD capability.¹²⁴ However, there are other factors that could lead to an increased risk of WMD proliferation that are not addressed by MLAs. Economic challenges, and vulnerabilities caused by severe reductions in security spending extend beyond the range of protection offered by MLAs. Specifically, I argue that economic challenges will increase the risks of weapons proliferation in Pakistan,

¹²⁰ Lynch, Colum, "U.N. to Investigate Chemical Weapons Allegations in Syria," Washington Post, March 21, 2013 accessed on March 21 at http://www.washingtonpost.com/world/national-security/un-to-investigate-chemical-weapons-use-in-syria/2013/03/21/2f497eee-9230-11e2-9cfd-36d6c9b5d7ad_story.html

¹²¹ United Nations, Mission to Investigate Allegations of the use of Chemical Weapons in the Syrian Arab Republic, "Report on the Alleged Use of Chemical Weapons in the Ghouta Area of Damascus," 21 August 2013.

¹²² Fallout – North Korea's Nuclear Test, *The Economist*, February 16, 2013 accessed on March 4, 2013 at <http://www.economist.com/news/asia/21571938-chagrin-his-neighbours-young-despot-appears-determined-continue-his-familys-atomic>

¹²³ Nuclear Security Summit Seoul 2012 (2012).

¹²⁴ Ibid.

Syria and North Korea, and that existing non-proliferation agreements are no longer adequate to contain the threat posed by WMD.

Methodology

The chapter will use comparative case study analysis to assess the affect of economic factors on WMD proliferation in developing states. Pakistan, Syria and North Korea were chosen due to their extreme values of economic crisis (independent variable) and the risk of proliferation (explanatory variable). The states are also appropriate for comparative purposes because they each posses a form of WMD and exhibit similar forms of economic distress and domestic instability. The fact that these states also have different forms of government adds to the rigor of the analysis. Pakistan is a Federal Republic, Syria, has an Authoritarian form of government, and North Korea is Socialists/Communist dictatorship. The selection of these particular states is also due to their outlier characteristics. Syria and North Korea are considered “outlier states” because they have failed to conform to international norms regarding WMD and both have been labeled by the U.S. State Department as a State Sponsors of Terrorism. Pakistan’s inability to control or curtail the activities of terrorist organizations operating within its borders is also considered an outlier characteristic for the purposes of this research.

Definitions

When using the term “economic decline” or “economic distress”, I am referring to the coexistence of severe reductions of gross domestic product, increasing rates of

unemployment, population and poverty; and increases in foreign held debt. When using the term “security,” I am referring to the apparatus’ used by the state, both military and civilian, government and private, that are responsible for the physical security of weapons, weapons facilities and weapons production. The definition is also extended to those resources dedicated to transporting weapons and the mechanisms used to vet personnel security with access to weapons, weapons technology and material. Security will also encompass security training, and domestic intelligence and counterintelligence functions dedicated to the security of WMD. “Internal Security” is a reference to activities conducted by the state to detect, deter and disrupt organized civil revolts against the government. These activities are directed by the state using either civilian or military resources. “Transfer” will refer to the deliberate provisioning of a WMD device to another state or non-state group; and the term “insider” is used in reference to an individual with authorized access to a particular weapons facility, weapons material and components, or weapons development information.

Case Study

Severe economic distress in Pakistan, Syria and North Korea is well documented in the literature. Robert Litwak and David Steven, among others, have noted the linkages between economic and demographic stress and the potential for civil unrest. Steven, discussing resource scarcity in Pakistan described the Pakistan economy as “teetering on the edge of bankruptcy.” He attributes Pakistan’s economic woes to its burgeoning

population and the impact this has on the availability of resources,¹²⁵ while Kahl explains how dire economic conditions can also make populations susceptible to radical ideologies that can cause internal security issues.¹²⁶ As evidence of the potential internal security concerns that can arise due to economic instability, Steven points to sectarian and terrorist group activities that have targeted Pakistan's critical infrastructure.¹²⁷

Like Pakistan, the Syrian economy may also be on the verge of collapse as the country enters its third year of a civil war.¹²⁸ World Bank assessments note that the struggling Syrian economy is worsened by the ongoing civil crisis.¹²⁹ Additionally, international sanctions have compounded the negative impacts of the crisis by significantly reducing oil revenues.¹³⁰ Foreign investors have also fled Syria as a result of the instability.¹³¹ Nearly two hundred fifty thousand Syrians have fled to neighboring countries, furthermore as many as seventy thousand have been killed, and some estimate that over one million have been displaced within Syria.¹³² These factors will undoubtedly have implications for labor and productivity throughout all sectors of the Syrian economy. The loss of human capital will disrupt and delay economic growth in Syria for the foreseeable future.

¹²⁵ David Steven, "Running Out of Everything: How Scarcity Drives Crisis in Pakistan," *World Politics Review*, May 3, 2011, accessed February 26 at <http://www.worldpoliticsreview.com/articles/8713/running-out-of-everything-how-scarcity-drives-crisis-in-pakistan>

¹²⁶ Kahl, Colin H., "States, Scarcity and Civil Strife in the Developing World," Princeton University Press (New Jersey, 2006) pp. 209-248.

¹²⁷ Steven (2011), p 5.

¹²⁸ The World Bank, "Syrian Arab Republic Overview," accessed on February 26, 2013 at <http://www.worldbank.org/en/country/syria/overview>

¹²⁹ The World Bank (2013).

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² Ibid.

In North Korea, the government is faced with an ongoing economic crisis. Persistent increases in military spending divert limited funds from domestic causes, in what can be described as a classic “butter or guns” scenario.¹³³ Additionally, environmental issues such as crop failures have exacerbated the abject poverty that exists throughout the country. The economy is further constrained by resource scarcity issues in the form of fuel and food shortages.¹³⁴ These conditions are believed to have influenced North Korea’s decision to engage in illicit activities to generate financial resources to sustain the regime.¹³⁵ Litwak, in discussing the causes of proliferation, states that North Korea has turned to illicit activities such as weapons proliferation, counterfeiting currency, and drug trafficking to maintain power and bolster its economy.¹³⁶

Pakistan

Pakistan established its nuclear weapons program after suffering defeat in a war with India in 1972.¹³⁷ The move was viewed by the international community as a hedge against continued threats from India and anticipated conflict over disputed territories.¹³⁸

¹³³ Central Intelligence Agency, *The World Fact Book*, accessed on March 4, 2013 at <https://www.cia.gov/library/publications/the-world-factbook/geos/kn.html>

¹³⁴ *The World Fact Book* (2013).

¹³⁵ Litwak, Robert S., “Outlier States, American Strategies to Change, Contain or Engage Regimes,” Woodrow Wilson Center Press, Washington, D.C. (2012). P. 148.

¹³⁶ Litwak (2012), p. 148.

¹³⁷ Kerr, Paul K. and Nikitin, Mary B., “Pakistan’s Nuclear Weapons: Proliferation and Security Issues,” Congressional Research Service, February 13, 2013, p. 3.

¹³⁸ Kerr and Nikitin (2013) p. 3.

Pakistan achieved its goals of producing weapons grade highly enriched uranium and is believed to have produced its first nuclear weapon in the 1980's.¹³⁹

As Pakistan's nuclear program matured, its economy experienced steady growth and was once heralded as an economic model for other countries in the region.¹⁴⁰ However, by the early 1980's, Pakistan had grown dependent on foreign loans, it was in the midst of a debt crisis, and the economy experienced a severe contraction.¹⁴¹ It was during this period of economic uncertainty that Abdul Qadeer Khan, a nuclear physicist, who is largely responsible for establishing Pakistan's nuclear weapons program, sold nuclear weapons technology to Iran, Libya, and North Korea.¹⁴² The economic factors that contributed to Khan's decision to sell nuclear weapons information are unclear, but the potential Khan's actions were sanctioned by the government has been a matter of speculation and could have been motivated by the financial losses confronting the Pakistan government.¹⁴³

Today, Pakistan's economy is in decline. Like many other nations, Pakistan was also affected by the global financial crisis of 2008. The impact of these losses on the Pakistan economy were magnified by catastrophic flooding in 2010 that affected over eighteen million people.¹⁴⁴ In addition to the displacement of millions and loss of life,

¹³⁹ Kerr and Nikitin (2013) p. 4.

¹⁴⁰ Zaidi, Akbar S, "Pakistan's Rollercoaster Economy: Tax Evasion Stifles Growth," Carnegie Endowment for International Peace, Policy Brief 88, September 2010, p. 4.

