

Economic Security: Neglected Dimension of National Security?

August 24–25, 2010

Overview

As economic strength is a critical element of national security, it follows that economic security should be an integral part of U.S. national security strategy. On August 24–25, 2010, the Institute for National Strategic Studies (INSS) at the National Defense University (NDU) hosted a symposium to examine economic security as a fundamental element of national security and to discuss current and emerging trends and issues. The goal of the symposium was to develop a framework for a strategy the Nation could use to ensure its economic viability.

Although the United States would benefit from a framework that allows for the development of grand strategies for developing the Nation's economy, the United States is not yet well prepared to develop such a strategy in the holistic, long-term sense. As a result, the increasingly complex, interdependent world is questioning the United States as a world superpower based on the notion that national strength moves well beyond providing for common defense, and most certainly ties in with the strength of the economy.

The growth of society is founded on strong infrastructure, which necessitates strong leadership in areas such as science, engineering, and technology development. Expanding on the idea of economic security as an

ingredient to being global superpower, one also must consider the power resulting from a nation's ability to develop globally competitive products and services, as well as strategies for reducing debt and dependence and investing in increased human capital, manufacturing, and the industrial complex. It takes capital to build business, which in turn creates profits and jobs, which provide taxes to support the U.S. military, which finally helps to ensure another aspect of national security—defense of the Nation.

Thus, the United States needs a strategy to deal with issues related to national security, and therefore economic security, both at home and abroad. The precarious current state of the economy should serve as a warning, as history shows that poverty leads to political instability, which fundamentally threatens national security. Although the Government Accountability Office previously created a long-term economic strategic plan, the Office of Management and Budget does not have any similar strategy in place. The plan should look at performance and consider factors such as whether the Nation is meeting objectives, if the economy is getting better or worse, and how the country compares to competitors. The leading indicators of the economic future such as savings, critical infrastructure, education outcomes, and health care

outcomes suggest that the United States is below average for an industrialized nation; political reforms are needed to address these deficiencies. Without a forward-thinking plan to address the strength of the economy today and in the future, U.S. international standing, standard of living, national security, and domestic tranquility will suffer.

Governmental debt has more than doubled in the last 10 years, and projections based on structural deficits and entitlement and mandatory programs predict that this debt will increase. Also, the Nation is reliant on foreign lenders for oil and capital, giving these lenders sizeable leverage. In another area, the costs of health care are growing much faster than inflation, also draining much of the Nation's limited funding. The personal and national savings rates also have declined. What can the United States do to address these challenges?

The Federal Government must reprioritize the budget with a focus on the future and generating real, lasting results. First, the government should implement statutory budget controls without loopholes both for discretionary and mandatory spending and tax preferences. Second, Social Security should be reformed to make it sustainable and secure for the future. Third, the rate of increase in health care costs should be reduced, and related taxpayer subsidies and tax preferences should be adjusted accordingly. Fourth, the government should implement comprehensive tax reform to better address the costs associated with mandatory and discretionary spending. As the national debt continues to grow, it is important that the government adopts processes ensuring that these objectives are achieved within a reasonable time period and remain future-focused.

The Economic Element of National Power

As a strong national economy allows the United States to exert influence around the globe to support national interests, it is important that the national

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economy remain vibrant. The symposium examined the role of the Department of Defense (DOD) and defense spending in addressing the state of the economy. One of the first areas that traditionally comes under scrutiny when examining the national debt is defense spending. At the local level, while base closures can increase local unemployment, the long-term impacts of base closures resulting in positive economic growth typically outweigh the initial negative impact of the closures themselves.

While defense spending reductions may contribute to deficit reduction, national security is broader than defense expenditures. Long-term debt impacts national security in several ways, including the Nation's ability to pay for national security and defense; ability to lead, as credibility with partners abroad depends on the strength of the economy, and foreign owners of debt enjoy their own degree of leverage; the willingness of the American public to engage; and the weakening of the defense industrial base, including investments in U.S. manufacturing and research and development. The major task for reducing national debt and strengthening national security should be to prioritize and commit only to those expenditures that the Nation can afford.

One economic strategy for long-term prosperity is to focus on science and technology and increase research and development. This long-term focus on growth, productivity, and manufacturing is different from the current focus on government spending and deficit reduction. DOD has played a major role in general-purpose technologies, such as aircraft and computer industries and the Internet. But should DOD or the private sector have this role in the future? While science and technology assets are important for economic growth, the United States must consider where new technology is developed and whether technology developed for commercial purposes could be used for defense.

