



ECONOMISTS for **PEACE & SECURITY**

War and Poverty Peace and Prosperity

*A conference at the Levy Economics Institute of Bard College
Annandale-on-Hudson, NY*

May 30 - June 1, 2007

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FOREWORD - Thea Harvey

The discipline of economics has traditionally viewed war as an external disruption of the normal course of events, and thus of minimal interest. It is such a rare thing for economists to study war and conflict that there is (as yet) no code number for this sub-specialty in the Journal of Economic Literature (JEL).

However, when the US defense budget claims more than half of all discretionary funding, when the US spends more than the entire rest of the world combined on "defense," when a new arms race is developing in space, and small arms kill over half a million people per year, we find these issues cannot be ignored.

Security policy is too often settled without informed economic input and consideration. Too often, weapons are built and bought without full consideration of their costs, effectiveness, and alternative means toward the desired goals. Too often, threats are made and confrontations launched without full appraisal of the risks. In the extreme, nations go to war without anticipating the full costs in relation to the goals. This tendency generates an extreme form of buyer's remorse, as citizens recoil from decisions that could have been avoided had they been properly understood from the start.

At the same time, economic issues of security are often narrowly understood as pertaining to the military, police, and other state security services. These are legitimate topics but they offer a restricted view of the causes and consequences of conflict and of possible ways to prevent or end it. At its broadest, security can be defined as freedom from pervasive threats to people's rights, safety or lives, involving both safety for people from violent threats, such as organized conflict, gross violations of human rights, terrorism and violent crime and safety from non-violent threats, such as environmental degradation, economic crises, illicit drugs, infectious diseases and natural disasters.

Further, conflict and security are largely thought of as issues that happen "over there," the purview of foreign policy. This conference will specifically address how domestic policies can affect peace and security. How can a government provide a peaceful environment for its citizens? What are the economic conditions that guarantee a secure population? How do monetary policy, full employment, investment in infrastructure, or poverty reduction measures contribute to creating lives that people have reason to value?

We see the need to incorporate an economics of war and peace firmly at the heart of an economic analysis. War and large military budgets have reduced human welfare and harmed the environment far more than inflation, business cycles, and many other factors that economists regard as the business of their profession. In an age of increasing interdependence and globalization, we can no longer afford to regard the causes and costs of war, anywhere in the world, as beyond our scope. An economist's approach to issues of conflict, war, and peace may, we hope, work to reduce the incidence and therefore the costs of war.

I am very pleased to present these proceedings of our organization's first stand-alone conference in over ten years. It was a great success - from the perfect weather and beautiful setting to the compelling presentations and stimulating discussions. I hope that these pages will give you the essence of having been with us for the actual proceedings.

This conference examined the broad range of issues that tie together economics, peace and security. It brought together international leaders in economic thinking, as well as policy analysts, other scholars, media, and citizens from diverse viewpoints, to present research findings and exchange views.

The conference took place from Wednesday, May 30 through Friday, June 1, 2007 at the home of EPS, the Levy Economics Institute of Bard College, Annandale-on-Hudson, New York. We are housed in the Georgian mansion Blithewood, overlooking the Hudson River and the Catskill Mountains, a beautiful setting for a conference. Much of the work of any conference happens outside the formal sessions; the tranquility and graciousness of the venue helped the participants to relax and brainstorm during the breaks as well as during the presentations and question and answer periods. The Levy Institute and in particular Dimitri Papadimitriou have been extraordinarily welcoming and generous to us over the last two and a half years since we were invited to make this our home. I would like to take this opportunity to thank them again, and especially the staff without whose help organizing this conference would have been a nightmare.

I would also like to thank our sponsors: the Ewing Marion Kauffman Foundation, the Arsenault Family Foundation, the Proteus Fund, and Warren Mosler made this event possible with their generous support.

Due to constraints of space, we have summarized the conference sessions here. I would encourage you, if you find your interest piqued, to visit our website (www.epsusa.org) for transcripts and audio recordings of the conference itself, PowerPoint presentations, and many of the papers that were delivered, as well as a great wealth of other information about these topics.

I hope that you find these proceedings interesting and compelling, and that we will see you in person at the next conference.



Thea Harvey

PROGRAM

Wednesday, May 30, 2007

4:00pm: Registration opens

5:00pm: Reception on the veranda

6:00pm: Buffet dinner in the foyer

7:00pm - 9:00pm

Welcome by [James K. Galbraith](#), Chair of Economists for Peace and Security
[Dimitri Papadimitriou](#), The Levy Economics Institute of Bard College
[Warren Mosler](#)

Keynote address by [Michael Lind](#), New America Foundation



Thursday, May 31, 2007

8:00am - 9:00am Registration and Breakfast

9:00am - 10:15am

SESSION I - The Comparative Economics of Global Security

- [Global Security and Human Security](#), Michael Intriligator, UCLA, EPS Vice chair and Fanny Coulomb, Université Pierre Mendès France
- [Interstate vs. Intrastate Wars in Africa](#), K. Maeve Powlick, Skidmore College
- [Genocide](#), Alan Kuperman, Lyndon B. Johnson School of Public Affairs, University of Texas at Austin

Moderator: [Jurgen Brauer](#), Augusta State University

10:15am - 10:45am Coffee break

10:45am - 12:15pm

SESSION II - Poverty, Conflict and Agriculture

Session co-organized by the Dutch/Flemish Chapter of EPS and the Households in Conflict Network

- [Livestock, Crop Choice and Civil War: Evidence from Burundi](#), Tom Bundervoet, Free University of Brussels, Belgium
- [War, Peace and Coffee: Farm Level Evidence from Rwanda](#), Eleonora Nillesen, German Institute for Economic Research (DIW), Berlin, and Philip Verwimp, University of Antwerp and European Center for Advanced Research in Economics and Statistics (ECARES), University of Brussels
- [Civil War and Child Health in Burundi](#), Philip Verwimp, University of Antwerp; Tom Bundervoet, Free University of Brussels; and Richard Akresh, University of Illinois at Urbana Champaign

Moderators: [Philip Verwimp](#), University of Antwerp and [Ecares](#), University of Brussels, and [Eleonora Nillesen](#), DIW, Berlin

12:15pm - 1:30pm Lunch

Keynote speaker - [Linda Bilmes](#), Kennedy School of Government, Harvard University

1:30pm - 2:45pm

SESSION III - The Economics of Warfare and the Costs of War

- [Equality and War: An Empirical Investigation](#), James Galbraith, University of Texas, EPS Chair
- [Why Bombs Fall and Fail](#), Lloyd Jeff Dumas, University of Texas - Dallas
- [Why Doesn't the United States Spend More on the Military?](#) David Gold, The New School
- [Privatizing War: the Renewed Rise of Private Military Companies](#), Herbert Wulf, Bonn International Center for Conversion

Moderator: [William Hartung](#), Arms Trade Research Center, World Policy Institute, the New School



PROGRAM

(Thursday, continued)

2:45pm - 4:15pm

SESSION IV - Rethinking Post-Cold War US Security Policy: What went wrong? How do we get it right?

Session co-organized by Carl Conetta of the Project on Defense Alternatives

- Carl Conetta, The Project on Defense Alternatives
- Michael Lind, New America Foundation
- William Hartung, The Arms Trade Resource Center, World Policy Institute, The New School

Moderator: Winslow Wheeler, Strauss Military Reform Project, Center for Defense Information

4:15pm - 4:45pm Afternoon coffee break

4:45pm - 6:15pm

SESSION V - Space Economics and the Dis-economies of Space Weapons

Session sponsored by the Arsenault Family Foundation

- The Arms Race in Space, Richard Kaufman, The Bethesda Research Institute
- The Costs of US Space Dominance, Nancy Gallagher, Center for International and Security Studies at the University of Maryland
- Space Security and Economics, Henry Hertzfeld, Space Policy Institute
- Space Security: Capabilities and Limits of Technical Solutions, Laura Grego, Union of Concerned Scientists

Moderator: Richard Kaufman, The Bethesda Research Institute

6:15pm - 9:00pm - Reception and dinner. Keynote speaker - **Barbara Bergmann**, emerita at American University and University of Maryland

Friday, June 1, 2007

8:00am - 9:00am Breakfast

9:00am -10:15am

SESSION VI - Avoiding War

- Inexpensive Economics of Preparing for Terrorist Attacks and Disaster, Clark Abt, Cambridge College
- Democracy, Peace, and Trade, Solomon Polachek, State University of New York - Binghamton
- Institutionalizing and Safeguarding Peace, Charles Anderton, College of Holy Cross

Moderator: Jeff Madrick, Challenge Magazine

10:15am - 11:30am

SESSION VII - Constructing Peace in Post-conflict Zones with Innovative and Entrepreneurial Tools

Session sponsored by the Ewing Marion Kauffman Foundation

- Using Technology to Promote Lasting Communication and Peacebuilding Activities in Cyprus, Romina Laouri, Tech4peace and Ashoka Foundation
- Working with Craftswomen in Conflict and Post-conflict Regions to Offer Business as a Potent Vehicle for Sustainable Development, Amber Chand, The Amber Chand Collection
- Entrepreneurship Against the Odds: Fragility and Private Firms with Lessons from Africa, Wim Naude, World Institute for Development Economics Research, United Nations University Helsinki

Moderator: Thea Harvey, Executive Director, EPS

11:30am - 12:00pm Coffee break

12:00pm - 1:15pm

SESSION VIII - Building a Secure America at Peace

- Fighting for Jobs: War and Employment, Warren Mosler
- Global Warming Solutions for America, Eban Goodstein, Lewis & Clark College
- Global Warming, Hurricane Katrina and New Orleans, Marcellus Andrews

Moderator: James K. Galbraith, University of Texas, EPS Chair



WELCOME James K. Galbraith

Welcome. On behalf of Economists for Peace and Security, and especially my vice chairs, Mike Intriligator and Richard Kaufman, who are here, other members of the board, I would like to extend to you a very warm welcome to this first, and what we hope will be a series of conferences of members and friends of Economists for Peace and Security in the years ahead.

EPS was founded eighteen years ago in an effort to give voice and organization to members of the economics profession who were concerned about the costs of war, the obstacles that conflict places to economic development, and also about the possibilities that are foregone when a country devotes far too much, far more of its resources than it needs to, to the military dimensions of security. We believe, and we believe across a very wide spectrum of talents and persuasions, preoccupations, research interests in the economics profession, that we have a role in these discussions, that the question of cost has historically been decisive in the outcome of policy decisions over war; but that the point of decision has historically come too late, that these issues are generally not properly raised in advance, in the rush to military commitment, but that they emerge afterwards, as the burdens and the foregone chances come to weigh on those who have made the commitment and who are bearing the price.

We think that economists as a group, who are by in large united on this proposition, ought to be playing a larger role in the policy discussions than we as a profession have done in modern times. And in recent years I think it's fair to say that our position has in fact gotten wider recognition, and in part because of our efforts. We set out, a few years ago, to effectively dominate the news coverage awarded to the American Economic Association at those annual meetings where we control the grand total of two sessions; but after the last of those meetings, or maybe it was one before, I did a Google news on American Economic Association a few days later. There were 77 hits, and 74 of them referred to the work of Economists for Peace and Security, and that was a paper co-authored by Joe Stiglitz and Linda Bilmes. Linda will be here tomorrow, giving the real full breakout of the costs of war in Iraq. And more recently, as many of you know, Linda's work has been at the center of the enormous realization of scandal associated with the failure to prepare, which is essentially a failure to budget, essentially a failure to plan for what is and should have been perfectly predictable, the requirements of wounded veterans for medical care when they return to the United States. A quintessentially economic issue on which, I must say, we have been, through one of our fellows, among the most active voices.

