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**Supplemental Report On Socio-Economic Fragility**  
To The  
**Deputies Committee On Complex Priorities**



May 2009

**Forward Engagement**  
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## The Deputies Committee on Complex Priorities

5 May 2009

### MEMORANDUM FOR THE PRINCIPLES COMMITTEE:

FROM: Blair Foulds and Amanda B. Kadlec, DCOM Staff Directors

SUBJECT: Report to the DCOM on Socio-Economic Fragility

This presentation to the President is based on the results of the First Annual Report to the Deputies Committee on Complex Priorities, which determined three Complex Priorities pertinent to US national security: (1) Managing acceleration of technological innovation (2) Fragility of the state-based system (3) **Socio-economic fragility**.

Given the severity of the current global economic recession, the DCOM recommends that the President places (3) Socio-Economic Fragility, as the highest priority. Throughout the course of our research, we determined a set of scenarios designed to consider possible future outcomes for the purpose of creating sound policy in the wake of the economic downturn:

**REVISED DURABILITY** – The US emerges as global leader in all traditional forms of power

**POWER SHIFT** – A revised global order of shared power among nations

**SOCIOECONOMIC COLLAPSE** – The US is struggling to survive in an anarchic world

We believe **REVISED DURABILITY** to be the most favorable outcome for the United States. This report explores each scenario, focusing on key issues and challenges regarding energy and environment, international political dynamics, economics, security, and social welfare. The purpose of this exercise is to prepare the United States with near term policy decisions that could change the course of US global influence in the future.

The DCOM also produced an annex to the body of this report that examines the structural and cultural changes needed in the executive for the US to have the capacity to address critical future challenges. We are pleased to present our findings to the Principles Committee.

Sincerely,

Blair Foulds, Amanda Kadlec

*The DCOM staff wishes to thank the following people  
for their generous time, advice, and contributions to this report:*

Mr. Evan Faber

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## Table of Contents

<u>SECTION</u>	<u>NAME</u>	<u>PAGE</u>
<u>I.</u>	<u>Introduction</u>	
	<u>Executive Summary</u>	<u>6</u>
	<u>The Necessity of Forward Engagement</u>	<u>14</u>
	<u>Summary of the Previous Report to DCOM</u>	<u>16</u>
	<u>Purpose and Motivation for the Supplementary Report</u>	<u>18</u>
	<u>Definition of Key Terms</u>	<u>19</u>
	<u>Methodology</u>	<u>21</u>
<u>II.</u>	<u>Socio-Economic Fragility</u>	<u>23</u>
	<u>Overview of the Scenarios</u>	<u>26</u>
	<u>Revised Durability Matrix and Trajectory</u>	<u>32</u>
	<u>Power Shift Matrix and Trajectory</u>	<u>43</u>
	<u>Socio-Economic Collapse Matrix and Trajectory</u>	<u>52</u>
<u>III.</u>	<u>Policy Recommendations</u>	<u>64</u>
	<u>Economics</u>	<u>65</u>
	<u>International Politics</u>	<u>66</u>
	<u>Energy and the Environment</u>	<u>68</u>
	<u>Security</u>	<u>69</u>
	<u>Social Welfare</u>	<u>70</u>
<u>IV.</u>	<u>Conclusions</u>	<u>72</u>
<u>ANNEX</u>	<u>Encouraging a Shift in Bureaucratic Culture</u>	<u>75</u>

## Executive Summary

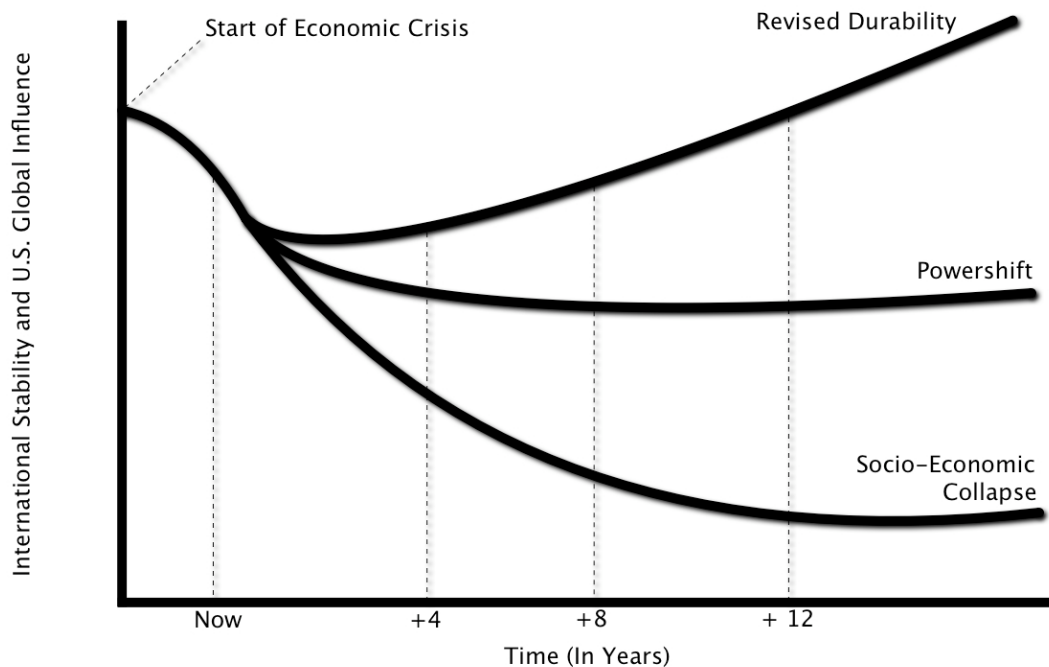
The United States is in a position unlike any time in its modern history. Its military is stretched between two costly wars, its once resilient financial institutions are insolvent, and its infrastructure is outdated. The challenges the government must face today are many and they are difficult. Yet beyond these apparent concerns lies a world more complex and more interconnected than the problems directly in front of us. The most appropriate means to approach policymaking is no longer through detached, linear thinking. As our nations, peoples, and economies become increasingly involved with one another, our leaders must begin to view their decisions as having lasting, far-reaching implications beyond the immediate future. The purpose of this report is to clarify the necessity of forward engagement – the combination of forecasting methods with mechanisms for policymaking to encourage early awareness of potentially major trends or events – in order to shape those trends towards the most desirable outcomes.

The Deputies Committee (DCOM) defines a collection of overlapping future events culminating into an overarching policy dynamic as a Complex Priority. In the Fall 2008, our staff identified three such areas for consideration in the First Annual Report to the Deputies Committee on Complex Priorities. Among these priorities – Management Of Accelerating Technological Innovation, The Revealed Fragility Of The State-Based International System, and Socio-Economic Fragility – our committee deemed Socio-Economic Fragility as most deserving the President's immediate attention. We therefore selected it for detailed analysis as presented in the following pages.

Socio-Economic Fragility, by its nature, is a highly interwoven concept requiring further delineation. To more thoroughly comprehend the structure of this Complex Priority, it is broken down into three scenarios that the United States may face at some point in the future: **REVISED DURABILITY**, **POWER SHIFT**, and **SOCIO-ECONOMIC COLLAPSE**. Indeed, the future is unpredictable and uncertain. Therefore, the DCOM recommends a thorough investigation of each of these possible scenarios, the events that drove them there, and the policy choices that either steered the US toward or away from favorable outcomes.

To determine how the United States may arrive at a scenario – a possible future culmination of events beyond 12 years from now – we begin by addressing the myriad of events that takes it there. These paths are defined as trajectories. One the next page is a graphic representation of the three end-state

scenarios and the trajectories that lead to them.



Throughout each time interval, issues intersect and overlap at critical junctures, providing the United States government with opportunities to direct policy toward the most desirable outcomes. The following pages present three matrices of events along the trajectories toward REVISED DURABILITY, POWER SHIFT, and SOCIO-ECONOMIC COLLAPSE. Each trajectory is parsed by time-period and sector. The horizontal rows show a single sector of activity, describing it at the *short-, medium-, and long-term periods* of time of *less than 4 years, 4 to 12 years, and greater than 12 years*. These intervals correspond to the United States presidential election cycle. The short- and medium-term intervals consist of the trajectories that lead up to the resulting end-state scenario in the third, long-term interval. The vertical columns show the activity that can be expected in each time interval across all five sectors of analysis. Each sector is identified by color:

- **Economy**
- **International Political Dynamics**
- **Environment and Energy**
- **Security**
- **Social Welfare**



When certain events create a strong correlation with a particular sector of the matrix, the text describing that event is same color as the sector with which it relates.

This type of abstract analysis is crucial for the United States to prepare for unexpected and potentially devastating future events. In today's world, situations change rapidly and nonlinearly: deadly and highly transmittable disease can span continents within hours; a collection of carbon-emitting factories in China may contribute to refugee crises in Africa; authoritarian governments may crumble because they can no longer control information due to widespread internet access that links nations, people, and ideas. The international climate is constantly altering its complexion, and the United States government must undertake a collective, bureaucratic shift in consciousness if America is to survive in the 21<sup>st</sup> Century and beyond.

These matrices appears on the following three pages.

The most desirable future for the United States is identified in the **REVISED DURABILITY** scenario:

- Liberal democracy has endured as the most desirable and resilient form of government.
- The United States has reaffirmed its leadership role in the world.
- Environmental, social, and economic chaos has been held at bay.

	< 4 Years	4 - 12 Years	12+ Years
	Trajectory		Scenario
Economy	<ul style="list-style-type: none"> <li>• Domestic investment in rail and highway, healthcare, broadband</li> <li>• Strong dollar</li> <li>• Some protectionism</li> <li>• Current account debt decreases</li> <li>• Development of international financial regulation system</li> </ul>	<ul style="list-style-type: none"> <li>• Increased foreign investment in dollar holdings</li> <li>• Rising US GDP</li> <li>• Well-managed money supply and interest</li> <li>• Regional trading blocs encouraged</li> </ul>	<ul style="list-style-type: none"> <li>• US economic dominance, dollar as reserve currency</li> <li>• Free-market capitalism reigns</li> <li>• Regional trade blocs abound</li> <li>• Regulation globally managed by supranational organizations</li> <li>• Medicare, Social Security insolvency addressed</li> </ul>
Political Dynamics	<ul style="list-style-type: none"> <li>• Renewed focus on Latin American, Asian relationships</li> <li>• Promotion of democracy in China</li> <li>• Multilateral military cooperation on small-scale operations</li> </ul>	<ul style="list-style-type: none"> <li>• China abandons one-party system</li> <li>• Political liberalization throughout Asia</li> <li>• Increased adoption of democracy and human rights</li> </ul>	<ul style="list-style-type: none"> <li>• Multilateral organizations successfully contain/minimize global ills</li> </ul>
Energy and Environment	<ul style="list-style-type: none"> <li>• Construction of clean power plants, SmartGrid begin</li> <li>• Requirements for sustainable development in future projects</li> <li>• China and India continue existing energy consumption tracks</li> <li>• Blue-chip tech stocks soar</li> </ul>	<ul style="list-style-type: none"> <li>• China and India begin modest regulation of industrial sector</li> <li>• Drop in energy prices</li> <li>• Continued green technology boom</li> </ul>	<ul style="list-style-type: none"> <li>• SmartGrid complete</li> <li>• Sophisticated environmental technologies in development</li> <li>• Developed nations follow US environmental policy</li> <li>• Heavy US investment in alternative, renewal energies</li> <li>• Lower fossil fuel use</li> </ul>
Security	<ul style="list-style-type: none"> <li>• DoD acquisitions resume, target full spectrum of operations</li> <li>• Increased coalition interoperability</li> <li>• Enlistment, academy applications increase</li> <li>• Iraq, Afghanistan wars end</li> <li>• Improved civ-mil coordination</li> <li>• Developing nations stabilize</li> </ul>	<ul style="list-style-type: none"> <li>• Sufficient DoD, DHS, government manning levels</li> <li>• Increased Asian cooperation, integration</li> <li>• Decreased oil-driven conflict</li> <li>• Greater stability and legitimacy in developing world</li> </ul>	<ul style="list-style-type: none"> <li>• US has no military equal, capable of convention and irregular operations</li> <li>• Non-state actors, interstate conflicts are managed</li> <li>• Completed withdrawal from stable Iraq and Afghanistan</li> <li>• Nuclear powers retain weapons responsibly</li> </ul>
Social Welfare	<ul style="list-style-type: none"> <li>• Diplomatic promotion and funding to address global social ills</li> <li>• Internet availability</li> <li>• US investment in water supply technology</li> <li>• Promotion of globalization</li> <li>• US encourages democracy worldwide</li> </ul>	<ul style="list-style-type: none"> <li>• Diminished health and social ills</li> <li>• Clean water technology exported to developing world</li> <li>• Globalization in developing countries</li> <li>• ICC, WHO increase legitimacy and reach</li> </ul>	<ul style="list-style-type: none"> <li>• Health and social ills mostly eliminated or contained</li> <li>• English most prominent language</li> <li>• Increased acceptance of liberal democracy globally</li> </ul>

A less desirable, but acceptable scenario for the United States is represented by a **POWER SHIFT**:

- American power and influence is redistributed.
- The liberal democratic model has been rebuffed by much of the developing world.
- China and the European Union have emerged as two additional poles.

	< 4 Years	4 - 12 Years	12+ Years
	Trajectory		Scenario
Economy	<ul style="list-style-type: none"> <li>• Loss of domestic, foreign faith in US financial system</li> <li>• Shift to holdings in other currencies</li> <li>• Infrastructure investment limited to repair</li> <li>• Debt high</li> </ul>	<ul style="list-style-type: none"> <li>• BRIC, EU relative economic dominance increase</li> <li>• Globalization not driven by West</li> <li>• Positions of power in IMF, WTO shift</li> <li>• Medicare and Social Security insolvent</li> </ul>	<ul style="list-style-type: none"> <li>• US, BRIC, EU share economic dominance</li> <li>• Increased global connectedness</li> <li>• Supranational organizations regulate world finance</li> <li>• US unable to fund all needed public services</li> </ul>
Political Dynamics	<ul style="list-style-type: none"> <li>• US global influence declines</li> <li>• Governance shift or failure in emerging democracies</li> </ul>	<ul style="list-style-type: none"> <li>• US military might remains</li> <li>• Operations increasingly multilateral</li> </ul>	<ul style="list-style-type: none"> <li>• Competition with other power blocs</li> <li>• US unable to police globe unilaterally</li> </ul>
Energy and Environment	<ul style="list-style-type: none"> <li>• US investment in alternative energies</li> </ul>	<ul style="list-style-type: none"> <li>• Slow development of clean energy infrastructure</li> <li>• Clean coal as primary energy, decreased dependence on foreign oil</li> <li>• China and India apply limited regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate progress on energy SmartGrid</li> <li>• Alternative energies are beginning to be fully realized</li> <li>• Reduced coal use</li> </ul>
Security	<ul style="list-style-type: none"> <li>• DoD spending centers on personnel care</li> <li>• End-strength plus-ups on existing course</li> <li>• US maintains nuclear arsenal with renewed responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic holding of energy resources still consideration</li> <li>• Decreased global reliance on foreign oil reserves</li> <li>• Stability in developing world improved but not assured</li> </ul>	<ul style="list-style-type: none"> <li>• Acquisition of conventional combat capabilities</li> <li>• Cybersecurity concerns</li> <li>• Increase in nuclear-capable nations</li> <li>• Rebuilding in Afghanistan continues</li> <li>• Near-peer military competitors</li> </ul>
Social Welfare	<ul style="list-style-type: none"> <li>• Concerns within US over future potable water availability</li> <li>• US funding of global health initiatives continues</li> <li>• Spotty compliance with social, human rights</li> </ul>	<ul style="list-style-type: none"> <li>• Disease outbreaks continue in developing world</li> <li>• Polarization on social welfare issues</li> <li>• Glacier melt offsets potable water concerns</li> </ul>	<ul style="list-style-type: none"> <li>• Stable literacy rates</li> <li>• Increased wealth disparity</li> <li>• Limited pandemic management</li> <li>• Women's rights promoted</li> <li>• Humanitarian aid leads to alliances with benefactor nation</li> </ul>

The least desirable outcome for the United States is the **SOCIO-ECONOMIC COLLAPSE** scenario:

- Local and international order has fractured
- The issues of regional conflict, failed or failing states, and terrorism are widespread
- Massive humanitarian disasters, mass migrations of refugees to wealthy areas
- There are significant disruptions to the security of the global commons.