Although the idea of economic security is being considered as a segment of national security, historically there has not been a good connection between economic and national security policy. For example, during World War II, the national security policy elements were

diplomacy, military, and intelligence. The Obama administration, however, includes economic security as one dimension of national security, using a broader lens to view national security in terms of whole government and whole nation. Unfortunately, this broadened focus is not yet operationalized, and departments do not have statutory mandates, staff competencies, and the security clearances to integrate economic security into their policies. One suggested solution to this disconnect is to require economic impact statements for decisions on national security issues that would force policymakers to consider the economic dimensions of their decisions.

The Voice of Industry

The U.S. critical technology sectors currently are challenged by the absence of a geostrategic adversary both in defining the economic element of national power and the strategic ends to which the economic element should be employed. There is no single consensus or single community of national interests, but rather a multitude of competing elites and threats coming from different directions. Additionally, globalization has influenced economic decisions from those made on Wall Street to the research and development strategies pursued in the global market. As a result of the diversity in interests in the globalized market, there is not a unified decision on the direction of science and technology policy and the options for influencing the security and competitiveness of the base. The positions of the information technology, aerospace, biotechnology, and automotive industries were considered during the symposium's discussion of these challenges.

One proposed strategy for protecting critical infrastructure is to establish partnerships between the defense industrial base (organizations within the government and private sectors that possess the capabilities to support military operations and satisfy military requirements) and information technology sectors (entities such as Internet service providers, software companies, and communications companies) to coordinate on strategies, policies, and responses to pertinent issues of economic

strength and national security. The information technology sector is vertical, but also crosscuts horizontally and is essential in other critical infrastructure sectors, providing the resources and means to carry out mission functions. The challenges for such a partnership include understanding world relationships and international dependencies, addressing supply-chain issues resulting from the large number of departments and agencies, and knowing the legal and regulatory issues, both nationally and internationally and between the government and private sectors. In addition, legislative initiatives should be based on a greater understanding of the information technology and cyber sectors.

The United States aerospace industry sector includes defense, commercial aviation, and space goods. The industry is increasing in sales, with military and civil aircraft comprising the largest components, and has the largest export surplus of any manufacturing sector in the U.S. economy. Despite the elements that make the aerospace industry significantly important to the United States (including its contribution to national security and commercial economy, employment, and higher-than-average

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wages), research and development investment in the industry is declining. The aerospace industry is characterized by a large number of integrators atop a complex supply chain dependent on the information technology and materials sectors, a reliance on the private capital markets for the costly and risky development of new technologies, high barriers to market entry and exit, and the influence of governmental policy and budget decisions on the health of the industry as related to standards, research and development and procurement spending, and infrastructure. The challenges facing the aerospace industry include flattening research and development budgets, DOD efficiency reform, and supply-chain consolidation

and globalization, all of which influence military aircraft, missiles, and related products. Challenges influencing civil aviation include foreign competition, reduced air travel as a result of the uncertain economy, and pressure to globalize production and development. Finally, an ageing workforce and the lack of a national, multiagency government aerospace strategy both present formidable challenges to the industry in general.

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The United States is losing ground in the high-tech competitiveness in the biotechnology sector as a result of a loss in knowledge, skilled people, and infrastructure to manufacture and engineer products. A robust techno-industrial policy for biotechnology is an economic security imperative for the United States, particularly considering the industry is a tremendous driver of research and development. In addition, national health security is a major societal value as the Nation faces concerns about deliberate attacks, emergent natural disasters, and international public health in the face of pandemics and infectious diseases. In contrast to competitor countries, domestic biotechnology policies stop short of comprehensive, long-term strategies. The challenges facing this industry are the need for “patient” money for credible resource commitment over decades, the pipeline innovation crisis emerging from flat success rates and increasing research and development and launch costs, decreased venture capital investments resulting from the weakening economy, and balancing national and global interests and priorities within multinational corporations. The insufficient pull for biodefense and public health products currently is a challenge, although public-private partnerships and funding may help to revive research and development within the sector. To craft effective biotechnology policy,

the United States should build on the momentum of the Department of Health and Human Services and DOD, consider institutional mechanisms such as an appointing an innovation czar or engaging the biotechnology industry, and consider questions of tax incentives, education, and human capital to build a robust policy.