So I'm very proud of what we have been able to do so far, and I'm very pleased with this particular meeting. The board and Thea and I set out in planning this meeting to do something original and to do something creative. And what we thought we would do is to bring together a very wide range of people, including economists who have been working with us closely for a long period of time, including specialists in security policy, in foreign policy, including some people from the activist community, including some people who have experienced working in post-conflict environments and in the economic reconstruction of those environments; to bring them together for two days' talk about the issues that are of specific and common concern, and try to develop from this going forward projects of collaboration, of research, and of public action that will over a certain time advance the cause that we have in common, which is to try to bring about a greater recognition of the economic issues associated with war and peace.

I want to say that this conference in particular would not have been possible without, first of all, the brilliant management of Thea Harvey in bringing it together. I should also like to mention the support of the Kaufman Foundation. That was an extremely helpful and extremely timely endorsement of our efforts.

But I most of all would like to begin by expressing our appreciation to the Levy Economics Institute and to its president, Dimitri Papadimitriou, who is our host here. But he's not just our host here, and not just one of my really closest friends over many years; but also has been the host and provided this wonderful setting as a home for Economists for Peace and Security. And I have to say, if you have a one-person non-governmental non-profit, you really should have an office building like this one. It balances everything out. So we are just delighted not only to be part of the Levy Institute, but to be here this evening.



MICHAEL LIND: The Comparative Economics of Global Security

James K. Galbraith

Our hope in inviting a participant this evening to give opening remarks was to find someone who was truly an original. And to give you an idea of how original Mike Lind is, I could just say that at the time when just about every loathsome individual one can imagine was seeing the opportunities in making an ostentatious migration from the left to the right, Mike decided to make a migration in the other direction. And he got at least as far as the radical center.

I first got to know him, actually, when he reviewed one of my books, and said two things memorable: one at the beginning, which was that it was brilliant and iconoclastic - I like that very much - and then at the end at which he said his reaction was, You and whose army?

But it wasn't until one looks a little bit at what this fellow has been up to that you realize what a powerhouse and a polymath he actually is. He has edited or written for, and extensively, just about every worthwhile publication journal in America and a few that would not reap that, a few worthless ones. But in addition to that, he has a book of poetry entitled *The Alamo*, he has a children's book entitled *Blue Bonnet Girl*, and he is a comprehensive and incisive commentator on every dimension of American political economy and foreign policy. So he is in many ways the ideal person to start us off this evening. And I will just note the most recent three of these books, which give you some of the range. One of them is called *The Radical Center*. It describes a political position. One of them is called *Made in Texas*. I was not made in Texas, but I've spent a couple of decades there, so I have some sense of what a truly strange place it is. And Mike's book, which is about George W. Bush naturally, gives you an understanding of how such a - what's the right word; now I don't think I want to use the right word - how such a person could emerge from such a sociological environment riven between some of the most retrograde economic sectoral interests, oil and agriculture on the one hand, and a small but valiant group of modernizing influences. And then he has most recently - is it most recently? - ventured into an exercise in what I'd call the historical philosophy as a discussion of what Lincoln believed, and that's his most recent book.

So there was no question in my mind who I wanted to have speak for opening our conference, and so I'm very happy to give you Michael Lind of the New America Foundation. Michael.

Michael Lind

Thank you. I'm more intimidated than ever after those introductory remarks. I was intimidated coming in, because I've admired the work of many of the people here for many years. I may have more to learn from them over the next few days than any of you have to learn from me. I was intimidated in addition by the fact that I would be competing for your attention with dessert.

And then as Jamie was speaking my heart sank, as the door was opened over here onto this wonderful bucolic prospect and the marvelous evening. And I thought, maybe this is a sign, in the spirit of 18th Century allegory in this 18th Century building. I'll be discussing, in fairly somber tones, a fairly somber subject, so naturally I would be in the dark part of the picture. So I'm security. Or insecurity perhaps today. And there, outside the door, is peace. There's hope. There's at least an opening to peace after the gloomy tenebrific shade in which I'll deliver my remarks.

In his classic study, *US Foreign Policy: Shield of the Republic*, written at the height of World War II in 1943, the American journalist Walter Lipmann wrote, "Foreign policy consists in bringing into balance, with a comfortable surplus of power in reserve, the nation's commitments and the nation's power." When commitments exceed resources, the result is what Samuel P. Huntington has described as a Lipmann gap.

The strategy of American global hegemony today, I argue, suffers from a serious and growing Lipmann gap. Even apart from the cost of wars in Iraq and Afghanistan, the scale of America's commitments greatly exceeds the budget and manpower that America's leaders have allocated, or are willing or likely to allocate, for the defense of those commitments.

Some have called the contemporary US an empire. That is a half-truth at best. We have imperial commitments, but in spite of defense spending increases in recent years, we don't have an imperial budget. In the next generation we are going to have to choose either to scale back some of our commitments or to ramp up our spending even further on the military. Either way, the Lipmann gap that exists in American strategy, at some point, will have to be closed.

Now the origin of the present Lipmann gap in American foreign policy can be found, in my opinion, in the early 1990s. The defeat and disintegration of the Soviet Union made it possible for the US to reduce both its commitments and its military spending. Instead the United States, under the first President Bush, and then under President Clinton, expanded its geopolitical commitments even while reducing defense spending as a share of GDP to slightly less than 3 percent in the late Clinton years.

The US sought to maintain its existing Cold War protectorates over its East Asian allies, Japan, South Korea, and Taiwan, as well as reunified Germany, indefinitely. In addition, during the Clinton years, the US expanded its military influence into regions that had previously been contested or under Soviet domination, the Middle East, the Balkans, and Eastern Europe,



MICHAEL LIND: The Comparative Economics of Global Security (cont.)

where NATO was expanded to the very borders of Russia. Instead of viewing the end of the Cold War as a chance to enjoy the fruits of great power peace, the US under Republicans and, I'm afraid, many Democrats alike sought to convert America's temporary Cold War alliance leadership into indefinite global hegemony.

In 2000, Paul Wolfowitz himself observed with satisfaction, "In 1992, a draft memo prepared by my office at the Pentagon which proposed a post-Cold War defense strategy leaked to the press and caused a major controversy. Just seven years later, many of these same critics seem quite comfortable with the idea of a Pax Americana."

This bipartisan plan for perpetual US military domination of every region with power resources outside of North America represented a radical departure from America's previous policy of seeking to preserve rather than prevent a diversity of power in the world and to share the burdens of preserving the peace with other rich and militarily powerful states. This strategy is often justified by its proponents on the basis of a very pessimistic and somewhat theoretical version of the Realpolitik, which leads to extreme gloom about the prospects for great power peace. The key concept - I'm sorry to be academic, but it's necessary in discussing these ideas - is the security dilemma. The idea is very simple: all sovereign states are naturally suspicious of each other. If any country builds up its military forces for defense, other countries will assume that it will use those forces for aggression and feel compelled to build up their own militaries in response. The result inevitably will be a cycle of arms races that spin out of control into all-out war.

Now according to the theory of the security dilemma, the only possible way to prevent the security dilemma from producing arms races and wars is for one state to more or less monopolize military force and provide free security to others. In effect, the hegemonic power - hegemon comes from the Greek word for general, or military leader - acts as a de facto government for a regional or global system of sovereign states. In civilized countries, individuals do not feel the need to amass weapons in their homes out of fear of their neighbors because they trust the government to protect them from crime. In the same way, according to the theory, states that trust a benevolent hegemon to protect their existence and interests can relax, reduce their armaments to a minimum, and focus on civilian pursuits like trade, as President Bush suggested in his 2002 remarks.

A distinguished political scientist, Michael Mandelbaum, in his recent book, *The Case for Goliath: How America Acts as the World's Government in the 21st Century* - a significant title in itself - invokes American hegemony as the solution to the security dilemma in Asia, Europe, and the Middle East. He writes, "Reassurance insures against what might happen, and the need for it arises from the structure of the system of sovereign states. Because no superior power controls relations among them, an attack by one against another is always possible. But military preparations that one country undertakes for purely defensive reasons can appear threatening to others, which may then take military measures of their own, and so set in motion of spiral of mistrust and military buildups." You may get the sense that the spiral is the favorite geometric figure of proponents of this school of thought, the out-of-control spiral in particular.

Now fortunately, according to Mandelbaum, US hegemony eliminates this dilemma. He writes: "The American military presence in Europe acts as a barrier against such an undesirable chain of events. It reassures the Western Europeans that they do not have to increase their own forces to protect themselves against the possibility of a resurgent Russia. At the same time, the American presence reassures Russia that its great adversary of the first half of the 20th Century Germany, will not adopt policies of the kind that led to two destructive German invasions in 1914 and 1941." So Mandelbaum concludes that the alternative to US hegemony would be a far more dangerous world. At best, an American withdrawal would bring with it some of the political anxiety typical during the Cold War and a measure of the economic uncertainty that characterized the years before World War II. This reference to the "beggar-thy-neighbor" trade policies of the 1930s is a recurrent theme of this literature. At worst, the retreat of American power could lead to a repetition of the great global economic failure and the bloody international conflicts the world experienced in the 1930s and 1940s.

The neo-conservative journalists William Kristol and Robert Kagan made the same argument for permanent US global hegemony. "The more Washington is able to make clear that it is futile to compete with American power, the less chance there is that countries like China or Iran will entertain ambitions of upsetting the present world order. And that means the United States will be able to save money in the long run; for it's much cheaper to deter a war than to fight one."

On June 26, 2003, in remarks before the International Institute for Strategic Studies, Dr. Condoleezza Rice, the National Security Advisor, officially endorsed the security dilemma theory. She spoke of

"...a historic opportunity to break the destructive pattern of great power rivalry that has bedeviled the world since the rise of the nation-state in the 17th Century. This is in fact more than opportunity; it is an obligation. Instead of repeating the historic pattern in which great power rivalry exacerbates local conflicts, great power cooperation can now solve conflicts. In recent months, some have questioned whether this is possible or even desirable. Some argue that Europe and America are more divided by different world views than we are united by common values. More troubling, some have spoken admiringly, almost nostalgically, of multi-polarity as though it were a good thing to be desired for its own sake. The reality is that multi-polarity was never a unifying idea or a vision. It was a necessary evil that sustained the absence of war but did not promote the triumph of peace. Multi-polarity is a theory of rivalry, of competing interests, and, at its worst, of competing values. We have tried this before. It led to the Great War, which cascaded into the Good War,

which gave way to the Cold War. Today this theory of rivalry threatens to divert us from meeting the great task before us.” Now here we have all of the themes of security dilemma theory laid out by the National Security Advisor of the United States. The mere existence of independent great powers tends to lead to world wars in the absence of unanimity among them, enforced, although Dr. Rice does not say so, by a benevolent hegemon, namely us. Multipolarity leads to war; unipolarity means peace. This is a very Hobbesian view of international relations in which there can be no peace without a Hobbesian Leviathan to impose it.

Now the theory that the world’s great powers will plunge into rounds of rivalry and even more war in the absence of American hegemony repeatedly has been invoked to justify that hegemony. Is the theory valid?

The only way to test theories about international politics is to interpret history, and history does not support the idea of an inevitable security dilemma that forces neighboring state into ever-worsening spirals of destructive competition that lead to war. The idea that the global conflicts of the 20th Century were produced by a security dilemma in Europe, in my opinion, is simply wrong. The World Wars and the Cold War were not accidental results of destabilizing arms races. They arose not from the dynamics of a system of multiple great powers, but from the ambition of particular aggressive regimes in Berlin and Moscow. To paraphrase a slogan of opponents of gun control: arms races don’t cause World Wars; great powers do.

In neither 1914 nor 1939 was Germany in any peril of unprovoked attack by France, Britain, or Russia, much less the United States. Motivated by ambition rather than by insecurity, the rulers of Germany in both World Wars wanted their nation to be an awe-inspiring global super-power rather than a medium-sized regional European power, and this required the conquest of Europe and Western Eurasia and its transformation into a German sphere of influence. If Germany’s leaders had been content, as Bismarck had been, with Germany’s status as first among equals in Europe, there might have been arms races among Germany and its neighbors, perhaps even small wars in the Balkans; but there probably would have been no World Wars, no matter how many archdukes were assassinated.

