

Saving America From Itself; Avoiding the Fallen Empire Syndrome

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Preface

Americans cannot envision a day when the U.S. is not a superpower. Although it is impossible to know how long America will be able to sustain its status as the world's sole superpower, many historical and quantitative trends can be examined to predict potential future outcomes. Historian Paul Kennedy's seminal work *The Rise and Fall of the Great Powers* provides a context for discussion of former empires by focusing on the economic power of nations. Based on this analysis of previous world powers, Kennedy argues that a nation's economy is central to its overall power, fueling its military strength and foreign enterprises.

Modern U.S. national security strategy is based on four elements of national power: Diplomatic, Informational, Military, and Economic (DIME). This paper analyzes the U.S. strengths and weaknesses in the DIME formula, while contrasting the U.S. strategic position with those budding world powers identified by former U.S. Secretary of State Henry Kissinger in his 1994 book *Diplomacy*. He states that the 21st Century "will contain at least six major power centers - the U.S., Europe, China, Japan, Russia, and probably India."¹

Subsequently, statistical indicators will be used for each area of the DIME construct from which to evaluate the present day strategic situation and project potential outcomes. This paper analyzes the strategic position of each nation-state competitor. It makes recommendations for U.S. policy changes to improve national security strategy implementation and preserve America's place as a world power.

EXECUTIVE SUMMARY

Title: Saving America From Itself; Avoiding the Fallen Empire Syndrome

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Thesis: If current trends continue, the U.S. will cease to be the world's sole superpower, while China will become the world's most powerful nation by mid-century.

Discussion:

U.S. national security strategy embodies the four elements of national power: Diplomatic, Informational, Military, and Economic (DIME). None of these elements can be the sole building block upon which the U.S. or any nation can stand as a world power. This paper analyzes the U.S. strengths and weaknesses in the DIME formula, while contrasting the U.S. strategic position with the budding world powers identified by former U.S. Secretary of State Henry Kissinger in his 1994 book *Diplomacy*. He states that the 21st century "will contain at least six major power centers - the U.S., Europe, China, Japan, Russia, and probably India." Statistical indicators are used for each area of the DIME construct to evaluate the present day strategic situation and project potential outcomes for 2050.

Conclusion(s) or Recommendations:

Statistical analysis of key indicators shows that China will emerge as the major strategic competitor with the U.S. by mid-century, while the European Union, Japan, and U.S. will decline as world powers. Further, China will manage increase in strength across the spectrum of national power, while the western powers will decline substantially. This is due primarily to trends in economic growth, military spending forecasts and information technology investment and development.

The U.S. government must become more efficient in order to strengthen and maintain the four elements of national power. The U.S. must do three things to improve its chances of survival as a world power. First, the U.S. government must reorganize itself to better support the elements of power and focus its limited resources on maintaining and fostering the elements of national power. Second, the U.S. government must address three negative economic issues: the federal budget deficit, trade deficit and consumer debt. Third, the U.S. must work to reshape the global political landscape now to better position itself for emerging global politics. This includes significant reform of the United Nations or possibly organizing a new world body with democracy as the basis for membership.

In summary, American power will diminish if current trends continue. History shows that global powers decline over time if they fail to adapt to world changes and allow their economies to deteriorate. U.S. national security strategy must optimize government resources to better support the four elements of national power. The U.S. must adapt to the new world environment and address negative trends in its economic and fiscal policies to improve its prospects for maintaining power into the future.

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CHAPTER I.

From Whence National Power

Americans cannot envision a day when the U.S. is considered less than a superpower. It is impossible to know how long America will be able to sustain its status as the world's sole superpower, but many historical and quantitative trends can be examined to predict potential future outcomes. If current trends continue, the U.S. will cease to be the world's sole superpower, while China will become the world's most powerful nation by mid-century. For the ordinary American citizen, the stakes could not be higher. American national power provides security, economic prosperity and, arguably, a certain degree of world stability. If American power diminishes, so does the ability of the government to promote American values and interests. Therefore, American policies must promote the preservation of the U.S. as a world power through a careful examination of the critical elements of national strength necessary to sustain it.

Many historians refer to the 20th Century as the "American Century" because of the U.S.'s economic and military ascendancy in the wake of World War II. Should current economic trends continue, the 21st Century may well be known as the Century of American Decline. Competing and ascending nations will continue to rise from the ashes of World War II and the Cold War to challenge America's status as the sole superpower. Historian Paul Kennedy's seminal work *The Rise and Fall of the Great Powers* provides a context for discussion of former world powers. Kennedy argued that empires were sustained by superior economic power, rather than purely military strength. He analyzed former world powers such as Great Britain, Netherlands, Austria-Hungary, and Spain. Kennedy's work documents the friction generated between global powers as one great power declines and another rises, like shifting tectonic plates buckling under each other's pressure.

Consequently, an examination of American power must be contrasted with the world's power centers as identified by former Secretary of State Henry Kissinger; which were the U.S., European Union (EU), China, Japan, Russia, and India. Similarly, Kennedy identified the U.S., USSR (now Russia), China, Japan, and the European Economic Community (now called EU) as world power centers.² The EU must be considered as a single entity because of its potential long-term power and growing economic clout as an integrated economic body. The draft EU constitution supports this argument because it furthers European integration:

Convinced that, while remaining proud of their own national identities and history, the peoples of Europe are determined to transcend their former divisions and, united ever more closely, to forge a common destiny.³

U.S. national security strategy has evolved over time to identify four specific elements of national power: Diplomatic, Informational, Military, and Economic (DIME). U.S. national power must be examined in relation to each of the above geopolitical powers respective to each of these elements of national power. This paper describes the current power structures under the DIME construct and extrapolates potential outcomes based on statistical trends in each area. It creates measurements of performance for each DIME area and quantifies the national elements of power to compare and contrast the various world powers.

Statistical indicators are used for each area of the DIME construct from which to evaluate the present day situation and project potential outcomes. This paper analyzes the strategic position of each nation-state competitor and makes recommendations for U.S. policy changes to preserve America's place as a world power.

CHAPTER II.

Overview - The Elements of National Power

U.S. national security strategy is based upon the four acknowledged elements of national power in the DIME construct. Each of these elements, in and of itself, cannot act as the sole building block upon which a nation achieves and maintains its position as a world power. Each element must be strong and complementary to the others.

It's important to understand the origin of DIME as it pertains to American national security strategy. While pieces of this formula can be clearly seen in American policy throughout its history, it was the Carter administration that published the first comprehensive discussion of national power through an assessment of American power contrasted against the former Soviet Union. In *Presidential Directive (PD) 18, U.S. National Strategy*, August 26, 1977, the U.S. government assessed it had "a number of critical advantages" in its prosecution of the Cold War against the Soviet Union, including substantive advantages in "economic strength, technological superiority and popular political support."⁴ The Reagan administration's National Security Council followed up on PD 18, expanding the analysis by addressing national "diplomatic, political, economic and information efforts" and "military strategy" in *National Security Decision Directive 32, US National Security Strategy*.⁵

These presidential directives resulted in an agreed construct for discussing the key elements of national power. The DIME formula has since evolved as a means of formulating government planning to fulfill national objectives. The George H.W. Bush and William Jefferson Clinton presidencies supported the DIME construct and, under these two administrations, the Department of Defense refined the concept, resulting in the 2000 Joint Staff Officer's Guide definition of "National Security Strategy":

The U.S. National Security Strategy is a strategy of active engagement throughout the world. U.S. engagement abroad is carried out through the four elements of national power: diplomatic, informational, military and economic (DIME).⁶

While DIME is seldom publicly acknowledged in policy statements, the DIME construct is used as the baseline for focusing national efforts toward American policy objectives. Variations have existed from administration to administration on the means of fulfilling U.S. policy with emphasis shifting from one element of power to another based on the political views of the administration or specific policy challenge of the time. For example, President George W. Bush's National Strategy for Combating Terrorism states that the U.S. government will defeat terrorism by "using every instrument of national power: diplomatic, economic, law enforcement, financial, information, intelligence, and military," while the plan's press release affirmed, "We are using all elements of our national power."⁷ Bush's strategy addresses all of the elements in the DIME construct, while stressing other key areas specific to terrorism.

The challenge of using the DIME construct to compare potential world power competitors arises in developing statistically meaningful measurements from which to deduce future outcomes in each category. Not everything is measurable. There are many intangible elements involved in any analysis because it is impossible to predict internal and external factors with certainty, such as future political and geopolitical changes, international crises or catastrophes, technological revolutions and economic downturns. History shows that global powers decline over time if they fail to adapt to world changes and allow their economies to deteriorate. This research explores the pillars of American national power juxtaposed against its most likely strategic competitors. Understanding the DIME construct is critical to this examination, as are the choices of data indicators used to measure and project outcomes for each area. Appendix A provides a detailed overview of the research methodology.

CHAPTER III.

Diplomatic Power - The Art of Influence

Diplomacy is an instrument of power. It is essential for maintaining effective international relationships, and a principal means by which the U.S. defends its interests, responds to crises, and achieves its foreign policy goals.⁸ – U.S. State Department

The Cold War provided a framework for American power through its ideological battle with the Soviet Union. America provided security and organized a collective defense for much of the world to prevent smaller powers from being swallowed up by Soviet expansionism. The Soviet collapse heralded in the beginning of a new world order, one in which the U.S. became the world's sole superpower. As a result, the world's perception of American power and policy goals has changed. Even assumed friendly governments seem concerned about unchecked American power. This is best shown in the loose alignment of France, Germany, Russia, and to a lesser degree, China, in their opposition to the American invasion of Iraq. After the Iraq invasion, the EU Institute of Security Studies wrote, "The age of geopolitics in American foreign policy is over, the age of global politics has begun."⁹

The realist perspective on diplomacy includes "the threat or imposition of punishment or sanctions as tactics that may be employed by the diplomat in addition to (or in place of) more positive inducements."¹⁰ Namely, diplomacy is enabled by the inherent strength in its economic, military, and moral qualities, as codified by the world political body. Without these key enablers, diplomacy is impotent in the world of power politics. While one cannot predict the human and political issues affecting future diplomacy, one can extrapolate relative power from the three aforementioned areas. A nation's economic strength is the preeminent factor in enabling diplomacy because it fuels military spending, provides the material strength for

independent action, and enables diplomacy through the threat of sanctions, economic tariffs, economic and military aid, humanitarian initiatives, and access to the nations marketplace. Of course, there are many facets of diplomacy that cannot be measured, like cultural relationships, interpersonal diplomatic skills, secret negotiations, popular will, and other intangible areas. America has dominated the world economic and political system since the end of World War II and Cold War. Table 1, below, shows today's diplomatic indicators and the commanding lead enjoyed by the U.S. over its main competitors.

Table 1. Current Diplomatic Indicators; 2003.

	U.N. Permanent Member of Security Council	Economy: GDP (\$billion) (1)	Economy: GDP Growth (2)	Comparative Percent of Economy (GDP) of the 6 World Powers*	Military Budget (\$ billion) (2)	Military Percent of GDP Spending (2)	Comparative Military Spending of the 6 World Powers*
U.S.	Yes	\$10,881	3.1%	31.7%	\$370	3.3%	29.2%
EU	Yes (France, UK)	\$8,174	1%	42.2%	\$206	2.5%	51.6%
Japan	No	\$4,326	3%	16.7%	\$60	3.5-5%	6.1%
China	Yes	\$1,409	9.1%	2.3%	\$42	1%	2.1%
India	No	\$598	8.3%	1.7%	\$14	2.4%	1.7%
Russia	Yes	\$433	7.3%	5.4%	\$12	2.6%	9.3%

Sources: (1) World Development Indicators database, World Bank, September 2004, (2) CIA World Fact Book 2004. Asterisk "*" denotes figures based on direct comparison of six powers only. Bolded data columns indicate the key indicators used in diplomatic indicator series. See Methodology, Appendix A.

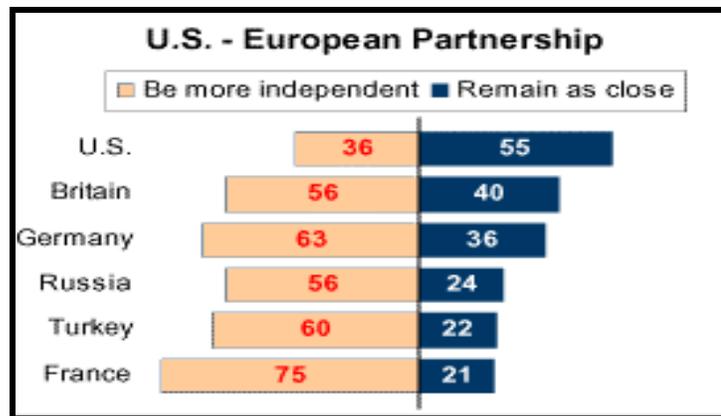
The world's geopolitical system is changing. History has shown that when one country rises to unprecedented power, smaller powers band together to counterbalance the disparity in diplomatic or military power. One must recognize the old axiom that "nations act in their own interests."¹¹ The United Nations (UN) has increasingly become the focal point for public diplomacy and a moral force from which to blunt the power of larger states. To many, the UN provides a degree of international legitimacy for state actions and policy aims. Those countries with permanent membership on the UN Security Council have a larger voice in security issues

and global politics because of their veto power over Security Council motions and the megaphone offered to their country’s perspective regarding UN and world politics. As an example, the *Foreign Policy Concept of the Russian Federation* states explicitly that the UN Security Council is central to Russian diplomatic power:

Being a permanent member of the UN Security Council, possessing a substantial potential and resources in all spheres of vital activity and maintaining intensive relations with the leading states of the world, Russia exerts significant influence on the formation of a new world order.¹²

Currently, the biggest concern for American diplomacy is America’s image around the world. Especially troubling are the current polling figures in functioning democracies. Increasingly, Americans are viewed with suspicion, distrust and, in some cases, outright hatred. Attitudes in the EU are of particular interest as the U.S. has many significant ties, historically, diplomatically, and militarily. March 2004 polls published by the Pew Global Attitudes Project of the Pew Research Center show that a “discontent with America...has intensified.”¹³

Figure 1. Pew Research Center, Pew Global Attitudes Project.