	< 4 Years	4 - 12 Years	12+ Years
	Trajectory		Scenario
Economy	<ul style="list-style-type: none"> <li>• Economic bail-out efforts fail</li> <li>• Global position of dollar declines</li> <li>• Implementation of trade barriers by nations</li> <li>• <b>Supranational economic organizations powerless</b></li> </ul>	<ul style="list-style-type: none"> <li>• Value of dollar continues to decline</li> <li>• International trade declines</li> <li>• Development of black-market banking</li> <li>• <b>Regional financial organizations replace global ones</b></li> </ul>	<ul style="list-style-type: none"> <li>• Widespread instability of domestic currencies</li> <li>• Protectionist economies</li> <li>• Extremist economic philosophies abound</li> <li>• <b>Supranational financial organizations fail</b></li> <li>• <b>Proliferation of black-market economy</b></li> <li>• <b>Surging unemployment worldwide</b></li> </ul>
Political Dynamics	<ul style="list-style-type: none"> <li>• Developing world powers seek to replace diminished US influence</li> </ul>	<ul style="list-style-type: none"> <li>• Domestic issues in emerging powers prevent them from filling hegemonic role</li> </ul>	<ul style="list-style-type: none"> <li>• Multilateral organizations prove ineffective</li> <li>• Interests focus on regional, domestic issues</li> </ul>
Energy and Environment	<ul style="list-style-type: none"> <li>• Alternative energy technology in small-scale use</li> <li>• Economic focus shifted away from SmartGrid</li> <li>• Continued dependence on coal, foreign oil</li> <li>• Chinese and Indian energy requirements increase</li> </ul>	<ul style="list-style-type: none"> <li>• US still dependent on coal energy</li> <li>• Alternative energy only partly implemented</li> </ul>	<ul style="list-style-type: none"> <li>• Alternative energies not fully harnessed</li> <li>• US still dependent on foreign oil</li> <li>• Limited enforcement of environmental policies</li> <li>• China and Indian follow existing consumption trends</li> </ul>
Security	<ul style="list-style-type: none"> <li>• Acquisition of surveillance, patrol platforms</li> <li>• US withdrawal from abroad</li> <li>• African stability diminished</li> <li>• Traditional terrorism</li> <li>• Increased viability and reach of non-state actors</li> <li>• Iran has nuclear weapons</li> <li>• <b>Military personnel cutbacks</b></li> <li>• <b>Increased Middle Eastern defense spending</b></li> <li>• <b>Eco-terrorism</b></li> </ul>	<ul style="list-style-type: none"> <li>• Collapse of Pakistan</li> <li>• US military end-strength reduced</li> <li>• Widespread African collapse</li> <li>• <b>Homeland defense increase</b></li> <li>• <b>Increase in US import security</b></li> <li>• <b>Institution of social stability measures globally</b></li> </ul>	<ul style="list-style-type: none"> <li>• States focus on internal, border, and domestic resource security</li> <li>• US domestic surveillance flourishes</li> </ul>
Social Welfare	<ul style="list-style-type: none"> <li>• US international social policies neglected</li> </ul>	<ul style="list-style-type: none"> <li>• Xenophobia abounds</li> <li>• Global social, health ills not addressed</li> <li>• <b>US water shortage</b></li> </ul>	<ul style="list-style-type: none"> <li>• Unmanageable disease</li> <li>• <b>Global education, literacy drops</b></li> <li>• <b>Domestic tensions along lines of identity distinction</b></li> </ul>

Based on our assessment of **REVISED DURABILITY** as the most desirable scenario for the United States, we provide appropriate policy recommendations toward steering the United States along that trajectory. Specifically, we make the following recommendations along the five sectors used in trajectory analysis:

- **Economy**
  - Establish an International Financial Regulatory Commission
  - Restructure the Securities and Exchange Commission
  
- **International political dynamics**
  - Conduct effective democracy-building in foreign nations
  - Bolster multilateral organizations
  
- **Energy and environment**
  - Pursue renewable energy technologies and reduce dependence on foreign oil
  - Develop and implement a Smart Grid electrical system
  - Lead a new global climate change initiative
  
- **Security**
  - Fully structure and fund a civilian response corps
  - Bolster Veterans' Affairs funding and programs
  - Increase Department of State reach through increasing manning and budget
  - Pursue enhanced security cooperation
  
- **Social welfare**
  - Increase international cooperation to address issues of global importance
  - Invest in public health and education

Finally, to achieve the government changes necessary for forward engagement and proactive policy development, we recommend a cultural shift in the U.S. bureaucracy. The exploration of Socio-Economic Fragility at this time is particularly relevant in light of the deep cut to our nation's financial stability. As our quickly moving international political, economic, and social environment is forcing our government to react with more agility, simplified, compartmentalized policy approaches are obsolete.

To survive and thrive in a global society replete with poverty and mass migrations, a united challenge to thwart global warming, and an ubiquitous threat of terrorism, our nation must ready itself for the drastic and unexpected. We are not yet there. This report is based on the DCOM's findings of the most efficient and effective means to address the challenges before the United States Government.

*End of Executive Summary*

## The Necessity of Forward Engagement

At no point in human history has the rate of change been as sudden and as far-reaching as it is today. The rate of technological innovation has increased exponentially over the last century, bringing with it both great advancements and new challenges. The world has become increasingly interconnected—bound together by trade, communication, ideologies and peoples—giving rise to a complex global system that is arguably more vulnerable, fragile, and susceptible to change than ever. Indeed, it is a world where environmental degradation in one region of the earth can trace its origins to a political decision on the other, and vice-versa. Where the gravest security threats are no longer nations with great militaries, but where terrorist cells, pirates, viruses, cyber-terrorists, and environmental change pose some of the greatest threats to human welfare.

These trends make clear that events do not occur in a vacuum, nor is the effect of a particular event necessarily proportionate to its cause. Today, we are recognizing that policy actions from years past are affecting us in ways unintended or unanticipated, be they positive or negative. In this increasingly complex world of overlapping everything – economies, governments, and environments – our government and governments must organize to adapt to the rapid change that defines the speed of life in our new era.

These challenges demand a new approach to policy-making, one that appreciates the nature of complexity and fragility in the international system and that has the capacity to anticipate potential challenges and shifts well before they have the opportunity to develop into clear and imminent threats. As noted in the Fall 2008 report by DCOM staff, there has been an increase in “the rate at which relatively minor, seemingly unrelated trends and events develop into major global incidents that outpace our ability to govern. We can no longer address complex problems through reactive analysis, or resolve them with narrow solutions. Nor can we afford to wait until negative developments reach fruition to act.”

And yet, well into the 21st century, the United States retains a bureaucratic structure that precludes it from adequately anticipating or preparing for change, particularly where doing so involves the cooperation of multiple agencies. For instance, the election cycles, devised over two centuries ago, are valuable for preserving accountability but render it exceptionally difficult to enact legislation imbued

with great foresight. Within the executive, bureaucratic politics and inter-agency competition for funds, relevance and resources make it equally difficult to address complex national security policies where there is a convergence of environmental, economic, social and security concerns.

It is the purpose of this report to identify the nature of a pressing complex priority which will necessitate the introduction of greater degree of inter-agency cooperation and foresight into the policy-making process.

*~ The DCOM staff*



## Summary of the First Annual Report to the Deputies Committee on Complex Priorities

The First Annual Report to the Deputies Committee on Complex Priorities submitted in December of 2008 forms the foundation on which the current report is built.

The goal of Forward Engagement is to obtain actionable knowledge of critical future contingencies before the culmination of a world- changing occurrence. The United States is inadequately identifying these contingencies, as may be demonstrated by the September 11<sup>th</sup>, 2001 attacks, Washington's failed response to hurricane Katrina, and failure to prevent the economic meltdown of 2008.

The first DCOM report on Complex Priorities recognized the United States government's (USG) increasing inability to quickly adapt to emerging, complex problems. These challenges can no longer be viewed in compartmentalized sections to be analyzed in a linear framework. The USG must shift its collective conscious by recognizing that the world is deeply interconnected on multiple levels, and must make policy decisions incorporating this concept in order to thrive in an increasingly complex environment. The adaptive capacity of US governance, therefore, hinges on two requirements: 1) Proactive Assessment - confronting contingencies *well before* they happen, and 2) Complexity Analysis – factoring various future contingencies *simultaneously* as a larger system of interactions.

The report established a task force to address and assess each of the **Complex Priorities** the DCOM determined as most imperative to US policymaking:

- (1) Managing technological innovation
- (2) Fragility of the state-based international system
- (3) Socio-economic fragility.

Within each Complex Priority, the DCOM has identified a number of **Trajectories**—the direction a Complex Priority may take in the future. Trajectories organize all possible Future **Contingencies of Interest (FCI)** – individual possible future events – into directed pathways that allow policymakers to more clearly see alternatives for policymaking.

Trajectories are different from scenarios in that they are in constant motion from a single point and are analyzed in terms of “*fore-casting*.” **Scenarios**, conversely, establish a static situation in the future from which “*back-casting*” may be used to identify potential problems leading back to the present. Trajectory analysis, therefore, complements the other analytical tools introduced in the report by reinforcing the need for policymakers to (1) identify and track faint signals; (2) observe the development of FCIs as they relate to their Complex Priority; (3) explore possible future pathways to discover critical opportunities for engagement; and (4) anticipate the direction and the consequences of FCI interactions in order to implement sound policies.

In response to **Complex Priority (3) – Socio-Economic Fragility** – the staff developed a series of possible trajectories to be considered:

- ❖ (3.1) Socio-Economic Collapse – analyzing a series of cascading system failures leads to the breakdown of socio-economic systems,
- ❖ (3.2) Sustained Instability – when systems reach a new equilibrium characterized by the presence of inequalities and uncertainties, and
- ❖ (3.3) Socio-Economic Durability – when positive multilateral trends strengthen global and national socio-economic systems.

These methods give policymakers the tools to more effectively adapt to complexity in order to steer the United States towards desirable, rather than undesirable, future trajectories. The DCOM has outlined several recommendations for guiding complexity analysis to intersect potential crises, reduce negative outcomes, and seize upon new opportunities. An improved interagency system for effective analysis and policy implementation is an urgent and necessary change. The purpose of the First Annual Report is to provide the DCOM with the Complex Priorities most relevant to US national security, analyze those priorities with trajectory analyses, and provide policy recommendations that will steer the USG toward its most favorable outcome. By implementing these methods of forward engagement, the United States may be better able to immediately and adeptly meet future challenges by fully considering their possibilities today.

## The Purpose and Motivation for this Supplementary Report to the Deputies Committee on Complex Priorities

The Fall 2008 report by the Deputies Committee Staff offered valuable recommendations on strategies for forward engagement that will thoroughly address current and emerging challenges. Based on its findings, the Deputies Committee recommends that a supplementary report be included President's National Security Strategy. This additional documentation is intended to:

- Further investigate a Complex Priority, in this case Socio-Economic Fragility, by utilizing forecasting methods to develop probable future scenarios
- Offer policy recommendations to steer the United States along the most favorable trajectories
- Develop contingency plans to prepare for and contain undesirable events and trends
- Recommend ways in which to manage a shift in the bureaucratic culture that will facilitate a more unified and sustained approach to forward engagement

## Key Terms

The following terminology will be employed frequently throughout this report.

### **Forward Engagement:**

A combination of forecasting methods and policy-making mechanisms that seeks to offset the challenge posed to traditional policy-making structures by Complex Priorities. The first principle of Forward Engagement is to encourage early awareness of potentially major trends or events, in order to support earlier actions designed shape them. Forward Engagement provides a theoretical framework for thinking systematically about the long-range future in ways that can be practically applied to public policy.

### **Future Contingency of Interest (FCI):**

An event or trend capable of abruptly and significantly upending an anticipated course of events. For example, “The global supply of oil is completely extracted earlier than anticipated in year 2030...”

### **Complex Priority:**

A critical policy dynamic emerging from the interaction of a range of FCIs that interact in a systemic, simultaneous manner. Complex Priorities, by definition, engage complex, interacting systems that cannot be managed by engaging their FCIs individually. They are characterized by non-linear changes and often give off faint signals that may alert policymakers to the onset of significant change.

### **Scenario:**

An account or synopsis of a hypothetical future event, projected course of action, or situation that requires a temporary suspension of disbelief. Scenario development assists in policy planning, organizational development, and as a tool to test strategies against uncertain future developments. In our analysis, scenarios represent the end state of our trajectories.

### **Back-casting:**

For the purpose of analyzing a scenario, it is the process of identifying the myriad of possible events that may take place from some point in the future that arrives back at the present. This method allows for the pinpointing of specific times and places where certain policy choices may positively or negatively affect long-range outcomes.

**Trajectory:**

The motion or directionality of events resulting from a number of FCI interactions. Trajectory analysis is one method of organizing the various FCI tangents into manageable pathways to aid policymakers in identifying critical engagement opportunities. When analyzing trajectories, it is useful to utilize back-casting from scenarios to illustrate possible outcomes that could occur depending upon various FCI interactions and policymaker responses to them.

## Methodology

The DCOM staff was tasked with identifying and analyzing the most urgent of the three Complex Priorities described in the previous report to DCOM. The rapid and ongoing economic crisis engulfing the globe has triggered a global recession, and is sparking a sense of urgency to answer questions about economic stability. Immediate economic concerns are consequently diverting attention away from issues of international security. Therefore, the DCOM selected **Socio-Economic Fragility** as the most pressing topic for expanded analysis.

Within the Complex Priority of Socio-Economic Fragility, the DCOM established a subset of three trajectories for analysis (*see 'Summary of the First Annual Report to the DCOM'*):

- ❖ (3.1) Socio-Economic Collapse – analyzing a series of cascading system failures leads to the breakdown of socio-economic systems,
- ❖ (3.2) Sustained Instability – when systems reach a new equilibrium characterized by the presence of inequalities and uncertainties
- ❖ (3.3) Socio-Economic Durability – when positive multilateral trends strengthen global and national socio-economic systems.

While these trajectories provided a foundation from which to further analyze Socio-Economic Fragility, the DCOM staff did not utilize them in exact form. We agreed to rename, redefine, and elaborate on the above listed trajectories. To add breadth to the Complex Priority analysis, and provide more detailed policy recommendations, the DCOM eventually transformed the three suggested trajectories into complete scenarios:

- **REVISED DURABILITY**
- **POWER SHIFT**
- **SOCIO-ECONOMIC COLLAPSE**

The staff employed back-casting to determine the intermediate steps necessary in order to transform our current world into each of the three scenarios. For each, we imagined what events must happen between the present day and the future for each scenario to become a reality. These paths form a

trajectory. Determining the trajectory involves both forecasting from the present and back-casting from the future. We then reconsidered the trajectories, attempting to see where they overlap, interact, or diverge. We also considered where these paths might reveal ‘weak signals’ that may indicate whether one future scenario is becoming more likely than another. Finally, having determined which of the trajectory and scenario possibilities were most desirable from a US viewpoint, we examined all the potential interactions previously identified in order to construct pragmatic policies that could be used to nudge the US from less desirable to more desirable trajectories.