¹⁴¹ Zaidi (2010).

¹⁴² Litwak, Robert S., "Outlier States, American Strategies to Change, Contain or Engage Regimes," Woodrow Wilson Center Press, Washington, D.C. (2012), p. 134.

¹⁴³ Bast, Andrew, Pakistan's Nuclear Calculus, Center for Strategic and International Studies, Washington Quarterly (Fall 2011), 34:4, pp.73-86.

¹⁴⁴ World Bank, "Pakistan Overview," accessed on February 25, 2013 at

the floodwaters covered over seventeen million acres of farmland.¹⁴⁵ The economic ramifications of the floods will be substantial given that Pakistan is largely an agrarian based economy. According to the Pakistan government, the agriculture sector represents twenty-one percent of GDP.¹⁴⁶ In addition, the agriculture sector employs forty-five percent of the labor force, in rural areas the figure is sixty-percent.¹⁴⁷ Given these percentages, the Government of Pakistan considers the agriculture sector “vital for ensuring food security, generating overall economic growth, and reducing poverty.”¹⁴⁸ This economic reality associated with the loss of agriculture revenue could reduce the amount of domestic spending allocated for nuclear weapons security.

Equally disconcerting is the fact that revenue sources for Pakistan’s nuclear security extend beyond those funds derived from its GDP. Economic and security aid from the United States is also to the day-to-day functioning of Pakistan’s government and military. These funds can be used to enhance domestic security operations within Pakistan.¹⁴⁹ Reductions in foreign aid from the United States could result in a substantial degradation in the Pakistani military, which could negatively impact their ability to safeguard nuclear arsenals. Pakistan, one of the largest recipients of U.S. aid, has received more than twenty billion dollars in economic and security aid between 2002 and

<http://www.worldbank.org/en/country/pakistan/overview.print>

¹⁴⁵ Waraich, Omar, “Pakistan’s Floods Threaten Economy and President,” accessed on March 16, 2013 at <http://www.time.com/time/world/article/0,8599,2010949,00.html>

¹⁴⁶ Government of Pakistan, Ministry of Finance, Pakistan Economic Survey 2011-2012, Agriculture, accessed on March 14, 2013 at www.finance.gov.pk/survey/chaper_12/02-Agriculture.pdf

¹⁴⁷ Government of Pakistan (2013).

¹⁴⁸ Government of Pakistan (2013).

¹⁴⁹ Shapiro, Andrew J., A New Era for U.S. Security Assistance, *The Washington Quarterly*, 35:4, (2012), p. 23.

2011.¹⁵⁰ This figure represents a significant increase in funding since the September 11, 2001 terrorist's attacks on the United States. This increase is attributed to the strategic alliance the United States needs to implement its counter-terrorism strategy.¹⁵¹ Therefore, it is reasonable to assume that some of these funds are used to enhance security at nuclear facilities. In 2012 and 2013 estimated requested funds for Nonproliferation, Antiterrorism, Demining and Related Programs (NADR) in Pakistan reflect a twenty-percent reduction from 2011.¹⁵² These funds are to be used primarily for counter-terrorism and counter weapons of mass destruction initiatives. Although exact figures that reflect Pakistan's spending on nuclear weapons security are not available, it is reasonable to conclude that if nuclear security funds are derived from NADR dollars, those amounts are likely to be reduced.

Funds provided to Pakistan by the United States are also essential to economic stability. The Economic Support Fund (ESF) represents the largest percentage of the total U.S. foreign aid package provided to Pakistan.¹⁵³ Though the 2012 fiscal year request reflects a slight reduction from the previous year, the 2013 amount has decreased by almost twenty million dollars. These reductions in foreign assistance funding are likely to be sustained or reduced further as the U.S. implements severe budget cuts on the Department of Defense and the Department of State due to its own economic issues.

¹⁵⁰ Epstein, Susan B. and Kronstadt, K. Alan, "Pakistan: U.S. Foreign Assistance," Congressional Research Service, October 4, 2012, p. 6.

¹⁵¹ Epstein and Kronstadt (2012) p. 6.

¹⁵² Epstein and Kronstadt (2012) p. 10.

¹⁵³ Epstein and Kronstadt (2012)

Litwak and Krasner assert that severe economic and demographic stress can lead to violent anti-state conflict.¹⁵⁴ There is evidence in the literature that anti-state conflicts occur in Pakistan with some regularity. In 2008, insurgents targeted Pakistan's energy critical infrastructure by sabotaging gas pipelines and power grids.¹⁵⁵ Shapiro takes the analysis further, indicating that weak economic challenges will negatively impact the military and a state's ability to protect its weapons arsenal.¹⁵⁶ Consistent with this view, extremist groups in Pakistan have taken advantage of the opportunities a weakened government presents. For example, in 2011 the Taliban targeted the heart of the Pakistani government, its military, by attacking and commandeering the Mehran Naval Airbase in Karachi.¹⁵⁷

These incidents of anti-state conflict demonstrate how Pakistan's economic challenges are an intervening variable that has led to a diminished capability of the state to maintain control and order within its own borders. This is no trivial consequence as Pakistan is home to several terrorist organizations and sectarian groups including the Pakistani Taliban, Afghanistan Taliban, the Haqqani network, Al-Qaeda, and Lashkar-e-Taiba.¹⁵⁸ The problem is compounded as Pakistan moves toward becoming the sixth largest nuclear arsenal in the world and building a fourth nuclear reactor.¹⁵⁹

¹⁵⁴ Litwak (2012) and Krasner (2005).

¹⁵⁵ Steven (2011).

¹⁵⁶ Shapiro (2012).

¹⁵⁷ Bast (2011).

¹⁵⁸ Bast (2011).

¹⁵⁹ Bast (2011).

Thus, as domestic instability increases in Pakistan, its nuclear weapons program is growing, creating additional security vulnerabilities. The construction of new uranium enrichment facilities, laboratories, and component manufacturing sites will require additional security at substantial costs. These new expenses are in addition to an estimated 2.2 billion dollars Pakistan spends on its nuclear program annually.¹⁶⁰ Furthermore, Pakistan does not rely entirely on domestic sources for sustaining and securing its nuclear weapons program. According to media reports, between 2001 and 2007, the United States provided Pakistan with approximately one hundred million dollars for nuclear weapons security.¹⁶¹ Other foreign subsidies help to offset the full financial burden of maintaining nearly 100 nuclear weapons and associated materials and technology. The convergence of poor economic conditions, domestic instability, weak government institutions and the dispersion of weapons material could result in increased proliferation risks.

Syria

Syria is in the midst of a civil war that many predict will lead to the collapse of the Assad regime. In the years preceding the crisis, Syria's economy experienced some growth, but those advances were short lived due to the negative impact of the global financial crisis and a decline in agriculture output due to drought.¹⁶² According to the

¹⁶⁰ Mian, Zia, "Assuring Destruction Forever – Nuclear Weapon Modernization Around the World," ed. By Ray Acheson (2012) accessed April 22, 2014 at <http://www.princeton.edu/sgs/faculty-staff/zia-mian/Pakistan-nuclear-modernization-2012.pdf>

¹⁶¹ Sanger, David E. and Broad, William J., U.S. Secretly Aids Pakistan in Guarding Nuclear Arms, New York Times, November 8, 2007.

¹⁶² The World Bank, "Syrian Overview," September 2012 accessed on February 25, 2013 at <http://www.worldbank.org/en/country/syria/overview>

Syrian Centre for Policy Research, the cause of the current civil uprising is political, but also because of economic disenfranchisement of large segments of the population.¹⁶³ This conclusion is consistent with Kahl and Krasner's theories on the causes of conflict.

Additionally, a number of international sanctions have specifically targeted revenue generating sectors of the Syrian government. The Syrian Accountability Act "bans all exports except food and medicine." The Act also bars American financial institutions from conducting transactions with the Commercial Bank of Syria.¹⁶⁴ The European community has enacted similar sanctions.¹⁶⁵ These sections have had severe ramifications for the oil industry and for the Syrian people. Moreover, the Syrian economy is largely dependent on oil revenues. Prior to the economic sanctions targeting oil exports, the Syrian government generated approximately 8 million dollars (U.S.) per day in oil revenue.¹⁶⁶ The sanctions have cost the Syrian government an estimated 4 billion in revenue. The Syrian economy is further constrained by its designation as a State Sponsor of Terrorism by the U.S. State Department. As a result of this designation, Syria has not received U.S foreign aid since 1979.