Perceptions matter, especially in democracies. As Tip O’Neil, former Speaker of the House of Representatives, once remarked, “All politics is local,” so goes the political reality of

perceived American hegemony around the world and the potential for political and diplomatic repercussions from angry democratic masses.¹⁴

Significantly, election victories by candidates using anti-American or anti-U.S. political themes should cause concern if a prolonged trend materializes. Recent examples include Schroeder in Germany, Zapatero in Spain, Lula in Brazil, Chavez in Venezuela, and Roh in South Korea.¹⁵ While much of the recent erosion in American popularity can be blamed on the 2003 Iraq War, ongoing Iraq hostilities, and President Bush's image abroad, such poll numbers should give American policy makers pause. Continued negative trends may isolate the U.S. and raise the likelihood of world powers forming alliances in direct political opposition to American policy objectives.

American diplomatic efforts may be simply overshadowed by the use of the American military in the conduct of foreign policy. The American construct of geographic combatant commanders gives the military component of American power an unduly high profile on the world stage. For instance, U.S. Pacific Command's theater of operation includes forty-four countries.¹⁶ There is no American diplomatic equivalent for such a large region of the globe, which has the effect of making American foreign policy appear overtly militaristic in nature. Addressing this disparity may help in the battle of perceptions by placing a diplomatic face on regional diplomacy instead of a domineering military one.

European Union. The EU now has twenty-five member countries with two in line for formal membership, bringing its population to 481 million people.¹⁷ Four more countries on its eastern border are under consideration for future membership. Formally established in 1993 with the approval of the Maastricht Treaty, the EU was founded upon international treaties among sovereign European nations rather than by a ratified constitution. The 2001 Treaty of Nice laid

out the process for EU parliamentary and governmental integration by stating the need for “general guidelines for the common foreign and security policy”, “common strategies,” “joint actions,” and “systematic cooperation between Member States in the conduct of policy.”¹⁸ Additionally, the treaty states, “If a member of the Council declares that, for important and stated reasons of national policy, it intends to oppose the adoption of a decision to be taken by qualified majority, a vote shall not be taken,” which essentially provides any member a veto over EU policy.¹⁹

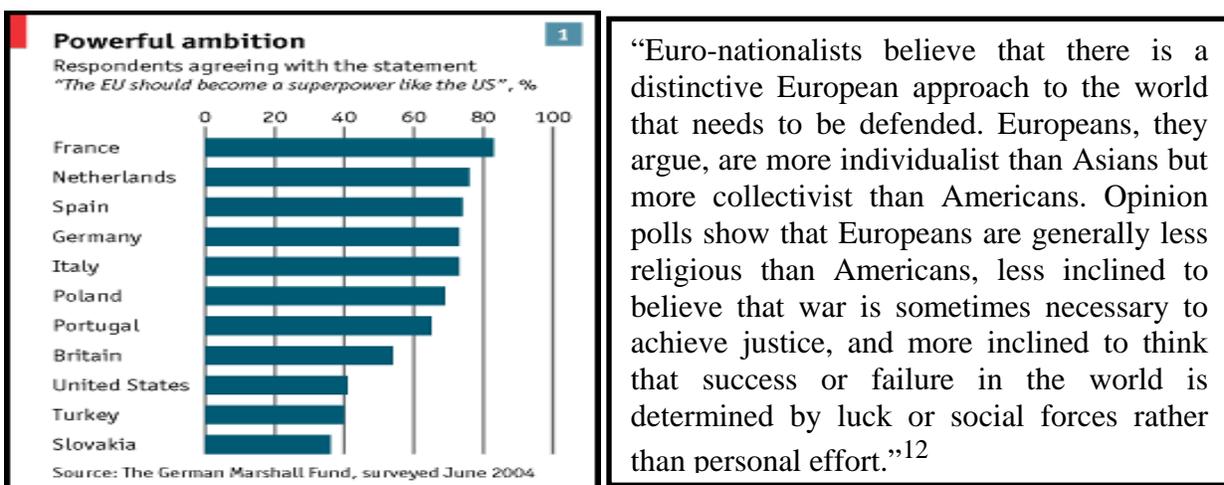
Despite the diplomatic language of the Treaty of Nice, the EU is proving itself to be a weak conglomeration of nationalistic, independent states. For instance, the EU proved unable to maintain a united front in averting U.S. actions in Iraq. While France and Germany vehemently opposed the U.S. invasion, Great Britain, Spain, Poland and thirteen other members of the EU supported it. During the National Intelligence Council (NIC) 2004 Europe Workshop, both foreign and domestic experts painted a somewhat bleak assessment of the long-term EU health, particularly if it is faced with an economic or other significant crisis:

The general atmosphere about its (EU) fate was gloom with some optimism from Central European participants. An agreement has manifested itself about the necessity of institutional reform to enhance legitimacy and to foster more effective decision-making. One view has been that since the EU is a primarily French creation – an attempt to preserve French power in Europe and to enhance France economically – its fate will depend on France. In crises, the French either wrote a new constitution or violently dismantled the state. This suggests that Europe (EU) may end in an explosive collapse.²⁰

As proven by the Iraq war, the EU does not function yet as a cohesive, united body. Diplomatically, the EU has proven itself effective only in dealing with trade and economic issues. Its current and future plans for a federal system do not lend itself to a strong central government capable of formulating a meaningful and consistent diplomatic course of action.

However, there are proponents in the EU that would like to see Europe united to such a degree that it could rival the U.S. in superpower status, which is backed by some public polling.²¹ Key findings in another survey called *Transatlantic Trends*, conducted in the U.S. and Europe, found that while Europeans wanted to maintain a cooperative relationship with the U.S., they have become more inclined to support the EU in its superpower inclinations and independence from the U.S.²² The same poll, however, showed that Europeans are unwilling to invest more on defense in order to achieve that goal and still hold a relatively pacifist view of EU foreign policy.

Figure 2. Transatlantic Trends in Polling.



Without a strong central government or desire for significant military spending, the EU is not capable of reaching a superpower status and will persist as a diplomatically weak and fractured conglomeration of states. At present, the EU presidency is essentially a figurehead role with no real power. Each EU nation provides a president for a rotational six-month term. To date, the EU presidency has been used by each member state to highlight issues their country deems important, and is viewed essentially as a bully pulpit and an opportunity for each leader to raise their nation’s profile and promote specific humanitarian and political causes.

Obviously, rotating the presidency undermines any level of consistency in the EU executive branch, particularly in the realm of foreign policy. UK Foreign Secretary Jack Straw complained loudly about the "musical chairs" system currently in place.²³ The draft EU constitution was sent to the member states for ratification on July 18, 2004. It states, "The European Council shall elect its President, by a qualified majority, for a term of two and a half years, renewable once."²⁴ The constitution requires ratification by all twenty-five EU nations, either by parliamentary vote or popular referendum. While the draft constitution provides for a longer and more stable presidency, it provides no real powers to the executive branch. Reflecting on the organization of executive branch powers, Alexander Hamilton once noted:

A feeble Executive (branch) implies a feeble execution of the government...the ingredients which constitute energy in the Executive are, first, unity; secondly, duration; thirdly, an adequate provision for its support; fourthly, competent powers.²⁵

The EU presidency allows for none of the critical elements of effective executive governance outlined by Hamilton. Therein lies the dichotomy of the EU concept. On one hand, member states want the EU to be recognized as a legitimate and respected government body. On the other, larger states, like France and Great Britain, are not inclined to surrender their national identity, sovereignty and foreign policy to the EU. This conflicting agenda perpetuates a weak executive branch, limiting it merely to economic matters, legislative coordination, legal regulation and ceremonial duties. Further, the EU president doesn't control the levers of government, including governmental spending or military forces. Without a strong central government and presidency, the EU will continue to lack a cohesive foreign policy and military capability. Instead, the EU will be limited to merely an economic power, instead of a bonafide superpower in its own right. Given the current structure, the EU's potential diplomatic strength

will be continuously undercut by differing national agendas and interests. A statement from French Prime Minister Lionel Jospin best embodies this EU contradiction:

I want Europe (the EU), but I remain attached to my nation. Making Europe without unmaking France, or any other European nation, that is my political choice.²⁶

The EU government relies on a contribution of approximately one percent GDP from each EU member to finance its operation. However, EU government spending is projected to grow modestly through 2013. If the current draft EU budget is approved, EU funding will increase from approximately 100 billion Euros (€) this year to €158 billion in 2013.²⁷ The stress of financing EU confederation and its burgeoning bureaucracy will increasingly strain member country budgets. For instance, if the EU budget is approved, Germany's contribution to the EU would almost double in size and reach nearly €40 billion by 2013, roughly ten percent of the Germany's federal budget.²⁸

Japan. Japan is a democratic nation with strong ties to the U.S. While Japan is the third largest economy in the world, it does not have a permanent seat on the UN Security Council, something it aspires to remedy in the near future. U.S.-Japan relations are centered on trade and international finance, economics, and regional security. Japan could easily finance a robust military capability and possibly become a superpower in its own right, if it had the national will to do so. However, Japan is hobbled diplomatically and politically by the regional collective memory of World War II and the atrocities associated with Japanese occupation throughout Asia.

Throughout greater Asia, there is a deep awareness of Japanese World War II aggression and early 1900's colonialism. For example, South Korea's President Roh stated in 2005, "Japan must make the truth of the past known and offer sincere apologies and, if necessary, pay compensation. Only then can we be reconciled."²⁹ Meanwhile, Chinese nationals (with tacit

support from the Chinese government) launched an on-line petition drive against Japan joining the UN Security Council by citing Japan's World War II atrocities.³⁰ The shadow of Japan's past continues to haunt it and limit its potential to become a relevant world power.

Japan has a deep and growing concern about China's rising diplomatic influence in the region and growing military strength. Japan's relationship with China has been "increasingly strained in recent years" due to competing claims over disputed islands, Chinese naval intrusions into Japan's self-declared 200-mile economic zone, and inflamed Chinese public passions about Japanese text books lacking appropriate references to Japan's military atrocities.³¹ Japan views its close relationship with the U.S. as a counterweight to both China's military intentions in the region and the growing nuclear and ballistic capability of China's ally, North Korea.

India. With a population of 1.05 billion, India is the largest democracy in the world, yet it is not a permanent member of the UN Security Council. Due to India's ties with the Soviet Union, the end of the Cold War heralded a change in U.S.-India relations and recent years have seen a growth in trade and diplomacy between the two nations. India has experienced many years of war with its two neighbors, Pakistan and China. Its immediate diplomatic and security concern continues to be its long-standing rivalry with Pakistan, which has been the scene of frequent border clashes over the disputed Kashmir region. Both India and Pakistan have become nuclear powers, causing the U.S. to engage both diplomatically to lower tensions.

India views China as a long-term strategic threat.³² In 1962, India fought a war with China over territorial disputes regarding its 3,225 kilometer-long Himalayan border. As such, India has sought closer relations with the U.S. in order to stabilize tensions with Pakistan and serve as a hedge against Chinese regional intentions. A senior Bush administration official

recently stated that the U.S. would “help India become a major world power in the 21st century,” with the stated goal of balancing against “Chinese influence in Asia.”³³

Russia. In the years following the fall of the Soviet Union, Russia’s foreign policy has become increasingly regionally focused with the goal of reasserting dominance and reintegration of former Soviet states. As an example, Russia’s President Vladimir Putin supported the failed pro-Russian Ukrainian government with the hope of “reasserting his grip on Russia’s ‘near abroad’ and preventing Ukraine from slipping into the EU and NATO orbit.”³⁴

On the international stage, Russia has worked in partnership with France, Germany, and China to prevent the U.S. from acting unilaterally. Its goal, shared by the other aforementioned players, is to create a "multipolar" world to prevent American dominance. The 2000 Russian Foreign Policy Concept lists Russia’s status in the UN Security Council as the central source of Russian diplomatic influence on the world stage and warns of “a growing trend towards the establishment of a unipolar structure of the world with the economic and power domination of the U.S.”³⁵ As a result, Russia has been keen to develop closer ties with China and signed a treaty in 2001, detailing a process for their bilateral cooperation in politics, economy, science, technology, humanities and international affairs. It also formally established the boundaries of their often-disputed 3,645 km border, which ended a long lasting friction point.³⁶

China. For centuries China stood as the leading civilization, outpacing the rest of the world in the arts, sciences, population and manufacturing. But in the 19th and early 20th centuries, China was beset by civil unrest, major famines, military defeats, and foreign occupation. The Chinese endured what nationalists call its “national humiliation” at the hands of the western powers and later by Japan in World War II. This has played a profound psychological role in China’s paranoia about its security. The struggle against Japan raised the

nationalist spirit of the Chinese and was exploited by Mao Tse-tung in his Communist movement that drove Chiang Kai-shek's more democratic leaning followers from the mainland to Taiwan.

President Richard Nixon opened China to the west in the 1970's, primarily as a calculated counterbalance against the Soviet Union. Nixon laid a foundation for working with the Chinese by supporting a "One China" approach, a view that Taiwan would eventually, but not forcibly, reunite with the Chinese mainland. After 1978, Mao's successor, Deng Xiaoping, introduced market-oriented reforms and slowly began a systematic decentralization of economic management, which saved China from the economic collapse later experienced by the Soviets. Currently, China is regionally and internally focused, primarily on its own economic growth and reunification with Taiwan. Although China still espouses communist precepts, it is growing further and further from the communist ideology through its embracement of capitalism. It is more accurate to view China as a "one party system" than as a communist government.

China is changing. Mao's generation of revolutionary Communist firebrands has died off and been replaced by a more moderate, professional class of leaders. Although it remains an authoritarian government, China's political process has undertaken many small steps toward openness; including recognition of some private property rights, allowing changes to communist party rules, and undergoing periodic government purges of allegedly corrupt officials. Indeed, since Hong Kong rejoined China in 1997, the government has shown some tolerance for democratic processes and opposition parties, including elections and public protests in Hong Kong, and some limited village-level elections on the mainland. However, open political expression and dissent still remains repressed by Western standards.