Nor was the Cold War the accidental result of the collision of defensive security strategies adopted by the Soviet Union and the US After World War II ended, the US withdrew most of its troops from Europe and Asia and demobilized them, even though the Red Army remained in Eastern Europe. And Stalin knew from American and British spies there would be years before American air power credibly could threaten his domain with atomic destruction. And since abandoning communism, post-Soviet Russia has been content with its status as a regional great power. It’s no longer a revolutionary revisionist power.

The security dilemma theory that justifies US hegemony strategy assumes that the nature of a country’s government is irrelevant to its foreign policies. It is not necessary to endorse the theory that democracies will never go to war with each other in order to reject the idea that Britain, France, Germany, and Russia, in the absence of US hegemony in Europe, would inevitably have arms races leading to war with each other. Contemporary Germany is not ruled by militaristic Junker generals or Nazis claiming Lebensraum in the east; Russia is not ruled by communists trying to overthrow capitalism; and British policies towards Europe are no longer driven by fears of a continental threat to British colonies overseas.

Why is all this important? It’s important because if the theory of an inevitable security dilemma is mistaken, then the major theoretical argument for US hegemony in terms of American national security collapses. This is because the cost benefit analysis of US hegemony depends on whether the security dilemma exists or not. If the alternative to perpetual US military hegemony in Europe or East Asia is a local arms race that might spiral out of control into World War III, then the cost of US hegemony in those regions, including the cost of occasional small wars by the US as local policeman, are relatively minor by comparison to the benefits; and I for one would be willing to pay the cost. But if the alternative to perpetual US hegemony in Europe and Asia is likely to be peace among the local great powers, if only in some cases a tense and armed peace, rather than new rounds of Sino-Japanese or Russo-German war, then the US hegemony strategy is very costly indeed.

If this policy of permanent US global hegemony over all of the regions with military-industrial power outside of North America were seriously pursued, it would be far more costly than it actually is, because we’ve allocated commitments far in advance of the actual resources devoted to securing them. Consider a policy that the neo-conservatives have favored: the proposal that the US outspend all other militaries in the world, on the theory that this will intimidate other countries into abandoning arms races with us, indeed abandoning arms races with each other, and concentrating on “trade and other pursuits of peace,” to use the President’s language. This will harm the US economy over time if it has not done so already, in terms of opportunity costs.

In 2004 - 2005, the US accounted for 45 percent of global spending on the military. But there’s less to this than meets the eye, as Tallulah Bankhead said on leaving the avant-garde play. This was largely the result of decision by other great powers to spend less on defense after the disappearance of the Soviet threat. The US is able to spend almost twice as much on defense as its NATO allies combined only because the latter have chosen to slash their defense spending. Following the Cold War, if our NATO allies had continued to spend as much on defense as they had in 1985, US spending would exceed theirs today only by 10 percent. This disproportion doesn’t prove that we’re the new Rome; it merely proves that the British, and the French, and the Germans quite appropriately are spending much less in the absence of an imminent threat.

The neo-conservative journalists William Kristol and Robert Kagan have written, “Americans should be glad that

MICHAEL LIND: The Comparative Economics of Global Security (cont.)

their defense capabilities are as great as the next six powers combined. Indeed, they may even want to enshrine this disparity in US defense strategy. Great Britain in the late 19th Century maintained a two-power standard, insisting that at all times the British Navy should be as large as the next two naval powers combined, whoever they might be. Perhaps the United States," say Kristol and Kagan, "should inaugurate a two- or three- or four-power standard of its own, which would preserve its military supremacy regardless of global threats." Kristol and Kagan argue that the US should perpetually spend as much on defense as it did during the Cold War. Similarly, former Reagan economic advisor Martin Feldstein, in the last month or so he published an article in *Foreign Affairs*, saying we're now spending about 4 percent - more than that unofficially - but we should raise it to about 6 percent, which was the Cold War average.

The problem is the US economy is not a limitless cornucopia that can sustain a level of permanent military spending comparable to that of the Cold War without harm. The long-term growth of the US economy, according to many economists, depends on public investments in scientific research, infrastructure, and education. Such public investments have diminished as a percentage of the US federal budget since the end of the Cold War. The main threat to the US budget is escalating health care costs, followed by entitlements for the elderly - although Social Security isn't that much of a problem - and Pentagon spending.

If the percentage of the US economy devoted to health care and pensions rises as the US population ages, spending more of the budget on the military may lead to less long-term public investment in laboratories, schools, and infrastructure, if you assume that the AARP will see to it that Social Security and Medicare are funded.

Some Pentagon spending produces useful spin-offs for the civilian economy, like the Internet; but for the most part, money spent on the military is money that cannot be used for public and private investments that increase long-term productivity growth. The waste involved is illustrated by the example of the Iraq War.

Before the war, the Bush administration argued that it would cost no more than \$60 billion. When White House economic advisor Lawrence Lindsey said that the price tag might be as much as \$200 billion, he was pressured into resigning. The ultimate cost of this war of choice to the American taxpayer may be \$1-2 trillion, according to Linda Bilmes, a former Secretary of Commerce, and Joseph Stiglitz, the former head of the World Bank and the winner of the Nobel Prize in economics. They conclude that if the money had been invested in the United States instead of Iraq, "avoiding war would arguably have saved the nation at least one trillion dollars, enough money to fix Social Security for the next 75 years twice over."

Even in the absence of conflict with other great powers and small but expensive wars against minor countries like Iraq, the attempt of the US to maintain its position at the top of the hierarchy by surpassing most or all other great powers combined in military spending is likely to grow ever more expensive. If China and other rising powers spend more on their military as their economy grows - they almost certainly will - the US will be forced to spend ever more to keep its solitary military lead as long as it is unwilling to pool the costs of its defense with allied great powers. It's all but certain that the US public, confronted with a choice between slashing middle class entitlements, dramatically raising taxes, and limiting military expenditures, will force their elected leaders at some point to limit military expenditures, thereby dooming the "dissuasion" or permanent subordination of other great powers as a crucial element of the hegemony strategy.

The price of American hegemony is too high as well in terms of manpower. While no Americans died as a result of combat in Kosovo, in the Iraq War more Americans have been killed than died in every US military conflict between the end of the Vietnam War and the US invasion of Iraq in 2003. The total number of dead, to be sure, is a fraction of the losses suffered by the US in Vietnam and Korea; but the stakes for the US during the Cold War conflicts in Asia were far higher than the stakes in Kosovo or Iraq. In any event, public opinion turned against the Iraq War once the American death toll neared 1,000.

An Iraq syndrome, a generational reluctance to commit US troops to combat, may very well follow the war in the same way that the Vietnam syndrome followed that much costlier war. In itself, this might doom the US hegemony strategy. In order to be the hegemon of Asia, Europe, and the Middle East and to reassure other great powers, the US must be willing to threaten war and occasionally to wage war completely on its own if necessary against states that threaten not the United States, but allies and protectorates of the United States. Already the US military is showing the strain placed on it by two simultaneous relatively small wars in Afghanistan and Iraq. Recruitment and reenlistment rates in America's military have plummeted. In the last couple of months, 20 percent of new recruits are high school dropouts, because military service has become so unattractive. The US has tried to fill the manpower gap by enlisting forces from allied countries; but with the exception of Britain, no allied countries sent more than token forces to assist the US. In desperation, the US government has relied on private contractors, or mercenaries, whose ambiguous legal and political status raises serious questions of ethics and oversight for US policy. Ironically, leading neo-conservative supporters of the US hegemony strategy implicitly concede the existence of a Lipmann gap, at least where manpower is concerned. Some have called for the US to spend vastly more on the military, and also to reinstate the draft. The clear implication is that absent Cold War levels of defense spending and a permanent draft, the US will not be able to function as the global hegemon in a unipolar world. This is almost certainly right.

To my mind, the most disturbing thing about the hegemony strategy of this administration in particular is that it's the first grand strategy in American history that cannot be explained to the American public for fear they would reject it. Some champions of the strategy are candid enough to admit this. In his book, *The Case for Goliath: How America Acts as the World's*

MICHAEL LIND: The Comparative Economics of Global Security (cont.)

Government in the 21st Century, which I cited earlier, Michael Mandelbaum concedes that the case for US global hegemony might not “persuade the American public, which might well reject the proposition that it should pay for providing the world with-government services.” Speaking perhaps for many supporters of this strategy, Mandelbaum concludes that it may be necessary to keep the American public in the dark because - and I’m quoting his words now - “the American role in the world may depend in part on Americans not scrutinizing it too closely.”

In the same spirit, neo-conservative defense analyst Eliot Cohen writes, “The United States needs an imperial strategy. Defense planners could never admit it openly, of course.” Yet another neo-conservative, Thomas Donnelly, writes of a global strategy aligning the US with Britain, Japan, and India against the other great powers as the “de facto plan of the Bush administration, though officials dare not speak its name.”

Nothing could be more repugnant to America’s traditions as a democratic republic than a grand strategy which can be sustained only if the very existence of the strategy is kept secret from the American people by their elected and appointed leaders.

Since the hegemony strategy was adopted by elites of both parties in the aftermath of the Gulf War, the Clinton and Bush administrations, in varying ways, have tried to have world domination on the cheap. The Clinton administration expanded America’s commitments to new allies in Eastern Europe, while cutting US military spending to a post-Cold War low. Sensitive to public opinion, the Clinton administration shrewdly waged the Kosovo war in a way that would ensure there would be no American combat fatalities.

George W. Bush, like Bill Clinton, has sought hegemony on the cheap. The Bush administration claimed, and no doubt believed, that the Iraq War would be brief and inexpensive, and that Iraqi oil revenues would pay for the costs of reconstruction. Sooner or later, however, there was bound to be a war in the service of hegemony, which, unlike the Gulf War, and unlike the Kosovo war, and like the Iraq War, proved to be truly costly in American blood and treasure.

If the United States is unwilling to pay the price in casualties and money for a medium-sized war like Iraq periodically, then it is not capable of policing the expanded American protectorate system that America’s leaders, in my view, recklessly created in the 1990s. As there is no political will to further increase the military’s share of American GDP, the only alternative that remains is to reduce America’s commitments. This does not mean a retreat into isolationism. It could mean more burden-sharing with traditional allies and rising regional powers.

One thing is clear: it is time for Americans to embrace rather than reject a multi-polar world - not the rivalrous multi-polarity of the past, of the kind Condoleeza Rice spoke of, but the kind of cooperative multi-polarity that Woodrow Wilson meant when he spoke of a community of power. The choice between American hegemony and a return to world wars has always been a false dilemma. The sooner we recognize that, the sooner we can return to the earlier American tradition of collaborating with other non-aggressive great powers in building a peaceful and prosperous global society of states. Thank you.

LINDA BILMES: The Battle for Iraq's Wounded

James K. Galbraith

Well, good afternoon. I hate to break into all of these conversations, but I am going to do so. This is a very - a particularly special moment in this conference, because I want to welcome a speaker for this lunch who has come to play an important and perhaps in some ways ultimately decisive role in a rapidly expanding area of our national debate.

Linda Bilmes was Assistant Secretary of Commerce for Management and Budget in the Clinton Administration. From there she went to the Kennedy School of Government, where she is presently a professor of practice. She first came into our network about a year-and-a-half or so ago with a paper, co-authored with Joe Stiglitz, that I mentioned last night. I said this was part of our campaign to take over all of the press coverage associated with the American Economic Association. Linda was not here, but I mentioned that if you Googled "American Economic Association" after that meeting on news, you would get 77 stories, of which 74 were about Linda's work.