As the economy deteriorates further under the pressure of economic sanctions and the costs associated with maintaining the Assad regime, the Syrian government will find it increasingly difficult to secure its chemical weapons. Not only will resources be

¹⁶³ Nasser, Rabie, Mehchy, Zaki and Ismail, Khalid, "Socioeconomic Roots and Impacts of the Syrian Crisis," Syrian Center for Policy Research, January 2013, pp. 9-10.

¹⁶⁴ Masters, Jonathan, "Syria's Crisis and the Global Response," Council on Foreign Relations, February 5, 2013 accessed at <http://www.cfr.org/syria/syrias-crisis-global-response/p28402>

¹⁶⁵ Masters (2013).

¹⁶⁶ Masters (2013).

reduced overtime as the civil war continues, there is a significant potential that as the regime weakens, personnel guarding chemical weapons could join the opposition or abandon their security post.¹⁶⁷ The existence of Hezbollah, Al-Qaeda affiliates and sectarian groups, which operate in Syria with impunity, also give cause for concern. There is also the potential that in final act of defiance, the Assad regime could transfer chemical weapons to one of these groups, or an insider could facilitate entry into a secure weapons facility. Foreign entities, such as Iran could also seize Syria's chemical weapons through proxy groups or with Iranian resources already in Syria.

North Korea

The role of economics, as it relates to proliferation risk posed by North Korea, differs from that of Syria and Pakistan although its economic outlook is just as bleak. North Korea continues to suffer from severe economic crisis attributed to several factors including decreasing outputs and a growing dependency on energy and food imports.¹⁶⁸ Economic growth is also stifled by a disproportionate allocation of resources to the military.¹⁶⁹

But unlike Pakistan and Syria whose weapons security is predicted to decline with their economies, potentially making arsenals vulnerable to theft or transfer, Habib contends that North Korea will likely continue to extract political and economic capital

¹⁶⁷ House Committee on Foreign Affairs. "When Regimes Fall: The Challenge of Securing Lethal Weapons, Hearing before the Subcommittee on Terrorism, Nonproliferation, and Trade of the Committee on Foreign Affairs, 112th Congress." July 19, 2012.

¹⁶⁸ Central Intelligence Agency, World Fact Book, accessed on March 13, 2013 at <https://www.cia.gov/library/publications/the-world-factbook/geos/kn.html>

¹⁶⁹ Habib (2011).

from the international community with threats of nuclear war and more proliferation as a result of its economic state.¹⁷⁰ North Korea's tactics are likely influencing the foreign aid decisions of the United States, South Korea and China, who contributed one, four, and nine billion dollars in economic aid to North Korea respectively since the mid-1990's.¹⁷¹

It is worth noting that North Korea was at one time a signatory to the NPT. As a state party to the agreement, North Korea was allowed to collaborate with other states that were also party to the agreement on the development of peaceful nuclear technology.¹⁷² However, as Pomper and Harvey concluded, in 2003 North Korea abruptly withdrew from the agreement and used information obtained as an NPT member to establish a nuclear weapons program. Not long after detonating its first nuclear device, North Korea provided nuclear materials and technology to Pakistan and Syria.¹⁷³ This state-to-state transfer was likely done for economic purposes. Similarly, in the case of North Korea, Litwak finds that a primary factor for providing a non-state entity with a nuclear weapon is economic.¹⁷⁴

¹⁷⁰ Habib, Benjamin, "North Korea's nuclear weapons programme and the maintenance of the Songun System," *The Pacific Review*, Vol. 24 No. 1 March 2011, pp. 43-64.

¹⁷¹ Eberstadt, Nicholas, "What is wrong with North Korean Economy," American Enterprise Institute, accessed on March 18, 2013 at <http://www.aei.org/article/foreign-and-defense-policy/regional/asia/what-is-wrong-with-the-north-korean-economy/>

¹⁷² Pomper, Miles A. and Harvey, Cole J., "The Proliferation of Weapons of Mass Destruction in the Modern World: Trends and Straining Regimes," *International politics in times of changes* (2012) p. 274

¹⁷³ Acton, James M., "Focus on Nonproliferation – Not Disarmament – in North Korea, Carnegie Endowment for International Peace, Article, February 14, 2013 accessed on February 25, 2013 at <http://carnegieendowment.org/2013/02/14/focus-on-nonproliferation-not-disarmament-in-north-korea/fg15>

¹⁷⁴ Litwak

Dual-Use and Nonproliferation

The dual-use potential for uranium enrichment and chemical/biological technology development is another area of concern likely to be impacted by economic considerations leading to increased WMD proliferation. Increases in the price of oil and increases in the costs associated with extracting, refining, and transporting oil can lead to increased demand for fossil fuel alternatives. Population growth and environmental concerns will accelerate demand for alternative fuels. Pomper argues that as demand for energy increases so will the desire to produce more nuclear energy.¹⁷⁵ This will further dilute the non-proliferation regime's ability to ensure compliance with the prohibitions of the NPT and more difficult for the IAEA to distinguish legitimate energy programs from weapons programs.¹⁷⁶

A similar scenario is applicable to the technology used in the development of chemical and biological components in the agricultural and pharmaceutical industries. As nations, constrained by economic forces, seek to meet increasing demand for less expensive food and improved medicines, investments in chemical and biological ventures are also likely to increase. Pomper contends that advancements in technology have led to the rapid spread of chemical and biological knowledge that can be used to produce lethal weapons.¹⁷⁷ As technology accelerates advances in the life sciences, and global

¹⁷⁵ Pomper (2012) p. 268.

¹⁷⁶ Pomper (2012) p. 269

¹⁷⁷ Pomper (2012) pp. 263-281.

population growth fuels the demand for energy, the number of nuclear energy programs, chemical and biological laboratories are likely to increase, thereby increasing the risk of technology proliferation.¹⁷⁸

Multi-lateral Agreements

The primary international mechanisms used to restrict the production and use of chemical weapons is the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases and of Bacteriological Methods of Warfare (the Geneva Protocol), which prohibits the use of biological and chemical weapons in war.¹⁷⁹ Similarly, the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological and Toxin Weapons and on their Destruction (Biological Weapons Convention) “bans the production and stockpiling” of biological weapons and material by state who are party to the agreement.¹⁸⁰ The Nuclear Nonproliferation Treaty establishes prohibitions concerning the production and transfer of nuclear weapons and fissile material, and serves as the basis for international collaboration on this topic.¹⁸¹ These multilateral agreements are aimed at restricting the deliberate actions of a state regarding existing weapons programs and to dissuade others from pursuing these weapons.

¹⁷⁸ Pomper (2012) pp. 268-271.

¹⁷⁹ Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases and of Bacteriological Methods of Warfare (Geneva Protocol), Signed at Geneva, June 17, 1925. Accessed on March 1, 2013 at <http://www.state.gov/t/isn/4784.htm#treaty>.

¹⁸⁰ Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, Signed at Washington, London, and Moscow April 10, 1972. Accessed on March 1, 2013 at <http://www.state.gov/t/isn/bw/c48738.html>.

¹⁸¹ Treaty on Nuclear Non-proliferation, signed at Washington, London and Moscow, July 1, 1968. Accessed on March 2 at <http://www.armscontrol.org/documents/npt>

MLAs are only effective for those states that voluntarily agree to abide by the restrictions and mandates outlined in the agreement. A significant limitation of the MLA's centers of the fact that compliance is not global, neither are the commitments of states that are party to the agreements indefinite. Member nations are free to rescind their membership at any time, which places nonproliferation regimes at significant disadvantage. As discussed in an earlier section, North Korea was allowed to exploit the collaborative processes encouraged among all treaty members for the development of nuclear energy to create nuclear weapons. Another obstacle that challenges the effectiveness of multilateral agreements is the dual-uses of chemical and biological technology and equipment. Several states have attempted to develop nuclear weapons programs under the guise of nuclear energy programs, including Syria. Also, unlike the IAEA established by the NPT to ensure compliance among member states, no such compliance organization has been established for chemical and biological weapons.¹⁸²

Counterarguments

Libya presents a compelling counter argument to the theory that economic crisis increases the risk of WMD proliferation. Libya, which now exists under a transitional government, developed chemical weapons and pursued components for a nuclear weapon under the dictatorial rule of Muammar Gaddafi. Gaddafi attempted to develop WMD in defiance of intense international pressure to come into compliance with nonproliferation

¹⁸² Pedraza, Jorge M., "The Need to Establish the Organization for the Prohibition of Biological Weapons: A proposal for the Future, Springer and Business Media B.V., May 31, 2011.