China has worked to strengthen diplomatic ties with Russia and the EU. Russian ties have shown the most promise for Chinese foreign policy, as both nations are vocal in their desire

to hold American influence in check. In their 2004 joint statement, China and Russia stated that it “is beneficial for the two sides to coordinate their stances on significant bilateral and international issues in time.”³⁷

Most recently, in 2004, the Seventh Annual EU-China Summit was held to discuss their “maturing strategic partnership,” which was designed to normalize and improve EU-China relations.³⁸ However, China’s recent passage of an anti-secession law has significantly clouded this relationship, because the law explicitly states that the Chinese government is authorized to use military force against any Chinese territory that took steps toward independence. This law is intended to intimidate Taiwan, but has resulted in some diplomatic blow back. An EU arms ban against China, imposed after the 1989 Tiananmen massacre, was to be lifted in 2005, but the Chinese anti-secession law has caused the EU to keep the ban in place for the time being.³⁹

Summary and 2050 Projection. If current trends prevail, the comparative strength of U.S. diplomacy will decline substantially by 2050 and the U.S. will be faced with a new diplomatic rival in China, which will draw diplomatic strength from its economy. The U.S. Congress has taken note of China’s rise as a world power and in 2000, required the Secretary of Defense to make an annual report to on the progress of the Chinese military and assess its geopolitical intentions. The Department of Defense’s 2004 report offers insight into China’s growing clout:

Largely because of the political influence Beijing has accrued from over a decade of sustained economic growth, as well as the status inherent in China’s geographic size, manpower, seat on the UN Security Council, and nuclear-capable forces, Beijing views itself as operating from an increasingly competitive position relative to other established world powers, including the United States.⁴⁰

Under a 2004 UN proposal, six new permanent members may be added to the UN

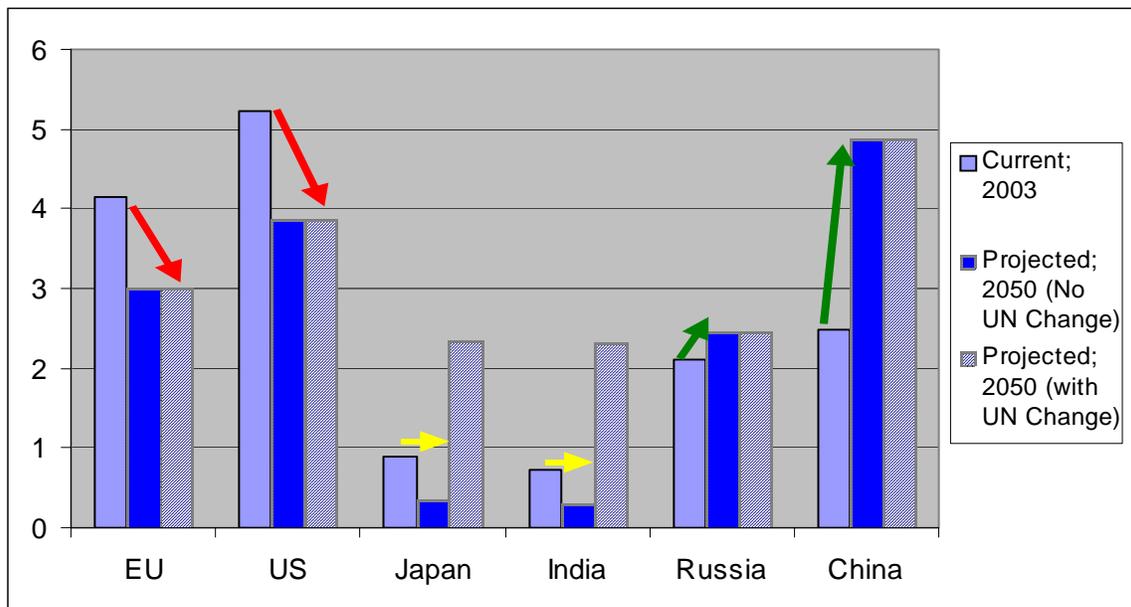
Security Council with Brazil, Germany, India, and Japan as likely candidates.⁴¹ Their addition to the Security Council would significantly alter the diplomatic equation in the UN body and bolster the diplomatic strength of each added country. Primarily due to economic trends, the U.S., EU and Japan will decline as diplomatic powers, while India and Russia may experience a modest upturn in diplomatic clout. Table 2 and Figure 3 project the diplomatic strength of each world power out to 2050 and show China's ascendance as a major power.

Table 2. Projected Diplomatic Indicators; 2050.

	<u>Permanent Member of UN Security Council</u>	<u>Percent Military Spending of World Powers</u>	<u>Percent Economy (GDP) of World Powers</u>
EU	Yes (France, UK)	12.2%	15.9%
US	Yes	27.2%	26.6%
Japan	No* Possible if UN reformed.	2.2%	7.1%
India	No* Possible if UN reformed.	5.1%	6.9%
Russia	Yes	5.7%	7.2%
China	Yes	47.6%	36.3%

Source: See Methodology, Appendix A.

Figure 3. Comparative Diplomatic Rating; 2003 to 2050.



Source: See Methodology, Appendix A.

CHAPTER IV.

Information Power - Commanding the Digital Divide

The competition for information is as old as human conflict. It is virtually a defining characteristic of humanity. Nations, corporations, and individuals each seek to increase and protect their own store of information while trying to limit and penetrate the adversary's.⁴²

- Sheila Widnall, former Secretary of the U.S. Air Force

The U.S. formally established the criticality and function of information in national security strategy through President Reagan's National Security Decision Directive (NSDD) 130, *U.S. International Information Policy*, dated March 6, 1984, which defined information as "a strategic instrument for shaping fundamental political and ideological trends around the globe on a long-term basis and ultimately affecting the behavior of governments."⁴³ NSDD 130 lays out the concept for leveraging information programs, technology and expertise as critical elements of national power projection:

The use of information, information processes, and Information Technology (IT) as strategic instruments for shaping fundamental political, economic, military and cultural forces on a long-term global basis to affect the behavior of governments, supra-governmental organizations, non-state actors, and entire societies to support national security objectives.⁴⁴

The U.S. has led the world in the IT revolution and associated technical and service sector innovation. Likewise, the IT revolution has led to a worldwide understanding of the importance of information and communications systems in the world power structure, both economically and militarily. Obviously, there are many intangibles that cannot be measured in the realm of information power. These include the various types of propaganda, information operations (IO) capabilities, government-media relationships, cultural awareness, strength of ideas, and credibility of the respective government or regime in the world political system.

The World Bank tracks the Information and Communication Technology (ICT) sector, which consists of commercial and government investment in computer hardware, software, networks, media collection, data processing, digital transmission, and IT systems that present and store information, including voice, data, text, and images. ICT statistics include all investment in manufacturing and service industries that capture, transmit and display data and information electronically. These statistics provide key indicators to the current and future abilities of countries to leverage information as an element of national power, because it shows the availability of IT through investment and Research and Development (R&D). Table 3, below, compares the ICT investment and intellectual capital of the world powers, including the number of scientists who conduct R&D in the ICT field.⁴⁵ These statistics provide key indicators relative to the current and future abilities of each country to leverage information as an element of national power.

Table 3. Information Indicators, 1995-2001.

	1995 Scientists and Engineers*	2001 Scientists and Engineers*	Growth in Scientists and Engineers (% Average 95-01)	1995 ICT Expenditures (\$billions)	2001 ICT Expenditures (\$billions)	Growth in ICT Expenditures (% Average 95-01)
EU	1789	2022.31	2.1%	479.70	674.56	6.7%
US	3730	4099.4	1.6%	557.25	812.63	6.3%
Japan	5368.5	5095.1	(1%)	279.79	413.77	6.5%
India	133.3	157.2	2.98%	7.25	19.66	16.9%
Russia	4120.1	3480.8	(3%)	6.18	9.9	7.8%
China	350.8	545.1	9.2%	20.4	66.61	20.5%

*Note: Scientists and Engineers measured per million of population.

Military analysts point to the fact that more than twenty countries have begun efforts to create military capabilities to leverage IT. This is part of a new form of military strength known as Information Warfare (IW), part an overall Information Operations (IO) construct.⁴⁶ U.S.

Joint Forces Command defines IO as, “Those actions taken to affect an adversary's information and information systems while defending one's own information and information systems.”⁴⁷

The CIA testified before a 2000 Joint Economic Committee on cyber threats by stating:

We are detecting, with increasing frequency, the appearance of doctrine and dedicated offensive cyber warfare programs in other countries...Foreign nations have begun to include IW in their military doctrine, as well as their war college curricula, with respect to both defensive and offensive applications.⁴⁸

Of the twenty known countries developing IW capabilities, the U.S., Russia, France, United Kingdom, and China have committed significant military resources toward its development. Those who invest and master IT will be better positioned to use it as a military tool for attack and defense, as well as a means to manipulate the decision making processes and choices of adversaries. IW can be used to wreak havoc on an enemy's computing, financial, telecommunications, and electrical infrastructures through computer viruses, electro-magnetic weapons, and anti-satellite or spaced-based weaponry.

European Union. The EU is a tale of two vastly different IT systems. The western states have a large, technologically advanced communications system with the world's largest number of internet and cell phone users. Whereas, the eastern countries, those formerly part of the Soviet-dominated Warsaw Pact, lag far behind in IT infrastructure and are playing catch up to their more advanced western partners. In 2001, EU science and technology Research and Development (R&D) exceeded 1.9 percent of GDP for the first time in over a decade, which is well below the 2.3 percent average of the thirty member Organization for Economic Co-operation and Development (OECD), a governmental forum focused on the economic, social, environmental and globalization of the world economy.⁴⁹ The EU, primarily through the

independent efforts of France and Great Britain, has developed IO capabilities as a part of their military forces.

Japan. Japan has been a leader in IT and high-tech products for several decades. It has modern, technologically innovative infrastructure, ranks third in the world for hosted internet sites, and provides internet access to roughly half of its population.⁵⁰ Japan ranks second behind the U.S. in improving worker productivity through IT investment.⁵¹ As a global IT trendsetter, Japan is committed to science and technology R&D. It was one of only four countries in which the R&D-to-GDP ratio exceeded 3 percent in 2001, which is well above the average of 2.3 percent for the thirty OECD member states.⁵² Japan's IT economy is driven by exports, primarily to the U.S., but increasingly through shipment of IT components to China in support of the growing Chinese IT manufacturing sector.

India. Due to its growing ranks of educated and skilled high-tech workers and entrepreneurs, India is at the forefront of developing countries involved in development and production of IT, especially in the software sector and IT services. In 2003, India's IT industry grew by more than 25 percent to over \$12 billion, including software, IT services and business IT outsourcing from western countries.⁵³ India made \$300 million in IT infrastructure management services, making inroads into the \$86 billion global IT infrastructure-management market. India is intent on being an information and space power in its own right. India and Russia are teaming on space technology to build a navigational satellite with both civilian and military applications, and India is planning an unmanned moon mission called "Chandrayan" during the 2007-2008 timeframe.⁵⁴ India is also planning an Air Force Aerospace Command, which would operate military satellites and link military radar and communications networks.⁵⁵

Russia. Russian information efforts have been primarily inwardly directed. The Putin regime has moved steadily and successfully to gain full control of the private broadcast and print media. This has been done through intimidation, trumped up corruption charges, arrests of owners, and outright takeovers. In taking over the major media outlets, staffs were purged, particularly of editorial writers and commentators who took an anti-Putin stance. In January 2002, the last independent Moscow television station was shut down.⁵⁶ Since 1995, Russia's total number of scientists and engineers have been decreasing at an average of three percent per year, many leaving the country for better paying foreign jobs.⁵⁷

China. China is modernizing its IT and communications systems rapidly in its metropolitan areas. Its domestic and international telephone services are improving and becoming more available for private use. For the most part, rural areas, the bulk of the Chinese population, remain under-funded and under-serviced by IT and modern communications. For a country of 1.2 billion people, only 79 million have internet access, a mere six percent of the population.⁵⁸ Of \$325 billion of exports in 2002, China's Ministry of Commerce rated only 20 percent as "high-technology" products, but high-tech products are on the rise.⁵⁹

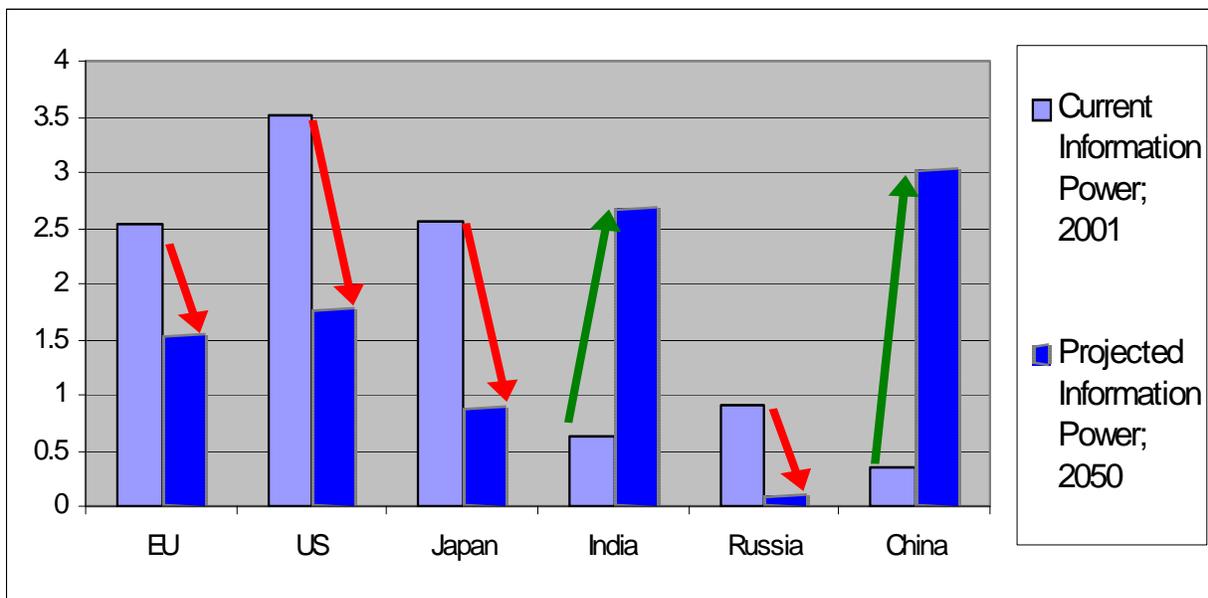
China's imports and exports of ICT goods have grown seven times as fast as the thirty OECD members.⁶⁰ The OECD recently noted the below about China's progress in the ICT sector:

China is targeting the ICT sector as a strategic sector, which will help China leapfrog in its modernization process...While the Southern Coastal region of China is developing as an ICT hardware production center, the Zhongguancun area in the outskirts of Beijing is quickly becoming a software development center. Unlike India, which is specializing in software development alone, China's development in the ICT sector can be characterized as a balanced development of both the hardware and software sectors.⁶¹

The Chinese government recognizes the power of IT, IO and IW, and has put significant resources into developing these capabilities. China has even organized a military battalion of computer experts, who have developed offensive viruses and defenses, which some U.S. officials call the "the Great Firewall of China."⁶² China is also focused on space systems affecting the IO arena by pursuing an antisatellite (ASAT) system, both military and commercial satellites, and space research and exploration, including a successful manned space flight in 2003.⁶³

Summary and 2050 Projection. Given recent trends in the ICT sector, China will become the leading innovator in IT through its aggressive investment in human capital and IT R&D. On the other hand, India will become a leading IT manufacturer, especially in computer software and IT services. China and India's commitment to space research and communications infrastructure will contribute to its strength in the IT sector and scientific advancement in general. Figure 4, below, illustrates that if trends continue, the U.S., EU and Japan will be outpaced by the growth of Chinese and Indian IT sector advances.