Despite the industry’s recent troubles, it appears that the U.S. automotive industry is recovering. It is important to note that innovations are no longer occurring within the confines of the automotive industry itself, but at the intersections with other industries, such as electronics, energy, and telecommunications, which changes the nature of competition. The automotive industry currently employs a reactive approach to policy, although a strategic approach is more important as the dynamics of the industry and national economy change, and the United States faces the risk of losing its manufacturing excellence and leadership. A comprehensive roadmap that takes a proactive, strategic approach to the future of the automotive industry and considers the fluid systems in which the industry competes will help to ensure the economic vitality of the industry.

The Voice of Government

The public and private sectors must establish a dialogue transmitting information and knowledge. On one hand, the world’s perception of the United States is colored by the Nation’s economic security, making it essential that the government and critical industries share information to gain a better understanding of the economic condition of the industrial sectors, the status of manufacturing and technical capabilities, and the ability of the sectors to surge in times of national emergency. The U.S. economic recovery also can be assisted through government and industry dialogue that helps government to better understand the workings of the industry sectors, allows industry to engage with policymakers, facilitates interagency cooperation in analysis, and encourages a proactive approach to asking the right questions. To open lines of communication and information-sharing, performance benchmarks and trend monitoring should

be employed to raise awareness, and well-developed and well-executed studies should be used to identify capabilities and reveal supply chain problems.

Increased open and honest communication between industry and government is particularly important for DOD for several reasons. First, the Nation is moving away from procuring unique defense items, meaning those items in need must be properly coordinated with partners to ensure compatibility and sustainability. Second, globalization is shifting production offshore to reduce costs, making monitoring important to ensure supply chain and product integrity. Finally, as future permissive spending is not anticipated, DOD is purchasing fewer goods and services from the defense industrial base, potentially leading to increased competition for fewer purchases and companies exiting the industry to pursue other opportunities. Strength in dialogue and industry partnerships is highly important for ensuring the United States has a healthy defense industrial base.

the Federal Government should recognize that creative thinking is strategic thinking

To establish partnerships and open dialogue between government and industry, government personnel should learn how to think and act more creatively, rather than allowing themselves to be constrained by the rules and regulations and only engage in critical thinking. Rather than using fragmented, analytical frameworks, holistic perspectives that focus on the big picture would help government personnel to synthesize information and ask questions that provide new approaches for dialoguing and solving complex problems. To remain relevant and move away from reactive responses, the Federal Government should, first, recognize that creative thinking is strategic thinking for proactive approaches, and, second, welcome this change in thought and recruit personnel with strong synthesis skills.

Expeditionary Economics

Expeditionary economics concerns the promotion of security and stability in overseas contingencies using economic tools and policies, focusing on a shift from government and donor dependence toward private-sector growth, local business development, and entrepreneurship. The starting point for an analysis of expeditionary economics is examining whether the government's current tools are effective for achieving this end—whether the Nation's current system stifles the private sector. If the United States agrees that there is a need for a new approach, messy capitalism and a new dialogue, such as that started by the symposium, will be necessary for creating and embracing new methodologies and attitudes.

The subject of expeditionary economics has both tactical and strategic importance and involves questions about investments that build or destroy, the role of the military, and whether economic expertise is important for military leaders. For military considerations, expeditionary economics is defined as the military's use of economic theory and resources as part of a multifaceted campaign to help establish economic development for local civilian workers and agencies. In postconflict situations where the main objective is to restore stability, the military is an essential aspect of expeditionary economics because it is already committed to the situation, conditions are too dangerous for civilians on the battlefield, and specific tools are needed to gain support from the people who continue to engage in war. The military's use of economics in this situation allows it to establish an initial level of security so that civilians then can take over. Because there is no clear point where security ends and immediate, long-term development begins, military leaders with economic expertise are valuable in establishing a unity of command during the critical phases following a regime change or state failure. The key elements of expeditionary economics in such situations include a messy, extended strategy, maximized local participation to ensure that local needs are met, tolerance for corruption, and private-sector input for creating sustainable jobs and local businesses.