norms. Throughout Gaddafi's forty-two year rule, Libya was targeted with debilitating economic sanctions, and like Syria and North Korea, Libya was also labeled a State Sponsor of Terrorism. However, in 2003 Gaddafi ended Libya's pursuit of chemical and nuclear weapons. The following year the United States and allies removed nuclear material and chemical weapons from Libya.¹⁸³

If we look at Libya's economy in the years proceeding Gaddafi's decision to comply with international norms, we would see an economy in decline. In the 1990's, Libya's economy was on the verge of collapse due to economic sanctions and reduced oil revenues.¹⁸⁴ Consistent with theories on the influences of economic crisis on internal conflict, there was an attempted military coup in 1993 and the Muslim Brotherhood mounted a formidable challenge to Gaddafi's regime during this period.¹⁸⁵ From 2000 to 2001, Libya's economy shrinks from an estimated 34.5 billion dollars to 29.9 billion. From 2001 to 2002, the Libyan economy contracted by almost forty percent to 19.2 billion.¹⁸⁶ The theory presented in this chapter suggests that Libya's chemical weapons were vulnerable to theft or transfer during this period of economic decline. I have argued herein that sectarian and terrorist groups supported by Libya may have been provided these weapons by the Gaddafi regime, or that security of Libya's chemical weapons would have so degraded that weapons facilities could have been overrun by anti-state groups.

¹⁸³ Litwak (2012).

¹⁸⁴ Litwak (2012), pp. 114-115.

¹⁸⁵ Litwak (2012), pp. 114-115.

¹⁸⁶ International Monetary Fund, World Economic Outlook Database, accessed on March 21, 2003 at <http://www.imf.org/external/pubs/ft/weo/2006/01/data/>

However, there is no evidence indicating that security vulnerabilities caused by economic crisis were exploited or that chemical weapons or weapons technology was transferred or lost. I would argue that several factors contributed to this outcome. First, as Litwak suggests, Gaddafi was given assurances by the United States that his regime would be supported if he agreed to relinquish existing chemical weapons and renounce future production of WMD.¹⁸⁷ The probability that a similar offer will be made to Bashar al-Assad of Syria and Kim Jong-un of North Korea is low; and as American military operations and resources in the Middle East are being withdrawn, the U.S. will become less dependent on Pakistan and therefore less likely to intervene in internal matters that threaten the authority of the Government of Pakistan. Additionally, the gross national income (GNI) per capita in Libya is significantly higher than in Syria or Pakistan. In 2002, the year before Gaddafi renounced WMD, Libya's GNI was \$4,720, compared to \$1,220 in Syria, and \$490 in Pakistan.¹⁸⁸

These figures suggest the average Libyan citizen is much better off than their counterparts in Syria and Pakistan. To extend this line of thinking further, one could also conclude that Libya's susceptibility to radical ideologues or the need for the government to sell WMD is not as pronounced as in Syria, Pakistan or North Korea. Gaddafi was also not likely to transfer weapons to other states because of the assurances made by the United States. Therefore, even though Libya was considered an "outlier" with WMD, economic and demographic instability, its political and economic circumstances are far different from those of Pakistan, Syria and North Korea.

¹⁸⁷ Litwak (2012), pp. 114-117.

¹⁸⁸ World Bank, Data, accessed on March 21, 2013 at <http://data.worldbank.org/indicator/NY.GNP.PCAP.CD>

Conclusion

In conclusion, the research shows that economic crisis can result in internal instability as a result of increased poverty and weakened government institutions. Also based on several documented incidents of security lapses, it is reasonable to assume that economic crisis can influence resources dedicated to nuclear, chemical and biological weapons security in several ways. States operating under severe fiscal constraints are at risk of reallocating security funds to suppress civil unrest or to satisfy the demands of large segments of the population who seek better employment, higher wages and a more responsive government. Both of these options have the potential to detract resources from security programs related to WMD. The civil unrest, stemming from economic crisis, can threaten military installations where weapons arsenals are typically housed. Recent incidents that demonstrate this potential include the Taliban assault of a Pakistan military base and in Syria, where opposition forces raided and now control a military air base.¹⁸⁹

Economic influences also make the dual-use characteristics of WMD more complex. As economies constrict there is a real potential that states could pursue less expensive forms of critical resources. The energy and agricultural sectors could experience growth during economic downturns for their potential long-term payoffs. Also, states seeking energy independence for national security reasons will contribute to growth in this sector. Growth in these industries would accelerate the diffusion of nuclear technology, and chemical and biological technologies, as more states seek fossil fuel

¹⁸⁹ Karam, Zeina, "Rebels in Syria Seize Air Base," Washington Post, March 24, 2013; and Bast (2011)

alternatives and ways to increase crop yields. As these commercial sectors grow, the ability to detect covert weapons programs will become increasingly difficult.

There is also the potential that funding for WMD security programs could incur reductions independent of the financial decisions made by the state. The risk of proliferation is even greater when you account for decreases in foreign aid and foreign military assistance received by a state that possesses WMD. This potential is demonstrated in projections for U.S. aid to Pakistan in 2012 and 2013. Other states that provide financial assistance to Pakistan are likely to follow suit as they adjust for resource limitations in their own countries.

Economic distress can also influence the actions of an individual or non-state organization. In the case of Khan, it is widely believed his actions were financially motivated and perhaps endorsed by the Pakistani government. Although this remains a topic of speculation, the real potential of an insider threat; and individual who is willing to compromise security or classified information, who is motivated by the promise of financial gain, exists. Insiders will be the first to notice decreases in security measures due to financial limitations, and the vulnerabilities that result from those decreases in security. The insider, like Khan, is best positioned to exploit security vulnerabilities.

Considering these facts, additional research is needed to determine the economic factors that contribute to WMD proliferation. Particular emphasis is warranted in the areas where economic challenges will have the most immediate effect on security issues

related to internal security, the challenges of dual-use technologies, reductions in foreign aid and military assistance, and degradations of weapons security.

The Rise of Economic Warfare: War by other Means

Introduction

Balance of Power Theory suggests that less powerful states will pursue strategies to contain or reduce the power of the predominant state in the international system.¹⁹⁰ In the current system, America has obtained a preponderance of power resources, which could be perceived as a threat by weaker states; therefore, according to realists' perspectives on this theory, America will be challenged by a rising power or a coalition of weaker states.¹⁹¹ However, a prevailing theme among international relations scholars is that "internal balancing," matching the United States militarily, is no longer a viable option for most states. Similarly, the literature on "external balancing" suggests that major powers are also not capable of forming durable coalitions to pursue these strategies, since no single state is capable of counter-balancing against the United States.¹⁹² To accept this conclusion would mean that few options are available to potential rivals who oppose the actions or policies of the United States. What remain are asymmetric options - terrorism, cyber-attacks, and economic warfare. Typically, these strategies are adopted by states "to counter indirect threats posed by sub-state groups."¹⁹³ The converse is also true in that sub-state groups, such as terrorist organizations, adopt asymmetric strategies to counter the actions of more powerful nation-state.¹⁹⁴

Contemporary uses describe methods used by weaker states and non-state groups, when

¹⁹⁰ Paul, T.V, Wirtz, James J. and Fortmann Michael, "Balance of Power, Theory and Practice in the 21st Century," Stanford University Press, Stanford, CA (2004).

¹⁹¹ Paul (2004).

¹⁹² Paul (2004) p. 290.

¹⁹³ Paul (2004) p. 3.

¹⁹⁴ Paul (2004) p. 3.

traditional military options are removed. Though traditional uses of the term are limited to interactions between state and non-state groups, this chapter expands the definition by also considering asymmetric strategies in state on state conflict.

This chapter will discuss the degree to which economic warfare targeting the United States is likely to occur; and if so, which countries and methods are most likely to use this strategy. I argue that soft balancing strategies by rival states or non-state groups will incorporate economic weapons to undermine America's role in the current unipolar international system. Realists' perspectives are used to demonstrate how classical forms of economic warfare are no longer viable options for America's rivals. I conclude that as a result of the power imbalances in the international system in favor of the United States, asymmetric financial weapons will become attractive options for rival states and non-state groups, and therefore their use is likely to rise.