Figure 4. Comparative Information Rating, 2001 to 2050.



Source: See Methodology, Appendix A.

CHAPTER V.

Military Power - Politics by Other Means

It never troubles the wolf how many the sheep be.⁶⁴
– Sir Francis Bacon

The Department of Defense defines “Military Strategy” as: “The art and science of employing the armed forces of a nation to secure the objectives of national policy by the application of force or the threat of force.”⁶⁵ Indicators of military strength can be gained from known military expenditures and investment. Significantly, this does not provide an assessment of military technical capabilities or readiness, nor can these areas be projected. For instance, a country that invests in modern weapons and equipment, but neglects strategic sealift and airlift, will severely limit its ability to project forces abroad. History is replete with examples of large standing armies that proved hollow and inept on the battlefield due a lack of training, bad leadership, flawed tactics and lackluster fighting spirit and motivation. Nevertheless, military expenditures provide the most available measurement for military strength and can be projected based on economic and military spending trends.

The U.S. military capacity is clearly in a league of its own. U.S. military expenditures are roughly the equivalent to the combined total of the next fourteen countries and it maintains permanent basing of military forces in forty countries. U.S. forces dominate across the spectrum: air, land, sea, space, and, as discussed earlier, IO. America will continue to dominate in the military realm for the first quarter of the 21st Century. The disparity between the military capabilities of these nations impacts the political abilities of nations to provide a meaningful counter-balance to American intentions. Moreover, there is little comparison in total spending by the major powers as shown by Table 4 below, which summarizes the Central Intelligence Agency’s (CIA) assessment of the military spending of the major world powers.⁶⁶

Table 4. Military Indicators, 2003.

2003 Military Spending Per Country

Country	Military Budget (\$billion)	World Ranking for Military Spending	Military Spending as % of GDP
U.S.	\$370	1	3.3%
EU	\$206	2	2.5%
China	\$60	3	3.5-5%
Japan	\$42	4	1%
India	\$14	8	2.4%
Russia*	\$12	9	2.6%

Source: CIA World Fact Book 2004. U.S. figures do not include Iraq and Afghanistan supplemental funding. CIA Russian figures unavailable. *Russian figures provided by Russia Journal; Defense.⁶⁷

European Union. During the Cold War, Europe used NATO as a shield against Soviet aggression and marched to the drumbeat of American military leadership. With the fall of the Soviet Union, much has changed in the relationship, and the EU has taken steps, however small, to create its own security identity. In the 1990s, the EU consulted with the U.S. about establishing its own military force called the European Security and Defense Identity (ESDI). In the 1990s, both the Bush and Clinton Administrations agreed to this EU pursuit as long as ESDI did not duplicate NATO command and planning staffs, but instead “borrowed” NATO forces to carry out EU-centric operations. Hundreds of European military personnel now work in EU council offices, and the European Security and Defence Policy calls for the EU to assemble a 60,000 strong military force capable of self-deployment and sustainment. Further, the EU envisions this force as providing a capability to act with “autonomous action” without NATO or U.S. involvement. This effort was later criticized by the EU’s Institute for Security Studies:

It (the EU) has set itself an ambitious “Headline Goal” – the ability to deploy up to an army corps...yet the target date of 2003 was not met. At the October 2003 informal meeting of EU defence ministers, Javier Solana (EU Defense Secretary) implicitly acknowledged that the likely deadline would be 2010.⁶⁸

The EU's goal has proven itself hard to meet for many reasons. First, the cost of this capability seems out of step with the amount of money EU countries want to spend on their defense. On average, EU nations in NATO spend 2.1 percent of GDP on defence, with the most populated country, Germany, only spending 1.5 percent. Additionally, only Great Britain and, to a lesser degree, France, have the technological ability to integrate with American forces across the spectrum of the modern battlefield.⁶⁹ The EU has little to no strategic airlift or sealift, and few precision-strike, all-weather assets. Without these capabilities, the EU will not be able to project forces in any meaningful way and will be forced to continue its reliance on U.S. forces.

The EU and U.S. are still committed to a common defense of all member states through NATO. The concern shared by many defense planners and analysts is that NATO and the EU could very well find themselves competing for the same “dual hatted” resources, especially regarding the more mobile, high-readiness forces desired by the EU. Further, while the EU has no plans to build a superpower-like military force, its modest steps toward an independent, autonomous force could contribute to the disintegration of NATO over time. Even though EU member nations spend in excess of \$206 billion annually on defense, their disjointed force and procurement structures, broad standards of readiness, language barriers and disparate training make EU forces far less capable than they could be if true centralization of EU military forces took place. For the foreseeable future, the EU will be heavily dependent on the U.S. for military support, especially for leadership, technology and strategic lift.

Japan. In the aftermath of World War II, General Douglas MacArthur governed Japan and led Japanese politicians to renounce war forever as part of their constitution. The Japanese endorsed a constitution that prohibited Japan from maintaining a military force or capacity to wage war. Importantly, the Japanese constitution does not mention the creation of defensive

forces. Despite the anti-war article of their constitution, U.S. and Japanese officials formed the Japanese National Police Reserve in the 1950s, later becoming the Self Defence Force (SDF). While controversial in Japanese politics, the Japanese government continues to argue that the SDF does not contradict the anti-war clause of the Japanese constitution, which states:

The Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes. In order to accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be maintained.⁷⁰

While Japanese government currently bars deployed Japanese forces from using deadly force or participating in offensive operations, the Japanese military is improving its deployment capabilities to better support international humanitarian and stabilization operations abroad. On a parallel track, there is growing support for changing the constitution to acknowledge Japan's rebirth as a world power. In fact, some nations have stated that Japan's repudiation of its constitutional military limitations should be a precondition for its potential ascension to the UN Security Council, because permanent members of the Security Council must be capable of providing offensive forces during a UN sanctioned military response.

Japan and the U.S. share a military alliance for the defense of Japan through a 1960 Security Treaty, which grants U.S. military basing rights to support the security arrangement. Since the 2001 terrorist attacks on the U.S., Japanese Parliament members have begun discussions about formally amending the constitution to codify the reemergence of Japanese military capability in the face of new threats, mainly in the form of international terrorism and missile threats from North Korea and China.⁷¹ Unless the constitution is changed and the Japanese people support higher military spending, Japan's World War II legacy and historic limits on defense spending will continue to hamstring Japanese military power.

India. During the Cold War, India maintained a close relationship with Russia, much as the U.S. had with Pakistan. With the collapse of the Soviet Union, U.S.-India relations have warmed through expanding trade and a growing bond formed through shared democratic values. India's longstanding hostilities with its neighbor Pakistan and the 1960 war with China place India between two potential military foes. The nuclear standoff between India and Pakistan and the invasion of Afghanistan after the 2001 terrorist attacks has brought U.S. attention and diplomacy to the two countries and the region to lower tensions.

In 2003 and 2004, the U.S. and India participated in a number of joint military exercises designed to improve military-to-military ties and promote a better overall relationship. In September 2004, the U.S. rewarded India by easing restrictions on the sale of technology that could support India's space and nuclear programs, a ban that had been in place since India's first known nuclear test in 1998. In October 2004, both countries began discussions on what is called the "Next Steps in Strategic Partnership," designed to improve cooperation in civilian space and nuclear programs, high-tech trade and to create a dialogue on missile defense.⁷²

Not only is India fostering close military and diplomatic ties with the U.S., it is furthering its relationships with Russia and China. In January 2004, India signed a \$1.6 billion arms deal with Russia, which will provide India a refurbished Russian aircraft carrier called the Admiral Gorshkov and twelve fighter planes by 2008.⁷³ Russia is India's largest military equipment and arms supplier, and both countries are pursuing a joint military technology venture designed to develop the supersonic "Brahmos" cruise missile, an air-to-air weapon capable of attacking distant, high value targets, such as the American airborne warning and control system (AWACS) aircraft, surveillance and intelligence aircraft, and tanker aircraft.⁷⁴

While there is still much distrust, the India-China relationship is warming. China and India held their first-ever joint military exercises in March 2004, and have discussed prospects for inviting observers to watch future exercises. However, their long-standing dispute over their 3,500 kilometer border remains unresolved and a potential flash point in their relationship. Despite growing cooperation with China, Indian moves toward U.S. partnership are designed as a hedge against potential Chinese intentions in the region.

Russia. The Russian military had a hard landing at the end of the Cold War, suffering sharp force reductions and extreme budget cuts. The Russian armed forces now hover around one million, a 77 percent plummet from its Cold War peak of 4.3 million in 1986.⁷⁵ However, in keeping with President Putin's desire to revitalize the military, the Russian government announced it would raise spending on military procurement by 26 percent in 2005.⁷⁶ Regionally and internally focused, Russia is primarily concerned with preserving control over former members of the Soviet Union, now known as members of the Commonwealth of Independent States. Meanwhile, Georgia, Ukraine, and Azerbaijan have taken significant steps to move away from a Russian alignment toward security and economic integration with the EU and NATO.

Russia is reaching out for strategic partnerships with its larger neighbors, India and China. Russia has scheduled its first-ever joint military maneuvers on Chinese territory for 2005 with participation of both nations' air forces and navies. Russia and China have had border clashes between elements of the 700,000 Russian and over one million Chinese forces once stationed along their frontier border. The 2005 exercise and other diplomatic moves are designed to put that past behind them and move toward a greater cooperation on regional security issues. China is Russia's number one customer for Russian manufactured arms,

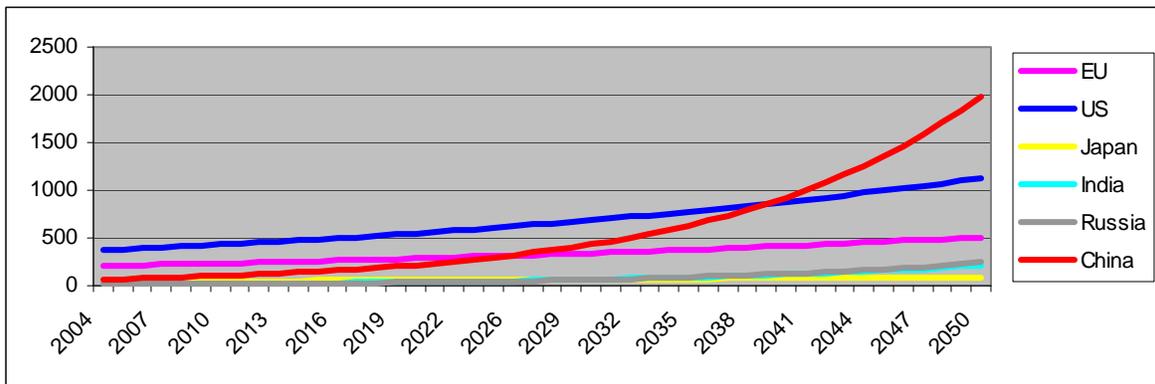
purchasing over \$2 billion in high-tech hardware, such as fighter jets, missile technology, and submarines in 2004.⁷⁷ Regarding India, Russia signed an agreement with India to establish a framework for a “strategic partnership” in 2000, which pledged each country to refrain from aligning with any military or political block and committed Russia to provide the aforementioned high-tech weapons to India.⁷⁸

China. China is aggressively pursuing defense modernization in nearly every sector of its military establishment and has used its economic strength to fuel dramatic annual increases to defense spending. Although its military lacks many of the sophisticated weapons used by western forces, China has the largest military force in the world with 12.5 million active and reserve military personnel, and an estimated defense budget of between 3.5 to 5 percent of its 2003 GDP, roughly \$60 billion in military expenditures.⁷⁹ From 2000 to 2003, China was the top ranked developing nation in securing foreign arms transfer agreements, purchasing \$9.3 billion from Russia and exporting approximately \$580 million in Chinese manufactured military equipment.⁸⁰

China has also been aggressively seeking military technology to upgrade its nuclear delivery capability. For example, in 2001, the Ukrainians secretly sold China Russian-made Kh-55 cruise missiles capable of flying 1,864 miles, putting Japan well within its reach.⁸¹ China has approximately 20 nuclear armed intercontinental ballistic missiles and will have an estimated 75-100 nuclear warheads capable of reaching anywhere in the continental U.S. by 2015.⁸² The Chinese air and maritime forces are transitioning from a defensive force to one with a modern, offensive strike capability focused on defeating regional air forces, denying hostile naval operations, and striking regional enemy airbases.