What was it about? It was about the full cost of the war in Iraq; that is to say, about the predictable long-term consequences of actions that had already been taken and actions that were essentially inevitable as of that time. And of course once one began to do the accounting in those terms, numbers, certainly all but the early numbers of \$50 billion or so, all paid for by the Iraqis themselves and already disappeared; the \$200 billion, which was a plausible a priori estimate in some ways by Lawrence Lindsay, also fades away; and the numbers go up to the range of a trillion to two trillion. And they rise from there as the situation is prolonged and gets worse.

And it turned out that a very large part of the accounting of this, of the projections, have to do with the long-term care of returning veterans who are injured. As the injury rates are much higher, the survival rates from injuries that would have previously been lethal are much higher, and the costs of care are much higher and go on very far into the future, as these young people face diminished and demanding lives. And Linda got into this, and she will tell you, this issue began to explode, because it's an issue that was known to the people who are affected by it, but was not known very well by the larger public. And I won't take my time to tell you this story, because I'm sure you will get it from her. It leads, of course, directly to this exploding scandal of the inadequate preparation for veterans' medical care and veterans' care in general that has come to characterize, and in some ways to epitomize and to symbolize and to capture, for most people's everyday experience, exactly what was wrong with the decision to go to war in Iraq, and with the entire approach that the administration took to prosecuting that war. So it has become, in some sense, in many ways, I said to Linda last night, the most important thing that we do, the most important that we have done: Her work represents what Economists for Peace and Security is all about. And so I'm really very happy and very pleased, privileged, and proud to introduce Linda Bilmes to you this afternoon.

Linda Bilmes

Thank you, Jamie, and thank you all for inviting me here to speak today.

There's a lot of information. I'm always reminded of the old wag, you should not try to cram everything into a speech that you know, because you might succeed.

But I'm Linda Bilmes, and I want to first of all point out that I'm not actually an economist, but I'm really an expert in budgets and public accounting. But I did team up with an economist in the form of Joe Stiglitz last year to write the first paper on the cost of the war. We wrote a subsequent paper in *The Milken Review* last year, and I've written a paper on the veterans' cost this year.

So what I'm going to try and do today is to discuss how we try to quantify the cost of the war. I'll focus in some detail on the veterans' cost and the medical and disability payments to the veterans.

Let me just start by making a couple of general observations about the cost of the war: When a country goes to war, the benefits are typically things like freedom and democracy, and things which are not very easily quantified. But in this war, certainly, which was a war of choice, where we had a lot of choice over the timing and the decision, it should have been possible to estimate what the war would have cost, or at least to take some effort to do that. And apart from a few academic studies, most notably by Bill Nordhouse of Yale, no one took a serious look at the cost of a prolonged occupation. Certainly no one in the government did this. In fact, as we all know, Secretary Rumsfeld, when he was asked if it was even possible whether the cost could exceed the \$60 billion that he had projected, dismissed it in that Rumsfeldian way as "baloney." In fact, things have turned out very differently. The war will cost us between \$1.2 and \$1.5 trillion dollars in budgetary costs, and another \$800 billion in economic costs.

But there is a kind of strange phenomenon even about these costs. An old friend of mine, who is 92, said to me that in his life he notes that countries usually end wars when they have spent enough blood or treasure. But in the current conflict, by fighting this war with a volunteer army supported by contractors, we have essentially been able to turn this cost in blood into a financial cost. It's basically how much we pay the soldiers and the contractors. And then, by borrowing all the money to fight the war, instead of raising taxes, we've deferred even that cost, and passed it on to the next generation. So the cost of the war that I'm about to describe has really not been felt by the population.

And you can see it clearly every day in the newspapers. Just picking up today's *USA Today*, we see "New Peak for the S&P 500," and at the same time, that the military needs \$25 billion for 22,000 new MRAPs (that's mine-resistant ambush-protected vehicles) by 2009. Since the initial study that Joe and I did last year, I can honestly say that every single day in the last year-



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and-a-half, I uncover another additional cost which we've not yet even incorporated into our figures.

Before I discuss the cost, let me just review the basic dimensions of the war. Over 1.5 million US servicemen have been deployed to operations in and around Iraq and Afghanistan. To date, about 690,000 soldiers have been discharged, which means that the majority, about 800,000, are still deployed. About half the force has served second or third deployments, or had their tours of duty extended involuntarily. The official death toll is more than 3,700. The number who have been wounded in direct combat is over 26,000. The number of troops who have been wounded or injured including non-combat, and that means, in other words, if your helicopter crashes into a mountain, as opposed to being shot down, if you are electrocuted while you're stringing barbed wire, if you are burned while being trained in how to detonate explosives, if you have heat stroke or whatever, is more than 62,000.

Now when I did my study of the veterans' cost, I ran directly head-on into a kind of state of denial of the Pentagon about this larger number of wounded and injured; so I'll just describe that to you for a second. It was a very strange situation. Since I was trying to understand the cost, I needed to look at the full number, because it doesn't matter if your helicopter crashes into a mountain or if it's shot down. If you're wounded, either way the Veterans' Administration is going to be paying for your disability benefits, and your medical care will be seen to.

But if you are in that helicopter and you do crash into a mountain, but you're not shot down, you don't show up on the official wounded list, because you're not wounded in combat. The Pentagon keeps two sets of books, and after I published my paper, Dr. Winkenwender, then Under-Secretary of Health for the Pentagon, actually phoned me up in my office and said, "Where did you get this number?" And I said, "Well, I got it from your website." And he said, "You did?" So I then faxed him his own website. I thought I was pretty clever, doing that. But a week later a number of veterans' groups contacted me, and then they said, "Did you see what they've done? They've changed the website."

Now you can still find the total number of wounded and injured on the military website, but you have to know what you're looking for; because there is no longer a total of what they call non-mortal casualties; you have to add up a number of columns to get there. You have to be able to know that you add up three different places in a fairly confusing form.

But the point is here that the number of casualties is much higher than in previous wars. In Vietnam, the number of wounded was 2.6 for every fatality; in Korea, it was 2.8; and in this war, if you count only the wounded in combat, it's 8 to 1, and if you count all the non-combat and combat injuries, it's 16 to 1. And that is obviously very good news, that so many people are surviving; but it carries a very high price tag.

So now let me turn to talking about the cost of the war. We examined four categories of costs of the war. (There are more, but these are the ones we worked with.) The first category is the running costs. This is what we read about in the newspaper. This is the cost that you see that John Kerry voted for, or he didn't vote for, and so forth. And Congress has appropriated \$500 billion to date for Iraq and Afghanistan military operations, reconstruction, and enhanced security at US bases, including about \$380 billion for military operations in Iraq. And one of the things that is striking is that this cost has been rising every month since the war began. In FY 2003, the monthly average cost of operations was \$4.4 billion; it's now \$9.8 billion. That's \$10 billion a month, \$2.5 billion a week. And people, usually journalists, they say, how can you spend that much money? What are we actually spending it on? Where does it go?

This money goes to a few things that really drive up the cost. One is combat pay. In addition to their regular salary, anyone who is deployed received combat pay. Combat pay has been rising throughout the war.

A second very expensive cost is the high cost of using Reservists. Forty percent of the fighting force is National Guardsmen and Reservists. Reservists are the most expensive way to fight a war, because if you think about it, normally we're only paying them for one weekend a month in the Reserve; but we have to pay them a full-time salary, plus combat pay, plus they're mostly older, so they get family leave, housing assistance, family benefits. So it's the sort of wartime equivalent of treating an ingrown toenail in the emergency room. It's a very expensive way to fund a war.

Third is the very high cost of contractors and the high security component of contracts. So in other words, we're using a lot of contractors to support the troops. Contractors have lower long-term costs, because they don't get as many benefits as active duty troops; but they increase the short-term running costs. We also are well familiar with the fact that contractors now, if you look month to month to month, the same contract for doing the same thing, whether it's tacking on bulletin boards, or replacing the electricity grid, an increasing share of those contracts is going to security costs, so the cost of the contracts goes up. Other things that are very expensive include fuel - fuel costs of course have hit the military very hard, and the price of oil before we invaded Iraq was \$23 a barrel; maintenance costs - equipment is being used up at six times the peacetime rate; repairs of equipment; and moving supplies into remote areas - for example, in Afghanistan, you have many people stationed in very remote areas, and it's a very high cost to get their supplies there; reenlistment bonuses for special forces are up to \$145,000 - it is very, very hard for the military to retain people, particularly at the sort of staff sergeant level, particularly in certain specialties; and then of course the high cost of medical care in the field. The increased survival rate has come at a very high cost, and the cost of being able to immediately get to somebody to airlift them out, to get them to Landstuhl in Germany, as well as quite extensive care in the field. These are the some of the things that lead to the very high operating cost.

Now moving onto the second level of costs: the second level of costs is the long-term cost that we have already accrued but not yet paid. And one of the great lessons of war, but particularly of this war, is that costs continue long after combat has ceased. But these costs are hidden by the government's cash accounting system. So when we make a decision to go to war, there's a

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commitment not only to pay for battlefield operations, but also to provide long-term medical care and disability pay, to replace depleted military equipment, and to recruit equipment-trained new soldiers to replace the soldiers who are lost. But because of the way we report expenditures, the costs that you see are very misleading.

A good example of this, just to focus our minds for a second, is the first Gulf War in 1991. That war is largely seen as a war that had no cost to us, because the operating costs were paid for by the Allies. But in fact we're still paying \$4 billion a year in disability benefits to soldiers for that war. Four billion dollars; that's almost as big as the Center for Disease Control's budget, and that war only lasted for a month. And that cost is increasing because soldiers from the First Gulf War are increasingly applying for disability pay, disability benefits, and medical care related to Gulf War Syndrome. And I haven't even counted - you could, I just have not calculated it - the amount that we're paying for First Gulf War veterans in medical care for Gulf War Syndrome. It probably would double it.

Now in the Iraq and Afghanistan wars there are two very large accrued liabilities in the form of health care costs and future disability payments to veterans, and these two items in today's dollars mean an additional \$250 - \$650 billion in cost. In other words - and I'll go through in a minute what accounts for the range - this hidden cost alone could well equal the total reported cost, or exceed the total cost of combat operations to date.

I just want to describe how I got involved in writing this veterans paper. After I wrote my first paper with Joe last year, I started receiving hundreds, if not thousands, of emails from people all over the world, but in particular, from soldiers who are stationed in Iraq and Afghanistan now and from veterans, saying, Please look at the veterans issue, please help look at the veterans issue. All of the major veterans organizations contacted me and said, Thank you for looking at this veterans issue; but you took a very cursory look at it. Can you please look at the cost and the situation for veterans in more depth? And I had literally hundreds of emails from veterans and their families saying, My son was in this situation. In fact, I have one here I'll read you:

Dear Professor Bilmes,

I have sent many letters and talked to senate offices. We seem to be getting nowhere. My nephew, Patrick [Sedges?], was severely wounded in Iraq. He had a visit from President Bush at Walter Reed Hospital, a Purple Heart from Governor Perry, but has to this date received no benefits for 18 months. He has been working with the VA, but letter after letter does not solve the problem. President Bush can use any numbers describing the wounded or the costs, but nothing is going to solve the problem if no one is paying attention or cares.

Thank you,
Kathleen [Kriesbaum?], Patrick's aunt
Sugarland, Texas

I have a stack this high of these kinds of things. And the last straw on the veterans thing was when I was visited by a group of women, the Gold Star Mothers, who were wearing the gold star for their sons who were lost. And they asked me specifically to look at the veterans' issues because they said they had promised their sons that if anything happened to them that they would try and fight for the veterans.

So let's take a minute and look at this veterans issue which is obviously a significant cost issue, but it's also an issue in terms of the capacity of the country to take care of its veterans. It's actually, unlike some of the more intractable issues around Iraq, an issue that can be fixed. And the will of people sitting in this room and others can actually fix this problem.