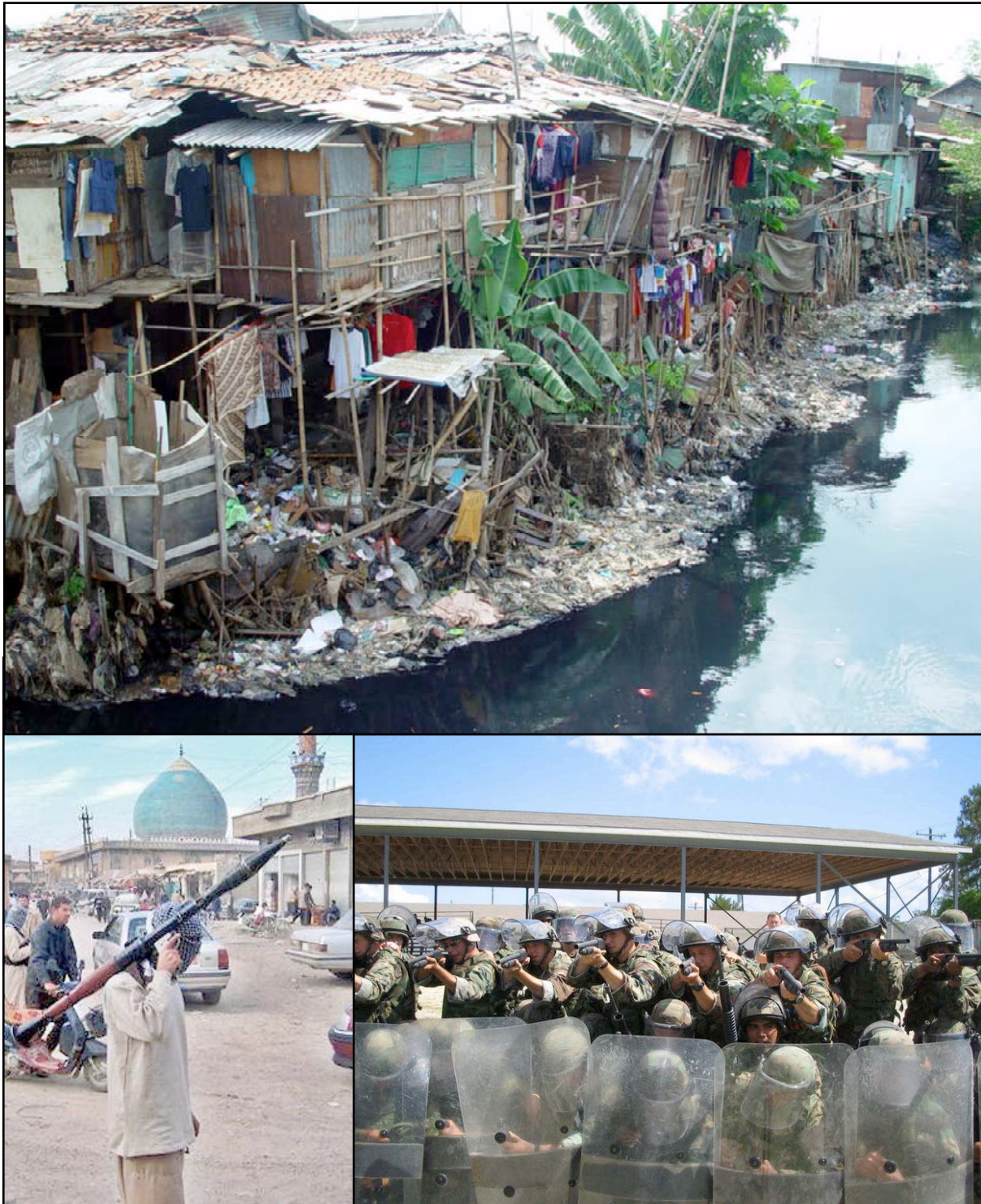
Each of the three scenarios describes vastly different global socio-economic futures. How can three starkly divergent scenarios develop from the same starting point? How can policymakers direct the United States and the world toward the most favorable scenario? To help answer these questions, we describe trajectories toward each of our defined scenarios along three time-points: short-term, <4 years, reveals those events which may be seen during the current Obama administration; medium-term, 4-12 years, discusses those events likely to occur (and indicative of our position along a particular trajectory) within the following two administrations; long-term, 12+ years, represents events in the even more distant future, closer to scenario end-states.

We examined these trajectories along five sectors of concern for mankind and the country:

- Economy
- International political dynamics
- Energy and the environment
- Security
- Social welfare

We explicitly identify events along these issues in our matrices, but allow our narratives to flow between them, as there is significant overlap and interaction among these issues.

## Section II: The Complex Priority of Socio-Economic Fragility





## **The Current Global Situation**

In its first report to the Deputies Committee on Complex Priorities, the Deputies Committee Staff outlines three complex priorities deemed crucial areas of interest for US policy makers. Since the submission of their report, one complex priority in particular has gained added urgency in light of the global financial downturn. The prospect for dramatic and immediate shifts in the world's socio-economic dynamics has, in the last several months, become a near inevitability. The possible nature of these shifts is the focus of this discussion.

As noted in the staff's Fall 2008 report, globalization has left nations more vulnerable than ever to social and economic disruption occurring around the globe, and the frequency and scale of these disruptions is likely to continue escalating. This interconnectedness of the global community became evident this winter, when a collapse in the US financial sector precipitated a global recession that has left almost no one unaffected. Unemployment has risen across the world, leading to spreading social unrest in countries like China, the possibility of state failure and insolvency even in some of the world's wealthiest centers, mass migrations of persons across borders, increased trade protectionism, and indications of a shift in political and economic influence away from the United States.

In addition to these issues, there exist a number of other challenges that could threaten to disrupt the earth's socio-economic order. These include global terrorism, as well as other non-conventional threats like piracy, which stand to severely disrupt the security of the global commons; the threat of global warming, which could alter weather patterns, food production, and sea levels, leading to massive refugee and humanitarian disasters; water scarcity resulting from irrigation, pollution and global warming; significant demographic challenges and population shifts, including the "graying" of the developed world and immigration out of poor regions; the threat of global pandemics and disease; the inevitable, if not imminent end to cheap oil; the rise of China and uncertainty over its future role in the international community; and the relative decline of American soft power and influence globally, but particularly in the developing world.

As we project these trends into the near term, we find that there is the possibility for probable trajectories to diverge in ways that could greatly alter the future. Some of the key questions that can be used to examine the earth's future level of socio-economic stability include:

- Can the American economy can recover, and on what basis?
- Can mass unemployment across much of the world be contained and/or minimized?
- What role will China, Russia, or the European Union play in the international system?
- Will the liberal democratic model remain resilient and desirable over more autocratic systems of government?
- Will terrorism, whether regional or global, increase or subside?
- Can security in the global commons be assured?
- To what extent are new green technologies able to replace traditional sources of energy?
- To what extent will climate change impact food production, population dispersal, sea levels and weather patterns, and in what time frame?
- To what extent will food and water scarcity in certain regions of the globe continue to worsen, and in what time frame?

By examining these questions as likely, and by then exploring the ways in which these factors are likely to interact, the Deputies Committee has produced three possible future scenarios:

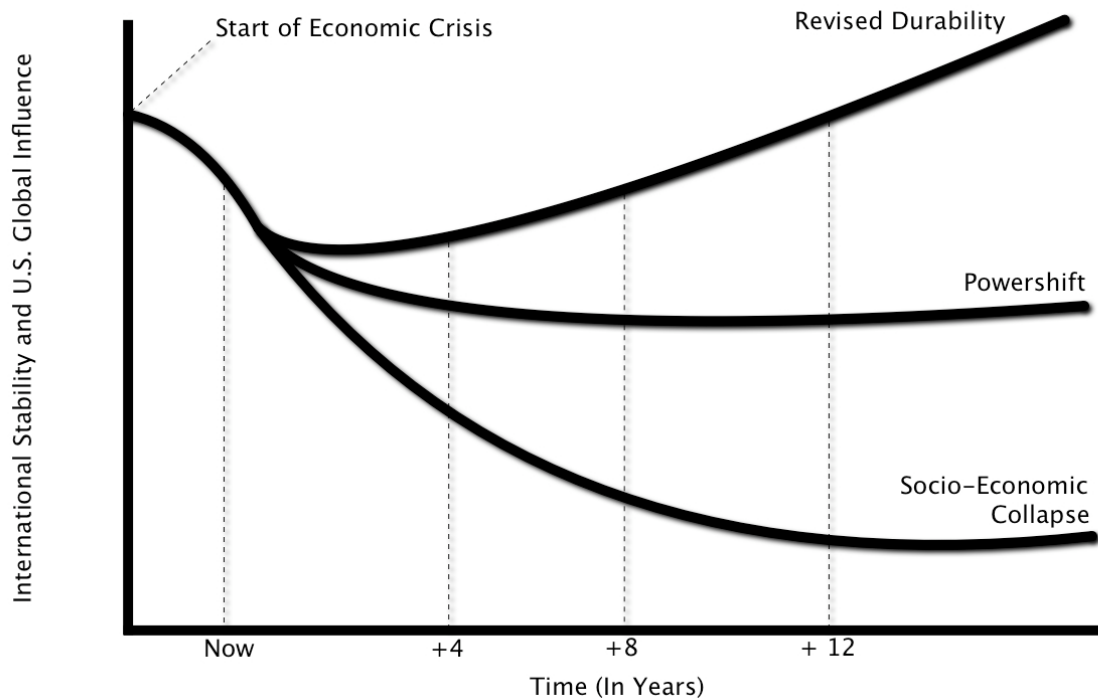
- **REVISED DURABILITY** – Most Desirable
- **POWER SHIFT** – Somewhat Desirable
- **SOCIO-ECONOMIC COLLAPSE** – Least Desirable

These scenarios are not intended to provide an exhaustive overview of all the possibilities, but instead to look at how different clusters of FCIs are likely to form, and along what trajectories they will evolve.

## The Scenarios – An Overview of SOCIO-ECONOMIC DURABILITY, POWER SHIFT, and SOCIO-ECONOMIC COLLAPSE

The following graph provides a visual representation of the imagined paths of the three scenarios. This image references the United State’s potential influence on world events using a hypothetical measure of national power relative to other states. This graph is not based on actual data, and serves only as an illustration of the differences between the trajectories and the scenarios to which they lead. The vertical axis represents the beginning of the global economic crisis, and the trajectories move forward in time through the current administration of President Obama, and the following three Presidential administrations.

### THREE SCENARIOS FOR UNITED STATES INFLUENCE AND GLOBAL STABILITY



In the following section, each future scenario is briefly described based on current global socio-economic conditions. Following these introductions, each trajectory is tracked from present day, within a succession of 4-year time frames, to each of the future scenarios in narrative.

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**REVISED DURABILITY**

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The first scenario represents a possible future in which liberal democracy has endured as the most desirable and resilient form of government, where the United States has reaffirmed its leadership role in the world, and where environmental, social and economic chaos has been held at bay. This scenario, however, does not represent the continuation or even return to the status quo prior to the current economic crisis. Rather, this scenario necessitates the greatest amount of intervention, as it requires not only that current challenges be contained, but also that fundamental weaknesses and sources of tension be resolved.

Under the REVISED DURABILITY scenario, the United States economy has rebounded on a more sustainable footing, driven by prudent economic policy, respectful diplomacy, and technological innovation. The United States and its allies have managed to adequately protect the global commons from threats such as piracy, terrorism and cybercrime, and environmental degradation and pollution, thus preserving the integrity of communication and transportation channels. Terrorists and those who would seek to employ terrorist methods are marginalized globally. China has emerged not as a strategic adversary or a source of unrest, but as a constructive and responsible stakeholder in the international community with a healthy legal system and vibrant civil society. Global food and water scarcity crises have been averted, and large-scale environmental challenges like global warming are being addressed.

The United States is leading the effort to strengthen multilateral organizations that are developing robust, effective regulatory agencies to enforce international laws. With the rigid economic downturn of 2008-2009 fresh in policy-makers' memories, these supranational bodies are establishing transparency standards for financial institutions, and individual governments are coordinating their responses to unexpected economic shifts. Having recognized the inextricability of each state with one another, the community of nations is cooperating to maintain economic stability, minimize natural and manmade threats to human security, and foster a peaceful global equilibrium.

Climate change is undoubtedly occurring, but early, internationally coordinated ambitions to sharply reduce carbon into the atmosphere have been resoundingly effective at slowing the rate of global warming. The United States is now on par with Europe in green technology, which is creating a global consensus toward ensuring environmental health. The international community, not only the United States, is continually pressing China and India to reform their environmental policies.

It is the DCOM staff's belief that this scenario represents the best possible outcome not only for the US, but for both the developed and developing world. We are aware that this viewpoint can be misconstrued as being overly 'Ameri-centric' or even hubristic. However, this viewpoint does not stem from a belief that America is somehow entitled or destined to be a world economic, military, and political leader, but rather from a rational, dispassionate analysis that suggests that the US will be best placed over the coming decades to act in a role as global leader. We emphatically reject the viewpoint that US leadership should take the form of a domineering state that frequently acts in a unilateral or self-interested manner. Rather, we promote the idea that the US engages in an inclusive leadership style that incorporates the concerns and ideas of Europe, China, Russia, India, and other developed and developing countries.

US leadership, if it is to be successful in the long-term, must enable Europe, China, and other powers to develop their own leadership capabilities in a cohesive and multilateral way. The US encourages the EU to consolidate its unity and stability, and encourages China to continue on its path of domestic development, political and economic liberalization, and responsible international influence. We also recognize that these paths of development may take decades, during which time the world will benefit from robust and benevolent United States leadership.

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## **POWER SHIFT**

Should trends continue along their current course, we envisage a scenario characterized by the redistribution of American power and influence globally, the rebuffing of the liberal democratic model by much of the developing world, and emergence of new poles of power, particularly China and the European Union. This dispersal of economic and political influence characterized by this scenario will be accompanied by the declining appeal of the liberal democratic model worldwide, especially in regions like Africa, Latin America, Asia and Eastern Europe, where a democratic tradition has not been firmly established. Global influence will be too stretched to allow for strong, unanimous international consensus on combating global issues, resulting in polarization along lines of allegiance.

Evidence of current tracking toward this scenario can be seen in the rise of Chinese influence across the developing world, the erosion of American legitimacy and soft power, the declining quality of

American education and health care relative to much of the rest of the world, and the political and economic rise of additional regional and world powers. These trends were exacerbated by the financial crisis, which provided China an opportunity to assert a leadership role in international affairs while the credibility of American-style capitalism declined.

The European Union (EU) also fills in diplomatic gaps with critical developing nations that the US State Department failed to during the immediate post-crisis years. While America's relationship with India is still strong, other emerging states like Brazil first approach the EU and China for economic assistance, trade relationships, and intergovernmental exchanges. International organizations are operational and influential, and are no longer directed by the United States, but the international community at large. The EU, China, Russia, India, Brazil, and the other members of the G20 are prominent forces in a realm once reserved for the US and its closest allies.

The power shift has also changed the dimensions of international environmental protection and prevention of global warming. Europe is taking the lead to strictly enforce carbon emissions standards on China and the United States, resulting in heightened political tension among the world's powers. Nonetheless, international agreements are slowly being reached and adhered to, albeit being constantly challenged by certain nations. Polar ice caps have begun to melt more rapidly, but a financial injection into green technology in 2009 and subsequent years by the US and EU has slowed the rate of carbon emissions. Sea levels have risen enough to cause headaches for cities and nations, but the problem of environmental refugees is still manageable.

In POWER SHIFT, the United States is witnessing a declining influence in all traditional forms of power. Its long-held economic and political superiority is now equally challenged by other powerful states and entities, and can no longer rely on old alliances to mold global outcomes. In this scenario, the US is struggling to redefine itself in a new world order, must reassess its domestic health, and constantly reassert its position on the global stage. America as leader is no longer a universally accepted premise. At this point, the United States is in stark competition with the rest of the world.