The first section of this chapter will review the literature on economic warfare to inform the reader of how these weapons were used and have evolved over time. I will then discuss balance of power dynamics in the context of the current unipolar international system to illustrate why traditional concepts of war, hard balancing, and classical economic warfare are no longer viable options for rivals of the United States. The case study will focus on the successful use of economic weapons by the United States during Suez Crisis in 1956. The Suez Crisis was chosen due to similar economic relations that exist currently between the United States and China, and the potential that China could use similar tactics against the United States. This crisis is also useful for

examining economic warfare targeting the currency of state and financial markets, instead of classical economic targets such as trade and manufacturing. The next section of this chapter will identify modern forms of economic warfare that are viable options to state and non-state groups. The conclusion will assess which strategy is more likely to be adopted and used against the United States. I argue that asymmetric strategies in the form of economic or financial warfare are likely to be adopted because they are passive activities, because there is growing opposition to dollar hegemony and the role of the United States in international monetary system, and lastly, because financial systems are vulnerable. The chapter draws on the scholarly works of Joseph Nye, Theodore Cohn, Barry Eichengreen, T.V. Paul and others who have published extensively on global economics and international relations. The works of Paul Bracken and Jonathan Kirshner will also be used.

Literature Review

Classical forms of economic warfare typically involve a state's efforts to deny another state access to goods. Targeted imports often involve goods that enable or sustain the war fighting capability of a state. These activities can include both military actions and government policies toward other states. Historically, these forms of warfare are effective for restricting the flow of critical goods and reducing the force projection capabilities of a rival military. Foreign policy initiatives have also been used to restrict the financial resources available to a state, which places additional strains on the military and government of the targeted state. In order to appreciate how economic warfare has evolved, a review of traditional methods is useful.

Naval Blockades

One of the most common forms of economic warfare discussed in the literature is the naval blockade, which is a military operation designed to prevent a state from receiving imports. Several authors have noted that this particular use of economic warfare can be traced back to the Peloponnesian War. In this epic battle between the Greeks and Spartans, the Athenians implemented what is known as the “Megarian Decree” to deprive Megara, a city allied with Sparta, access to Athenian shipping ports in the Aegean Sea.¹⁹⁵ Other wars throughout history have used the naval blockade as a primary economic weapon. During the American Revolution, the British used economic warfare against the American colonies by implementing naval blockades to restrict commerce. Similarly, the Union Army adopted this tactic during the American Civil War, and the Napoleonic Wars also saw the use of naval blockades to undermine the economies of rival states and reduce their ability to make war. Recent use of naval blockades include America’s blockade of Cuba during the Cuban Missile Crisis and Israel’s blockade of the Gaza Strip. In each of these cases, the economies of the targeted states were significantly affected. Though, naval blockades as a singular strategy do not decide the outcome of conflicts, the use of blockades can increase the cost of war and produce internal motivations from the civilian population to bring hostilities to an end.

¹⁹⁵Zarate, Juan C., “Treasury’s War, the Unleashing of a New Era of Financial Warfare,” PublicAffairs, New York (2013), pp. 3-12.

In modern warfare the naval blockade has become difficult to use effectively. This is primarily due to the ability of many countries to circumvent naval forces by air.¹⁹⁶ The proliferation of sea and air based threats to naval ships, such as missiles and submarines, further complicate the effective use of this strategy.¹⁹⁷ Additionally, the common use of multi-flagged commercial shipping makes targeting specific cargo or vessels of particular countries a worrisome task.¹⁹⁸ Though economic strangulation is one of the primary goals of a naval blockade, the use of this weapon has come under scrutiny because of the adverse effects they have on civilian populations and neutral parties.

Preclusive or Preemptive Purchasing

Preclusive or preemptive purchasing strategies are efforts of a state to accumulate strategic raw materials prior to the onset of a war and during war to deny a rival state access to goods produced or manufactured by neutral states.¹⁹⁹ During World War I, the use of economic instruments evolved to include preclusive purchasing. In addition to the import and export blockades used in previous wars, the French government expanded classical uses of economic warfare by seeking to purchase raw materials for the sole purpose of removing those materials from the market, where the rival states would have been able to acquire them for their own use.²⁰⁰ As Farrar states, preclusive or preemptive

¹⁹⁶ Rubel, Robert C. "Talking About Sea" *Naval War College Review* 63, No. 4, pp. 38-47 (2010).

¹⁹⁷ Rubel (2010).

¹⁹⁸ Rubel (2010).

¹⁹⁹ Farrar, Marjorie M., "Preclusive Purchasing: Politics & Economic Warfare in France during the First World War," *The Economic Review, New Strategies*, Vol. 26, No. 1 (1973), pp. 117-133.

²⁰⁰ Farrar (1973).

purchasing strategies are implement “solely to deprive the enemy rather than satisfying any domestic needs.”²⁰¹

Trade Embargoes and Sanctions

Trade embargoes are laws enacted by a government to restrict or prevent states from conducting commerce with a rival state.²⁰² The purpose of which is to prevent a rival state from profiting from the sale of goods it produces domestically or benefit from the imports of neutral states. In 1918, international relations scholar, A.E. Zimmern described the central powers as being under economic siege. Zimmern found that through economic means the Allied powers could control the Germans access to strategic resources such as rubber, iron ore, copper and wolfram.²⁰³ In his analysis, Zimmern emphasized the criticality of those resources to sustain the German war fighting capability and concluded that the Allied powers control of the sea and their ability to influence exporters of raw materials, would eventually lead to the demise of the German military.

The United States has recently used sanctions to target states that have supported international terrorism or engaged in the proliferation of WMD. For instance, Executive Order 13059 issued 1997, prohibits all American’s, regardless of their location, from conducting most forms of business with Iran due to their support for such activities, and

²⁰¹ Farrar (1973).

²⁰² Gruendl, Lois H., “The Impact of Offensive Economic Warfare on the Operational Commander,” Naval War College, New Port, R.I. (1995).

²⁰³ Zimmern, Alfred, *The Economic Weapon In the War Against Germany*, New York: George H. Doran Company (1918).

similar actions have been used against Cuba since the 1960's.²⁰⁴ Despite the widespread use of sanctions and trade embargoes, many question the effectiveness of the strategy for bringing belligerent states into conformity with international norms; Iran, Cuba and North Korea provide the best support this argument.

Lending, Blacklisting, and Asset Seizures

Strategic loan programs, blacklisting and asset seizures are other non-military strategies frequently referenced in the literature on economic warfare. These particular strategies are increasing in usage because they are not considered “acts of war” like blockades or embargoes, but can produce similar results on a rival state’s economy. America’s Lend-Lease Program, implemented during World War II, authorized financial loans to Britain to help them in their war fighting efforts against Germany.²⁰⁵ These funds bolstered the British economy and were used directly to support the military even though the United States had not yet entered the war. Blacklists, which are meant to persuade companies from doing business with a targeted state, were used by a coalition of Arab States to target the Israeli economy; and asset seizures are routinely used against states suspected of violating international norms. Moreover, the globalization of the banking and finance industry has allowed this particular economic weapon to be effective for

²⁰⁴ U.S. Department of Treasury, Office of Foreign Asset Control, “What you need to know about U.S. Economic Sanctions – Iran, accessed on March 30, 2013 at <http://www.treasury.gov/resource-center/sanctions/Programs/Documents/iran.pdf>

²⁰⁵ Gruendl, Lois H., “The Impact of Offensive Economic Warfare on the Operational Commander,” Naval War College, New Port, R.I. (1995).

targeting individuals. These strategies typically occur during times of war on a continuum leading up to the commencement of hostilities.²⁰⁶

Illicit Activities

The literature also illustrates how illicit activities such as counterfeiting can be waged upon a state to undermine its war fighting capacity. The strategy was used during the American Revolution and World War II. By injecting fraudulent currency into the market, an adversary is able to weaken a targeted economy by causing inflation, undermining confidence in the currency, and increasing the cost of war.²⁰⁷

Early Definitions and Institutions

Scholars began to study economic warfare in strategic terms during the early 1900s. Economist Robert Loring Allen was one the first to distinguish economic endeavors conducted to augment military or political actions from normal state trading in his work “*State Trading and Economic Warfare.*” Allen argues that the two can appear to be one in the same; however, state trading adheres to traditional principles of economics where factors such as supply and demand, profit and losses are key considerations, where economic warfare does not.²⁰⁸ In economic warfare the subjugation of the enemy is the single most important objective.²⁰⁹

²⁰⁶ Gruendl (1995).

²⁰⁷ Bracken, Paul “Financial Warfare,” Foreign Policy Institute, Elsevier Limited, (Fall 2007) pp. 685-696.

²⁰⁸ Allen, Robert Loring, “State Trading and Economic Warfare, 24 Law and Contemporary Problems, pp. 256-275 (Spring 1959).