In terms of medical costs, the servicemen who are officially wounded in combat are a very small percentage of the veterans who will actually be using the Veterans Administration System. Of the nearly 700,000 who've been discharged, about one-third of them have already gone to a veterans' hospital or clinic, and of that group, 38 percent have been treated for mental illnesses, particularly post-traumatic stress disorder (PTSD), depression, and substance abuse. Most of these veterans have also applied for disability benefits, and the result is that the VA system is completely overwhelmed by demand for medical care and the demand for disability claims.

Now you understand, the veterans system in this country does two things. It provides the hospitals, the medical care, and it provides the money, the stipends, the claims. First on the claims side, the Veterans Benefits Administration that provides the claims is inundated with claims, so it has a huge backlog. This year they received over 800,000 claims. Secretary Nicholson testified that he expects to receive 1.6 million additional claims in the next one-and-a-half to two years. These include claims both from returning soldiers and claims from soldiers from previous conflicts, for example First Gulf War veterans claiming for Gulf War Syndrome and for conditions that have worsened. My own projections show that we will receive this year between 250,000 and 400,000 claims from Iraq and Afghan veterans.

This has led to a huge backlog. There are now about 600,000 pending claims at the VA, and this is up from a backlog of 69,000 in 2001. That's 400,000 brand new claims which are sitting there, have not been touched yet, and another 200,000 that are in sort of back-and-forth paperwork process.

Now when we think about what's involved in actually processing one of these veterans' claims, it's an unbelievably sort of cumbersome paperwork-intensive technologically Stone Age kind of process, and the Veterans Benefit Administration takes 177 days - that's about six months - to process an initial claim, and two years or more to process an appeal. So the process for fig-

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uring out whether a veteran is suffering from a disability is incredibly (and when I explain this to you, you'll just say this is ridiculously) complex; any person sitting in this room spending five or six hours on this could figure out a better system.

But a veteran has to apply to one of the 57 different regional offices, where a claims adjudicator evaluates each one of the veteran's impairments, and they typically have five, six, seven, eight impairments in each claim, and assigns them a rating for the degree to which they're disabled for that condition. The simplest claim form is 23 pages long. Claims specialists must determine the percentage disability for each condition in increments of 10. However, conditions are not scaled monotonically from 0 to 100. Mental conditions, for example, are rated 0, 10, 30, 50, 70, or 100. Coronary artery disease ratings are 10, 30, 60, and 100. Spinal conditions are rated 10, 20, 30, 50, and 100. So you have a claims specialist who basically is looking at maybe eight different conditions for a veteran and rating them on this scale. And then if a veteran disagrees with any of this, they go through an enormously protracted appeals process.

The claims from Iraq and Afghanistan are much more complex than in previous conflicts. A Vietnam era veteran cited an average of three disability conditions. Gulf War veterans filed on average for four. In the current conflict, the claims so far, which, again, are the ones from the very beginning of the war, have an average of five separate disabilities in each claim form. Now this year, one-quarter of the new claims filed cited eight or more different disabilities, and often these involve complex battle-related injuries, as well as traumatic brain injury, PTSD, and complications from chronic diseases.

Now, as you can imagine with this system, there's a huge amount of duplication, and there's a huge amount of error, and there's a huge amount of inconsistency in how it is applied across the board, across all these many centers by the 9,000 people who are adjudicating the claims. And the GAO has issued numerous reports over the years about the flaws and the inconsistencies in this process. I mean they recently found that it takes 99 days to get a claim seen to in Salt Lake City, and 239 days in Honolulu. But ironically, due to the lack of preparation for the veterans returning home, the states with the highest number of returning veterans have the highest backlogs and the longest number of days.

What happens today is that after the veterans come home, they begin the process of filing for disability. So let's say that a veteran is discharged because he has back problems from having been in three deployments carrying a 120-pound pack, and he's also suffering from PTSD because he was trapped for eight hours in a Humvee which crashed into another Humvee in his convoy (which incidentally would not go on the wounded list, because if the one in front of you is blown up, but you crash into the one that is there, you don't get on the wounded list), and he also suffers from a partial loss of hearing in his left ear. So that's the veteran.

Now the full burden of gathering the medical evidence rests on the soldier. He's the one who has to go to the different doctors and gather all the documentation, and file the forms, and so forth. But this is very difficult for many reasons. First of all, he doesn't receive a medical examination when he's discharged. He might, but he usually doesn't, which is kind of incredible, but it's true. Secondly, the Defense Department, which would have treated him for his initial condition, typically does not share with the Veterans Administration its records. Some of them are electronic, some of them aren't; but there's a sort of extreme lack of seamless transition, as it were, between the Defense Department and the VA recordkeeping. Third, then, this veteran, who typically, because half of the soldiers now deployed are from rural communities, has to then travel long distances to get to see veterans specialists in three different areas, and has to go to the back of long waiting lists to get in to see the doctors, even if he doesn't need treatment.

So there are thousands of veterans in exactly this situation. Depending on where he is in the country, he can wait months and months and months to get medical appointments. And that's why, of the nearly 200,000 veterans from this war who've applied for disability so far, most of the claims are still somewhere in the process. When they finally get seen, 88 percent of them are approved. But - and this is an important point - veterans receive two years of free health care when they come home; but if they want to continue that health care, they have to apply for disability. So you have a situation where everyone wants to apply for disability so they can continue to receive health care, which is clogging up the disability claims process; and conversely, in order to apply for disability, you need to be seen by a veterans doctor, so that clogs up the veterans health care process, whether or not you actually have an urgent need.

Now this is, as we've read, creating bottlenecks and backlogs and waiting lists all through the system. Personally I've testified on this on numerous veterans Congressional committees, and I've met with Secretary Nicholson and numerous veterans' organizations; but the Walter Reed scandal is essentially happening all over the country in out-patient clinics because what happens is the veterans come home and they get treated in a hospital, and then they don't want to leave their military status because, if they do, they lose all their benefits. They lose their housing benefit; they lose their family benefit; they lose all income. And they know that if they have to start from scratch as a disabled veteran, they're going to have to go through six months to two years of this whole process.

Let me return to the cost implications of this. So the cost of providing these disability benefits is projected to be between \$75 billion and \$150 billion in current dollars; and the eventual cost will depend on several factors, including the number of troops stationed in Iraq and Afghanistan, the length of time they're deployed, the rate of claims and utilization of benefit programs. When I did my study on the veterans, I looked at it under a number of sort of scenarios based on how long the war would last, ranging from a most optimistic scenario, assuming that all troops were home by 2010, which, listening to Michael last night, seems overly optimistic, and assuming that 44 percent of the current veterans claim disability, which is the number that claimed disability in the First Gulf War.

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Now all of my projections are probably very conservative, because I've essentially based this on how many people claimed in the First Gulf War, even though in this war, of course, there are much longer deployments, much heavier and more fierce ground fighting, and much more serious casualties. But even under my most optimistic scenario, it turns out that 643,000 Iraq and Afghan veterans will be eventually claiming benefits, and there's a cost of \$67 billion, even if they receive the very lowest possible benefits.

And then under the highest scenario that I considered on the disability, I assumed that we eventually had two million servicemen deployed through 2015, that 50 percent of veterans would file some form of disability claim, and that benefits costs would increase at the rate that they have increased, which is a six-percent compound growth rate. And I, in all of these things, used the monthly benefit that is given to the initial First Gulf War veterans, which is about \$6,000. There are many ways you could do this. If anybody's interested, I have a massive interactive model that I've shared with many people and provided to many congressmen to try and get them to actually just look at the long-term implications for veterans.

Now, the health care costs are, of course, much higher. Using a similar set of assumptions, looking at how many First Gulf War veterans are using the VA health care system as their primary health care provider, I projected that the cost of providing medical care to current veterans will be a minimum of \$138 billion, and if health care costs continue to rise as they have, more like \$400 billion.

The medical consequences of this war are very considerable. In the last couple of months I've spoken at several conferences organized around the country by Physicians for Social Responsibility. There was a massive teach-in at the University of California at San Francisco Medical School last month. They had a thousand people there, doctors and medical students, who were all, like all of us in this room, trying to figure out what could they do. And a lot of them are trying to understand what is PTSD, what is traumatic brain injury, how much is there. No one really knows. And I am working with a large consortium of doctors and poly-trauma clinics to try and actually size this problem and figure out how much it actually costs to treat a traumatic brain injury and PTSD properly.

But I think what is clear from the data that has been shown by these doctors and neurologists is that there's a very direct correlation between the number of exposures to fire fights and the incidence of PTSD. So the longer people are deployed - this is not surprising, but they have proved it beyond a reasonable doubt - the longer people are deployed, the higher the incidence of PTSD. And mental health costs in the VA health care system are the most expensive costs to treat.

Currently the Veterans Health Administration simply doesn't have the capacity in providing mental health care. A lot of the disability issues are not necessarily just money problems; they're structural process problems. On the health care side, it's money problems. They don't have enough psychiatrists. They don't have the triage nurses who can say, this person is going to commit suicide if they don't get seen right now. They don't have the neighborhood vet centers. They don't have the psychologists and social workers.

Now, believe it or not, we're still just talking about the second cost of the four I mentioned. So I will very quickly run through the rest of them.

Another long-term cost is of course the cost of replacing military equipment. And in an accrual accounting system, the auditors would insist on large increase and depreciation costs, as planes, tanks, helicopters, and so forth, are rapidly written off. Even this might underestimate the cost if the military hardware is much more expensive than the previous one.

But none of these costs appear in the official cost that you see of the cost of the war. And we estimate that the funds needed to replace hardware being used up - and this is very conservative; this is like rock bottom; we even got the Congressional Budget Office, which is very conservative, to agree on this one - is between \$33 to \$90 billion. But that probably way underestimates, because just this month the Air Force said it needs \$400 billion to replace its fleet of aircraft, which is being used in extremely difficult conditions. But you can't count the whole of that cost either, because the fleet was already old when we invaded.

It's also becoming apparent that the length and the ferocity of the Iraq War will require a substantial expenditure to reset the military in the form of recruiting, training, and restoring full military strength. We estimate that this cost is an additional \$27 to \$65 billion.

I think the important point about these costs - whether we have underestimated them - I think we've been very conservative - but these are costs that are very large and very real. There's no chance that the government is going to refuse care for veterans, or refuse to replace helicopters. But under the cash-based accounting system, these costs just don't show up, and so the result is that the total budgetary costs, not even considering the economic costs, are completely underestimated.

Third are economic-social costs, and these are costs that somebody has to pay. Somebody has to pay, but not necessarily the government. For example, taking care of a soldier with brain injury. A soldier who's on maximum disability benefit gets \$44,000 a year. But that's just a pittance compared to the actual cost of taking care of a brain-injured person, and the rest of that cost is generally paid for by the family, the community, private health insurance, and other parts of society.

We also looked at the wage differential between some of the Reservists and the military pay, and we looked at the value of a statistical life as it is calculated by non-military government agencies, which is about \$6 million. So if you are killed in an OSHA accident, or an EPA-related accident, the US government values your life at \$6 million for a prime-age male. The military values the life of a casualty on a cost basis at \$500,000.

Finally, there are the macro-economic problems. Now here I wish Joe were here, because this is really his part of the study;

LINDA BILMES: The Battle for Iraq's Wounded (cont.)

but the main cost that we included here was a small portion of the increase in oil cost, which was \$23 a barrel before the invasion of Iraq. And Joe - and you know, this is exactly the thing that he won his Nobel Prize for, the asymmetry of information - he feels very strongly that the futures markets in 2003 already understood the global demand situation, so they already anticipated the rising demand from China, and India, and virtually everything else that has happened; that the only thing that changed, that was not foreseen, and it was a small blip, was Hurricane Katrina. So he would argue that we should take the entire increase in the price of oil and attribute it to the cost of the war. I, being a conservative budget person, only took five percent of that; but even that alone has major implications in terms of the economy and the multiplier effects. That alone is a couple of hundred billion dollars of deficit to the economy.