The vision of the Modern Silk Road (MSR) in Afghanistan is an example of expeditionary economics at work, with a goal of reestablishing Afghanistan's traditional role as the transportation and trade hub linking Europe, the Middle East, and Asia. Military leadership should foster business development, but the MSR should be driven by the private sector and its knowledge about the opportunities and challenges of the MSR, such as attractive routes and the rules and regulations constraining the possibilities of the MSR. U.S. economic growth strategy in Afghanistan includes job creation, extended basic services to the Afghan people, improved infrastructure, and progress toward fiscal sustainability. These goals cannot be achieved without private-sector input to develop a suitable operational plan, interagency cooperation, and a public-private

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partnership leader to foster this cooperation and coordination. The criteria for success in Afghanistan include directly benefiting the people of Afghanistan, an economic strategy that meshes with military strategy, a positive income stream, and movement toward these goals within the next 18 to 24 months.

Energy Security Fuels Our National Security

At the heart of U.S. economic and national security policies, energy is at the top of the Nation's agenda from climate change policies to approaches to regional conflict. If national security is defined as the ability of the country to pursue internal life without interference, the dependence of the United States on fuel is alarming. It is important that solutions are developed today to prevent questions in the future about what our policies were and what we expected to achieve.

The United States has 2 percent of the world's resources for oil, but the country consumes 20 percent of the world's oil. To address this imbalance, anticipatory governance and Presidential guidance is necessary. Because petroleum fuel products are not priced at their actual cost, legislators should consider increasing taxes to address this issue rather than continuing to send money overseas to satisfy the Nation's current oil demands. Additionally, by moving toward renewable energy sources, the Nation can reduce dependence on foreign countries, create jobs in the United States, and reduce environmental disasters and carbon in the atmosphere. Despite these benefits, challenges to shifting to alternative energy include immature industrial-scale technology, the high costs of new infrastructure, and the exportation of research and development.

Alternative energy and fuels are also important because the expanding world population will continue to compete for larger portions of a smaller supply of available fuels. Although energy security is a fear coming to the forefront, the United States does not have a strategy for acting on these issues and transitioning to 100 percent renewable and nonpolluting energy sources. Partial or temporary solutions are not the answer to the problem, and there will be many intermediate stages to reach the end goal. Currently, the Nation is employing bottom-up approaches without top-down policies. Accordingly, the Federal Government needs to encourage interagency work to develop a system of alternatives for implementing a long-term national energy policy that recognizes the true current situation and realizes the final vision, which will require policymakers to obtain and understand the relevant information to make informed policy decisions.

It is important to keep in mind that energy security entails more than the Nation's level of imported oil. Technology, leadership, value chain for capabilities, and geopolitical implications are also critical in this regard. In addition to imports, energy dependence is a function of domestic know-how, research and development investments, and energy mix and consumption.

To ensure the U.S. position in energy security, there are four areas that should be pursued: increased energy efficiency, research and development focused on clean energy, localized value chain for manufacturing capabilities, and an integrated policy to balance domestic issues and their global implications.

The Role of Research and Development, Science and Technology

Current and emerging global challenges such as climate change and resource scarcity demand scientific discoveries and technological innovations to provide solutions. Looking toward the future, the nation that develops clean energy technologies will hold an economic and security advantage. To achieve these ends, it is important that value is placed on diversity in ideas that can interact in a networked world to develop solutions and innovations. To encourage such innovation and resultant contribution in economic growth, the focus must move beyond capabilities to facilitate collaborative and cooperative networks built on trust and information-sharing with policymakers.

In addition to networked efforts, research and development in any sector needs a demand market to be truly successful. As it is not desirable to have government as the sole investor in research and development, future movement should shift the demand-pull from taxpayers to consumers demanding new products and services. As the largest consumer of energy and the least energy-efficient nation, China is concentrating on research and development efforts to become energy efficient to prevent faltering in economic growth. The United States should encourage solutions to this challenge because the biggest consumers shape product markets, and by consuming a product, innovations can result from learning by doing. One suggested approach for addressing U.S. energy challenges is to create an Energy Independence Trust, which would provide low-cost financing support to utilities, local governments, and small businesses for clean energy projects. By framing the projects in terms

of local economic development and the creation of jobs, consumer demand for clean energy would drive the Nation's research and development efforts.

Moving from energy to health and technology, there is a vast amount of available information that sits unnoticed or unused. As agencies use a plethora of systems, functionality of these systems is a major challenge for creating coordinated, collaborative networks. It is important to connect the "islands of information" so that agencies can share and monitor information more efficiently and effectively. For example, important information such as a drug allergy stored with one agency or organization is not available to emergency responders, and the lack of

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emergency treatment leads to tragic results. Furthermore, as a result of the segmentation of information, costly disconnects do not provide policymakers with all available information or a holistic overview of the situation.