²⁰⁹ Loring (1959).

One of the earliest assessments of economic warfare as a strategy is found in the writings of Percy W. Bidwell, a historian and economist, writing in 1942. Bidwell evaluates America's use of classical economic warfare strategies, such as export control, asset seizure and the "lend-lease" program during World War II.²¹⁰ Bidwell concluded that America's economic strategies in the years leading up World War II, were not made with military objectives in mind because Germany and Japan did not pose a direct threat to the United States. For this reason, Bidwell concludes that the American military was ill prepared for a war in which it was already an indirect participant. Bidwell, therefore, advocates for aligning the aggressive use of the economic tools only when accompanied with military preparedness since economic warfare can be viewed as an act of war by the targeted state. Bidwell insists that economic warfare is not a substitute for military conflict, but merely an adjunct of it.²¹¹

Although methods to deprive an adversary of the economic means to wage war are as old as war itself, a formal definition has only emerged since the mid-1900s. The literature on international relations and economic theory offer similar definitions for the term "economic warfare." One of the first official U.S. government definitions is found in a document prepared for the Joint Chiefs of Staff in 1950. In the report by the Joint Logistics Plans Committee, economic warfare is defined as "the use of economic, diplomatic, military or others measures to injure an enemy's economic support of his war effort or a possible enemy's economic potential." The JCS document list activities that could be used to achieve this objective, such as "shipping controls, naval interceptions,

²¹⁰ Bidwell, Percy W., "Our Economic Warfare," *Foreign Affairs* (1942) Accessed January 20, 2014. <http://www.foreignaffairs.com/articles/70162/percy-w-bidwell/our-economic-warfare>.

²¹¹ Bidwell (2014).

export controls, proclaimed listing, preclusive buying, financial precautions, war trade agreements, alien property control, foreign exchange control, and military attacks on enemy economic targets.”²¹² This definition captures the classical use of economic weapons from a historical perspective and broadens it to include financial instruments that can be manipulated to produce a desired political outcome.

Recognizing the immense potential to achieve political objectives through economic means, the United States formed institutions to coordinate national activities that could be directed at depriving an adversary of material and financial resources with the creation of the Board of Economic Warfare. The United States took further steps to hone their ability to conduct economic warfare by establishing the Office of Foreign Funds Control (OFCC) at the onset of World War II.²¹³ The purpose of the OFCC was to prevent Germany from accessing the funds of occupied states.²¹⁴ The OFCC evolved into the Office of Foreign Assets Control, established in 1950.

The OFCC is now responsible not only for enforcing sanctions against countries, but also seizing the assets of terrorists’ organizations, denying weapons proliferators access to capital, freezing the assets of drug traffickers and employing other financial means to meet national security objectives, which includes threats to the U.S. economy.²¹⁵

OFCC’s success in targeting specific groups, corporations, and individuals, while sparing

²¹² “Planning for Economic Warfare,” Joint Logistics Plans Committee, Memorandum for the Joint Chiefs of Staff (1950).

²¹³ Terrorism and Financial Intelligence, Office of Foreign Assets Control, U.S. Department of Treasury, modified on October 1, 2013 accessed on January 25, 2014 at <http://www.treasury.gov/about/organizational-structure/offices/Pages/Office-of-Foreign-Assets-Control.aspx>

²¹⁴ U.S. Department of Treasury (October 2013).

²¹⁵ U.S. Department of Treasury (October 2013).

the civilian population of the state in which the target resides is but one reason why America finds these weapons so appealing.

Zarate captures how the growth of financial markets and the ability to achieve political and national security goals through financial and economic influence has changed the instruments of conflict, he states;

We have entered a new era of financial influence where financial and economic tools have taken pride of place as instruments of national security. The conflicts of this age are likely to be fought with markets, not just militaries, and in boardrooms, not just battlefields.²¹⁶

However, the majority of the literature on economic warfare, focuses on the classic forms it takes such as sanctions, naval blockades, trade embargoes, preclusive or preemptive purchasing and counterfeiting, and how these tactics were used by major powers in times of war. Few academics have addressed how economic warfare has changed the nature of war.

To Balance or Not Balance?

America has amassed an unprecedented preponderance of power resources following the collapse of the Soviet Union. Emerging from the Cold War as the sole super power, America was embraced by other western powers as a benign source of

²¹⁶ Zarate (2013).

stability for the new unipolar world. America's leading economic, strategic alliances and role in governing the international monetary system has further entrenched America's dominance in all forms of state power and dissuaded others states from balancing against it.²¹⁷ Since the end of World War II, America has been viewed by developed states as the stabilizing force behind an international system that promotes liberal economic and social values. Although, some revisionist states have resisted "bandwagoning" with the United States, most states have been supportive of maintaining the status quo.

But despite America's alliance with other great powers including the European Union and Japan, and considering its economic ties to China, those who advance realists' perspectives suggests unipolarity is not sustainable. They argue that Balance of Power Theory dictates that other states will rise to challenge America's concentration of power. Scholars have found that balancing typically occurs in two forms, traditional or hard balancing, which consist of military build-ups and indirect engagement or "soft-balancing" which includes strategic alliances and other non-military actions.

Realists' such as Paul suggest that balancing will occur to redistribute power in the international system, while Walt infers that balancing will occur not just to counter power but to undermine a perceived threat from a hegemonic power.²¹⁸ Pape advances

²¹⁷ Layne, Christopher, "The War on Terrorism and the Balance of Power: The Paradoxes of American Hegemony" in Paul, T.V, Wirtz, James J. and Fortmann Michael, "Balance of Power, Theory and Practice in the 21st Century," Stanford University Press, Stanford, CA (2004), p. 114.

²¹⁸ T.V. Paul, "The Enduring Axioms of Balance of Power Theory and their Contemporary Relevance" in Balance of Power, Theory and Practice in the 21st Century, ed. T.V. Paul, Wirtz and Fortmann (Stanford Univ. Press, 2004) pp. 3-22.

this argument by suggesting that states will balance against the United States because of unilateralists' policies advanced by the Bush Administration.²¹⁹

A competing line of thought suggests that balancing will not occur. Several reasons are offered to explain this phenomenon. Some conclude the economic cost associated with direct military engagement, fear of retaliation, and the potential benefits of aligning with America, have made the balancing options of most states nonviable.²²⁰ North Korea and Iran are prime cases to evaluate the many ways America can respond to hard balancing by a rival state. Realist theory on hard balancing tactics such as those chosen by North Korea and Iran accurately predict a strong and overwhelming response from America. As a result of their pursuit of nuclear weapons, America's foreign policy toward these states has included debilitating economic sanctions and industrial sabotage to counter a perceived threat to U.S. national security.

A compelling theory on the motivations behind the American invasion of Iraq in 2003 provides additional insights into how America could respond to non-military balancing strategies targeting the status of the dollar as the standard currency for oil transactions. The theory suggests that the American invasion of Iraq was predicated on Iraq's decision to price oil exports in the euro instead of the dollar. The author contends that the purpose of the invasion was to dissuade other oil producing states from following suit, and jeopardizing the dollar's status as the currency of choice for oil transactions.²²¹

²¹⁹ Pape, Robert E., "Soft Balancing Against the United States" in *Primacy and Its Discontents*, ed. Michael Brown, Owen R. Cote Jr., Sean M. Lynn-Jones and Steven Millar (MIT Press, 2005) pp. 249- 287

²²⁰ Paul, *Balance of Power* (2004).

²²¹ Clark, William R, "Petrodollar Warfare," New Society Publishers, Canada (June 2005).

Though the proximate causes that led to America's invasion of Iraq are multifaceted and well documented in the literature, what Clark suggest is that the United States went to war to protect the dollar's role as the leading reserve currency. If aspects of this theory are true, this would serve as unambiguous threat to potential rivals of the United States, that wish to challenge current international power dynamics.

Liberal theorists take a different path to arrive at the same conclusion that states will not balance against the United States. They conclude that states with economic interdependencies will not jeopardize the economic benefits that result from those interdependencies by engaging in disruptive balancing strategies or other acts that could lead to war.²²² This logic is often used in assessments of Sino-American relations. Liberalists believe that China's dependence on American consumers for maintaining it's exports and America's dependence on China's appetite for U.S. debt, will override foreign policy, military and economic policies or actions that could negatively effect trade between the two states.