Taken together, the costs outlined here well exceed \$2 trillion; but of course we have not included some of the biggest costs, including the cost to Iraq itself, including the cost to other countries, including the cost in terms of long-term damage to the United States and the world.

I'd just like to close by reading you one of the many, many (I have so many to choose from) emails I received. This is a 19-year-old kid in the 82nd Airborne Division, named Matthew [Heptoe?]. I don't know how they find my name, but it's titled "Iraq Help."

Professor Linda Bilmes:

I was talking to a good friend of mine, and your name did come up. I am currently in Iraq and attempting to help my colonel develop a plan to stop the insurgency [He's 19]. One question keeps coming up: How we create jobs? What drives many in the insurgency is the lack of jobs in the country. If we can just develop a way to employ these people, the insurgency would be stopped. We are currently operating around Sader City and could use your advice. We want to get this right and win this war already. Please, any assistance you could give my team would be appreciated.

And I'll pass around a picture of this kid. He sent me a picture of himself and his team. I just want to close by saying we all have a responsibility to try and do something. I feel that my role, the thing that I could do, because I'm, like everybody here, sickened by reading the newspapers every morning, the thing that I could do is that I could put a number on the war. I could do this thing with the cash and the accrual accounting, and that could be my contribution. But it's not enough, and everyone has a part to play. Thank you.

BARBARA BERGMANN: Military Spending

James K. Galbraith

I want to start by saying: this is our last formal gathering at a meal, so I do want to take a minute here and say a word about the people who made this remarkable conference possible and ask them to stand and take your thanks ... They seem to have disappeared for a moment, but I would like to thank the caterers, Alan and his staff, for providing us with these very lovely dinners and for doing so with such great efficiency. And I'd like to thank - and I don't see them - Susan Howard and Linda Christendon of the Levy staff for their exceptional assistance to Thea in every aspect of the logistics of our first EPS conference at the Levy Institute; so a word of thanks will be conveyed to them later on.

But most of all I want to thank the person who really made this conference, and who not only organized it from a logistical point of view, but also from a financial point of view, and also from an intellectual point of view, and that actually is Thea. So Thea, could you stand up?

And now, if I may, I will turn to an introduction of our speaker for this evening.

Barbara Bergmann was early in her career a member of the senior staff of the Council of Economic Advisors in the Kennedy administration. She then had a long and illustrious career at the University of Maryland, later American University. She's now emerita from both. She's known for her work in macroeconomics, in simulations, and I would be tempted to say, as a leader, but I'm not sure that feminist economics has leaders, so I will say as a pioneer and an inspiration in the development of feminist economics, and as a comprehensive and incisive and all-wise commentator on every aspect of social and economic policy.

But as I said of Michael Lind last night, there's an aspect of polymathic qualities also in Barbara. She's the only economist I know of who is the author, co-author of a cartoon guide to the phony crisis of Social Security, and it's the only book of cartoons that it has ever been my privilege to referee. She's also known for the extreme delicacy and sensibility to the feelings of her adversaries that animate every choice of words that she's famous for. And I will only call your attention to the subtitle of a recent article on the work of the deeply beloved Gary Becker which is subtitled "Preposterous Conclusions."

That said, I first got to know Barbara in my very first professional job as an economist, when I came as a not-yet-degreed PhD student to lecture for a year at the University of Maryland, and also had my very first experience of that institution with which we are all, I think, drearily familiar, the faculty meeting. And the faculty meeting at the University of Maryland in those days had an interesting sociology. There were a great many prominent, even distinguished people on the faculty; but when they got into that room, there was a remarkable tentativeness about everything that they said. And you quickly realized, if you were at all observant, that they were just waiting and passing the time until Barbara Bergmann decided that she was ready to tell us what to do. And I have to say that's exactly the point at which we of Economists for Peace and Security have now arrived.

Barbara is a founding board member and now trustee of Economists for Peace and Security. She's been one of the people who brought me into the organization, one of the people who has been most steadfast of the support of what I've tried to do, and what we have tried to do, over my entire time associated with the organization, a person with the clearest sense of direction of what this organization is about. And so I will now invite you, Barbara, to take a few minutes and tell us, please, what to do.

Barbara Bergmann

Now Jamie, how did you know that was my subject? Thank you.

When this organization, of course, was founded, it used to be called Economists, I believe, United for Arms Reduction, Allied for Arms Reduction. And a little bit more forthright than Economists for Peace and Security, but I presume we still have the same aims. And this particular period should present us with an opportunity, if ever we're going to have one, to make an impact. The situation in Iraq, now the general public realizes, was a stupid, disgusting, and deadly mistake, and perhaps, perhaps, this is a good time to advocate the reduction of militarism in this country and even the reduction of defense expenditures.

But if you look around, if you read the newspapers, what you're seeing, of course, is that even the Democrats are suggesting that we raise the number of people in the military, and increase military expenditures even further from where they are now. So we would have our work cut out for us.

But I have a dream, to paraphrase Martin Luther King. I think that out of this conference we could have a wonderful publication, and who knows, if we did it right, maybe it would knock the socks off The New York Times, and The Washington Post, and the people in the Congress, and get a lot of publicity, and maybe even make a difference. So let me try to say what this publication would say, and perhaps even have the management of the organization to put out something like this.

Now in what sense are economists able to contribute to discussions of defense strategy and defense spending? Well, I suppose we are known as smarties, so maybe that could serve us. But I think we do have some unique contributions we can make. For example, we're adept at cost benefit analysis. And we have the idea of opportunity costs. So let me, under those two headings, discuss how we might be able to contribute to arguments that would reduce defense expenditures.



BARBARA BERGMANN: Military Spending (cont.)

Let's talk first about cost benefit analysis. Well, Linda Bilmes has told us of the monetary costs, so we could certainly put that in our publication. I think, in addition to that, we would want to put something about the benefits of defense expenditures. And if you start to look at the benefits, a helluva lot of them are negative. Of course, Iraq is, you might say, just the successor of the useless and bloody wars we have fought in the postwar period. I'm old enough to remember the Korean War. It started as a defense of South Korea, which had been invaded by North Korea; but of course they got a big ambition that was General MacArthur, and they then invaded North Korea, and they were essentially defeated there by an invasion of the Chinese across the Chinese-Korean border. And the war went on with lots of casualties, and I remember in '52 Eisenhower, who was running for president (and he was the first Republican elected since Herbert Hoover), he said that he would go to Korea. And the point of his going to Korea was virtually a promise to end the war. And it was ended on a sour note. We certainly didn't win over North Korea, although we did keep them out of South Korea.

Then came Vietnam and Iraq. And I think that we ought to emphasize that these military adventures have had virtually no benefit. They've had negative benefits, and considerable costs. I gave you a copy of a list of places the United States has bombed since World War II. This is thanks to William Blum. The list contains about 30 or 40 places, and Blum says, "Guess how many of these have become democracies?" To which the answer is - I guess except for South Korea, certainly North Korea has not - the answer is none. So here's an example of what militarism has accomplished since World War II.

Now, if Iraq has proved anything, it's that the expenditure of huge amounts of money has produced a military that is ineffective. It cannot even keep under a small backward country. So again, the benefit that we get from all this expenditure is very minor.

However, big defense expenditures and lots of equipment give presidents like Bush, when they happen to get into office, the temptation to wage war. We used to say, "The boys like to play with their toys." And if you recall the Bridge to Nowhere, that Alaskan bridge, you can say that defense expenditures are a bridge to war. Michael Lind told us about the dreams of hegemony, and Lloyd Dumas also spoke about that. To me, as I said last night, the most amazing thing is that this suggestion that we would maintain our hegemony and not allow anybody else to come up to where we are sank without any discussion of it. I've spoken around people and asked why that happened, why *The New York Times*, why *The Washington Post*, why almost any discussion has been absent; and some people said, well, they just wanted to suppress it. But my theory is I think they assumed that everybody was in favor of it, so there was no discussion needed.

But we might ask about this hegemony. What is the point? What would we get out of it except of course what sports fans get when their team wins the World Series? You're able to say, We're number one. Maybe that's not nothing, but it's costing a lot of billions of dollars.

Does it help our business? These days you might ask, Is our business ours? I mean, in globalization, a company is all over the world, and in what sense does any company belong anymore to any country? The theory, I think, of the British Empire was that it was supposed to enrich the British; but I think, again, that was doubtful.

How about access to oil? Well, last I heard there was a worldwide oil market, and I don't think that anybody is going to get any access that they don't get by paying the world price. So I fail to even understand what the point of it is again, except this ability to say, We're number one.

Okay, so much for cost benefit analysis. The answer being, there ain't no benefit.

Let's talk about opportunity cost. And here let me point out this wonderful cartoon by Jim Groveman. "What's in Your Wallet?" We could have this on the cover of the publication. And of course it shows Uncle Sam spending billions on universal war, and not having any money for universal health care.

Now, I haven't read it, I've been out of touch with civilization since I came here, but I understand Martin Feldstein in an op ed saying we ought to increase defense, in which I guess he's one with the Democratic congressmen, and keep non-defense steady. Well, I happen to think (and I think we could make a very good case) that there are expanding needs for non-defense spending. In particular, surely global warming is going to occasion important expenditures.

But as a student of social policy, let me tell you, if you didn't know, if you hadn't noticed, that the institution of marriage is slipping away. Last year more than one-third of the children born in the United States were born to unmarried mothers. And this demise of marriage, which is after all one of the basic institutions of our civilization, is inevitably going to, and right now is creating a demand for social spending; because children brought up by single mothers tend to be poor. And the number of poor children, or the percentage of children who are officially designated as poor, is rising, and the only way we can—I don't think, let me say, I don't think that abstinence education and marriage counseling are going to bring back marriage. It's possible that perhaps a more libertarian approach, maybe open marriage a la francaise, might do it; but even that is rather doubtful.

So if we are going to rescue these children, and I think we need to rescue them, we're going to have to spend amounts for the government to supply them with things that essentially their fathers used to supply them: such things as medical care, child care so their moms can work, and college subsidies. College subsidies, even if we didn't have the demise of marriage, I think would be a priority for expanded social spending.

So we've got a lot of things we need to do, and I think Feldstein is not correct.

Now, we might ask - I mean, to me, these reasons to reduce defense spending, the ineffectuality of the result, the evil of being drawn into war so we can play with our toys, and all the other bad things that happen, to me it's very obvious that we ought to

BARBARA BERGMANN: Military Spending (cont.)

be reducing defense spending fairly fast. So we might ask, Why don't these facts have more currency?

Well, I think the American public is very gullible. We had a terrorist attack, and, as I watched the Towers fall on 9/11, I knew that very soon the fight against the people who had done that was going to be defined as a war. And sure enough, about two days later, it was. But the real way, the real need for measures to find and root out the people who were doing that is of course a detective story. That's what the fight against terrorism is. We need Interpol and what have you. Going after these people is not something that can be done by infantry men in a tank. So the public, I think, has been grossly deceived by defining the reaction to 9/11 as a war. I don't think that it was bad to invade Afghanistan, but obviously Iraq was another story.

A second reason for the prevalence of the idea that we should continue, and in fact rev up, our spending I think has to do with the economics of pork. Winslow Wheeler spoke in one of the sessions about a plane that was not needed, that was being developed at vast expense; and when he brought this to the attention of Nancy Kestenbaum, the senator he was working with, she said, "Oh, I can't do anything about it." Well, why couldn't she do anything about it? It's because of pork.