To address this challenge and those of gaining a business advantage, rising health care costs, environmental concerns, and maintaining military technological superiority, a transdisciplinary approach to research and knowledge creation is key. By taking principles from one discipline and applying them to a comprehensive approach, researchers can transcend traditional disciplines and look at knowledge on a broad-based continuum. As isolated methods and disciplines start to interact with each other, the potential for convergent technologies is created, as well as opportunities for technological and economic competitiveness that enhances individual and group capabilities.

The Role of Human Capital

To ensure the prosperity and leadership within the interdependent global economy, the United States

must provide its citizens with a beneficial education and encourage highly capable, knowledgeable individuals to join the workforce. The symposium's final discussion questioned how to better engage the Nation's students and grow its next generation of public leaders. From encouraging students to pursue science and technology careers to boosting incentives for innovation to encouraging global engagement by allowing foreign students to come to the United States to study and research, there are many opportunities for enhancing the role of human capital in U.S. economic and national security.

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Graduate education should be viewed as a “pracademic” exercise that provides students with ample opportunities for application of the theoretical and abstract in the practical and real-life professional environment. As professionals are expected to have a deep, sophisticated knowledge of their fields, educators should focus on providing the tools for conceptual thinking and critical analysis within these fields. Additionally, as economic and national security depends on complex networks encompassing various jurisdictions, agencies, countries, and priorities, graduate education must build this collaborative capacity and provide an understanding of the various sectors, their points of interaction and tension, and the tools for forging discussions and consensus. Finally, educators must instill in their students a sense of value in serving in the public sector and invigorate them to be a part of addressing the challenges of governance.

For professional military education in particular, it is important to think of military leadership in strategic terms. The notion of jointness is important in the 21st century as wars cannot be won with military means alone or without the help of other nations and their military forces. The military education community—and the

national security community as a whole—must come to terms with operating in interagency networks to accomplish tasks. By examining the national economy and economic stability in terms of joint efforts, we can begin to understand how interagency efforts are essential for economic and national security.

In order to build the 21st-century workforce, it is essential that the government build a culture of education and learning among governmental agencies and the Nation's universities. Universities are engaging in high school outreach efforts to encourage students to become interested in governmental agencies and their work. To be successful in these efforts, there must be consistency and continuity among the agencies, universities, and high schools to increase public sector visibility and branding, as well as to build student awareness about public-sector career options and opportunities. By communicating with students and providing an education that builds the essential skills and competencies for governmental work, the United States can encourage these knowledgeable individuals to find professions that contribute to innovation and public service.

As the Nation's long-term prosperity also depends on addressing the problems within its high schools now, educators need to create new ways to connect with students and encourage them to complete their education and develop critical skills such as foreign language fluency. Most of today's students are best engaged with technology integrated in the classroom and best respond to flexible and collaborative projects. Educators should begin to use student-centric technology that encourages learning on the edge with tools such as the Internet, mobile devices, and the like. Additionally, seamless transitions among education, work, and life—and interorganizational collaborations—are important for maintaining student commitment and demonstrating to students the valuable connections between education and the other aspects of their lives.

Conclusions

Having established the importance of economic security as an aspect of national security, how important

is it for the United States to be at the forefront of innovation? Innovation has accounted for most U.S. prosperity in the post-World War II period, but it appears as if the American capacity for innovation has declined over time, although this is difficult to measure. It is important that the United States again start to increase its capacity for innovation and work toward increasing innovation to ensure the future prosperity of the country, both to counter the current economic downturn and to reconcile the maturing U.S. population. As the United States faces nations and power centers that challenge its position as the leader of economic security and innovation, it is important that the United States transition away from a status quo mentality and again foster a sense of urgency and motivation for growth. Although innovation cannot solve all problems, it is an economic advantage the United States should continue to keep.

The United States is moving gradually from a position of single, great power dominance toward more complex relationships with many nations. Given the changes in the global economy, it appears that dominance is a condition of the past. In light of these changes, the United States would be better served by making choices today to ensure that it remains the most influential power in the world, even once the concept of superpower status ceases to exist. As global interdependence now is a reality, the United States should develop a holistic worldview to develop an intimate knowledge of the complex systems within which the world operates and make policy decisions that are in concert with the well-being and security of the entire globe. Economic security, and therefore

national security, is now a matter of synthesizing information and resolutions and thinking strategically about where the United States is located in relation to its global competitors and how it can advance its economic security within the tangled spider web of global interdependence.

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