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## **SOCIO-ECONOMIC COLLAPSE**

The third scenario we identify is the most dire potential outgrowth of the current world situation, one marked by the presence of multiple regional conflicts and failed or failing states, massive refugee and

humanitarian disasters, widespread terrorism, mass migrations of persons into wealthy areas, and significant disruptions to the security of the global commons. Corruption and trade barriers, security threats to transportation routes such as shipping lanes, and resource depletion precipitate global food, water, and energy crises. Green technology has not kept pace with population increases so civilization continues to rely on fossil fuel as its main energy source. As prices rise as a result of scarce resources, poor, developing countries are left to depend on already depleted indigenous natural assets, leading to further environmental decline.

The United States is fighting for its basic survival. As a result of neglected calls to reduce global carbon emissions, natural disasters are becoming commonplace and high sea levels wash out coastal towns. In the face of substantial environmental obstacles, US agricultural production is dangerously low, and cannot keep pace with population growth as a result of southern migration. The power grid connecting people with electricity is in utter disrepair, and the last reserves of traditional energy sources such as oil and gas are being extracted. Basic infrastructure is collapsing as crumbling bridges, highways, and other transportation mechanisms go unmaintained.

The unstable global climate has given rise to protectionist and nationalistic governments in much of the developed world, and multilateral regimes are left unable to effectively mobilize to combat the world's challenges. Arms, biological weapons, and nuclear material in locations throughout the world are vulnerable to theft, and the United States cannot secure itself from attack by any of these means of warfare by any enemy element. If stable states remain and are able to sustain traditional multilateral organizations, their efforts taken to hamper outbreaks of violence, disease, and environmental emergencies are negligible. As governments collapse and anarchic sentiment takes over, liberal democratic ideals lose their appeal for hundreds of millions of people. In such a fractured global order, with numerous peoples weary of dysfunction, autocratic leaders proliferate.

Under the SOCIO-ECONOMIC COLLAPSE scenario, the United States is eking out its survival in an anarchic world. As individual nations across the globe confront the same challenges, supranational organizations have been rendered ineffective and are now incapable of containing even the most minor outbreaks of violence or terrorism. The Utopian international community is a foolhardy concept of the past, and the world has descended to Darwinian extremes.

### The Matrix – A Tool for Visualizing Change and Interactions

Tables 1, 2, and 3 on the following pages present matrices of events along the trajectories toward SOCIO-ECONOMIC DURABILITY, POWER SHIFT, and SOCIO-ECONOMIC COLLAPSE, respectively. Each trajectory is parsed by time-period and sector. The horizontal rows show a single sector of activity, describing it at the *short-, medium-, and long-term periods* of time of *less than 4 years, 4 to 12 years, and greater than 12 years*. The vertical columns show the activity that can be expected in each time period across all five sectors of analysis. Each sector is identified by color:

- **Economy**
- **International Political Dynamics**
- **Environment and Energy**
- **Security**
- **Social Welfare**

When certain events create a strong correlation with a particular sector of the matrix, the text describing that event is same color as the sector with which it relates.

The matrix below is included as an example of our color-coding, sectors, and timeline.

Example	< 4 Years	4 - 12 Years	12+ Years
	Trajectory		Scenario
<b>Economy</b>	<ul style="list-style-type: none"> <li>• Example point</li> <li>• <i>Interaction with 'Global Politics'</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Interaction with 'Economy'</i></li> <li>• <i>Interaction with 'Social Welfare'</i></li> </ul>	<ul style="list-style-type: none"> <li>• Example point</li> </ul>
<b>Global Politics</b>	<ul style="list-style-type: none"> <li>• Example point</li> <li>• <i>Interaction with 'Security' sector</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Interaction with 'Energy and Environment'</i></li> <li>• <i>Interaction with 'Social Welfare'</i></li> </ul>	<ul style="list-style-type: none"> <li>• Example point</li> </ul>
<b>Energy and Environment</b>	<ul style="list-style-type: none"> <li>• Example point</li> <li>• <i>Interaction with 'Economy'</i></li> </ul>	<ul style="list-style-type: none"> <li>• Example point</li> </ul>	<ul style="list-style-type: none"> <li>• Example point</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>• Example point</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Interaction with 'Energy and Environment'</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Interaction with 'Social Welfare'</i></li> </ul>
<b>Social Welfare</b>	<ul style="list-style-type: none"> <li>• Example point</li> <li>• <i>Interaction with 'Economy'</i></li> </ul>	<ul style="list-style-type: none"> <li>• Example point</li> </ul>	<ul style="list-style-type: none"> <li>• Example point</li> </ul>



## THE REVISED DURABILITY SCENARIO



Top: F-22A Raptor

Middle: Wind Turbines

Bottom: Wall Street

*Source: Wikimedia, except for Top photo by USAF Tech. Sgt. Kevin J. Gruenwald*

## Detailed Analysis of REVISED DURABILITY

[ The first scenario represents a possible future in which liberal democracy has endured as the most desirable and resilient form of government, where the United States has reaffirmed its leadership role in the world, and where environmental, social, and economic chaos has been held at bay. This scenario, however, does not represent the continuation or even return to the status quo prior to the current economic crisis. Rather, this scenario necessitates the greatest amount of intervention, as it requires not only that current challenges be contained, but also that fundamental weaknesses and sources of tension be resolved. ]

### REVISED DURABILITY Matrix

**Table 1** on the following page presents a matrix of events along the trajectories toward **REVISED DURABILITY**, and is parsed by time-period and sector. The horizontal rows show a single sector of activity, describing it at the *short-, medium-, and long-term periods* of time of *less than 4 years, 4 to 12 years, and greater than 12 years*. The vertical columns show the activity that can be expected in each time period across all five sectors of analysis. Each sector is identified by color:

- **Economy**
- **International Political Dynamics**
- **Environment and Energy**
- **Security**
- **Social Welfare**

When certain events create a strong correlation with a particular sector of the matrix, the text describing that event is same color as the sector with which it relates.

**Table 1: The REVISED DURABILITY Matrix**

	< 4 Years	4 - 12 Years	12+ Years
	Trajectory		Scenario
Economy	<ul style="list-style-type: none"> <li>• Domestic investment in rail and highway, healthcare, broadband</li> <li>• Strong dollar</li> <li>• Some protectionism</li> <li>• Current account debt decreases</li> <li>• Development of international financial regulation system</li> </ul>	<ul style="list-style-type: none"> <li>• Increased foreign investment in dollar holdings</li> <li>• Rising US GDP</li> <li>• Well-managed money supply and interest</li> <li>• Regional trading blocs encouraged</li> </ul>	<ul style="list-style-type: none"> <li>• US economic dominance, dollar as reserve currency</li> <li>• Free-market capitalism reigns</li> <li>• Regional trade blocs abound</li> <li>• Regulation globally managed by supranational organizations</li> <li>• Medicare, Social Security insolvency addressed</li> </ul>
Political Dynamics	<ul style="list-style-type: none"> <li>• Renewed focus on Latin American, Asian relationships</li> <li>• Promotion of democracy in China</li> <li>• Multilateral military cooperation on small-scale operations</li> </ul>	<ul style="list-style-type: none"> <li>• China abandons one-party system</li> <li>• Political liberalization throughout Asia</li> <li>• Increased adoption of democracy and human rights</li> </ul>	<ul style="list-style-type: none"> <li>• Multilateral organizations successfully contain/minimize global ills</li> </ul>
Energy and Environment	<ul style="list-style-type: none"> <li>• Construction of clean power plants, SmartGrid begin</li> <li>• Requirements for sustainable development in future projects</li> <li>• China and India continue existing energy consumption tracks</li> <li>• Blue-chip tech stocks soar</li> </ul>	<ul style="list-style-type: none"> <li>• China and India begin modest regulation of industrial sector</li> <li>• Drop in energy prices</li> <li>• Continued green technology boom</li> </ul>	<ul style="list-style-type: none"> <li>• SmartGrid complete</li> <li>• Sophisticated environmental technologies in development</li> <li>• Developed nations follow US environmental policy</li> <li>• Heavy US investment in alternative, renewal energies</li> <li>• Lower fossil fuel use</li> </ul>
Security	<ul style="list-style-type: none"> <li>• DoD acquisitions resume, target full spectrum of operations</li> <li>• Increased coalition interoperability</li> <li>• Enlistment, academy applications increase</li> <li>• Iraq, Afghanistan wars end</li> <li>• Improved civ-mil coordination</li> <li>• Developing nations stabilize</li> </ul>	<ul style="list-style-type: none"> <li>• Sufficient DoD, DHS, government manning levels</li> <li>• Increased Asian cooperation, integration</li> <li>• Decreased oil-driven conflict</li> <li>• Greater stability and legitimacy in developing world</li> </ul>	<ul style="list-style-type: none"> <li>• US has no military equal, capable of convention and irregular operations</li> <li>• Non-state actors, interstate conflicts are managed</li> <li>• Completed withdrawal from stable Iraq and Afghanistan</li> <li>• Nuclear powers retain weapons responsibly</li> </ul>
Social Welfare	<ul style="list-style-type: none"> <li>• Diplomatic promotion and funding to address global social ills</li> <li>• Internet availability</li> <li>• US investment in water supply technology</li> <li>• Promotion of globalization</li> <li>• US encourages democracy worldwide</li> </ul>	<ul style="list-style-type: none"> <li>• Diminished health and social ills</li> <li>• Clean water technology exported to developing world</li> <li>• Globalization in developing countries</li> <li>• ICC, WHO increase legitimacy and reach</li> </ul>	<ul style="list-style-type: none"> <li>• Health and social ills mostly eliminated or contained</li> <li>• English most prominent language</li> <li>• Increased acceptance of liberal democracy globally</li> </ul>

**REVISED DURABILITY: Short-Term (<4 Years)**

In the short-term, the United States takes a quick and robust lead in the recovery of the global economy. It initiates its own stimulus plan, but encourages a worldwide strategy for stemming an absolute collapse. American Recovery and Investment Act 2009 stimulates the quick and dramatic push to overhaul our energy system and infrastructure. Blue chip tech stocks skyrocket in anticipation of better and greener technological advancements. Construction firms begin to hire laborers, engineers, and technicians to build clean power plants and the nationwide Smart-Grid system. Spurred by concerns about global warming, the United States invests heavily in other technologies that can transform any water into clean drinking water, and develops solutions or mitigation strategies to problematic changes in glacier melt, aquifer levels, and precipitation patterns.

The National Institute for Science and Technology is investigating the most efficient means to distribute carbon-free energy sources such as solar, wind, nuclear. As Washington invests considerably in alternative energy projects, American use of coal, oil, and gas diminishes steadily. Although these efforts are significant, The United States trails Europe in efforts to reduce carbon emission. China and India are reluctant to change their environmental policies, but are willing to compromise because the US maintains significant international political leverage.

America's shifting relationship with energy is altering its political relationships as well. As the US becomes less reliant on foreign sources of oil, the ties that once bonded it to Middle Eastern governments are beginning to weaken. The black gold that produced such enormous wealth so quickly is no longer such a potent source of income for the Saudi Arabian monarchy and other oil-rich states. In the

**ENERGY / ECONOMY / POLITICAL  
DYNAMICS INTERACTION**

*A shift to renewable energies in the United States would be a threat to the economies of oil-exporting Middle Eastern nations, but also an opportunity for US democracy promotion efforts in the region.*

early years, their budgets become strained, but they are able to maintain control. The United States begins to invest in other forms of relationship-building in the Middle East, such as cooperation with individuals and organizations committed to political reform, because it recognizes the potential for the region to rapidly fall into disorder. The US is trending away from once ironclad ties with oppressive monarchies and dictators, and toward efforts designed to foster genuine democratic development.

The dollar, although not possessing the strength of the pre-crisis years, is still the most widely traded

currency. Countries have initially reverted to protectionism, however, due to the gravity and depth of the financial crisis. Trade slows and Americans change their spending patterns by buying less and saving more. China has toned down its manufacturing zeal, resulting in a stagnant export market with more of its citizens jobless and increasingly frustrated with the country's development model. As the Chinese economy falters, many of its allies in the developing world return their focus to the United States. In the US, the current account balance, while still negative, does not run as deep as in previous decades. Although foreign governments initially lost faith in the US economic model, Washington regains respect through the deft handling of its own troubled economy. It invests in desperately needed rail and highway systems, health care, and broadband technology. These injections, while further indebting the US to foreign governments, convince the world that the domestic economy will grow healthier in the future, thrive once again, and emerge as the global example. Investors no longer question the safety of US t-bills and bonds, and have renewed faith the historical debt incursion will be well-managed and amortized.

In this state of humbled confidence, the United States takes the lead in organizing a supranational commission to regulate financial institutions from Berlin to Beijing to Boston. Although Washington is the harbinger for an agency that will strictly enforce international banking laws, it does not serve as arbiter as it did with Bretton Woods in the post-WWII era. This is a new time – a new world order in which America earns the role as a trusted leader – not as delegator by primacy. It capitalizes on its new momentum to take actions that are best for the international community, not only itself. This is not a philanthropic endeavor; a more sustainable, cooperative, and peaceful world best serves US interests. The grim economic downturn exemplified the delicacy of our interactions with one another and between governments, and policies are now reflecting this lesson learned.

The United States, buoyed by a resurgent economy and an increase in global goodwill, reaffirms its leadership role in the international community. It promotes economic assistance and civil society support to developing nations based on a new incarnation of the Washington consensus, building greater support for liberal democracy while at the same time promoting equitable development. Europe and the United States work in tandem to quietly promote the cause for democracy across the globe. America's brand of liberal democracy, although different from European models, is viewed as a reputable system capable of being delivered to another society in a manner reflecting an understanding of their culture. Through such programs, the United States reestablishes long-neglected relationships in Latin America and Asia. In China, these democracy-building projects begin to progress toward peaceful transition

away from a one-party system. The United States concurrently promotes international trade and commerce, especially in services, via the Internet and provides funding for Internet infrastructure development in gap regions such as sub-Saharan Africa and the Middle East<sup>1</sup>.

Many leaders of these same developing nations begin good-faith efforts to increase their stability. States to which people have immigrated struggle to handle population increases and maintain their own stability, but effective international assistance allows for proper mitigation of refugee and migration issues. The US promotes international justice systems like the ICC and prosecute those responsible for genocide. The US, through funding the WHO and NIH, has contributed to significant progress in AIDS and malaria cures. The UN has an increased role in promoting women's rights through ECOSOC and literacy via UNESCO. Additionally, the US policy is now to unequivocally link aid provision to improvements in women's rights, freedom of the press, and human rights. The US works actively to strengthen international organizations on all levels from containing pandemic disease, to curbing environmental hazards, to reducing worldwide poverty, to facilitating peace-keeping operations in the event of war.

Recognizing the urgent threat posed by global warming, the United States demonstrates leadership by ratifying and adhering to a post-Kyoto climate change agreement, and pressures the developing world to follow suit. The United States continues to develop renewable energy technologies, and the Smart Grid system to utilize them, becoming a lead exporter in this field as developing countries face international and domestic pressure to reduce pollution and alleviate the threat from climate change.

*ECONOMIC / ENVIRONMENTAL  
INTERACTION  
Renewable energy technologies  
become a booming export business  
for developed countries.*

As the US military winds down from Iraq and Afghanistan, it refocuses much of its efforts on peacekeeping, humanitarian assistance and development projects, while also devoting smaller, specialized military forces to combating terrorism and piracy in cooperation with allies in Europe, Japan, South Korea, and Canada. The United States thus reengages in existing multilateral organizations as a highly cooperative partner, resulting both in an increase in American soft power as

<sup>1</sup> The "gap" refers to those nations left behind in the globalization of developed and developing nations. See Tom Friedman's The World Is Flat for more detail.

well as the strengthening of multilateral regimes. Furthermore, mid-life upgrades and other modifications to existing US platforms allow for interoperability with new technologies as well as more efficient and effective allied cooperation, resulting in a more integrated overseas presence and streamlined multilateral operations.