Few scholars have advanced theories that non-state groups opposed to the current international system could choose asymmetric balancing strategies to target American hegemony; and the few that have considered it have dismissed the potential. Even though traditional Balance of Power theory limits balancing to state actions, Layne does however assess the terrorists' attacks of September 2001 and the motives of Al Qaeda for their balancing qualities. Layne concludes that although Al Qaeda has political objectives centered on countering America's economic dominance to influence its actions in the

²²² Paul, Balance of Power (2004), p. 10.

Middle East, these strategies are not considered balancing in the traditional sense. However, Layne seemingly expands the definition of balancing to include activities pursued by a non-state group that are in “opposition, or resistance to a hegemon.”²²³ In this sense, terrorists’ organizations, like Al Qaeda, can oppose the policies and actions of a great power and are therefore engaging in a form of balancing. In light of America’s self-diagnosed “lack of imagination” in conceiving the terrorist attacks on 9/11, is it not also short sighted to assert that only a state is capable of using asymmetric balancing tactics?

Case Analysis

The following case analysis is used to assess the effectiveness of strategies designed to target a state’s currency and access to financial resources. The Suez Crisis is also useful for examining economic warfare as a strategy absent the simultaneous use of kinetic warfare strategies. Furthermore, similarities between the United States and Britain during this crisis, and the current relationship between the United States and China add to the interest of this case analysis.

Methodology

Case study analysis is used to examine economic conditions when effective financial warfare was used to target a major power. Due to the difficulty in distinguishing economic warfare from normal economic policy, the case study examines tactics used during the Suez crisis to identify the potential uses of

²²³ Layne, Balance of Power(2004) p. 106-107.

economic warfare targeting the United States. These tactics are then assessed for their potential to be incorporated in asymmetric strategies based on the principles of Balance of Power Theory.

Suez Crisis

In 1956, the United States introduced a new method of economic warfare. This strategy focused on targeting a state's currency valuation and its access to capital. In response to the British, French and Israeli invasion of the Suez Canal, an act opposed by the United States, President Dwight D. Eisenhower sought to bring about a withdrawal of the troops without using military force. After traditional diplomatic negotiations failed, Eisenhower targeted the British economy with two separate actions. One involved the threat to dump or sell off significant portions of British debt; the other exercised its influence within the International Monetary Fund (IMF) and the Export Import Bank to restrict loans to the British.²²⁴ Many conclude that had this financial pressure been sustained for an extended period it would have caused the collapse of the British economy. The American campaign was effective, and resulted in the complete withdrawal of British, French and Israeli troops from the Suez Canal.

It is worth noting that there are some similarities to the current dynamics between the United States and China with regard to the economic conditions that contributed to the success of this strategy. In 1956 America was Britain's largest creditor, as China is now to the United States. Another striking similarity is that the British were "dependent

²²⁴ Nye, Joseph, *The Future of Power*, Public Affairs, New York, 2011, p. 58 and Katz, David J., "Conflict by Other Means, Waging Financial Warfare," *Parameters* 43(4), Winter (2013-14).

on further international borrowing to sustain its standard of living.”²²⁵ These two conditions are applicable to an analysis of the American-China relationship. Although scholars such as Eichengreen rejects comparisons of America in 2014 to Great Britain in 1956, he adds to the list of similarities by finding that during this period Britain also suffered from “high wages”, “low productivity” and “hostile labor relations;”²²⁶ conditions that could be used to describe the American the current labor market.

Recent incidents seem to have incorporated some of the elements of the successful tactics used against British. Eichengreen discusses two proposals involving state directed asymmetric threats targeting the U.S. economy. One potential threat concerns a multi-state alliance formed to undermine the dominance of the dollar as the leading international reserve currency. Here, the major oil-producing states in the Middle East collaborate with China, Russia, Japan and France to price oil in a currency other than the dollar.²²⁷ Another widely discussed incident involves a Chinese government official’s proposal to sell-off substantial dollar holdings, which would cause a sudden devaluation of the dollar.²²⁸ In yet another threat to the U.S. economy, China and Russia contemplated selling their holdings of the government U.S. mortgage institutions Fannie Mae and Freddie Mac.²²⁹ Zarate contends that such action could have resulted in a potential run on the dollar and loss of confidence in America’s financial markets.²³⁰ The erosion of support for the U.S. dollar in response to the economic advantages it provides

²²⁵ Katz (2013-14), pp. 78-79.

²²⁶ Eichengreen (2011), pp. 157-159.

²²⁷ Eichengreen, Barry, *Exorbitant Privilege*, Oxford University Press, New York (2011), p 123.

²²⁸ Eichengreen (2011).

²²⁹ Zarate (2013), p. 382.

²³⁰ *Ibid.*

the United States, has also resulted in increased support for expanding the role of other currencies and diversifying foreign currency reserve holdings.²³¹ These actions, if they become reality, will weaken America's economy and make it more expensive for the United States to project its military, economic and political influence on other states.

But not all threats arise from major economic powers. A former U.S. Treasury official describes actions of non-state entities that could undermine American unipolarity. One concern involves the adoption of currencies or trading technologies that operate outside of the international system.²³² The Bitcoin and other virtual currencies are in this category. Of particular concern is Zarate's finding that "rogue states are coalescing around a common goal of undermining U.S. financial pressure using financial weapons;"²³³ and Al Qaeda has demonstrated its resolve to damage America by twice targeting the World Trade Center, plotting to attack the New York Stock Exchange and attempting to provoke America to overcommit militarily and financially in its counterterrorism efforts.

Globalization and the economic interdependencies that exist today have made economic warfare a potential tool for many nations. But unlike the previous wars, the modern battle space does not require a state to amass a mechanized army or a superior navy to conduct economic warfare. The scholarship on this expanding field of warfare has not kept pace. Paul Bracken was one of the first scholars to draw a sharp distinction between classical economic warfare and financial warfare. Bracken argues that the

²³¹ Zoffer (2012), p. 26 - 29.

²³² Zarate (2013).

²³³ Zarate (2013).

growth of international finance and the ability to accurately target financial weapons will increase their use in the twenty first century.²³⁴ As one example of how the financial markets have changed, Bracken describes how currency valued at more than 2.5 trillion dollars (1.5 in U.S. currency) is transferred through the Clearinghouse Interbank Payments System each day.²³⁵ Bracken insists that the large flows of currency that now “dwarf” currency transfers associated with goods and services is additional evidence that financial warfare will soon usurp classical economic warfare as the preferred means of influencing state behavior. This particular example brings to the fore, the potential catastrophic results a well-planned cyber-attack on CHIPS could have on the global economy.

Analysis

America’s predominance of military, economic, and political resources leave few options for states to conduct meaningful balancing against the United States. Traditional non-military methods of balancing available to rival states are difficult to sustain and likely to result in similar military or diplomatic response by the United States. With the United States “control of the commons” classical economic balancing such as sanctions or blockades would be costly and could be countered with similar measures imposed on the weaker states by America. The threat of a military response by America would also be on the table. Soft balancing would also require a coalition of states to act in unison

²³⁴ Bracken, Paul “Financial Warfare,” Foreign Policy Institute, Elsevier Limited, (Fall 2007) pp. 685-696.

²³⁵ Bracken (2007), p. 687.

against the United States, which balance of power theory predicts such coalitions would be hard to sustain when weaker states are faced with potentially severe retaliation.

An analysis of successful economic warfare strategies suggests they take two forms, active and passive strategies. First, active strategies are overt policies pursued by a state to damage the economy of another state. Currency dumping and loan restriction programs like those used against the British in the 1956 Suez Crisis would fit this category. The debt imbalance that currently exists between the United States and China has resulted in increased concern for this potential. According to the U.S. Department of Treasury, China currently holds an estimated 1.3 trillion dollars.²³⁶ This staggering number is disconcerting for some who see this as a national security vulnerability. A common scenario put forth by economists and national security scholars examines the potential damage to the United States caused by an intentional sell-off of U.S. debt by China. They hypothesize that China could use this strategy to counter policies of the United States it opposes, such as trade sanctions.²³⁷ The severity of the effects of the U.S. economy are proportionally related to the pace and magnitude of the sell-off; therefore the larger the portion of dollar holdings sold and the greater the pace, the more damaging the affect on the U.S. national security.