Again, I remember General Eisenhower, President Eisenhower, warned us against the military-industrial complex having undue influence on the legislative process, and it certainly has turned out that his warning was needed, but alas, not heeded. If you read the papers, you can see that there is a yearning in the defense community for China to take the place of Russia. And it's not because the Boeing executives really worry that China is a threat to their community, at least from the defense point of view. No, it's because they won't make as much money as they would if China is not viewed as an enemy with whom we must compete, with whom we must match two and three times the dollars append with dollars we spend. By the way, if they start spending a lot of dollars, it will be the dollars that they've got in their treasury from the deficit in the foreign exchange. Now we might ask, What are benefits from pork? When a congressman gets a defense project assigned to his or her district, how many people benefit? How many people get employed as a result? I think that it would be a very good project to undertake a study of the actual benefits from pork. Now of course the main benefit is that the pork recipient, that is the company that gets the project, makes more profit and holds a fundraiser for the congressman who got it for them. And of course what is this from? This is from the fact that we have an election process that depends very heavily on people collecting campaign funds.

Let me read you a very disillusioned quote from a professor of history. It was in The Washington Post about a week ago. This is Andrew Bacovics, whose son died in Iraq recently. And he says that - he's in Massachusetts - he says:

"Senator Kennedy and Senator Kerry telephoned to express their condolences [and so did his congressman], but when I suggested to them the necessity of ending the war, I got the brush-off. More accurately, after ever so briefly pretending to listen, each treated me to a convoluted explanation that said in essence, 'Don't blame me.' To whom do Kennedy, Kerry, and Lynch [his congressman] listen?"

And the answer is, wealthy individuals and institutions. He says:

"Money maintains the Republican-Democratic duopoly of trivialized politics. It confines the debate over US policy to well-hewed channels. It preserves intact the clichés of 1933 - 45 about isolationism, appeasement, and the nation's call to global leadership. It inhibits any serious accounting of exactly how much our misadventure in Iraq is costing. It ignores completely the question of who actually pays. It negates democracy, rendering free speech little more than a means of recording dissent. This is not some great conspiracy; it's the way our system works."

So that's what you might say we have to fight; that is, to get rid of pork, we may have to get rid of the system of the private financing of elections, electioneering.

But of course that's the father of a dead kid. He's, you know, bitter.

Another reason why we go for this stuff has to do, I think, with masculinity. If I need be a little Freudian, which is actually uncharacteristic of me, but it's very tempting, you may say it's gender anxiety. It's the fear of being considered soft. And of course Hillary Clinton needs to show she's man enough to be president, so she's got it even worse. Michael Lind said that this is mostly found in the south, this kind of anxiety. And of course that is where the rednecks come from and are well known for their masculinity. So we have a lot to fight to get this to happen, an improvement to happen.

Now there are, let's face it, real needs for the military. There's defense of the homeland. But, you know, Costa Rica abolished their army, and I don't think anything bad has happened to them. Of course we've got two wonderful oceans defending us, and so if we don't provoke the North Koreans into sending us missiles to Alaska, I think a relatively small defense establishment could probably deal with the homeland defense.

There are humanitarian interventions. Alan Cooperman, in one of the sessions, perhaps told us that perhaps we shouldn't do as much of that as we've been doing. So there are some real needs for a military, but they are not anywhere near as large

BARBARA BERGMANN: Military Spending (cont.)

as the present provision.

We should obviously try to think about what Michael Lind has said about a concert of powers, or the UN I'm a little bit scared of a "democratic" UN, which was suggested by Mr. Abt, I think; but nevertheless, there are problems here, because the UN is not a strong organization, it's not a good organization in many ways, and it cannot serve what I think a sensible alliance would serve.

So I think to close - and you've had a long day, so I will close - this would be a wonderful time to try to get, you might say, an extreme and courageous message across that we could improve our cost benefit situation with far lower defense expenditures, and we could improve our domestic situation with all the things we could buy with the funds. Thank you.

TABLE: US Bombing

PLACES BOMBED BY THE US SINCE WWII

(Source: *Rogue State: A Guide to the World's Only Superpower*, by William Blum)

Korea and China 1950-53 (Korean War)
Guatemala 1954
Indonesia 1958
Cuba 1959-1961
Guatemala 1960
Congo 1964
Laos 1964-73
Vietnam 1961-73
Cambodia 1969-70
Guatemala 1967-69
Grenada 1983
Lebanon 1983, 1984 (both Lebanese and Syrian targets)
Libya 1986
El Salvador 1980s
Nicaragua 1980s
Iran 1987
Panama 1989
Iraq 1991 (Persian Gulf War)
Kuwait 1991
Somalia 1993
Bosnia 1994, 1995
Sudan 1998
Afghanistan 1998
Yugoslavia 1999
Yemen 2002
Iraq 1991-2003 (US/UK on regular basis)
Iraq 2003-present
Afghanistan 2001-present

SESSION I: The Comparative Economics of Global Security

Chair: Jurgen Brauer, Augusta State University

Presenters:

Michael Intriligator, UCLA and EPS Vice chair: Global Security and Human Security

K. Maeve Powlick, Skidmore College: Interstate vs. Intrastate Wars in Africa

Alan Kuperman, Lyndon B. Johnson School of Public Affairs, University of Texas at Austin: Mitigating the Moral Hazard of Humanitarian Intervention: Lessons from Economics



Mike Intriligator began by defining global security and human security. For a system of global governance to deal effectively with fundamental threats to security, whether it be the UN or some successor organization, we will need to approach security from a global perspective rather than merely a national one. Our world is now so highly connected and interdependent that it is impossible to confine security to arbitrarily defined national frontiers.



Many of today's security threats (such as nuclear, biological and chemical weapons, diseases such as avian flu and HIV, and global climate change) represent immediate and major threats to the planet or the human species and thus endanger global security. They are, furthermore, interrelated. A common feature of all these threats is that they cannot be addressed by one nation, no matter how powerful, acting alone. Rather they require international cooperation, with increased reliance on existing but revitalized international institutions, including the UN and its affiliated bodies, and the creation of new international organizations. They demand coordinated remedial measures at national, regional and international levels - involving governments, NGOs, other international organizations, and the private sector.

Thus a definition of "global security" is the absence of threats to the vital interests of the planet. Dr. Intriligator insists that the idea must extend well beyond traditional military dimension to also encompass political, economic, environmental, health and other possible threats.

Human security, on the other hand, can be defined as the absence of threats to the vital interests of individual people on a world-wide basis.

Dr. Intriligator drew parallels between the rapidly globalizing world of today and that of 1913, when international terrorism and extreme nationalism led to World War I, and the flu pandemic of 1918 was right around the corner. He proposes two over-arching solutions to global security and human security problems. The first lies in a reformed UN with much more active participation on the part of non-governmental organizations (NGOs). The second is what he calls "50 Manhattan Projects."

In describing his idea, Dr. Intriligator states "When the US was fearful that Germany would develop an atomic bomb, we put together the so-called Manhattan Project. We took the world's best scientists and engineers, physicists, mathematicians, chemists, metallurgists, whatever, and we basically locked them up in Los Alamos, New Mexico, and said, Forget about everything. Forget about your families, your career, your work, your colleagues, your publications, everything. Forget everything. Do nothing but work on this project. We have to beat Hitler in this race to build an atomic bomb. Now you may not like the atomic bomb. I'm not entirely fond of it myself; but the fact is, it worked. We put the people together, the right people. It was an international, interdisciplinary group of people. We can repeat that today with all of the major problems that we face in the world."

Thus, Dr. Intriligator's talk gave us a good overview of the state of security in the world today. The next two papers honed in on specific topics. **Maeve Powlick** compared wars between states with wars where primarily the fighting is happening within one country. In both cases we see elements of intrastate and interstate components; there are insurgents in Iraq, and there is involvement of international actors in the Sierra Leonean civil war. Ms. Powlick's three main points were that opportunity and motive for conflict are not distinct, and that both of these can have international dimensions; and that lootable resources such as diamonds are created through international process where they have not only a physical characteristic of being lootable, but also a social characteristic of being lootable. And the informal flow of resources also has international dimension, such as the use of multinational corporations to escape patron-client relationship.

A review of World Bank literature on conflict reveals two main, rather surprising conclusions. The first is that that a motive for conflict, a grievance factor, which is measured in the models as income inequality or repressive regime, is not a significant predictor of conflict. More important is whether there exists an opportunity. Can a rebel group form and fund an army? Here we see the first intrusion of international elements into a "local" conflict, as well; a group looking for an opportunity for conflict might easily begin to bring in extra-national elements.

Paul Collier et al, who wrote the first wave of studies for the World Bank, said that if there's no opportunity for violence conflicts, then one is more likely to see political conflict. Ms. Powlick contends that the opposite may also be true, that if there's no opportunity for political conflict, you might end up seeing violent conflict. A new wave of studies has just recently been published by the Bank, which seems to indicate that motive and opportunity are not completely distinct.

Looking at the role of natural resources in conflict, Ms. Powlick used the specific example of diamonds in Sierra Leone. Here

SESSION I: The Comparative Economics of Global Security

is another opportunity for international players to enter an intra-state conflict. Many natural resources are controlled by multi-national entities, either in the extraction itself, or as purchasers. Property rights then become very important. For instance, during the civil war, the government of Sierra Leone paid mercenaries from South Africa with diamond mining rights. In response to the government's corrupt use of diamonds, the main rebellious groups, the NPRC, the National Provisional Ruling Council, the RUF, the Revolutionary United Front, and the AFRC, the Armed Forces Revolutionary Council, all had as a stated goal the capture of the diamonds from the corrupt government influences.

Another point about resources in conflict is the flow of resources through informal channels. In Sierra Leone, patrimonialism, or patron/client relationships, is a personalized way of allocating resources. The patron controls the resources and doles those resources out to clients. The clients then become indebted to the patron, and can easily be coerced into breaking the law or risking their lives. After the end of the Cold War, there were fewer resources channeling through West Africa, and thus the patrons had less power. William Reno, an Africa Studies scholar, theorizes that the lack of money to support the patron-client relationship is one of the reasons that violent conflict has become much more likely.



Alan Kuperman posed as a problem the emerging norm of humanitarian intervention, which more recently has been called the responsibility to protect. The notion is that if a sub-state group falls victim to or is under threat of ethnic cleansing or genocide, that the international community has a responsibility to do something about it. The problem is that, in the vast majority of cases, most genocidal violence, whether genocide or ethnic cleansing, is actually retaliation by the state against a rebellion by a sub-state group. And the problem with this emerging norm of humanitarian intervention is that it is like an insurance policy against genocidal violence. As a result, it produces moral hazard, just like every kind of insurance policy does.

Groups may say to themselves, Well, if we rebel all by ourselves, we will suffer state retaliation, so we're not going to do it. But now that there's this responsibility to protect, if we rebel and the state retaliates, the international community will come in and protect us and even perhaps give us our own state, as the Kosovo Albanians are about to get. And so this well-intentioned policy of humanitarian intervention may backfire in certain cases in a classic instance of moral hazard. Economics offers four possible solutions to the moral hazard: cost sharing; randomization; regulation; and other methods.



As an example of the application of cost sharing to these issues, we can think of a deductible. The idea is if we have to pay the first thousand dollars, we're going to be more careful than if they're going to pay from the first penny. Is there an analogy for humanitarian intervention? In this case, there's already a deductible built in; that is, the international community does not intervene until violence reaches a certain threshold. So that's not going to work.

A randomization analogy might be constructive ambiguity. If people are told they're definitely going to get an IMF bailout, then developing countries are going to be very irresponsible and profligate. What needs to be done is say you might get it, you might not get it. Is there an analogy for humanitarian intervention? I would say no, because we already have constructive ambiguity. There is no actual guarantee of intervention. Sometimes we do; sometimes we don't.

Regulation is what, for example, we do with bank deposit insurance, where we say you only qualify for insurance if, before the failure, you have been observing reserve requirements and interest rate requirements. What is the analogy for humanitarian intervention? If you are a group that was not rebelling and you fall victim to genocidal violence, then we will definitely come in and help you. But if you are a group that rebelled, and thereby provoked the violence against your own group, then we are not going to intervene, certainly to help the rebels, unless the state retaliation is grossly disproportionate.