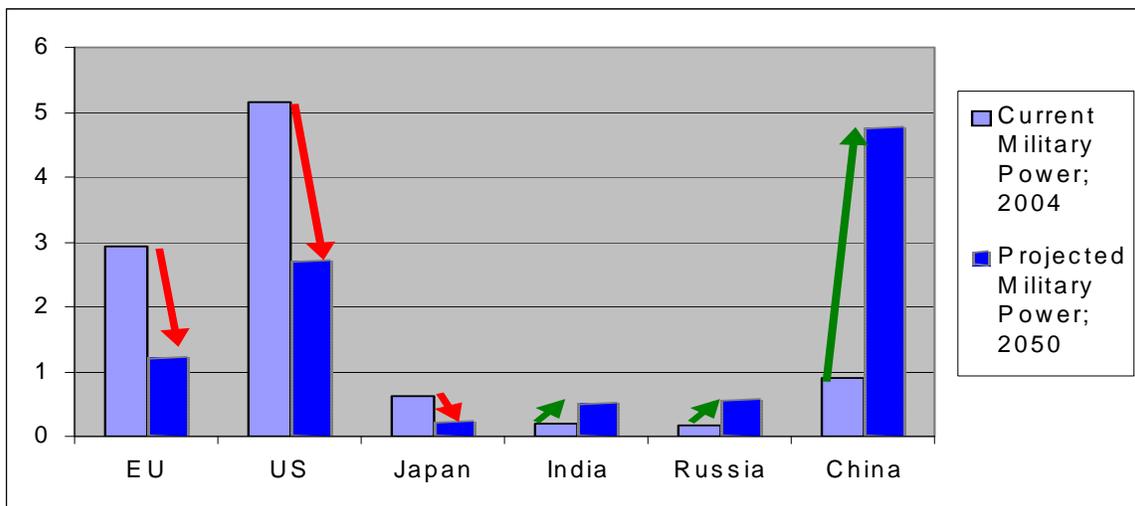
Summary and 2050 Projection. Currently, there is no world power capable of sufficiently challenging the U.S. However, if Chinese GDP growth and military spending rates remain constant, it will exceed U.S. military spending by mid-century. While spending alone may not translate into immediate advantage on the battlefield, it provides the core evaluation for potential military strength. Technology continues to become more dispersed, making it far easier for adversaries to close the gap on the military technology needed to compete with the U.S. and its allies. Figures 5 and 6, below, illustrate the projected military spending and potential military power dispersal of the world powers through 2050.

Figure 5. Military Spending Graph, 2003-2050.



Source: See Methodology, Appendix A. Projections in \$billions.

Figure 6. Comparative Military Rating, 2003 to 2050.



Source: See Methodology, Appendix A.

CHAPTER VI. **Economic Power - The Critical Element of National Power**

Markets, open to trade, and minds, open to ideas, will become the
sole battlefields.⁸³ – Victor Hugo

Historian Paul Kennedy's seminal work *The Rise and Fall of the Great Powers* provides context for the historical comparison of world powers by focusing on economic strength, which he asserts is the engine that fuels a nation's military and foreign commitments. Congressman Mel Levine introduced legislation on March 2, 1989, which led to the Secretary of Commerce being seated on the National Security Council. His remarks on the floor of the U.S. Congress underline the criticality of the economy to all forms of U.S. power and bolster Kennedy's assertion:

In the world of the 1990s and beyond, a nation's economic strength--the health of key manufacturing sectors and the level of its technological development--will play an ever-increasing role in its political and military stature on the world stage. We need to begin giving greater priority to U.S. long-term industrial competitiveness and technological leadership, along with the defense and diplomatic concerns that have traditionally defined our national security interests.⁸⁴

The American economy is currently the largest, most diverse economy on the world stage. The U.S. market economy is enabled by the American entrepreneurial spirit, strong sense of individualism, and ingrained fondness for consumerism. These cultural and economic philosophies have made America a nearly ideal laboratory for capitalism. In the wake of World War II, the American economy, untouched by war, became the world's dominant economic power. The following decades have witnessed the recovery of Europe and Japan, and a surge in manufacturing by developing nations. Inevitably, the American share of the world market has

precipitously shrunk as the global market has become increasingly more competitive. Table 5, below, provides an overview of the current economic situation of the six world powers.

Table 5. Economic Indicators, 2003.

Country	GDP (\$billions) (1)	World Ranking GDP (1)	Average GDP Growth 99-03 (3)	GDP Per Capita (2)	National Debt (\$billions) (2)	Debt as %GDP (2)
U.S.	\$10,881	1	3.1%	\$37,800	\$7,601	62.4%
E.U.	\$8,174	2	1%	\$25,700	\$8,084	63.3%
Japan	\$4,326	3	3%	\$28,200	\$6,575	154.6%
China	\$1,409	4	9.1%	\$5,000	\$198	30.1%
India	\$598	8	8.3%	\$2,900	\$102	0.597%
Russia	\$433	11	7.3%	\$8,900	\$176	34.1%

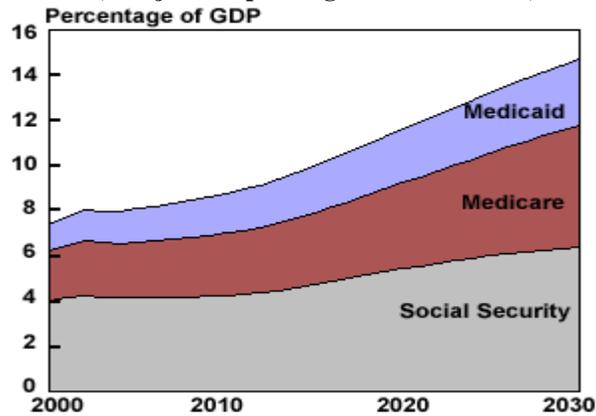
Sources: (1) World Development Indicators database, World Bank, September 2004, (2) CIA World Fact Book 2004, (3) Economist data for 1999-2002, and CIA World Fact Book for 2003.

The U.S. has many significant challenges. Besides the upward economic trends of competing nations, there are other troubling signs of potential American economic decline, including the enormous federal budget deficit, mushrooming national trade deficit, and growing individual consumer debt. In the short-term, these types of American deficit spending are sustainable, but will increasingly sap economic strength from the country if not addressed.

"Entitlements" are government commitments promised to certain segments of society based on specific eligibility criteria. American entitlement programs include Social Security, Medicare, Medicaid, veteran's benefits and other programs mandated by congressional legislation. As Federal Reserve Chairman Alan Greenspan recently pointed out, entitlement spending directly affects the federal budget deficit and must be addressed because it will, "create significant fiscal challenges in the years ahead."⁸⁵ If present entitlement spending trends continue, the U.S. government will not be able to finance its entitlement obligations by mid-

century. Figure 7, below, shows the projected percent of GDP spending needed to sustain the three largest entitlement programs; Social Security, Medicare and Medicaid.

Figure 7. CBO; Projected Spending for Entitlements, 2000 to 2030.



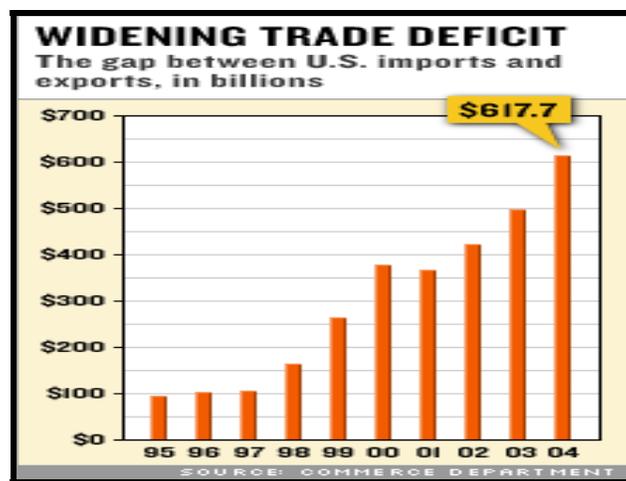
Source: Congressional Budget Office.

The federal deficit is a long-term concern for the U.S. because bigger deficits drive interest rates up, negatively impacting private investment and stunting long-term growth. Japan's enormous deficit is a cautionary tale for America, because it has produced abysmal economic growth in the 1990s, averaging just one percent over a ten-year period. Large budget deficits negatively impact potential performance and slow sectors that might otherwise flourish. Government deficits raise interest rates and discourage investment by "crowding out" private borrowing through increased government demand for loans.⁸⁶

In fact, both the World Bank and the International Monetary Fund have issued reports warning that America's federal deficit poses a serious risk to the world economy, because an estimated 70 percent of global foreign reserves are kept in American dollars.⁸⁷ U.S. deficits are funded by foreign investors, mainly Japan and China, which places dollar assets in an increasingly vulnerable position, subject to global pressures for currency correction. Reducing the U.S. federal deficit would ensure the stability of the dollar and improve the national capability to rebound from economic downturns and disruptions.

Another troubling factor is the steady growth of the U.S. trade deficit. Part of this trade deficit is America's consumption of oil, which is the highest in the world. U.S. oil imports alone accounted for over a third of the global increase in oil consumption in the last ten years, which further aggravates the U.S. trade imbalance.⁸⁸ Figure 8, below, shows the growth of the U.S. trade deficit from 1995 through 2004, a year that set yet another trade deficit record of \$617.7 billion, a full \$121.2 billion more than 2003.⁸⁹

Figure 8. U.S. Trade Deficit, 1995-2004.



Finally, another significant trouble spot for the U.S. economy is the spiraling amount of consumer debt and personal bankruptcy. U.S. credit card use has grown from an average of 3.4 bank credit cards and 4.1 store credit cards per person fifteen years ago to 6.3 bank credit cards and 6.3 store credit cards per person in 2005.⁹⁰ Americans bought over \$2 trillion via consumer credit cards in 2004 and total consumer debt now stands at an average of \$7,100 per person, including non-mortgage lines of credit.⁹¹ There were nearly 1.6 million personal bankruptcy filings in 2004, which drives consumer interest rates up to account for the lost payment of funds.⁹² If these consumer trends continue unabated, it could eventually constrict American GDP growth and negatively impact the nation's financial footing.

European Union. Due to its sheer market size and large collective GDP, the EU can be considered an economic superpower. The U.S. and EU share the largest trade and investment relationship in the world. As such, occasional trade disputes occur between the two giants, and the EU has matured enough as an economic block to challenge U.S. trade policies that are deemed unfair by EU ministers. EU economic reforms led to the development of a single European market in the early 1990s and the introduction of a single currency. The EU market has become increasingly open and more competitive and the prospects of expanding EU membership will have significant economic impact. For instance, the eight central European states who joined the EU in 2004 are expected to grow an average of 4.6 percent in 2005, while the EU's larger countries will likely generate only 1.8 percent growth.⁹³

Japan. Japan's economy, once the envy of the free world, has suffered a dramatic downturn in the last two decades. Japan now has the highest ratio of national debt to GDP of any modern country and has averaged annual growth of only one percent for most of the 1990s, the worst ten-year economic record of any modern economy in the last half-century.⁹⁴ The Japanese political system seems incapable of addressing the central problem of its economic decline, which is an overhaul of its financial and banking systems. Until it does so, Japan will struggle with its enormous national debt and unbalanced banking system.

India. India is a developing country with great economic potential. It averaged growth of above 6 percent for much of the 1990s. The U.S. is India's largest trading and investment partner, having exported nearly \$5 billion in goods to India in 2003, and imported nearly \$13 billion in goods and services from Indian manufacturers. However, trade friction remains as India has yet to reform tariff and trade policies that severely restrict import markets. India's western inspired educational system, healthy democracy, and English-language proficiency have

given rise to an elite, professional class of workers, parlaying India's intellectual capital into substantial market gains in the IT sector and other economic areas. However, India faces problems due to its enormous population with hundreds of millions of impoverished, unskilled and illiterate citizens.

Russia. Since the collapse of the Soviet Union, most of the Russian population has experienced crushing economic conditions on par with the U.S. Great Depression. Unlike China, Russia did not plan a slow integration of capitalism to replace its centralized, government-managed economic construct. Rather, capitalism was forced upon it with the rapid, unexpected disintegration of the Soviet Union. Russia moved quickly to privatize its economy at the end of the Cold War, but the most profitable industrial and economic enterprises were sold below cost to those who were politically connected to the Yeltsin regime. Unfortunately, corruption has become a hallmark of Russian capitalism.

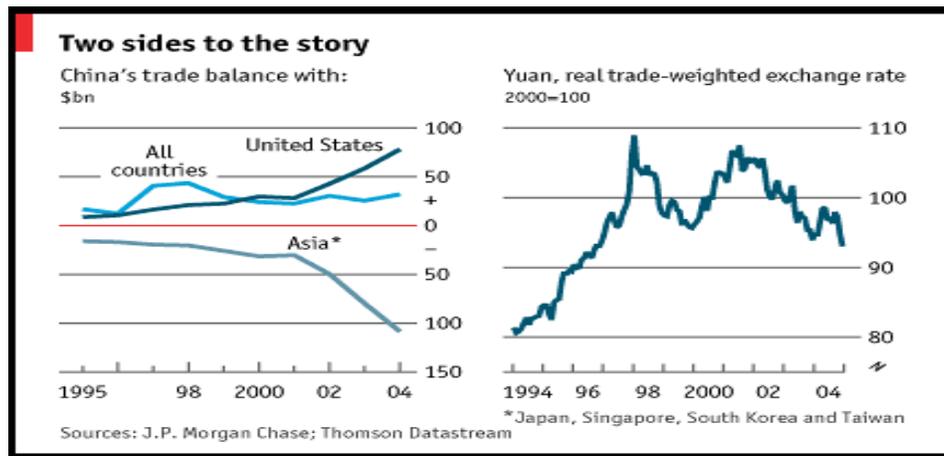
Russia is the second-largest world oil exporter and is heavily dependent upon this industry for its economic survival. Approximately 80 percent of its GDP came from the sale of its natural resources, including oil and natural gas.⁹⁵ Placing so much of its stock in energy exports subjects the Russian economy to high levels of volatility based on the flux of world energy prices. Despite these challenges, Russia has produced above-average annual growth in its GDP over the last five years. If Russia is to sustain GDP growth for the long-term, it will require a true diversification of its economy and move away from dependence on a single sector.