Remaining forces in Afghanistan and Iraq apply the lessons of previous draw-downs to effectively disarm, dismantle and destroy Taliban and Al Q'aida structures. There is more coherence of remaining efforts in these countries as efforts to improve civil-military coordination gain traction—modified Provincial Reconstruction Teams operate in a more holistically, both locally and regionally. There is an increased focus on efforts at the local/district level, where the impact of both military and rebuilding efforts more concretely contributes to better bilateral relationships. We begin to see real progress toward attaining strategic objectives of fostering strong relationships with people who do not provide a safe haven for extremists and supporting the legitimate, elected government in which these people have a stake.

With renewed economic vitality, new US Department of Defense (DoD) acquisitions, such as fighter jets and aircraft carriers return to or exceed pre-recession levels. Budget allocations are able to sustain emerging technologies (i.e. the F-22) and encourage the development of additional platforms for many diverse missions including intelligence gathering, surveillance, reconnaissance and electronic defense. Unmanned aerial and ground-based craft evolve in a way that supports such advancement.

### **REVISED DURABILITY: Medium-Term (4-12 Years)**

Foreign governments, having witnessed the resilience of the US economy and political leadership, invest heavily in US dollar holdings. However, global trade has not yet reached levels seen before the economic downturn, and the turn away from regionalism and toward multilateral trade is only just occurring. The United States maintains its regional trade agreement (NAFTA) while encouraging trade among blocs. GDP has been increasing steadily in the past few years due to renewed confidence in the economy, government stimulus in the aftermath of the crisis, and increased private sector investment. The technology sector continues to flourish with advances across the spectrum, particularly as energy-capturing efficiencies are realized. The Federal Reserve Bank carefully manages monetary supply and interest rates to prevent inflation during this period of growth and increased borrowing.

Initial energy infrastructure construction phases are almost all complete. Energy prices have now diverged based on oil have dropped tremendously (oil & gas or Green), and tax breaks and rebates for environmental spending (hybrids, solar roofs, etc.) are quietly curtailed. Housing construction is now done almost exclusively using sustainable methods; installation of solar paneled roofs and better insulation techniques become the norm. China and India have begun applying precautionary measures and properly regulating their industrial sector. Decreased dependence on foreign oil supplies the world over, due to burgeoning alternative energies, could lead to either a decrease or increase in geopolitically-driven instability.

As developed nations become less dependent on the Middle Eastern governments for steady supplies of oil, their autocratic strongholds will weaken as income runs dry. Without the ability to maintain the lifestyles to which their populations have become accustomed, the citizens will no longer tolerate oppressive rule. Regional instability would become an inevitable prospect. However, if the US is able to firmly establish the tenets of democratic governance in neighboring nations where even a modicum of political space exists, a Middle East debacle resulting from clean energy may be averted.

Stability in Afghanistan and Pakistan improves markedly. This, paired with increased strength and stability of legitimate actors, and renewed internal coherence, leads to improved governance in these countries. Correspondingly, India and other regional actors move toward facilitating cross-border cooperation and commerce. The movement of goods and people allows for previously unseen levels of cross-border economic cooperation in Central, South, and East Asia.

The world over, democracy and human rights are more widely embraced, although different regions carry on their unique culturally and historically-based interpretations of these terms. Most remaining opposition to American liberal democracy has diminished, and differences in governance are few, even if differences in government still remain.

Moreover, innovations in communication and information technology help bridge many cultural divides and conflicts within and between the young people of inchoate democracies. The Internet is widely accessible in all developed and most developing countries and widely used for communication across long distances. With a vibrant civil society and modernizing legal system, China emerges as a valuable strategic ally and a responsible stakeholder in the international community, thus spurring



greater political liberalization throughout Southeast Asia, Central Asia and North Korea.

With significantly improved stability throughout the world, currently stable, developed countries begin to shift their security focus. Countries with improved public morale due to the prospect of legitimate governance are more productive actors on the world stage. In fact, robust multilateral organizations are able to effectively contain and minimize emerging threats, such as climate change, weapons proliferation, food and water scarcity and disease. The ICC is more powerful and well-respected than ever before, and states have signed on to enforcement of ICC judgments and are prepared to use peaceful force to ensure compliance. The World Health Organization has a renewed purpose as orchestrator of the world's pandemic management policies, and key states in all regions have helped formulate and agreed to use the WHO's standardized mechanisms to ensure timely sharing of pandemic-related information and treatment. Other institutions, like the UN, have an increased role in the promotion and implementation of women's rights and freedom of the press issues. Most target countries have improved their records in these two areas, mainly due to withholding of aid and access to trade if certain target milestones are not achieved. Many formerly poverty-stricken African nations even begin to ensure their own stability after effectively recovering from the wake of mass refugee migration, ethnic cleansing, and conflict.

With a growing drive to understand and monitor aquifers, glaciers, and precipitation patterns, scientists can more effectively manage potable water levels and use water more efficiently. Although these are significant scientific breakthroughs, the most useful breakthrough has been a cost-efficient way to transform any water into clean drinking water. These machines are being deployed throughout low-water regions such as sub-Saharan Africa and the Middle East. Experimental AIDS and malaria drugs continue to have increasing levels of success.

### **REVISED DURABILITY: Long-Term (12+ Years)**

The United States is the dominant economic heavyweight. Alternate systems, such as centralized economies, have failed in their promise to be viable alternatives to free-market capitalism. Although the United States continues to champion globalization and free markets, it does so under a wiser set of regulations, oversight, accountability, and safeguards. The world remains closely coupled to the US economy, and the US dollar remains the world's reserve currency. Regional trading blocs are more

permanent and used as a counterbalance to US economic heft. The crisis of 2008/2009 has been relegated to economics textbooks, where its causes, consequences, and solutions are described with great certainty.

Domestically, the United States begins to tackle the problems of Medicare and Social Security insolvency. While not completely solved, a method for fixing these problems is becoming clearer. Concurrently, the country takes steps to reduce its fiscal and trade deficits. Although still consumer-driven, America has managed to reduce its debt-fueled consumption patterns, without a severe drop in the quality of life for its citizens. The US economy remains dynamic and innovative, and continues to develop new technologies and services to offer to consumers and clients. New big businesses arise, bringing with them new issues for the enforcement of intellectual property rights. More US companies have achieved global status. With these factors combined, regulation and enforcement of intellectual and other property rights begin to occur globally through supranational organizations like the WTO. China, now well equipped to protect intellectual property, becomes a center for technological innovation.

The US continues to reap the rewards of infrastructure projects begun over a decade before. As a result of heavy investment in alternative energies (solar, wind, geothermal, tidal, and hydroelectric), efficiency has finally been realized. Policies have been implemented to drastically overhaul our energy system and our dependence of fossil fuel (coal, oil) is greatly reduced. A clean energy infrastructure is being built at an exceedingly rapid pace, and in the interim, clean coal is used as a primary energy source. In fact, dependence on foreign oil has been drastically reduced, and the United States has begun to export coal. Sustainable practices for resource extraction (agriculture, forestry, and mineral) have become standardized and legally regulated. Carbon capture technology is commercially available.

A complementary nation-wide Smart-Grid system, running nearly exclusively on renewable energies, has been completed. Other technologies for cooling the planet are advancing as well and showing real signs of promise. Warming trends and rising sea levels have proven to be slower than scientist had initially feared. Polar ice caps have continually refrozen but scientists continue to worry this may not be true in the future. The other prominent powers of the world have begun taking steps to follow our lead on environmental policies. China and India have continued to value growth over environmental sustainability, but have begun applying precautionary measures and regulations in the face of global criticism and sanctions, and internal pressure from their own populaces.

In the developing world, the United States is seen as a symbol of hope, encouraging both a brain drain of the highly intelligent and skilled upper echelons, and emigration of low-skilled labor from these countries. The rise of the Internet and other alternative forms of news media has also encouraged increase in freedom of the press in many areas, contributing to the overall rise/acceptance of liberal democracy as an effective form of government. Additionally, the status of women worldwide has improved, and women enjoy relatively equal access to education and opportunities as the men in their countries. This contributes to a worldwide rise in literacy rates as more people obtain the basic skills to function in an interconnected global environment. English is undoubtedly the unofficial ‘world language’ due to its pervasive use on the Internet, which is now accessible to most everyone in the world.

Terrorists have been marginalized globally and piracy has been reduced to a manageable level. The US has made great strides in shoring up its cyber-infrastructure defenses. It also has no peer or near-peer military competitors, and maintains a military force well-balanced to address either major combat or irregular missions as they come up. Acquisitions programs reflect this balance. For the most part, however, conflicts of significant scale have been minimized or contained, and additional interstate conflicts are minimal or manageable. The wars in Iraq and Afghanistan wars are over--US military forces have completely withdrawn (to include advisory units) and governments are stable. Although this scenario is not a nuclear weapon-free world, all global nuclear weapons stocks have been accounted for and have been reduced. Nuclear powers commit to the diplomatic resolution of disputes. Strains in relations are addressed through constructive dialogue on everything from terrorism to economics.

Global growth has resumed, and there is a general decrease in poverty worldwide. Many of the problems that plagued world populations in 2009 have been eliminated or contained. Populations no longer worry about the availability of potable water, especially in sub-Saharan Africa. Humanitarian crises such as genocide are effectively contained and managed in ways that do not threaten regional stability. The prevalence of pandemic diseases like AIDS and malaria has been greatly decreased, and the world has adopted a plan to manage future outbreaks quickly and effectively, severely decreasing the likelihood that another SARS-like episode would threaten the global population.

## THE POWER SHIFT SCENARIO



Top: Meeting Hall of the European Parliament

Middle: Meeting Hall of the UN Security Council

Bottom: Meeting Hall of the National People's Congress, China

*Source: Wikimedia Commons*



## Detailed Analysis of POWER SHIFT

[ Should trends continue along their current course, we envisage a scenario characterized by the redistribution of American power and influence globally, the rebuffing of the liberal democratic model by much of the developing world, and emergence of new poles of power, particularly China and the European Union. ]

### POWER SHIFT Matrix

**Table 2** on the following page presents a matrix of events along the trajectories toward **POWER SHIFT** and is parsed by time-period and sector. The horizontal rows show a single sector of activity, describing it at the *short-, medium-, and long-term periods* of time of *less than 4 years, 4 to 12 years, and greater than 12 years*. The vertical columns show the activity that can be expected in each time period across all five sectors of analysis. Each sector is identified by color:

- **Economy**
- **International Political Dynamics**
- **Environment and Energy**
- **Security**
- **Social Welfare**

When certain events create a strong correlation with a particular sector of the matrix, the text describing that event is same color as the sector with which it relates.

**Table 2: The POWERSHIFT Matrix**

	< 4 Years	4 - 12 Years	12+ Years
	Trajectory		Scenario
Economy	<ul style="list-style-type: none"> <li>• Loss of domestic, foreign faith in US financial system</li> <li>• Shift to holdings in other currencies</li> <li>• Infrastructure investment limited to repair</li> <li>• Debt high</li> </ul>	<ul style="list-style-type: none"> <li>• BRIC, EU relative economic dominance increase</li> <li>• Globalization not driven by West</li> <li>• Positions of power in IMF, WTO shift</li> <li>• Medicare and Social Security insolvent</li> </ul>	<ul style="list-style-type: none"> <li>• US, BRIC, EU share economic dominance</li> <li>• Increased global connectedness</li> <li>• Supranational organizations regulate world finance</li> <li>• US unable to fund all needed public services</li> </ul>
Political Dynamics	<ul style="list-style-type: none"> <li>• US global influence declines</li> <li>• Governance shift or failure in emerging democracies</li> </ul>	<ul style="list-style-type: none"> <li>• US military might remains</li> <li>• Operations increasingly multilateral</li> </ul>	<ul style="list-style-type: none"> <li>• Competition with other power blocs</li> <li>• US unable to police globe unilaterally</li> </ul>
Energy and Environment	<ul style="list-style-type: none"> <li>• US investment in alternative energies</li> </ul>	<ul style="list-style-type: none"> <li>• Slow development of clean energy infrastructure</li> <li>• Clean coal as primary energy, decreased dependence on foreign oil</li> <li>• China and India apply limited regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate progress on energy SmartGrid</li> <li>• Alternative energies are beginning to be fully realized</li> <li>• Reduced coal use</li> </ul>
Security	<ul style="list-style-type: none"> <li>• DoD spending centers on personnel care</li> <li>• End-strength plus-ups on existing course</li> <li>• US maintains nuclear arsenal with renewed responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic holding of energy resources still consideration</li> <li>• Decreased global reliance on foreign oil reserves</li> <li>• Stability in developing world improved but not assured</li> </ul>	<ul style="list-style-type: none"> <li>• Acquisition of conventional combat capabilities</li> <li>• Cybersecurity concerns</li> <li>• Increase in nuclear-capable nations</li> <li>• Rebuilding in Afghanistan continues</li> <li>• Near-peer military competitors</li> </ul>
Social Welfare	<ul style="list-style-type: none"> <li>• Concerns within US over future potable water availability</li> <li>• US funding of global health initiatives continues</li> <li>• Spotty compliance with social, human rights</li> </ul>	<ul style="list-style-type: none"> <li>• Disease outbreaks continue in developing world</li> <li>• Polarization on social welfare issues</li> <li>• Glacier melt offsets potable water concerns</li> </ul>	<ul style="list-style-type: none"> <li>• Stable literacy rates</li> <li>• Increased wealth disparity</li> <li>• Limited pandemic management</li> <li>• Women's rights promoted</li> <li>• Humanitarian aid leads to alliances with benefactor nation</li> </ul>

**POWER SHIFT: Short Term (<4 Years)**

The United States emerges from the economic crisis but is significantly knocked back from its previous position. Trusted banks and automakers have defaulted on US loans and have no capacity to repay them. As a result of the loss of trust in the US financial system, foreign governments turn away from America as the vanguard of economic stability. The strength of the US dollar is dropping and foreign governments are selling their dollar holdings, instead purchasing other currencies such as the Euro.

The United States continues to invest in infrastructure at the rate that its tax revenues allow, but because its GDP is growing at a slower pace than in previous years, this infrastructure spending goes only towards repairs. Although funding is limited, the United States continues to invest in alternative energies (solar, wind, geothermal, tidal, and hydroelectric); some have reached the necessary level of efficiency required to begin repowering the country. Policies have been implemented to overhaul our energy system reducing our dependence of fossil fuels. Construction of a clean energy infrastructure faces the same steady, but slow, progress.

Attempts to be frugal with US funds as the country recovers also lead US DoD resources to focus to a large extent on the existing cost of care of personnel, vets, and retirees. Post-traumatic stress disorder and associated ailments are, and will continue to be, the signature military medical challenge facing the DoD. Mental health care becomes a major priority of the defense community. Applications for military academies and for enlistment remain at current level due to these considerations. In an effort to meet the nation's commitments and relieve stress on our forces and their families, the DoD continues to expand the end-strength of forces with these existing join rates. It begins to think creatively about ways to attract the best military officers.

Funding for defense is strained in Afghanistan and Iraq, despite the fact that the US military has begun to draw down its forces—much remains to be resolved. Based on past experience in Afghanistan—and applicable lessons from Iraq—assessments temper expectations on how or whether we might be able to achieve our goals. Having recognized the imperativeness of stability in both Afghanistan and Pakistan, the international community is coordinating military, economic, and civil-society building efforts. In combating nebulous terrorist Taliban and Al Q'aida networks, the United States cannot possibly operate unilaterally. Washington now depends on the collective action of global leaders to address the complex challenges ahead.

The gradual decline in American soft power and diplomatic influence continues concurrent with its financial torpor, exacerbated by the United States' inability to provide strong and timely leadership amidst a global economic downturn. China, along with regional powers like Brazil, Indonesian, India, seek to fill the leadership opening as it begins to develop. Supranational organizations such as the ICC lack comprehensive enforcement mechanisms, but is developing a more respected and influential position in the international community.

Due to the speed and easy flow of internet information, autocratic governments face increased internal pressure to liberalize, both politically and economically. Because US requests for improvement in women's rights, freedom of the press, and human rights issues are tied tightly to aid, some countries still bend to US influence. Others, however, have repudiated the traditional concept of the United States as a benefactor and turned to other global powers such as a China, the EU, or Russia for support. These diverted linkages serve to polarize the world.