Terrorism or cyber means directed at economic or financial targets are also in this category. Passive strategies are those strategies both military and political that are not

²³⁶ U.S. Department of Treasury, "Major Foreign Holder of Treasury Securities," Treasury International Capital Reporting System, April 15, 2014, accessed at <http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/mfh.txt>

²³⁷ Morrison, Wayne M., "China's Holding of U.S. Securities: Implications for the U.S. Economy," Congressional Research Service, October 2, 2008.

directly confrontational, nor do they appear to be hostile towards America, but are intended to constrain and undermine American influence. One potential outcome of a passive economic warfare strategy is to cause an over commitment, militarily and financially, by the United States in an effort to preserve the status quo. The collapse of the Soviet Union illustrates this potential. America’s policy responses to Soviet expansionism during the Cold War incorporated aspects of hard and soft balancing. To contain communism, the United States entered proxy wars, supported anti-communist groups around the world, and pursued economic policies with national security objectives. These combine activities strained the Soviet economy and hastened its eventual collapse.

	SE Asia	China	European Union	Alliance	Al Qaeda
Currency		X	X	X	
Passive	X	X		X	X
Terrorism	X				X
Cyber		X	X	X	

Figure 1, depicts state and non-state entities with the type of economic warfare it has the capability to conduct. Those entities with the capacity to pursue policies to devalue the U.S. dollar or threaten its position as the leading reserve concurrency include China, the European Union or an alliance of states. Entities with the capability to prompt

America to overcommit militarily include China, an alliance of states and Al Qaeda. Al Qaeda is also the terror group most likely to target America's economic infrastructure. A well-coordinated cyber-attack on the financial infrastructure of the United States is an emerging threat, accelerated by the pace of technology. The primary threat from this method is likely to emerge from China, the European Union or an alliance of states.

Conclusion

As the preceding sections of this chapter suggests, asymmetric warfare is one of the few remaining options for weaker states to balance against the United States. Within this category, terrorism, cyber warfare and economic warfare raise the gravest concerns.

But terrorism targeting the United States, as September 11th has demonstrated, will not likely result in the removal of the United States as at the dominant state in a unipolar system. The use of state sponsored terrorism will also draw international condemnation, severe economic sanctions, and military strikes upon the perpetrators. For rivals seeking to replace the United States, acts of terrorism would also undermine the legitimacy of the rival and erode international confidence in the rival's currency, which would significantly hamper efforts to gain the support of other states. For these reasons most states will not adopt terrorist activities as a means to balance against the United States.

The use of cyber attacks on America's financial system are likely to have cascading effects on other financial systems around the globe. This could potentially lead

to further entrenchment of the dollar as states seek shelter in American financial assets.²³⁸ This outcome was observed during the financial crisis of 2008.²³⁹ Considering the value of the dollar increased as a result of the crisis, one could conclude that rivals would be dissuaded from deliberately undermining American financial markets to bring about a redistribution of power, since America is likely to benefit and perhaps grow stronger from such action.

The financial crisis of 2008, however, provided learning opportunities for potential rivals of the United States. First, the crisis came on suddenly and shocked the international financial system; as a result most states were caught unprepared. The major powers, including the United States, took emergency actions to contain the crisis. However, a multi-state economic warfare strategy with the goal of upsetting current balance of power dynamics could be managed over an extended period of time. This tactic would allow for a gradual and controlled transition of power as America's economic outputs are reduced and its ability to retaliate or balance against a coalition of rivals is diminished. The crisis also exposed vulnerabilities in the global financial markets that America's rivals may seek to exploit.

In the end, economic warfare will rise because of three attributes that make these strategies attractive and viable options for balancing against the United States. First, the use of economic warfare can be a passive balancing strategy. Since soft-balancing is difficult to distinguish from normal trade and foreign policy actions, the coordinated

²³⁸ Nye (2011), p. 58.

²³⁹ Nye (2011), p. 58

efforts of a coalition of states intent on challenging the role of the United States in the international systems may go undetected. These efforts may include activities to build support for alternatives to the dollar as the leading reserve currency, or replacing the dollar as the standard currency for oil transactions.

Secondly, there is increasing international support for more diversity in reserve currency holdings and challenging America's "monopoly of the dollar." This rhetoric has increased in the aftermath of the global financial crisis. Lastly, potential rivals of the United States will use economic warfare because of inherent vulnerabilities in global financial markets. Several vulnerabilities are identified by Katz, who finds that "highly centralized financial chokepoints" are vulnerable to interruption, "levered derivative U.S. financial products" such as the mortgage back securities introduce significant risk, and "deficit fueled federal spending" by the United States can undermine America's ability to respond to economic crisis.²⁴⁰ The pervasiveness of the dollar also places a significant portion of all dollars outside the control of the U.S. government. As Katz notes, as much sixty percent of all dollars and fifty-five percent of all highly rated securities are owned by foreign entities.²⁴¹ These substantial holdings of U.S. currency and financial instruments may provide leverage to rival states in ways that are not fully understood and will require further research to address this potential vulnerability.

However, threats to America's role in the current international system are not totally dependent on the actions of rival states. America's inability to address its

²⁴⁰ Katz (2013).

²⁴¹ Katz (2013).

increasing debt issues has done more to undermine America's international status than the scenario's outlined in the proceeding sections of this chapters. A gradual erosion of confidence accelerated by passive balancing strategies, aggravated by America's failure to act, is a war against America...by other means.

Conclusion

The conclusions reached in this thesis demonstrate how economic considerations within states can figure prominently into the calculus for future conflicts. The findings also suggest that security issues with economic or financial underpinnings will transcend classical determinants of war and conflict, and change the manner by which rival states engage in hostile acts toward one another. The research shows that security concerns emanating from economic uncertainty and the inherent vulnerabilities within global financial markets will present new challenges for national security, and provide developing states new asymmetric options for balancing against stronger states.

The security areas, identified in the proceeding chapters, are likely to mature into global security threats in the immediate future. As the case study on South Korea suggest, the overlapping security issues associated with economic decline and reduced military spending by the United States will affect allied confidence in America's security guarantees. The study shows that this outcome could cause regional instability or realignments of strategic partnerships in the Asia-pacific region with ramifications for U.S. national security. Rival states and non-state groups may also become emboldened to challenge America's status in the unipolar international system.

The potential risks associated with stolen or loose WMD, resulting from poor security, can also pose a threat to U.S. national security. The case study on Pakistan, Syria and North Korea show how financial constraints affect weapons security making

weapons vulnerable to theft, and how financial factors can influence WMD proliferation by contributing to the motivating factors behind a trusted insider's decision to sell weapons technology. The inherent vulnerabilities within the global financial markets will provide terrorists' organizations and other non-state groups, who object to the current international system or distribution of power, with opportunities to disrupt global finance and perhaps weaken America's status. A more ominous threat originates from states intent on increasing diversification of foreign currency holdings, establishing alternatives to the dollar for international trade, or engaging financial warfare against the United States.

The importance of this paradigm shift in U.S. national security, which places new emphasis on the causal relationships between economics and global security threats, will require innovative strategies. These strategies must involve multilateral and domestic policy solutions in the following key areas: international institutions, threat response, and U.S. fiscal policy.

First, the International Monetary Fund, which was established to promote global economic stability, should amend its charter to reflect affirmative statements, which prohibit member states from taking economic actions that could adversely affect the global economy. Moreover, the IMF's surveillance function, which monitors member state's policies for their potential effect on other member states, should incorporate political and military intelligence into its existing analytical processes, to enhance the IMF's ability to distinguish routine economic and monetary policies from deliberate acts

of economic or financial warfare. To increase effectiveness, the IMF should increase surveillance schedules for the largest economies and expand technical assistance teams to include economists with substantial military strategy and international relations backgrounds.

In addition, the United Nations Security Council, which is responsible for promoting global peace and security, should expand the criteria used to determine breaches of security to include economic acts of aggression and acts determined by the Security Council to be financial warfare. The Security Council currently only considers acts involving armed forces in determining breaches of security.²⁴² Also, security teams capable of rapid deployments to states with existing WMD stockpiles during economic or domestic crisis should be formed. These teams would be used in situations where armed conflict is ongoing or likely to occur, but also in states, which due to its economic conditions, are determined to be incapable of maintaining and securing WMD. In these cases, security teams would protect existing stockpiles of WMD until identified threats subside.

Lastly, until such a time that international community embraces another state to lead the international financial system, or adopts new global monetary regimes or alternatives to the dollar as the leading reserve currency, the United States must adopt policies and practices that promote stability through transparency, reduce resentment

²⁴² United Nations, U.N. Security Council, Frequently Asked Questions, accessed March 29th, 2014 at <http://www.un.org/en/sc/about/faq.shtml#threat>

through self-regulation, and foster broader support for the continuance of the current unipolar system.

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