China. China's growing economic strength is the cornerstone of its emergence as a great power. China has become the world's dominant low-cost manufacturer, expanding from low-end goods like toys and cooking utensils to more technology-based items like consumer electronics and computers. From 1975 to 2000, China averaged a growth rate of 8.1 percent,

while the U.S. averaged only 2 percent for the same period. Chinese trade practices have come under increasing scrutiny as its economy has matured with sixteen countries from a variety of regions filing fifty-seven separate trade complaints about anti-dumping and other protectionist policies.⁹⁶ While the U.S.-China economic relationship since 1972 has been mutually beneficial, several points of economic friction remain, including trade and currency policies.

The 2004 U.S. trade deficit with China jumped nearly 31 percent to approximately \$162 billion, the largest gap with any trade partner.⁹⁷ Morgan Stanley, an American investment banking company, recently stated that the global economy is “a two-engine world -- driven by the American consumer on the demand side and the Chinese producer on the supply side.”⁹⁸ Interestingly, China's overall trade surplus for 2004 was only \$32 billion due to China’s negative trade balance with other Asian countries (Figure 9), who provide China capital equipment and technology components for use in manufacturing.⁹⁹

Figure 9. Chinese Trade Balance and Yuan Exchange Rate.



Chinese monetary policy plays a role in the U.S.-China trade deficit. Since 1994, China has maintained its currency rate at a ratio of roughly 8.3 to the dollar, which has served to keep China’s currency artificially undervalued by as much as 40 percent against American goods.¹⁰⁰ This gives China an unfair advantage that must be addressed. Another indicator of China’s

economic rise is investment. For the first time ever, China overtook the U.S. in 2003 as the biggest world recipient of foreign direct investment.¹⁰¹ Economist Jeremy Siegel, Professor of Finance at the Wharton School of Business, University of Pennsylvania, recently wrote:

What we see happening in China and India is no blip on the screen. By 2050 China is projected to have about 1.5 billion people, nearly four times the 400 million inhabitants projected in the U.S. If China were to achieve half the per capita income of the U.S. by the middle of the century (putting it on the same relative footing as Portugal and South Korea today), the Chinese economy would be almost twice the size of the U.S. economy. Is this possible? Most certainly...China could reach 50 percent of the U.S. per capita income level by 2050 with a productivity growth rate of 3 percent a year above the U.S.¹⁰²

Instead of being merely an export economy, China's growth is increasingly fueled by domestic consumer demand for housing, cars, infrastructure, and retail consumption, like clothing and home goods.¹⁰³ China has recently begun a transition to a domestic-driven economy. Additionally, China's trade balance and economic progress will increasingly be linked to its access to oil, and the inherent global fluctuations in the energy and oil markets. China's demand for oil has risen an average of 7 percent per year since 1990, which puts it on track to surpass U.S. oil consumption within the next twenty years.¹⁰⁴ Oil will increasingly impact its overall trade balance and economic performance.

If current GDP trend lines continue, China's economy may surpass the U.S. some time in the first half of this century. While China's long-term growth projections are robust, there is the potential for a significant downturn if economic reforms and fiscal system modernization do not occur. Although the outlook for the Chinese economy appears strong, achieving sustained high levels of growth will be contingent upon avoiding several potential pitfalls to its growth. For instance, it is estimated that Chinese banks have 22 percent of their total lending invested in non-performing, insolvent state-owned enterprises.¹⁰⁵ As a comparison, China dramatically

surpasses South Korea's 6 percent rate of non-performing loans, a crisis that led a 1997 international bailout to prevent South Korea's financial collapse.¹⁰⁶

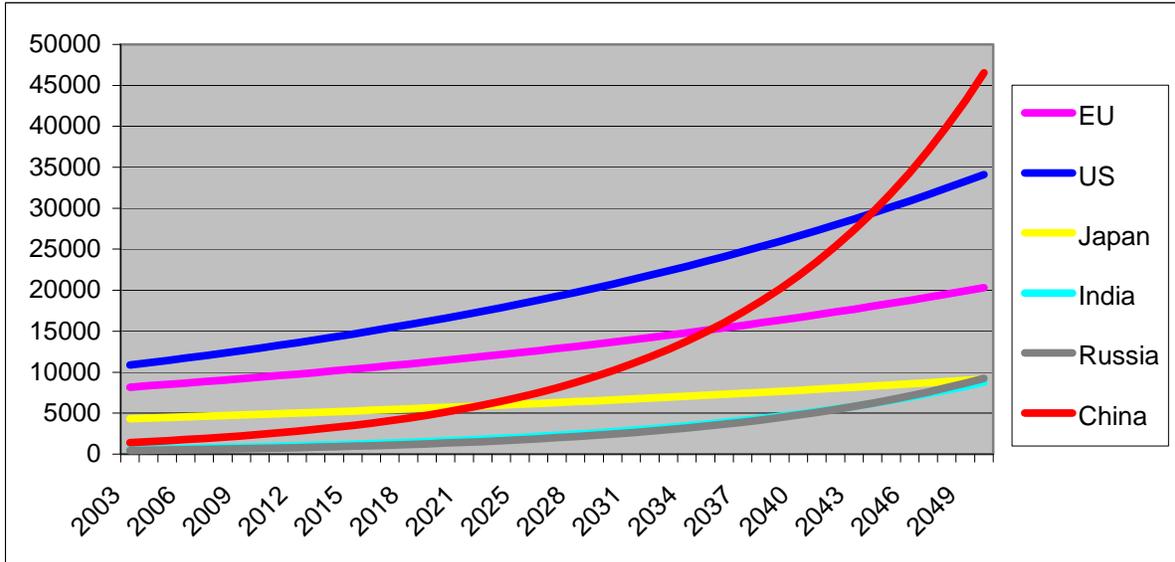
Summary and 2050 Projection. Developing countries like China and India will most likely be unable to sustain their recent growth rates of seven to nine percent. As their economies mature, their growth rates will stabilize at a much lower percent, but no economic model can predict with certainty when this will happen and to what extent. While economic projections can be significantly impacted by many global factors, there is a growing consensus about China's potential emergence as an economic giant. Both the CIA and World Bank project that by 2020, China may have the largest economy in the world.¹⁰⁷ China must overcome many challenges in the long-term to become a modern economy, including major banking and currency reforms. The Rand Corporation recently studied China and observed the Chinese dichotomy:

China is like a man being chased by a tiger. It is very impressive that he runs faster than virtually anyone else in world history; it is also impressive how big the tiger is. The West's literature on China is divided into two parts: one about how fast the man runs, emphasizing all the growth rates, the other about the tiger, emphasizing the banking, unemployment, inequality, and political problems. Any real understanding, however, must include the man and the tiger.¹⁰⁸

If current economic trends hold, China will become the world's largest economy by mid-century, while the western powers, U.S. and EU, will become the second and third largest economies, respectively. China shows every sign of becoming an economic powerhouse, less dependent on exports and fueled by its own maturing domestic market. This transition will continue to strengthen China's economic hand and propel it to the next level of economic sophistication. Similarly, it may signal a gradual shift in the global marketplace in which China becomes the world's major market for goods, displacing the EU and U.S. as the world's major

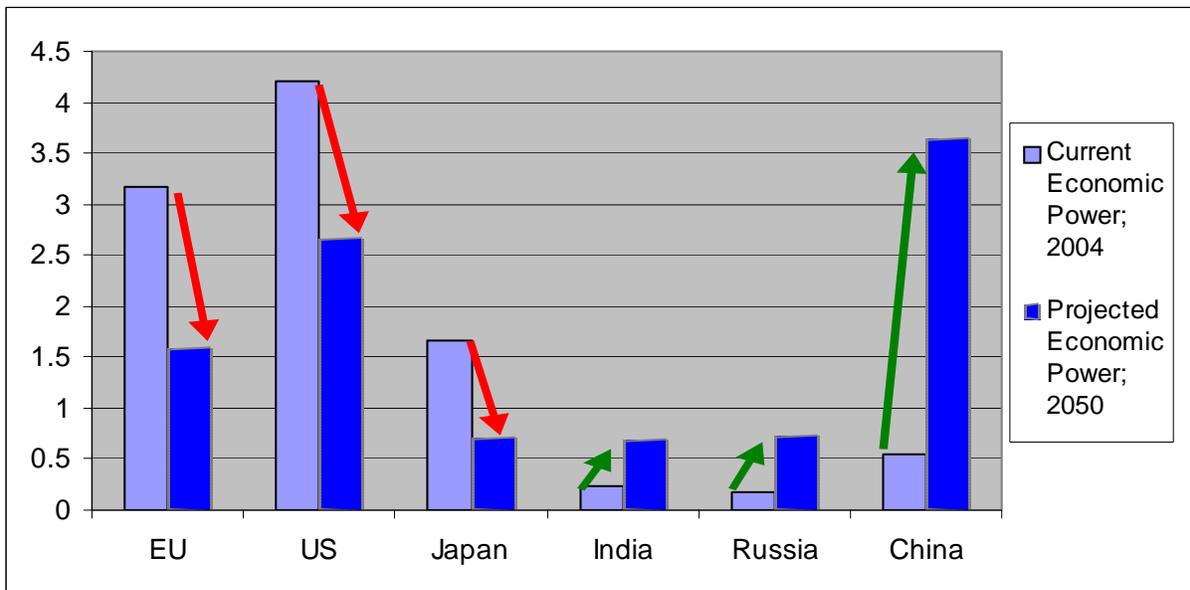
markets. Figures 10 and 11, below, depict the potential dramatic change in the world economic power equation.

Figure 10. Economic Growth Chart, 2004 to 2050 (\$billions).



Source: See Methodology, Appendix A.

Figure 11. Comparative Economic Rating, 2004 to 2050.



Source: See Methodology, Appendix A.

CHAPTER VII.

Analysis

It must be considered that there is nothing more difficult to carry out,
Nor more doubtful of success, nor more dangerous to handle,
Than to initiate a new order of things.¹⁰⁹
– Niccolo Machiavelli

As described by Kennedy, the historical response to the rise of a dominant world power usually produces a military and diplomatic counterbalance in the form of smaller state power coalitions.¹¹⁰ Today it is comparatively harder for countries to rise in collective opposition to the U.S. for several reasons: (1) with the exception of China, democratic institutions and shared democratic values dominate the world power centers; (2) the world is more integrated, especially through the world economic system; and (3) the disparity in military capabilities between the U.S. and other nations is so vast that it precludes many from formally aligning against it.

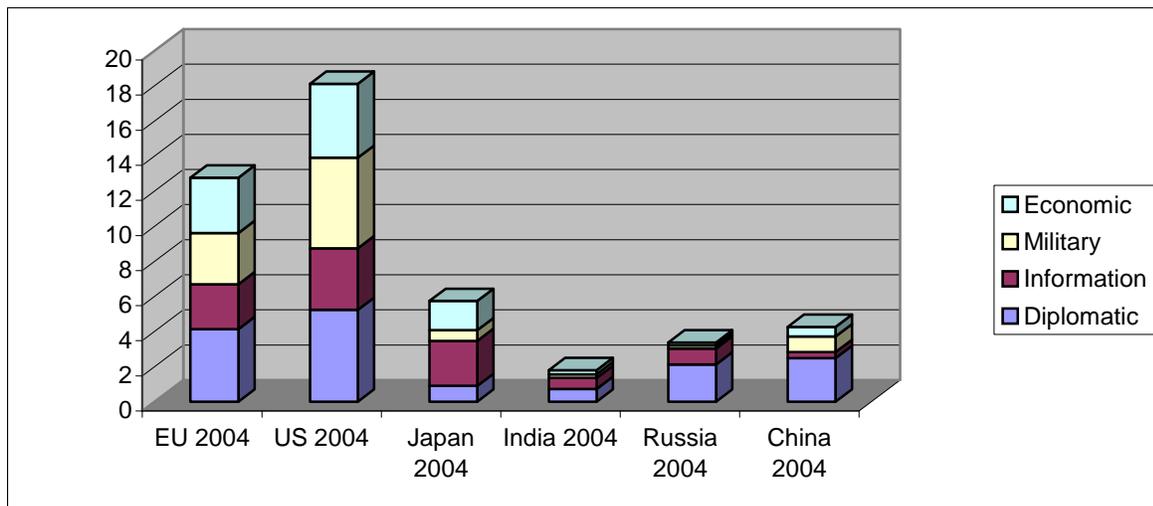
In past world power conflicts, many of the chief participants were dictatorships, totalitarian regimes, or monarchies bent on expansion. Today, the major powers are predominantly democratic, including the EU, U.S., Japan, India, and, to a lesser degree, Russia. Only China stands out as an authoritarian regime, but even it has undergone significant reforms and recently shown some modest tolerance for democratic processes in its repatriation of Hong Kong. While the potential for war and hostilities exists in democratic systems, functioning democracies typically have checks and balances that lessen the likelihood for unprovoked aggression. Additionally, functioning democracies share inherent values that other systems do not, such as free speech, support of human rights, and the peaceful mediation of conflict.

Over the past three decades, the world has become more integrated through trade, travel, communications and open media access. If a serious attempt at military alignment against the U.S. took place, it would upset world integration and cause economic fissures to spring forth in

the form of sanctions, boycotts and dramatic shifts in world stock markets. One simply has to examine the U.S. public reaction to French political opposition in the lead-up to the 2003 Iraq War to see the impact such government actions can have on trade. The American public reacted to perceived French antagonism by boycotting French goods and tourism. The French Government Tourist Office estimated its American tourism losses at about \$500 million in 2003.¹¹¹ Meanwhile, French wine sales to Americans dropped 15.2 percent and have yet to rebound.¹¹² Likewise, opposing viewpoints in other countries could lead to boycotts of American goods as foreign opinion turns against American policy.