As a response to its waning global influence, the United States strives to maintain a safe and credible nuclear deterrent. The stewardship of that arsenal is one of the most sensitive and decisive missions. Grave previous lapses in the handling of nuclear weapons and material (as a result of problems in training, expertise, resources, and accountability) lead to implementation of reforms from unit level and to top leadership. Despite the shortcomings of the past, the US nuclear deterrent remains safe, secure, and reliable.

Because federal debt as a percentage of GDP is at an all time high, programs such as Medicaid and Medicare begin to prove unsustainable. More broadly, health concerns surround the future availability of potable water—the country starts to realize that concerns over potable water supplies may soon lead to regional instability that affects US interests worldwide. Some investment is made in exploration of clean water technologies. The United States also continues to fund AIDS and malaria drug research as practicable.

#### **POWER SHIFT: Medium Term (4-12 Years)**

US economic strength declines relative to China, India, Brazil, and the EU. Countries rely less on their use of the dollar for their currency, or to peg their own currency to a weighted basket rather than solely to the dollar. The global economy remains interconnected, but this globalization is no longer driven by



the West. In fact, the United States has lost its veto power in the IMF (although it still helps to fund it). Moreover, IMF leadership does not always have a European face; the World Bank is not always run by an American. Most of the world still abides by WTO rulings, but the US increasingly loses cases. Global economic events are partially decoupled from the US economy, behaving somewhat independently of it.

Domestically, the United States maintains its consumer-driven and service-oriented economy, but other nations have gained in economic strength and dynamism. Individual states continue to experience problems funding infrastructure or other programs, and the federal government is unwilling or unable to make up the shortfall. Medicare is insolvent, and there is no feasible plan for fixing Social Security. Increases in military enlistments/commissions help maintain a sufficient US military structure—personnel who normally may have sought short-term military careers are inclined to stay due to reliability of pay and benefits.

Technologically, advanced clean coal remains our principle energy source. Foreign dependence of oil has correspondingly decreased—a boon, since foreign oil supplies are less reliable. A decrease in the need for foreign oil leads to a corresponding decrease in geopolitically-driven instability; however, classic

*ECONOMICS / POLITICAL  
DYNAMICS INTERACTION*

*A reduction in US dependence on foreign oil will not end the use of energy as a geopolitical tool.*

“great game” thinking remains a problem – especially vis-à-vis Russia. Russia continues to flex its influence through tight control of the oil and natural gas pipelines to European nations. Sustainable practices for resource extraction (agriculture, forestry, and mineral) have become standardized and legally regulated. Carbon capture technology has received incredible increases in funding and is theorized to be operational in the next 10 years. Other technologies for cooling the planet are advancing as well on the same plane. The US is also in the preliminary construction stage for the nation-wide Smart-Grid system.

Stability in Afghanistan and Pakistan improves, but important concerns remain. Questionable reliability of legitimate actors and internal coherence leads to uncertain governance prospects. India and other regional actors have reservations about decreasing military presences along the borders. Despite improvements, imports and export levels along with cross-border transit in general remain impeded by these issues.

Due to their proximity to strife, many formerly poverty-stricken African nations are still able to begin

ensuring their own stability after effectively recovering from the wake of regional conflicts. No long-term solutions exist for pandemic disease issues such as AIDS, malaria, and other potential outbreaks. In other developing countries, the shortage of potable water supply has been averted, at least temporarily, due to the rate of glacier melt. However, no long-term solutions exist for the issue. The ICC continues to lack enforcement mechanisms, although it remains a well-respected institution among the developed nations.

With significantly improved stability throughout the world, currently stable, developed countries begin to shift their security focus. The United States remains the preponderant source of political and military influence into the medium-term, and together with allies, multilateral regimes are able to provide some relief in response to the world's evolving challenges. Countries with improved public morale due to the prospect of legitimate governance are more productive actors on the world stage, but they compete with other countries for influence in a way that is not entirely productive. In fact, the world has been further polarized as smaller countries "take sides" based on whether or not they wish to comply with US requests to improve women's rights, freedom of the press, and human rights issues. Smaller countries are clearly coalescing around the numbered powerful countries as benefactor alliances form.

### **POWER SHIFT: Long Term (12+ Years)**

The US is still a major economic force, but now shares its elevated status with other powers throughout the world. China, India and Brazil are now counterweights to the United States and EU, and are forming their own powerful trading blocks. As a result, the dollar is no longer the most widely traded or held denomination, although is still strong relative to other currencies. The United States is struggling to draw down its debt to the Chinese and Japanese. Supranational institutions are functioning and central to enforcing financial systems regulations, and no longer favor Western interests. China and Brazil are still major exporters of manufactured goods, while the West and India are more service-oriented export industries. Both inward and outward FDI are common and prevalent, creating increasingly interconnected economies. Because substantial debt remains, domestic infrastructure is in need of repair but there is little means to finance it. Although a universal healthcare system is still not in place, the public is widely clamoring for its implementation, and the government recognizes its necessity for the welfare of the nation. The Social Security system is bankrupt and government agencies are attempting to establish a more modern system of retirement security. Individual states, while attempting to finance necessary programs like emergency preparedness on already strained budgets, are

becoming increasingly dependent on the federal government for funding and direction.

The health of the environment and the development of green technology are adequate. Warming trends and rising sea levels have proven to be slightly lower than scientist had initially feared though growing evidence predicts world-altering effects by the end of the century. Polar ice caps have managed to refreeze but scientists question for how much longer. The other prominent powers of the world have begun taking steps to follow our lead on environmental policies. China and India have continued their “business as usual” approach but have begun applying precautionary measures and regulations in the face of global criticism and sanctions.

As geopolitical challenges grow, the United States—already burdened by domestic challenges—is stretched too thin to adequately police the international community. Moreover, competing power blocks – including a possible coalition of Russia, China – render it increasingly difficult for multilateral organizations to function on a cooperative basis to address the world’s emerging challenges. China has gained, and Russia has regained, military capability and material such that they are now both near-peer competitors with the United States. Each of these major world powers maintains a strong global presence through permanent bases in allied countries, and all have blue water Navies capable of global reach. NATO abandons the idea of expansion in light of these new structures. The list of nuclear weapons-capable nations has increased dramatically, although no additional countries have reached the levels of stockpiles currently held by the US and Russia.

Because of these new potential threats, terrorism and irregular warfare are significantly less of a security focus, and new US military acquisitions programs are focused on big-ticket items, such as fighter jets and submarines. As other world powers seek to match US military dominance, they also seek to gain an upper hand in other, less kinetic offenses--cybersecurity is a major concern of the US military and civilian worlds alike, and "probing" attacks are commonplace.

The United States is still engaged in ongoing efforts to help Afghanistan rebuild itself after years of war. The US, along with others in the international community, provide resources and expertise to Afghanistan in a variety of areas, including humanitarian relief and assistance, capacity-building, security needs, counter-narcotic programs, and infrastructure projects. The efforts continue to be taxing, but allies are willing to work together in pursuit of shared security objectives.

Fortunately, many of the world's problems in 2009 have been eliminated or contained. Potable water is available to world populations in relatively abundant amounts. Humanitarian crises are effectively contained and managed, but often lead to regional alliances or increased ties with a 'benefactor' country. Pandemic diseases like AIDS and malaria have been greatly decreased through scientific advances, but the world still lacks a coordinated plan to deal with future outbreaks. Women have enhanced ability to pursue education or other opportunities and comprise significant membership in the workforce, especially in countries ruled by authoritarian regimes. Literacy rates remain stable, allowing countries like the United States, Russia, China, and much of Europe to remain 'a step ahead' in terms of development and economic opportunities. The gap between the "haves" and "have-nots" remains.

## THE SOCIO-ECONOMIC COLLAPSE SCENARIO



Top: Homeless person in Bogata, Columbia  
Middle: Riots in Paris, 2007  
Bottom: Riot Police Training, Finland  
Source: *Wikimedia Commons*

## Detailed Analysis of SOCIO-ECONOMIC COLLAPSE

[ This scenario depicts a world in which local and international order has fractured, marked by the presence of multiple regional conflicts, failed or failing states, massive refugee and humanitarian disasters, widespread terrorism, mass migrations of refugees into wealthy areas, and significant disruptions to the security of the global commons. ]

### SOCIO-ECONOMIC COLLAPSE Matrix

**Table 3** on the following page presents a matrix of events along the trajectories toward **POWER SHIFT** and is parsed by time-period and sector. The horizontal rows show a single sector of activity, describing it at the *short-, medium-, and long-term periods* of time of *less than 4 years, 4 to 12 years, and greater than 12 years*. The vertical columns show the activity that can be expected in each time period across all five sectors of analysis. Each sector is identified by color:

- **Economy**
- **International Political Dynamics**
- **Environment and Energy**
- **Security**
- **Social Welfare**

When certain events create a strong correlation with a particular sector of the matrix, the text describing that event is same color as the sector with which it relates.

**TABLE 3: The SOCIO-ECONOMIC COLLAPSE Matrix**

	< 4 Years	4 - 12 Years	12+ Years
	Trajectory		Scenario
Economy	<ul style="list-style-type: none"> <li>• Economic bail-out efforts fail</li> <li>• Global position of dollar declines</li> <li>• Implementation of trade barriers by nations</li> <li>• <b>Supranational economic organizations powerless</b></li> </ul>	<ul style="list-style-type: none"> <li>• Value of dollar continues to decline</li> <li>• International trade declines</li> <li>• Development of black-market banking</li> <li>• <b>Regional financial organizations replace global ones</b></li> </ul>	<ul style="list-style-type: none"> <li>• Widespread instability of domestic currencies</li> <li>• Protectionist economies</li> <li>• Extremist economic philosophies abound</li> <li>• <b>Supranational financial organizations fail</b></li> <li>• <b>Proliferation of black-market economy</b></li> <li>• <b>Surging unemployment worldwide</b></li> </ul>
Political Dynamics	<ul style="list-style-type: none"> <li>• Developing world powers seek to replace diminished US influence</li> </ul>	<ul style="list-style-type: none"> <li>• Domestic issues in emerging powers prevent them from filling hegemonic role</li> </ul>	<ul style="list-style-type: none"> <li>• Multilateral organizations prove ineffective</li> <li>• Interests focus on regional, domestic issues</li> </ul>
Energy and Environment	<ul style="list-style-type: none"> <li>• Alternative energy technology in small-scale use</li> <li>• Economic focus shifted away from SmartGrid</li> <li>• Continued dependence on coal, foreign oil</li> <li>• Chinese and Indian energy requirements increase</li> </ul>	<ul style="list-style-type: none"> <li>• US still dependent on coal energy</li> <li>• Alternative energy only partly implemented</li> </ul>	<ul style="list-style-type: none"> <li>• Alternative energies not fully harnessed</li> <li>• US still dependent on foreign oil</li> <li>• Limited enforcement of environmental policies</li> <li>• China and Indian follow existing consumption trends</li> </ul>
Security	<ul style="list-style-type: none"> <li>• Acquisition of surveillance, patrol platforms</li> <li>• US withdrawal from abroad</li> <li>• African stability diminished</li> <li>• Traditional terrorism</li> <li>• Increased viability and reach of non-state actors</li> <li>• Iran has nuclear weapons</li> <li>• <b>Military personnel cutbacks</b></li> <li>• <b>Increased Middle Eastern defense spending</b></li> <li>• <b>Eco-terrorism</b></li> </ul>	<ul style="list-style-type: none"> <li>• Collapse of Pakistan</li> <li>• US military end-strength reduced</li> <li>• Widespread African collapse</li> <li>• <b>Homeland defense increase</b></li> <li>• <b>Increase in US import security</b></li> <li>• <b>Institution of social stability measures globally</b></li> </ul>	<ul style="list-style-type: none"> <li>• US domestic surveillance flourishes</li> <li>• <b>States focus on internal, border, and domestic resource security</b></li> </ul>
Social Welfare	<ul style="list-style-type: none"> <li>• US international social policies neglected</li> </ul>	<ul style="list-style-type: none"> <li>• Xenophobia abounds</li> <li>• Global social, health ills not addressed</li> <li>• <b>US water shortage</b></li> </ul>	<ul style="list-style-type: none"> <li>• Unmanageable disease</li> <li>• <b>Global education, literacy drops</b></li> <li>• <b>Domestic tensions along lines of identity distinction</b></li> </ul>

## **SOCIO-ECONOMIC COLLAPSE: Short-Term (<4 Years)**

In the short term, the economic crisis fails to dissipate. Developed and developing countries continue to keep interest rates near zero, and to launch attempts to stimulate their economies or bailout key industries. These attempts fail to stabilize or grow the world economy. Internationally, the G8, G20, OECD, and World Economic Forum continues to meet, but consensus becomes more difficult to achieve, and many meetings are widely perceived to have failed to accomplish anything meaningful.

The world marks 10 years since the beginning of the Doha round of WTO talks without completion of negotiations. Countries begin to ignore WTO rulings and deal with trade issues on a bilateral or unilateral basis by continuing to implement technical barriers to trade. Some countries also begin to implement blatant non-technical barriers to trade. Indicators of the health of international trade, such as the Baltic Dry Index, continue to decline from their 2009 levels, falling to less than 5% of their 2007 highs.

Large international commercial banking conglomerates fail and are broken up by their creditors, with their pieces being sold at ‘fire-sale’ prices. The economic crisis metastasizes into another phase as developing countries experience waves of insolvency and permanent economic collapse. The dollar begins a steep decline as fear over the US’s long-term fiscal health grows. Debtor nations such as China

**ECONOMIC / POLITICAL  
INTERACTION**

*The United States uses political leverage to stifle dollar-selling panics in international markets.*

and Japan begin to quietly diversify away from their dollar-holdings on an unprecedented scale. The US has trouble selling new issues of Treasuries. Short episodes of dollar-selling panic erupt periodically, and are sometimes stifled by US political arm-twisting.

The US proves too overburdened by debt, healthcare costs, a deteriorating education system, and ongoing wars to provide strong and credible leadership in the international community. Women’s rights, freedom of the press, and human rights issues remain as tangents in US foreign policy. As the world’s sole superpower saw its influence gradually decline in most regions of the globe, the power vacuum was filled by China, along with regional powers like Brazil, Russia, Indonesian, India and others. However, these nations also face significant challenges domestically, including massive unemployment, unrest, unfavorable demographics, food and water shortages, and ethnic or religious conflict. With the absence of human-rights pressure from the United States and other western powers,



these countries generally greet any civil unrest with draconian crackdowns. Multilateral regimes like the United Nations, ASEAN, and the African Union are rendered ineffective by the inability of states to form consensus or to properly fund programs.

The Obama administration's stimulus bill encourages alternative energy use, but progress is slow and the technology advances too slowly to replace fossil fuels. Implementation of the 'Smart-Grid' electrical system began, but funding fell short as economic and political pressure focused national attention on short-term stability. Therefore, coal is still the principle source of electrical power for the US, and carbon capture technology becomes more desirable. The nation is still dependant on foreign oil, as are China and India.

Department of Defense acquisition of big-ticket items, such as fighter jets and aircraft carriers, is halted at current fiscal year levels. Budget allocations instead shift toward acquisition of items such as the Littoral Combat Ship, unmanned intelligence, surveillance, and reconnaissance assets, and Coast Guard patrol craft. Existing large ships and aircraft are used with decreased frequency, as funds and oil prices preclude their persistent use and presence abroad. The US completely withdraws forces from Iraq. These factors lead to a significantly decreased overseas presence and operational tempo of US forces. Applications for military academies and for enlistments sky-rocket as the likelihood of deployment decreases and Americans seek secure, well-paying jobs; however, with an ever increasing debt, the US is forced to cut back on defense personnel spending and many of these applicants are rejected.