Finally, no country has sufficient economic or military power to challenge the U.S. in the near term. However, this situation will change as technology becomes more dispersed and economic development provides more resources from which to modernize military forces and flex diplomatic and economic power on the international scene. Figure 12, below, provides a summation of findings based on key statistical indicators and compares the U.S. with its strategic competitors in the current day global environment. At present, the U.S. enjoys a significant lead in every element of national power outlined in the DIME construct.

Figure 12. Current Comparative DIME Ratings, 2004.



Source: See Methodology, Appendix A.

Forecasting World Power in 2050. The world does not stand still. If economic trends remain constant, the western powers will decline in relative strength to developing nations, particularly China. Certainly the statistical analysis in the previous chapters supports this assertion. Contributing to this assessment is a growing consensus among political scientists, diplomats and economists, who conclude that China will emerge as a superpower rival to the U.S. This includes Kissinger, who views China as the preeminent challenge to the U.S.:

China is on the road to superpower status. At a growth rate of 8 percent, which is less than it has maintained over the 1980's, China's Gross National Product will approach that of the U.S. by the end of the second decade of the twenty-first century. Long before that, China's political and military shadow will fall over Asia and will affect the calculations of the other powers, however restrained actual Chinese policy may prove to be.¹¹³

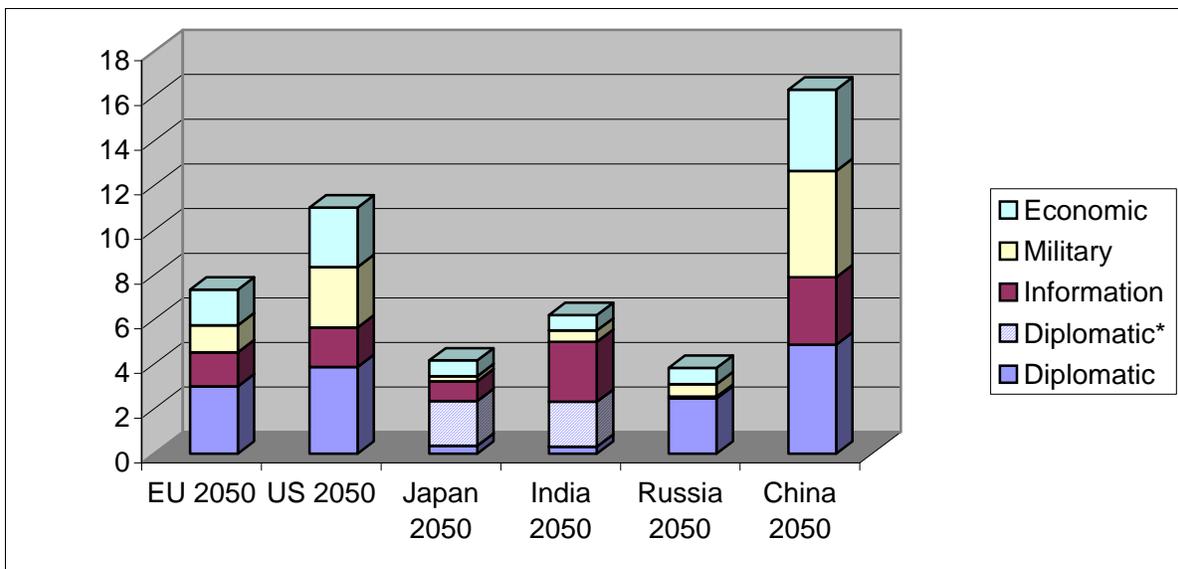
China will manage strengths across the entire spectrum of national power by mid-century. As detailed in previous chapters, linear trends forecast an American decline across the spectrum of national power with China emerging as the most likely rival by mid-century. This is due primarily to trends in economic growth, military spending forecasts and IT investment and development. As far back as 1987, Paul Kennedy stated that China's ascendance as a major world power "is only a matter of time."¹¹⁴ Eighteen years later, time has validated Kennedy's assertion. The Wall Street Journal recently warned of China's growing national power:

Understanding this trend is far from academic, with an impact likely to shake up businesses and governments and today's U.S. driven world order. Having the world's largest economy will give China a greater say in global affairs. Its currency, which is now pegged to the U.S. dollar, will join the yen and the euro as globally traded currencies and in doing so will erode the dollar's position as the world's default coin of choice. China's military, which has enjoyed double-digit budget increases for much of the past 15 years, is likely to grow larger, bolstered by the huge economy.¹¹⁵

There are four truths about the future. First, China will likely become the world’s largest economic power. Second, China's military power will grow exponentially with the progress of its economy and allow it to project power regionally and, eventually, on a global scale. Third, globalization and integration will make it harder for any world power to assert itself and act unilaterally, especially through military force. Finally, America cannot stop China’s rise, but it can stem its own decline, while managing constructive relationships with China and the other world powers.

There are a number of disturbing trends for America across the spectrum of national power; the challenge for U.S. policy makers is to reverse or mitigate them. While unforeseen catastrophic events and significant political or economic changes may impact future statistical projections, statistical trends point to a major realignment of world power by 2050. Figure 13, below, summarizes the trends of key statistical indicators and projects the world power configuration for 2050.

Figure 13. Comparative DIME Rating Projections, 2050.



Source: See Methodology, Appendix A. Note: The asterisk “*” indicates the additional diplomatic rating should Japan and/or India be admitted to the UN Security Council as permanent members.

CHAPTER VIII. **Recommendations**

We moved as the Spirit listed. They never altered their pace,
Being neither cloud nor wind-borne like the Gods of the Marketplace;
But they always caught up with our progress, and presently word would come
That a tribe had been wiped off its ice field, or the lights had gone off in
Rome.¹¹⁶
- Rudyard Kipling

The U.S. government must focus its resources and considerable intellectual capital on maintaining national power by doing three things. First, it must reorganize itself to better support the elements of power and focus its resources on the country's long-term national interests. Second, it must address the nation's three negative cash flow problems: federal budget deficit, national trade deficit and consumer debt. Third, the U.S. must reshape the global political landscape now to better position itself for emerging global politics.

Currently, the U.S. government fulfills national security strategy in a highly disjointed manner due to its highly dispersed governmental functions across the executive branch. The executive branch is organized into fifteen separate departments, many of which have overlapping and competing responsibilities under the DIME construct. The landmark Goldwater-Nichols Department of Defense Reorganization Act of 1986 provided a new legislative requirement for joint military operations and integration of the military services' capabilities. The U.S. government needs legislation similar to Goldwater-Nichols for the rest of the government in order to foster interagency coordination and support the pillars of the DIME construct. Such legislation would create new responsibilities and requirements for interagency planning, execution, professional education, and standards of measurement for interagency fulfillment of the national security strategy.

To its credit, only the Department of Defense (DoD) has ventured forth with a concept

for integrating governmental analysis and actions to better fulfill national security strategy. Based on the DIME construct, DoD has developed a program called Operational Net Assessment (ONA), which serves as an intelligence and assessment tool for commanders to evaluate the enemy as a complete system. ONA promises a comprehensive understanding of both the adversary and friendly forces and categorizes their strengths and weaknesses along a construct equivalent to DIME: Political, Military, Economic, Social, Infrastructure, and Information.

This program, still in its infancy, is DoD-centric and has no formal buy-in from other U.S. government departments and agencies. Intellectually, the program has a great deal of promise as a means from which to promote interagency cooperation and synergy of governmental action in employing and leveraging the elements of national power. However, as in all things government, if Congress attaches no legislative requirement or financial incentive to interagency cooperation, little support from the other departments can be expected to materialize.

The growth of the executive branch has blurred the focus of the multitude of agencies and bureaus within each department. If a true national security strategy is to be realized, the government must focus its limited resources on buttressing the four recognized elements of national power. This could be accomplished by reorganizing the executive branch into four departments designed around the DIME construct. Congress should take legislative steps to mandate a closer integration of the departments of government in the fulfillment of national security objectives. If the U.S. government is going to make a serious long-term effort to maintain national power, it must retool itself for the coming challenges. Table 6, below, illustrates a potential governmental reorganization designed to better focus government agencies on maintaining and developing the elements of national power:

Table 6. Proposed U.S. Government Reorganization.

Department of State Diplomacy	Department of Justice and Information Security	Department of Military Affairs	Department of Economic Security
Department of State	Department of Justice	Department of Defense	Department of Homeland Security
U.S. Trade Representative	Director of National Drug Control Policy	Department of Veterans Affairs	Department of Commerce
	Director of National Intelligence		Department of Transportation
	<i>(Central Intelligence Agency)</i>		Department of the Interior
	<i>(Computer and Information Technology Security)</i>		Department of Energy
			Department of Health and Human Services
			Department of Agriculture
			Department of Housing and Human Development
			Department of Labor
			Department of the Treasury
			Environmental Protection Agency
			Office of Management and Budget

Without a strong economy, little is possible. Paul Kennedy’s thesis in *The Rise and Fall of the Great Powers* stipulates that economic strength is the true engine of national power. With few exceptions, economic power is the linchpin from which all of the elements of national power derive its strength. As a result, economics should be the central focal point of American domestic and foreign policy, because it provides the best way to preserve American power and promote a spirit of cooperation and mutual benefit abroad.

In order to preserve U.S. economic superiority, America must act now to address its growing federal budget deficit by controlling spending, especially in the area of entitlements. The President and Congress must control budget deficits and establish budget targets with apolitical discipline. This effort will reassure investors and currency markets alike, eventually freeing up capital for savings and investment, R&D, and domestic infrastructure. Additionally, the U.S. must address unfair trading practices that exacerbate the trade imbalance. This includes

steps to mend unfair currency management and manipulation by the Chinese, and closed market policies currently enacted by both China and India. Allowing the Chinese unfair trading advantages puts the U.S. in the role of financing China's economic and military rise on the back of the American consumer.

The U.S. must seek to establish a new construct for global politics. The UN was built upon the ashes of World War II and little has changed in its power structure and organization to adjust to a new world order. The U.S. must seek to update the UN by placing more emphasis on democracy and openness as prerequisites for membership in the UN body. The UN must be transformed or disbanded, and a new entity similar to the Organization of American States (OAS) must rise in its place. Like the OAS, such an entity must be focused on promoting democratic values, lowering military tensions and building cooperation. Dictatorial and authoritarian regimes, like China, need not have an equal say in a world political body. Empowering such nations through the UN is immoral, dilutes the power of democratic nations, and is counter to American political aims.

American diplomacy must change and modernize by making significant reforms to the Department of State and its diplomatic corps. Ambassadors should be appointed for longer periods to promote stability and cultural competency at each diplomatic post. This would create merit-based posts and eliminate the traditional, unskilled political appointees brought into office with each new President. The goal is linguistic and cultural competency for the diplomatic corps. This is especially useful in dealing with China, a country in which trust, personal relationships and cultural respect play a major role in diplomatic effectiveness.

Additionally, the U.S. military has an unduly high profile on the world stage, which has the effect of making American foreign policy appear overtly militaristic in nature. There is no

diplomatic equivalent to the geographic combatant commander's region of the globe. Therefore, it is critical to create a long-term diplomatic post on par with the military's theater combatant commander, providing oversight and coordination of regional diplomatic efforts. This diplomatic post would work in tandem with the geographic combatant commander and ensure a diplomatic face is planted on the region, not just a military one. It would also provide a regional manager for coordinating the national security strategy implementation.

During the 2004 campaign for the Democratic Party's presidential nomination, Governor Howard Dean suggested that American might was on the decline by stating, "We have to take a different approach. We won't always have the strongest military."¹¹⁷ Such statements are rare in American politics and for good reason. Dean was roundly criticized by his opponents and media pundits alike, which contributed to his precipitous decline in the polls. Ironically, Dean's statement could prove prophetic should current trends continue. While there may be few American politicians who will publicly acknowledge potential American decline, U.S. policy makers must address the root causes of decline now and strengthen the pillars of American power through legislative and executive reform.

In summary, American power will diminish if current trends continue. Although most Americans cannot envision a day when the U.S. is less than a superpower, history shows that global powers decline over time if they fail to adapt to world changes and allow their economies to deteriorate. U.S. national security strategy must optimize government resources to support the elements of national power and the nation must change course now if it wants to play a relevant role as a world power in the future. Otherwise, the U.S. may find itself recorded in the dustbin of history with the likes of the Roman and British Empires, yet another sad example of an exhausted world power collapsing under the strain of its own weight.

APPENDIX A.

Methodology

Economist Todd Buchholz, a former member of the White House Economic Policy Council, noted the challenges in projecting future outcomes:

The point is that long-term forecasts regarding economic resources and technology require divine gifts, not degrees in economics.¹¹⁸

Limitations aside, forecasting potential outcomes is critical to understanding the effects of present day trends and long-term policy. It provides a necessary context for examining the DIME formula and basis for recommendations to U.S. policy makers. This research endeavored to forecast the relative power of the U.S. juxtaposed against its potential strategic competitors under the DIME construct using available, relevant data from credible sources. While there are many types of forecasting tools available, the one chosen for research is a general linear model, using recent and relevant indicators from specific sectors.¹¹⁹ In order to develop a linear model, it was necessary to create a unit of measurement for each category of the DIME construct.

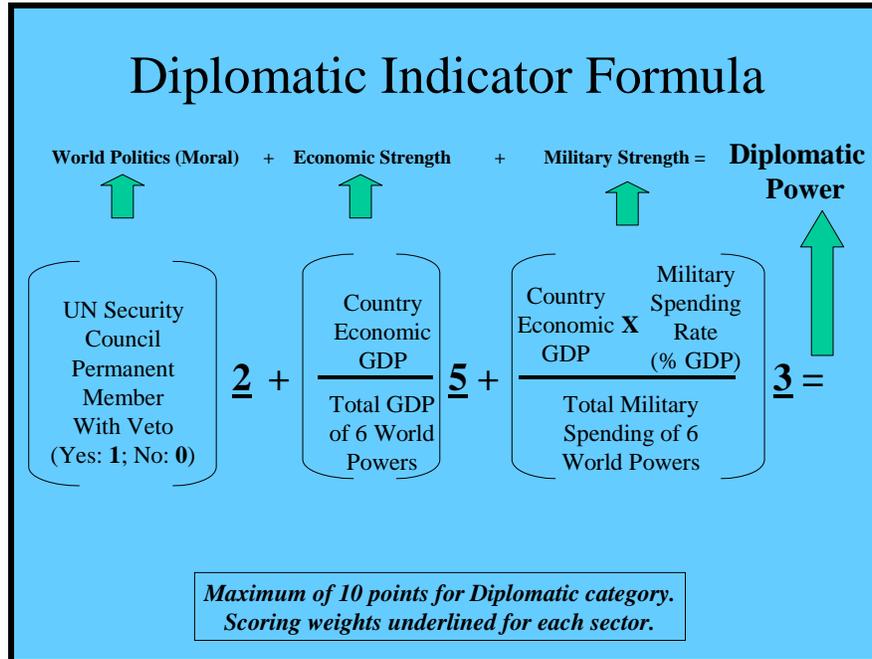
The examination of potential outcomes focuses the analysis on key negative policy and public sector dynamics that could potentially contribute to a decline in American power. Both current statistical indicators and projections were scored to provide a comparative value for the analysis of potential outcomes. 2050 was chosen as a marker because several noted authors, Kissinger among them, have stated that China will emerge as a world power by mid-century. Thus, projections out to 2050 help validate written assessments by projecting the potential power of other world powers for comparison and trend analysis. The selected criteria provided linear patterns from which to forecast potential outcomes.

The analysis also includes narrative assessments from each DIME area, including a review of the various immeasurable aspects of each element of power. The analysis provides

predictive criteria from which to compare and contrast the elements of national power for each of the six nation-states in question. For scoring purposes, each category of the DIME construct was assigned a potential ten points per category for a total of forty points available for the overall DIME cumulative score. As stated by Kennedy's thesis, economics affect all areas of national power. Therefore, economics provided a weighted indicator wherever appropriate in the quantitative and predictive analysis of the DIME construct. Both the current status and future status, out to 2050, were scored to provide a trend line and comparative value for analysis of potential outcomes.

Diplomatic. Of the ten points for the Diplomatic category, the economic forecast was given the largest weight, a maximum score of five, because of its importance in enabling national power. Economic strength is the preeminent factor for enabling diplomacy by backing up words with potential action, including the threat of sanctions, economic tariffs, economic and military aid, humanitarian initiatives, and direct military action. The economic forecast was based on Economist and CIA GDP growth data from 1999-2004, World Bank GDP statistics from 2003, and then scored based on the percentage of GDP as compared with other world powers listed. Military spending was weighted at three points. It was projected based on 2003 levels of spending and linked to the aforementioned economic forecast. The final score was based on the percentage of total spending as contrasted solely against the projections of the other world powers. Finally, the moral element was derived from the relative power of the nation-state as a permanent member on the UN Security Council. Therefore, each world power was assigned 2 points for permanent membership on the UN Security Council with the potential for Japan and India to ascend to the UN Security Council represented graphically in one potential outcome. The diplomatic indicator formula is illustrated below, providing the limitations for the

assessment of diplomatic strength:



The below table shows the data used for the diplomatic power calculations:

Current

	<u>U.N. Permanent Member of Security Council with veto= +2</u>	<u>Military Spending (percent military spending of 6 world powers)x3</u>	<u>Economic Power (percent GDP of 6 world powers)x5</u>	<u>TOTAL</u>
EU	2 (France, UK)	29.2% x3=0.876	31.6% x5=1.58	4.456
US	2	51.6% X3=1.548	42.1% x5=2.105	5.653
Japan	0	6.1% x3=.183	16.7% x5=0.835	1.018
India	0	2.1% x3=.063	2.3% x5=0.115	0.178
Russia	2	1.7% x3=.051	1.67% x5=0.0835	2.35
China	2	9% x3=.27	5.4% x5=1.62	3.89

Projected, 2050 (No UN Change)

	<u>U.N. Permanent Member of Security Council with veto= +2</u>	<u>Military Spending (percent military spending of 6 world powers)x3</u>	<u>Economic Power (percent GDP of 6 world powers)x5</u>	<u>TOTAL</u>
EU	2 (France, UK)	1.22% x3=0.366	15.9% x5=0.795	3.161
US	2	27.1% x3=0.813	26.6% x5=1.33	4.143
Japan	0	2.2% x3=0.066	7.1% x5=0.355	0.421
India	0	5.1% x3=0.03	6.9% x5=0.345	0.375
Russia	2	5.7% x3=0.171	7.2% x5=0.36	2.531
China	2	47.6% x3=1.428	36.3% x5=1.815	5.243

Projected, 2050 (UN Change)

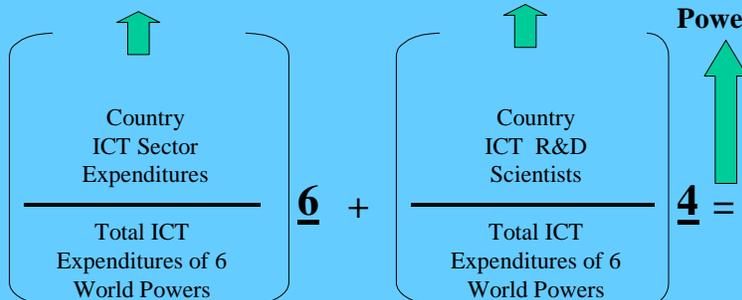
	<u>U.N. Permanent Member of Security Council with veto= +2</u>	<u>Military Spending (percent military spending of 6 world powers)x3</u>	<u>Economic Power (percent GDP of 6 world powers)x5</u>	<u>TOTAL</u>
EU	2	12.2%x3=0.366	15.9%x5=0.795	3.161
US	2	27.1%x3=0.813	26.6%x5=1.33	4.143
Japan	2	2.2%x3=0.066	7.1%x5=0.355	2.421
India	2	5.1%x3=0.03	6.9%x5=0.345	2.375
Russia	2	5.7%x3=0.171	7.2%x5=0.36	2.531
China	2	47.6%x3=1.428	36.3%x5=1.815	5.243

Information. Information category scoring was linked directly to statistics provided by the World Bank on the ICT sector, which consists public and private investment in computer hardware, software, networks, and media for collection, storage, processing, transmission, and presentation of information (voice, data, text, images). ICT statistics also include all public and private sector investment in manufacturing and services industries that capture, transmit and display data and information electronically. This analysis included a comparison of the six major powers through their investment in the ICT sector, which provided their relative status in the intellectual capital of scientists and engineers who conduct R&D in the IT field.

Therefore, information power was scored based on ICT expenditures and the relative number of ICT scientists and engineers conducting research and development in the field. ICT expenditures were calculated based on World Bank ICT growth rates from 1995 to 2001 and scored based on the percentage of ICT spending as compared with the other world powers, and then multiplied by a factor of six. ICT scientists and engineers were calculated based on World Bank data from 1995 to 2002, scored based on the percentage of scientists and engineers per million of population as compared with the other world powers, and then multiplied by a factor of four. The information indicator formula is illustrated below, followed by the data used in assessing the Information category:

Information Indicator Formula

Information Investment and Production + Information Intellectual Capital = Information Power



Maximum of 10 points for Information category.
Scoring weights underlined for each sector.

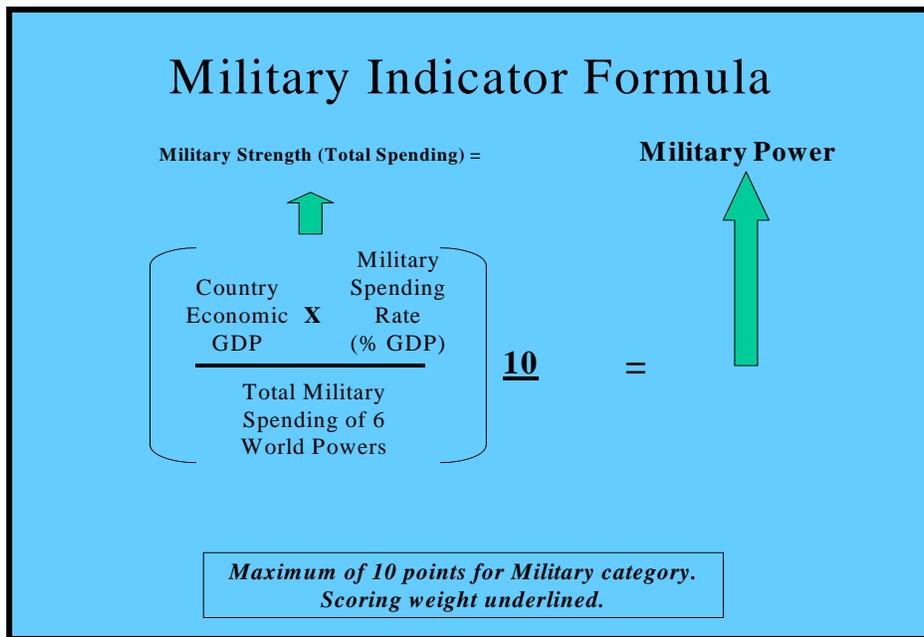
Information Power, 2001

	<u>ICT Expenditures (Percent Expenditures of 6 world powers)x6</u>	<u>Scientists R&D(Percent Scientists of 6 world powers)x4= 4 max</u>	<u>TOTAL</u>
EU	33.7% x6=2.022	13.1% x4=0.524	2.546
US	40.7% x6=2.442	26.6% x4=1.064	3.506
Japan	20.7% x6=1.242	33% x4=1.32	2.562
India	0.98% x6=0.588	1% x4=0.04	0.628
Russia	0.49% x6=0.0294	22% x4=0.88	0.9094
China	3.3% x6=0.198	3.5% x4=0.14	0.338

Information Power, 2050

	<u>ICT Expenditures (Percent Expenditures of 6 world powers)x6</u>	<u>Scientists R&D(Percent Scientists of 6 world powers)x4= 4 max</u>	<u>TOTAL</u>
EU	18.9% x6=1.134	9.8% x4=0.392	1.526
US	19% x6=1.14	15.7% x4=0.628	1.768
Japan	11% x6=0.66	5.7% x4=0.228	0.888
India	44% x6=2.64	1.1% x4=0.044	2.684
Russia	0.45% x6=0.027	1.4% x4=0.056	0.083
China	6.3% x6=0.378	66% x4=2.64	3.018

Military. Military projections were based on CIA assessments of military spending as a percentage of GDP for 2002. For the 2050 projection, the percent of GDP military spending was linked to economic forecasts, which were based on Economist and CIA historical GDP growth from 1999 to 2004, while using World Bank GDP statistics from 2003 as the economic baseline for the calculations. The result was then scored based on the percentage of military spending as compared with the other world powers listed, and then multiplied by a factor of ten. The military indicator formula is illustrated below, followed by the data used in assessing the Military category:



<u>Military Power; 2004</u>		
	<u>Military Expenditures (Percent of Total Expenditures of 6 World Powers)x10</u>	<u>TOTAL</u>
EU	29.2% x10	2.92
US	51.7% x10	5.17
Japan	6.2% x10	0.62
India	2.2% x10	0.22
Russia	1.7% x10	0.17
China	9% x10	0.9

	<u>Military Power; 2050</u>	
	<u>Military Expenditures (Percent of Total Expenditures of 6 World Powers)x10</u>	<u>TOTAL</u>
EU	12.2%x10	1.22
US	27.1%x10	2.71
Japan	2.2%x10	0.22
India	5.1%x10	0.51
Russia	5.7%x.10	0.57
China	47.6%x10	4.76

Economic. Economic power is reflected in numbers and data points that are readily available from a multitude of sources, and is thus more straightforward in its measurement relative to other indicators in the DIME model. There are also many economic predictive tools. Economists use diverse and sometimes conflicting predictive models based on differing economic philosophies and modeling tools. There are many forces at work in economic forecasts, many of which cannot be predicted with certainty, such as trade wars, UN or nation-state embargoes, military conflicts, consumer boycotts, and currency manipulation. Additionally, developing countries like China, India and Russia, will likely not be able to sustain their recent growth rates of seven to nine percent. As their economies mature, growth rates will stabilize at a much lower percent, but no economic model can predict with certainty when this would happen and to what extent.

Economic forecasts were based on Economist and CIA historical GDP growth data from 1999-2004, using World Bank GDP statistics from 2003 as the baseline. For the 2050 forecast, the results were scored based on the percentage of GDP as directly compared with the other world powers listed, and then multiplied by a factor of ten. The economic indicator formula is illustrated below, followed by the data used in assessing the Economic category:

Economic Indicator Formula

$$\text{Economic Strength (GDP)} = \text{Economic Power}$$

$$\left(\frac{\text{Country Economic GDP}}{\text{Total GDP of 6 World Powers}} \right) \underline{10} =$$

*Maximum of 10 points for Economic category.
Scoring weight underlined.*

Economic Power, 2002

	<u>Nation GDP (Percent GDP of 6 world powers)x10</u>	<u>TOTAL</u>
EU	.31.6% x10=3.16	3.16
US	42.1% x10=4.21	4.21
Japan	16.7% x10=1.67	1.67
India	2.3% x10=0.23	0.23
Russia	1.67% x10=.167	0.167
China	5.4% x10=.54	0.54

Economic Power, 2050

	<u>Nation GDP (Percent GDP of 6 world powers)x10</u>	<u>TOTAL</u>
EU	15.9% x10=1.59	1.59
US	26.6% x10=2.66	2.66
Japan	7.1% x10=0.71	0.71
India	6.9% x10=0.69	0.69
Russia	7.2% x10=0.72	0.72
China	36.3% x10=3.63	3.63

APPENDIX B.

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APPENDIX C.

End Notes

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