In the Middle East, continued economic decline leads more Afghans to turn to poppy farming and the black market for reliable income. Increased supply of opium does not lead to falls in prices, however, as general global psychological depression leads many more to turn to drugs for escape. Demand for opiates increases along with supply, and the black market flourishes. Control of opium production allows the

**ECONOMY / SOCIAL  
WELFARE INTERACTION**

*Psychological depression leads to an increase in drug and alcohol use that, coupled with increased opium trafficking out of Afghanistan, expands the black market of drug smuggling.*

Taliban and Al Q'aida to increase their numbers and supplies of weapons. With increased strength, they are also able to extend their reach. The Shari'a law recently implemented in the Federally Administered Tribal Areas of Pakistan bleeds over into nearby Pakistani and Afghani regions. The Pakistani military is unable to stop or reverse this development. Due to the increased national debts and security concerns of the United States and Europe and the continued instability in Afghanistan, Operation Enduring

Freedom is aborted, and all NATO forces pull out of the area.

Iran successfully develops a nuclear weapon and increases its inflammatory rhetoric; other nations in the region develop their own nuclear weapon programs and bolster their defense spending in an effort to balance increased Iranian power. This increased defense spending occurs during a weakening global economy, and accompanies a decrease in spending on public services, leading to decreased quality of life and popular discontent among their citizens.

SECURITY / SOCIAL WELFARE INTERACTION  
*Middle Eastern countries, facing public discontent due to declining public services (as traded-off for border security and nuclear arms programs spending), implement draconian measures to stem public uprisings.*

In Africa, continued rampant inflation, disease, and infrastructure collapse in Zimbabwe leads to mass migration out of the country. Food scarcity and ethnic has the same effect in Sudan, where President Omar Bashir continues to remain outside of ICC custody. African states that receive large influxes of refugees struggle to handle population explosions and to maintain their own stability.

SOCIAL WELFARE INTERACTION  
*Inflation, food scarcity, and ethnic cleansing lead to mass migration in Africa.*

The Movement for the Emancipation of the Niger Delta (MEND) increases attacks and bunkering of Nigerian oil pipelines. Frustrated by the lack of forward progress on alternative energy sources and global warming initiatives, eco-terrorists begin attacks on offshore oilrigs within US waters, such as the Gulf of Mexico. Al Q'aida-affiliated cells continue to launch more terrorist attacks as they attempt to capitalize on the continued socio-economic decline of Western and secular Arab governments.

SECURITY / ENERGY INTERACTION  
*High oil prices create inequality and instability in energy-exporting countries.*

Domestically, changing precipitation patterns and aquifer overuse have created a shortage of water for the interior of the United States. This has been temporarily remedied by the increased pace of glacier melt, but lacks a viable long-term solution. The US becomes a much more selfish society due to the economic downturn and shortage of jobs and capital. Social tensions begin to reignite along racial, ethnic, religious, and ideological fault lines. Successful treatments for AIDS, malaria, and extremely-drug resistant tuberculosis remain elusive.

**SOCIO-ECONOMIC COLLAPSE: Medium-Term (4-12 Years)**

Under this trajectory, the medium term future of the economic crisis will be marked by a collapse of faith in the governments of the developed world to manage the economic turmoil. The crisis begins to seem less like momentary turbulence, and more like the new global status quo. Accordingly, countries begin to make long-term plans that factor in the crisis as a permanent feature of geopolitics. The dollar declines in value slowly, until debt-holding countries begin to sell their dollar-denominated assets. This sell-off will happen slowly at first, but with a steadily increasing momentum, and will be preceded by a quiet diversification of the debtor countries' portfolios.

Countries expand their implementation of technical barriers to trade, and the hardest-hit begin implementing blatant traditional barriers to trade (quotas and tariffs) in blatant violation of their WTO agreements. These countries will probably promise to reduce these barriers once the crisis has passed, but argue that the WTO's infringement on their sovereignty is unacceptable while the global economy is in flux. If countries such as China that follow a quasi-mercantilist policy have so far avoided serious collapse, other countries will be inclined to implement their own mercantilist ideas. Some developing countries begin the creation of a regional alternate to the WTO, possibly as an enhancement to ASEAN (Association of South East Asian Nations), the SCO (Shanghai Cooperation Organization), or the Bank of the South. A country announces its permanent withdrawal from the WTO, marking the first time that a country has ever done so. This withdrawal is most likely to occur after the election or revolution of a party or group espousing a fundamentalist, nationalist, populist, or socialist economic policy.

As trade continues to decline, a criminal economic underworld arises. This underworld comprises of bank-like enterprises that exist entirely outside of the traditional, regulated, legal financial world. They are distinguished from criminal organizations like the mafia in that these illegal banks seek to advise multiple clients who are possibly competitors. The world experiences the first case in which the IMF would like to offer a loan to a country, but doesn't have the funds available to do so, and the first recent case in which a developed country experiences extreme inflation of greater than 20% per annum as a result of spending to avoid the crisis.

Stability in Pakistan deteriorates. This, paired with the increased strength of non-state actors, and renewed internal strife, leads to a complete failure of the Pakistani government. India significantly

increases its military presence along the border to ensure that this instability does not spill over the border, although Kashmir sees a surge in violence. With Pakistan a failed nuclear-armed state and possessing nuclear weapons, security in central and South East Asia deteriorates sharply, and fears of nuclear-terrorism escalate.

**ECONOMY / SECURITY INTERACTION**

*The US now mandates all imports be scanned for radioactivity before being allowed into the country.*

Many formerly functional African nations lose the battle to ensure their own stability in the wake of mass refugee migration, ethnic cleansing, and social conflict, and failed states propagate throughout Central Africa. With significantly instability spreading throughout the world, developed countries begin to shift their security focus. Rather than attempting the daunting job of maintaining stability throughout the world, they focus on ensuring their own stability through border security and attempts to limit internal sources of instability. For

**ENERGY / SECURITY INTERACTION**

*Instability in foreign oil supplies and non-state security threats to domestic oil production lead the US to actively protect its own energy resources.*

instance, in the face of eco-terrorism, hydrocarbon piracy, and threats from religious extremists, the Department of Homeland Security may be mandated to provide security for oil platforms and refineries.

The shortage of water for the interior of the US has become critical and permanent. The US is exploring alternate methods of producing clean water, but funding is severely limited as other social crises require the government's attention. The economy is in disarray, leading to widespread discontent and open hostility by Americans towards anyone perceived as competition, especially foreigners in the United States. Although a few new pandemics have emerged in Africa, the US and other countries have not devoted much time, attention, or resources to management of the problems due to their inward-looking focus and lack of funds for external aid. As a result, there is no international system to effectively monitor or contain these outbreaks. Similarly, women's rights, education, and literacy issues across the globe no longer appear on the US foreign policy agenda as the government is focused on internal problems. Washington engages with foreign countries on only topics of direct, immediate concern.

### **SOCIO-ECONOMIC COLLAPSE: Long-Term (12+ Years)**

The international economic order has collapsed. The flow of all forms of trade has severely ebbed, and

most countries have been buffeted by macroeconomic turmoil. This collapse constrains policymakers' decisions, generates distrust and trepidation for businesses, and has deteriorated the quality of life for ordinary citizens. International trade is severely restricted. Countries have imposed significant trade barriers, and international trade is at the lowest levels in at least 90 years. Countries have imposed both 'technical barriers to trade', which are arbitrary or politically motivated standards and regulations that serve to block imports, and more traditional protectionist measures such as tariffs and quotas. There are also barriers to capital flows and Foreign Direct Investment, and barriers to the flow of labor, such as strictures against immigration. These barriers are applied based on political as well as economic motives. The WTO still exists, and maintains its free-market mandate; however, membership has declined by a dozen or more countries, WTO rulings are routinely ignored, and competing international trade organizations have formed, based on alternate economic doctrines. The IMF is bankrupt.

Fixed trade barriers create incentives for black market operations, which have proliferated globally. These illicit activities are not limited to the smuggling of solid goods: refugee and immigrant smuggling, underground foreign investment, black markets for financial services, money laundering, and black market currencies have proliferated. Countries that tolerate or manage these black economic services wield enormous underground global influence, and have begun to use these black markets as weapons against their enemies. For instance, currency attacks are becoming accepted as a standard tool of statecraft. Commodity prices vary wildly, facing conflicting pressures from falling demand and their traditional status as safe-havens during economic trouble. Businesses struggle to maintain the flow of inputs to their products, and have reacted by simplifying their supply chains and abandoning Just-In-Time production methods. Years of uncertainty have left management with ingrained conservative attitudes, hampering innovation and risk. Numerous big businesses have failed, and small firms fail at an even faster rate. Distrust is rampant among banks and firms.

Countries face frequent, extreme fluctuations in their inflation levels, exchange rates, and capital flows. Global economic chaos has exacerbated all three of these phenomena, and several countries are undergoing hyperinflation, struggling to maintain a fixed exchange rate, or suffering from rapid flows of 'hot money'. The collapse in trade has led to higher prices for consumers worldwide, leading in turn to a lowering in the standard of living in both developed and developing countries. Those countries with sufficient land and labor forces have sought to build their own agricultural or manufacturing industries. Other countries without these resources struggle to supply their citizens with basic needs, leading to a wave of innovation in trade agreements and improvisation.

The US dollar is still widely circulated throughout the world, although its value has deteriorated over the years. The US maintains a floating exchange rate, mostly due to a lack of a stable standard against which to fix the currency. Instability in currency values, coupled with the collapse of export markets, has led to a debt crisis in the developing world. The US's own debt load has also triggered international tensions with its debtors, who frequently engage in massive sales of US debt. US GDP has suffered, as has global growth.

Unemployment has surged worldwide. In some countries, hordes of impoverished and frustrated youth roam the streets, turning to petty and organized crime as a means to survive. Riots and mass protests are commonplace, and several countries have collapsed into anarchy and poverty, or been overthrown and replaced by communist, military or authoritarian governments. Declining US influence also leads to several young democracies in the former Soviet Union and Latin America to turn to authoritarianism as a means to control popular unrest; other states fall into a period of sustained political turmoil. In extreme cases, these political competitions may evolve into limited civil wars. There have been several assassinations of prominent finance ministers or bankers. Ideologically, heterodox economic philosophies have multiplied and become more extreme as they struggle to fill the vacuum left by the perceived failure of free-market principles. Socialism, World Systems theory, centralization, barter systems, and Kondratiev waves are respectable subjects of scholarly attention.

The world economy is not without hope, and analysts routinely detect signs that a recovery is imminent. Since the start of the collapse, however, all nascent recoveries have fizzled. Economists struggle to explain the reason for the lingering economic malaise, and there is no consensus on which policies would best return the US or the world to growth. It is clear to all, however, that this crisis is not merely a repeat of the Great Depression, but something different, more complex, and even more intractable. Poor global health care and monitoring has allowed the evolution and spread of contagious and antibiotic-resistant diseases, which sometimes eliminate large segments of a population in a short time period. Women have expanded domestic opportunities as the demand for scientists and law enforcement personnel grows. As existential threats demand the attention of the world's regimes, education and literacy levels fall and the world plummets towards permanent instability.

The United States has continued to invest in alternative energies, but the rate of investment slows as the technologies fail to reach their potential. A clean energy infrastructure is being built, but the project is

underfunded and over budget. Technologically advanced clean coal has remained our principle energy source. The US is also constructing a nation-wide Smart-Grid system. Foreign dependence on oil has decreased only marginally. Sustainable practices for resource extraction industries such as agriculture, forestry, and mining have become legally regulated but not strictly enforced.

Carbon capture technology has proven to be a failed and costly experiment. Climate change continues to disrupt human activities. Technologies to cool the planet exist, but their implementation is politically infeasible because most countries refuse to sacrifice any reduction in economic growth. Polar ice caps have managed to refreeze in many years but evidence of melting ice caps is irrefutable. The developing world has continued their ‘business as usual’ approach even in the wake of global criticism and sanctions.

In a world where each country is very much on its own, the US has become focused on the security of its near-abroad, and in some cases, internal regions. The Department of Homeland Security budget has grown substantially, using money previously earmarked for the Department of Defense. Border security is strongly enforced, and the US Coast Guard and appropriate US Navy assets have a significant coastal presence. Aircraft carriers and amphibious ships remain in port and unused, and a significant number of Sailors have left the service for civilian or Coast Guard jobs. Mexico has become a collapsed narco-state, and the US-Mexico border has been sealed to the highest degree possible with infrared, motion-detecting ‘fences’ running the length of the border. Tripping of these fences leads to either deployment of quick reaction border forces or unmanned drones authorized to use lethal force.

The international community is characterized principally by the absence of any government or multilateral regime capable of adequately providing order and security in a global environment wracked by regional conflicts and humanitarian disasters. Terrorism, failed states, and intrastate conflict abound, and some failed nuclear-armed states have been unable to account for all of their nuclear stockpiles. For this reason, US security concerns are also highly focused on ensuring the protection of resources within its borders, since these are the only ones where supply is guaranteed.

Many of the social problems that plagued developing countries in 2009 now affect the United States as well. Potable water is in short supply, leading to occasional riots or protests against water utilities and local governments. Although the US has not resorted to genocide, xenophobia has risen and social tension and unrest along racial, ethnic, religious, and political lines have dramatically increased. The

National Guard finds itself constantly engaged in public order operations, as police forces are either insufficiently manned or funded to fully address regular unrest. Wiretapping and other internal surveillance techniques are standard practice as the US seeks to ensure security and stability within its borders.



## Section III: Policy Recommendations



**President Obama signing legislation**

*Source: New York Times*

As the trajectories detailed in the report illustrate, high levels of intervention will be required in order to steer the United States, and the world, away from a state of sustained instability and fragmentation. The recommendations that follow are intended to provide a basis for arriving at REVISED DURABILITY, where the United States remains the preeminent global power, but works more cooperatively with strong, democratic allies and multilateral organizations to address and minimize multinational security threats.

The following policy recommendations include among them many objectives that can be effectively carried out in the course of one administration and through the application of the Component Level Implementation Process (CLIP). This process breaks large policy goals into packets of legislation that can be enacted incrementally over a long period of time. The key concept is to make each component of the legislation valuable to the country, while enabling a long-term combination of components that will culminate in the achievement of complicated, long-term goals. In addition to dividing long-term goals into more manageable, feasible, and realistic short-term goals, this process renders the legislation more difficult to dismantle by successive administrations and Congresses.

The United States must seek to mitigate the following most pressing issues: the weakening of the global economy, which could give rise to popular unrest; the fragmentation of global power into competing and frequently non-cooperative poles and the deterioration of multilateral cooperation; environmental challenges, including global warming and threats to the earth's fresh water supplies; persistent terrorism, including piracy and cyberterrorism that could severely disrupt communication and transportation lines; the rise of authoritarianism; and a global energy shortage. Effectively combating these contingencies will require policies that target all five areas on concern for mankind: the economy, international politics, energy and the environment, security, and social welfare.

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## **Economics**

### **Establish an International Financial Regulatory Commission**

The United States must take the lead in establishing a supranational international financial regulatory commission that sets global standards for ethical market practices. While each state government has its own systems, like the SEC in the US, each must comply with these rules or face litigation by other

nations. This is similar in function as the WTO for trade rules: if a nation is considered having made an unfair trade practice, a government takes its complaint to the WTO for a ruling. The international financial regulatory commission will work in the same manner. If a state's international markets break guidelines based on internationally agreed upon standards, the government can be subject to litigation or punitive measures. This puts an onus on individual domestic governments to ensure that their markets are working transparently and ethically.

### **Restructure the Securities and Exchange Commission**

The US overhauls the SEC in the early years after the crisis to understand how individuals like Bernie Madoff escaped notice for so long. Congress is urged to pass legislation that increases SEC transparency and oversight, and regulates the derivative securities trade. The DCOM recommends that the SEC create an internal office for the purpose of recognizing and addressing weak signals like the housing bubble. Of course, this office may be subject to groupthink and internal corruption, so both an internal and external set of checks and balances must be present, independent economists or financial analysts to serve one to two year terms in this office.

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## **International Political Dynamics**

### **Effective Democracy-Building**

Among the defining characteristics of the REVISED DURABILITY scenario is the spread of liberal institutions throughout the world, including free access to information, independent judiciaries, elected government and respect for political and civil liberties. While it is certain that such a world will not be free of conflict – young, activist democracies will inevitably adopt different and sometimes competing values, cultures and interests – it is a relatively stable world that is reasonably well equipped to address new challenges. For instance, the availability of information and existence of transparent, accountable government will minimize the risk of severe human rights abuses, help mitigate violent, inter-state conflict, and reduce the risk that pandemic diseases or other threats to human health or safety could spreading unreported. Perhaps most importantly, it also greatly reduces the number of governments that pose, or seek to pose, a strategic threat to the United States.

In its recent history, the United States has learned the consequences of attempting to impose by force democratic institutions with insufficient concern for the receiving culture. Other attempts to build

democratic, capitalist systems abroad have also been flawed, such as the application of Washington consensus principles in Latin America. Yet the country also has a proven capability to champion effective democracy building through organizations such as the National Endowment for Democracy and the Department of State.

As the country moves forward, it should seek to build on these strengths by adopting a more humble, culturally sensitive, and nuanced understanding of the types of institutions it would like to support. The focus of democracy-building efforts should shift from emphasizing elections to emphasizing an independent and well trained judiciary and media, active civil societies, respect for human rights, and government transparency and accountability, all while respecting indigenous cultures. It should increase funding through the NED and DoS for projects to support civil society growth and education in vulnerable regions such as South and Central Asia and the Middle East, and support highly effective, US-based initiatives to bring Internet freedom to all corners of the globe.

Among the greatest potential threats to the spread of democratic institutions is China. Itself the world's largest dictatorship, China is a model of authoritarian economic development with an expanding global reach. Yet it is also a country with the potential for internal liberalization, home to networks of highly trained activist lawyers, a resurgent democracy movement, and a growing independent civil society (much but not all of it faith-based). Given China's considerable clout in Asia and the developing world, its liberalization alone would serve to advance the democratic cause dramatically, and should thus be a focus of US efforts.

### **Strengthening Multilateral Organizations**

Over time, socio-economic shocks have increasingly global ramifications. Unconventional security threats, from piracy and terrorism, to food and water shortages, pandemic diseases to climate change, are all capable of causing significant disruptions to the global economy and to human welfare on a large scale.

Addressing these challenges and containing their impacts necessitates that nations be able to work cooperatively together across all regions of the earth. Political fragmentation into non-communicative, non-cooperative poles could allow global security threats to proliferate.

For this reason, the United States should seek to strengthen multilateral cooperation on key issues such

as human rights, development, education, environment, security and poverty, to name a few. It should seek membership in several multilateral organizations that it is not currently party to, continue to provide funding and other forms of support to sustain vital organizations and operations, and lead by example in areas such as human rights and environmental protection.

As part of such a strategy, the United States is already seeking membership in the United Nations Human Rights Commission. Future steps may include support for the International Criminal Court and earnest leadership in developing and implementing any future multilateral agreements on carbon emissions reduction. The United States should also seek to play a more active role as a partner to nations in the developing world where US investment has been on the decline, including Southeast Asia and Latin America.

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### **Energy and the Environment**

Recognizing the high degree of interaction between energy and environmental issues, the United States must engage in a multipronged approach to tackle both simultaneously. First, the United States should vigorously pursue the development of renewable energy technologies. In addition to the obvious benefits of reducing pollution, renewable energy will be crucial in reducing the United State's dependency on foreign oil and gas, providing an important security benefit. Finally, developing countries are almost certain to place a higher value on environmental issues as their populations grow wealthier. Therefore, renewable technology is likely to be an important export market in the coming decades, and the United States should seize on the potential to gain a first-mover advantage in these markets.

The development of a 'Smart Grid' system will be vital for the United State's pursuit of renewable energies. This rebuilt electrical grid will allow the distribution of electricity from numerous sources, such as wind farms, which are scattered throughout the American Midwest. The smart grid system will replace our current electrical grid, which is insufficient to use these sources of power to their full potential.

To directly address the gathering threat of global warming, the United States should take the lead in negotiating, ratifying, and implementing a post-Kyoto climate change agreement. It is vitally important

that the United States act multilaterally in this area, since the US will not be able to unilaterally confront this problem if other developed nations and large developing countries do not also ratify the agreement.

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## Security

### **Fully Structure and Fund Civilian Response Corps**

To stem the potential for post-conflict states to fail and prevent future conflicts in which the US is engaged from becoming repeats of Iraq or Afghanistan, we recommend the United States Congress develop legislation for the Civilian Response Corps to become a permanent body, with guaranteed funding in the annual budget. The Civilian Response Corps would be capable of both quick reaction and long deployment activities aimed at bolstering or developing institutions needed for state function. However, for such a Corps to be viable and powerful, it will require both defined structure and sufficient funding. Participation in the Civilian Response Corps could be encouraged by: 1) encouraging private corporations to allow their employees to participate by providing tax incentives or other corporate benefits, and 2) creating incentive within public institutions through promotional benefits of participation. Once a US Civilian Response Corps proves functional, the United States may be able to propose a supranational organization with contributions from multiple states aimed at this function, much like a reconstruction/stability NATO.

### **Bolster Veterans' Affairs Funding and Programs**

Regardless of the scenario that develops, the United States will soon be faced with a boom in veterans dependent on the government for medical and financial support. By shoring up VA funding and programs, the United States may be able to significantly reduce social impacts of poorly-treated PTSD. By increasing and improving programs to find employment for injured vets, Congress can also bolster US economic viability by diminishing the number of veterans dependent on the system and increasing their contribution to the nation's economy.

### **Increase State Department reach through increased manning and budget.**

In order to continue to promote the spread of democracy and ensure that US hegemony is seen as benevolent, it will be important for the State Department to engage often and in a substantial way with the global community. This will require increased staffing, both domestically and at embassies, and

sufficient funding for DoS to execute its expanded role.

### **Enhanced Security Cooperation**

Another theme underlying recommendations is the need to think about future conflicts in a different way, to recognize that the imposed distinction between irregular war (i.e. nuclear, chemical, and/or biological) and conventional war is an outdated model. We must understand that we face a higher degree of complexity. It is possible that conflicts will range along a broad spectrum of operations, where near peers will use irregular or asymmetric tactics and non-state actors may have weapons of mass destruction or sophisticated missiles. This kind of warfare will require capabilities with the maximum flexibility to deal with the widest possible range of engagements. It will also require that the US continue to strengthen interoperability and cooperation with our allies; we cannot ignore the risks posed by the military forces of other state actors. The weight of America's conventional and strategic strength has shifted in that way -- conventional and strategic modernization programs will have to be tailored to fit this framework.

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## **Social Welfare**

### **Increased International Cooperation**

Many of the policies for ensuring human welfare overlap with policies used for other issues already discussed, and such interactions represent key targets for effective policymaking. A few examples of these dual-purpose policies include supporting civil society growth in South and Central Asia and the Middle East; promoting Internet freedom; strengthening of multilateral cooperation, and extension of the Civilian Response Corps. We believe that upholding these policies can only serve to advance human welfare throughout the world, especially in developing countries. Specifically, US involvement in the International Criminal Court will help to provide the ICC with much-needed legitimacy and enforcement measures so that it may serve as a forum for the disclosure of humanitarian abuses and an effective deterrent for future abuses due to its ability to prosecute and punish those found guilty of crimes like genocide. Many organizations within the UN can also be bolstered to address human welfare issues, such as the Human Rights Commission, World Health Organization, Economic and Social Council, and UN Educational, Scientific and Cultural Organization.

**Invest in Public Health and Education**

The US must continue to identify the most pressing human welfare issues and invest in methods of eradicating or mitigating their effect. The US should invest heavily in HIV/AIDS and malaria drug research, possibly in the National Institutes of Health. The US should also invest in technology to ensure the continued supply of potable water to populations throughout the world, to include monitoring of precipitation patterns, glacial melt, and aquifer levels. Lastly, the US should link the provision of foreign aid with achievement of certain levels of human rights, women's rights, education, and freedom of the press, and encourage other countries to do the same. This could have tremendous influence on the willingness of states to abide by certain international rules or norms.

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**Encourage a Cultural Shift in the U.S. Bureaucracy**

An expansion of DCOM to integrate a wider range of expertise and government interaction would enhance the US government's ability to receive warnings, input, and feedback on policy effectiveness at higher levels of policymaking authority. This input will be a valuable tool for decision-makers to judge the effectiveness of their policies, and will serve to prevent important long-term issues from being forgotten due to the press of short-term considerations. For more information on this cultural shift, please see the special Annex that is attached to this report.



## Section IV:

### Conclusions

In the course of the last year, the world has experienced the beginning of what could prove to be a fundamental shift in the international socio-economic order towards a new equilibrium – or, as our projections demonstrate, the possibility of long-term disequilibrium.

In the years to come, the rate at which large-scale challenges to the socio-economic order arise will only continue to increase. And, more than any other time, these events will not occur in isolation, but will have far-reaching effects into other regions and fields, affecting security, environment, economy, governance and society.

Meeting these emerging challenges before they develop the potential to dramatically destabilize the international system will require the continued development of greater foresight and inter-agency cooperation in the policy-making process. Moreover, maintaining a state in which the world's socio-economic order is not irrevocably threatened by environmental, social, political and economic turmoil will require that the United States embark on an ambitious program of intervention, both domestically and internationally.

In the best case scenario, it may be possible through active intervention to achieve a state in which the United States retains its preponderance of power and influence, where liberal democracy continues to expand, global GDP rises and inequality falls, and where significant conflicts and environmental challenges have been minimized and contained. Alternately, power could continue a gradual shift away from the United States, illiberal democracies and autocracies continue to gain prominence as alternatives to liberal democratic models, multilateral organizations grow fractured and increasingly unable to adequately respond to emerging socio-economic challenges, and environmental, security, and social threats could produce a state of elevated uncertainty and instability. Finally, it is also possible that the world could head into a state where the global economy experiences sustained depression, where no nation or organization can adequately address emerging challenges, and where unrest, conflict, and humanitarian crisis abound.

Even in a best-case scenario, it will never be possible to altogether avoid destabilizing forces. The

recent outbreak of swine flu illustrates that unexpected shocks to the system can appear at any time with worldwide ramifications. Although these shocks cannot be eliminated, it is possible to construct policies that will serve to better anticipate challenges and establish the international cooperative structures to contain and minimize emerging crisis. Based on our assessment of likely trajectories, the panel concluded that the following should be regarded as policy priorities for the United States government:

### **Economics**

- Establish an International Financial Regulatory Commission
- Restructure the Securities and Exchange Commission

### **International Political Dynamics**

- Conduct effective democracy-building in foreign nations
- Strengthen multilateral cooperation

### **Energy and environment**

- Pursue renewable energy technologies and reduce dependence on foreign oil
- Develop and implement a Smart Grid electrical system
- Lead a new global climate change initiative

### **Security**

- Fully structure and fund a civilian response corps
- Bolster Veterans' Affairs funding and programs
- Increase Department of State reach through increasing manning and budget
- Pursue enhanced security cooperation

### **Social welfare**

- Increase international cooperation to address issues of global importance
- Invest in public health and education

Finally, to achieve the government changes necessary for forward engagement and proactive policy development, we recommend a cultural shift in the U.S. bureaucracy.

The panel also noted the difficulty inherent in enacting effective, forward-thinking policies, which are hindered by the election cycles, the lack of coordination among executive branch departments, and the urgency of current issues. Taking these challenges into consideration, the above policy recommendations include among them many objectives that can be effectively carried out in the course of one administration and through the application of the CLIP method. That is, they can be achieved through packets of legislation enacted incrementally over a long period of time. This renders the legislation more difficult to dismantle by successive administrations and Congresses. Moreover, each packet would be able to stand on its own to effectively advance these goals. The panel also recommends a consistent method of feedback, whereby different government departments can provide feedback on developing trends and shifts that might affect the nature of the trajectories, allowing policy-makers to alter their plans accordingly.

## **Annex on Encouraging a Cultural Shift in the US Bureaucracy**

“I am not an advocate for frequent changes in laws and constitutions. But laws and institutions must go hand in hand with the progress of the human mind. As that becomes more developed, more enlightened, as new discoveries are made, new truths discovered and manners and opinions change, with the change of circumstances, institutions must advance also to keep pace with the times. We might as well require a man to wear still the coat which fitted him when a boy as civilized society to remain ever under the regimen of their barbarous ancestors.”

Thomas Jefferson, 1816

This staff is not unique in concluding that the US Government’s interagency processes are insufficient for the challenges that we face today. As noted in the recommendations of the First Annual Report to the Deputies Committee on Complex Priorities, the current interagency process is:

*“...inefficient, overly hierarchical, and inflexible. It poorly integrates information and resources, and obstructs innovation. Participating agencies focus on their core missions and do not reward their officials for engaging in the interagency processes, and interagency policymaking is often under-resourced and. The result is an interagency system that often functions ineffectively, to the great detriment of our ability to anticipate and engage contingences in the medium to long term.”*

Therefore, we offer these comments and suggestions for encouraging a cultural shift in the US bureaucracy to better prepare our government to address both positive and negative future contingencies of interest.

**First, the staff supports the recommendations of the Project for National Security Reform (PNSR) in seven broad areas:**

- Focus on national missions and outcomes
- Create unity of purpose
- Achieve unity of effort
- Link resources to goals
- Align personnel incentives with strategic incentives
- Improve the flow of knowledge and information
- Build a legislative branch-executive branch partnership

**Second, the executive branch should reduce or eliminate the length of time top administration posts remain vacant during president transitions.** Changes in administration are inevitably chaotic times for the federal government structure, and the lack of senior leadership in key posts to provide guidance and direction during these periods amounts to “time-lost” for the US Government to accomplish its goals.

**Third, the federal government should require rotation of civil service posts as a pre-requisite for advancement to senior leadership.** Based on the joint duty requirements in the Goldwater-Nichols Act, these required rotations provide civil servants a better understanding of how different government agencies fit into the national security structure and a wider view of how other government agencies can contribute to their home agency missions as well as how their home agencies can contribute to other government agencies. Additionally, establishing the informal social network associated with serving in a different part of the federal government will prove invaluable in future efforts to collaborate and integrate operations. The goal is to create a culture in which a civil servant's allegiance lies not with an individual agency, but with the national security system and the US Government as a whole.

**Fourth, all national security-related departments and agencies should require annual attendance by mid- to high-level staffers of a seminar on Forward Engagement.** This interagency seminar would reinforce our third recommendation above and allow participants to discuss issues that may be outside the purview of their own accounts or on the periphery of the government's awareness. Additionally, these seminars should teach and illustrate basic methods of Forward Engagement that can be utilized at their home agencies, including the STEEP matrix, scenario building, component level implementation process, trajectories, interactions, and backcasting. The participants should serve as ombudsmen for Forward Engagement in their home agencies to promote the use of these methods and assist when needed.

**Fifth, the executive branch should expand the role of the Deputies Committee on Complex Priorities.** Reiterating a recommendation of the last Annual Report, DCOM should engage a wide range of experts who would normally be excluded from DCOM proceedings. These include ambassadors or other representatives to nongovernmental organizations as well as the so-called 'czar' positions, such as the border czar, auto czar, drug czar, etc. Additionally, DCOM should reach out to academics and private sector practitioners who may have specialized skills and knowledge that would be applicable to the examination and management of complex priorities.

**Lastly, the DCOM should form a sub-committee on feedback and weak signals.** This sub-committee would be specifically charged with identifying and monitoring weak signals that may indicate what trajectory our world is on, as well as identifying and monitoring sources of feedback on policy implementation and effectiveness. The sub-committee would serve as a constant "reality check" and allow the US Government the opportunity to change course if needed.