In the catch-all basket of other methods, one suggestion is following the model of risk-based premiums. If you get in a couple of car accidents, your rates go way up. There's not a perfect analogy for this; but it reminds us to incentivize low-risk behavior, as opposed to incentivizing high-risk behavior. Right now, the humanitarian intervention regime is exactly backwards. If you engage in low-risk behavior of non-violent resistance, you get no reward, we ignore you, you don't make the newspaper. If, on the other hand, you rebel and start a civil war, and then there's retaliation of ethnic cleansing and genocide, then you are on CNN, you're on the front page of The New York Times, and you get all sorts of assistance - sanctions against the state, and perhaps military intervention. So currently we incentivize high-risk behavior.

Dr. Kuperman proposes four reforms of the intervention convention. First of all, don't help rebels unless the state retaliation is grossly disproportionate. Secondly, use international resources instead to pressure states to address the legitimate grievances of non-violent groups. Third, aid civilians in ways that don't inadvertently aid rebels. Fourth, if we are going to help rebels (given human nature) we should be prepared for the state backlash in the form of genocidal violence against them by providing a preventive peacekeeping deployment.

SESSION II: Poverty, Conflict and Agriculture

This session was co-organized by the Dutch/Flemish Chapter of EPS and the Households in Conflict Network, and chaired by Philip Verwimp, president of the Dutch/Flemish EPS affiliate and co-founder of the Households in Conflict Network. The Households in Conflict Network brings together researchers interested in the micro-economic and econometric analysis of the relationship between violent conflict and household behavior. HiCN members undertake collaborative research into the causes and effects of violent conflict at the household level. In particular, they work to identify channels through which households are affected by conflict-induced shocks; to quantify the impact of conflict at the household level, such as the loss of household members, livestock and land; to analyze the feedback mechanism from household behavior to violent conflict, such as the effects of inequality and poverty on the incidence of conflict; and to derive policy recommendations based on research findings for supporting households and communities affected by conflict. The network members conduct frequent field work, using tools such as household surveys to collect data.



Moderators:

Philip Verwimp, University of Antwerp and Ecares, University of Brussels, and **Eleonora Nillesen**, DIW, Berlin

Presenters:

Tom Bundervoet, Free University of Brussels, Belgium: Livestock, Crop Choice and Civil War: Evidence from Burundi

Eleonora Nillesen, DIW (German Institute for Economic Research), Berlin, presented a paper co-authored with Philip Verwimp: War, Peace and Coffee: Farm Level Evidence from Rwanda

Philip Verwimp, University of Antwerp presented a paper co-authored with Tom Bundervoet and Richard Akresh, University of Illinois at Urbana Champaign: Civil War and Child Health in Burundi

Tom Bundervoet began the session by presenting a micro-level study of the consequences of war at the household level. The authors looked at savings and activity choices during civil war, with an empirical reference to Burundi. Specifically, this paper focuses on the income-generating choices that households make and how those choices are affected by war. The starting hypothesis was that war and the heightened insecurity or risk related to war drives households into low-risk activities and low-risk subsistence strategies, like growing of low-risk food crops, abandoning the markets and market-oriented activities, because these are more risky than the auto-subsistence strategies. The panel data needed to test this hypothesis directly will be gathered July - December of this year, so this paper uses a cross-section from Burundi households gathered in 1998.

The standard economic risk argument is that households with more savings, the wealthier households, will tend to engage in higher-profit, higher-risk activities, since if these activities turn out wrong, they can use savings; while the poor households with fewer assets, less savings and minimal access to credit markets have to engage in the low-risk activities since they do not have the means to smooth consumption if things go wrong. However, during war assets of households, which in rural settings are mainly livestock, are very, very risky; livestock are subject to pillaging and stealing, both by government forces and by rebels. So if we adapt a micro-economic theoretical model of the association between savings and activity choices to assume risk in the assets, then the theoretical prediction is of households, even the richer households, will not engage in the profitable activities because assets, their livestock, can easily be stolen during a conflict. So everyone, more or less regardless of savings, would engage in the safe, low-risk, low-paying activities. Theory would then predict a decrease in household income, since all households engage in low-profit, low-risk activities, and an increase in poverty levels.



Before the Burundi civil war, in 1993, average livestock holdings per household were 3.93 (measured in tropical livestock units) in the three provinces which would be most effected by the war, and 2.14 in other regions; so actually the war regions were the richest ones before the war. Five years into the war, average per household in the war regions was 0.68; in other regions, 0.62. The difference is more than double in the war regions than in the other regions, which again shows that in these regions savings were particularly risky because they were stolen basically every day.

Livestock were used in the study as a proxy for savings and off-farm labor was used as a proxy low-risk, low-return activities. Unskilled agricultural wage employment is a very low-paying, low-risk job. When the authors ran their equations they found that within the war regions, assets or savings do not play any role at all in determining safety choices. Why? Because assets are very risky, thus everyone, even the wealthier ones, would on average allocate more to safe, low-paying activities with, of course, negative welfare implications in the longer run.

The consequences were massive increase in poverty levels in the three war provinces over the period 1993-1998. They were the richest provinces in Burundi before the war, with a poverty head count of only 22.4 percent in 1993 (fairly low for Africa), and 52.5 percent in 1998. So more than 30 percent increase, which is obviously very, very large. And this can probably at least part-

SESSION II: Poverty, Conflict and Agriculture

ly be explained by retreat into subsistence, low-risk, low-paying activities during conflict, during wartime.

Next, **Eleanora Nillesen** presented her work, co-authored with Dr. Verwimp. The objective of this research was to provide a micro-economic assessment of what happened in Rwanda after the 1994 genocide at the household level with a specific reference to the coffee sector. The study was spurred by the observation that there had been a precipitous drop off in coffee production after the genocide, and the authors wondered if this was related to the unavailability of workers; many of the men who were the traditional coffee producers had been killed. The study used two national representative surveys, one collected in 1992, and the other collected in 2001.

Prior to the genocide, coffee growing was highly incentivized by the government and made up 60 to 80 percent of the state revenues, depending on the annual output and the market prices. Using province-level data on coffee farms in 1992 and 2002, the authors applied a “conflict shock index,” developed by Philip Verwimp and Patricia Justina, to assess the impact of conflict shock on coffee. Four shocks were identified: shocks of civil war, the genocide, mass migration, and counter-insurgency. They found that there is indeed a positive, statistically significant correlation between conflict shocks and the level of coffee cultivation.

Then, comparing household survey data from 1992 and 2002, the authors found that the number of female-headed households increased 47 percent; that the number of coffee trees in production decreased sharply; and that the number of farmers in coffee decreased by 26 percent during the conflict and by another 30 percent shortly after the war. They also saw a sharp decrease in the number of farmers who were investing in new trees and in those who were fertilizing their trees.

The authors then made an econometric analysis, attempting to establish a causal link between the war and coffee cultivation. They focused on property rights and investment in coffee; but were forced to ask, “Do property rights enhance investment, or does investment actually increase security of getting land?” The model assumed the probability of cultivating coffee defined by whether or not farmers had access to land, the size of the land they had, and the number of socio-economic characteristics. Ms. Nillesen and her co-author concluded that ownership status or land rights are a positive predictor of cultivating coffee.



Philip Verwimp then presented another empirical application of the household level effects of war, focusing on the health effects on small children. There is a growing body of literature that demonstrates that negative health shocks early in life, say before age five, have persistent, long-run negative effects on adult welfare. The authors wanted to see if the civil war in Burundi had a negative effect on children’s health, and if so, there would be welfare consequences for the entire lifetimes of these children. Dr. Verwimp pointed out that Africa was affected by civil war throughout the ’80s and ’90s, and there has been a lot of research cross-country and micro-level research on the causes of war, but very little into its consequences.



Studies by other authors have shown direct relationships between child health and performance later in life. For instance, one study showed that in Zimbabwe healthier children complete more grades, even after controlling for other factors that also affect the completion of schooling. In China, children who were affected by a famine when they were very young reached less height as an adult and therefore had less physical strength. In a rural economy people earn less when they don’t have physical strength, because they can’t do much work as a stronger adult.

This study looked at the health of children born between 1993 and 1998 in war-affected areas during the Burundian civil war. The authors compared the health status of exposed children with non-exposed children to pin down exactly what the effect of the civil war was on child health.

To summarize the results: the health status of women and children is very poor. Overall, sixty percent of Burundian children are undernourished, which is one of the highest percentages in the world, with about one-third severely malnourished. However, in one of the provinces most affected by the war, 75 percent of the children were under- or severely malnourished. Children exposed to civil war are between 0.44 and one standard deviation shorter for their age than non-affected children. The

authors argue that these problems are direct causal impacts of the war, not a spurious relation.

The authors made several calculations to control for other possible causal relationships. They controlled for poverty, geographical differences, age of the mother, etc. and found children who had been affected by the war had worse health regardless of these other factors. And so they have shown econometrically that this is really a causal effect of the war on child health.

One of the policy implications of this work is that early interventions may yield a big impact, and the impacts are big exactly because children carry over this negative effect throughout their lives. So if intervention occurs early in life, then it yields positive effects throughout life.

SESSION III: The Economics of Warfare and the Costs of War

Chair:

William Hartung, Arms Trade Research Center, World Policy Institute, the New School

Presenters:

David Gold, The New School: Why Doesn't the United States Spend More on the Military?

James Galbraith, University of Texas, EPS Chair: Equality and War: An Empirical Investigation

Lloyd Jeff Dumas, University of Texas - Dallas: Why Bombs Fall and Fail

Herbert Wulf, Bonn International Center for Conversion: Privatizing War: The Renewed Rise of Private Military Companies



David Gold began the session by addressing the recent Foreign Affairs article by Martin Feldstein, in which Dr. Feldstein argues that because US security needs are expanding, military spending should be increased back to about 10 percent of GDP. Dr. Gold argues against this on two fronts. The first is that we don't need to; the problems are not problems of the amount of resources, rather they are problems of resource allocation.



For example, the US is still spending tens of billions of dollars a year on Cold War-era weapons that have absolutely nothing to do with the present or likely future security environment, e.g. the F-22 fighter plane. Dr. Gold proposes, as an example, a policy change that would help make resource reallocation easier: the president could have the authority to put a hold on procurement; to say, for example, "We don't need the F-22 to fight Al Quaida. Let's just stop building it. Maybe we'll pick it up later, but for now we'll put the money elsewhere."

The second counter-argument overturns the "guns vs. butter" discussion about military budgeting. Traditionally, we speak of military spending (guns) when it increases as coming at the expense of consumption spending (butter). However, there is a very powerful economic reason why social spending has been increasing over the last 50 years, regardless of the military budget: investment in human capital returns great dividends.

One example involves the economic usefulness of advances in medical technology. Economists have estimated that increases in life span due to improved medical technology added about \$2.8 trillion per year, in 1992 dollars, to national wealth between 1970 and 1990. America's gross domestic product in 1980, the midpoint of the period, was about \$4.6 trillion in 1992 dollars. So the estimate

is just one benefit from health expenditures is equal to more than half of the average level of GDP. They estimate that the ratio of the monetary return to the investment was 24:1.

Dr. Gold suggests we stop talking about guns versus butter and instead talk about guns versus future living standards, guns versus future welfare. Because if in fact we increase the military budget, and even hold real spending constant, we're denying the role that that spending plays in growth, and therefore we are denying the economists' fundamental mantra, namely, "Growth at all costs."

The second speaker, **James Galbraith**, addressed the topic of whether there are fundamental determinants of who prevails in war. He suggests that this is an issue of some interest to opponents of war, because you might be able to persuade people, even if you can't persuade them that it's too costly, that it's not prudent to go to war because they're not likely to win.

Dr. Galbraith and his co-authors formed a hypothesis that inequality might offer a single-variable model that is a more accurate predictor than the traditional models. He poses three reasons why the more egalitarian country might have a military advantage: One is the solidarity of the soldiers. The second is that in very inegalitarian countries, the military forces are geared toward internal control and don't have the comparative advantage in fighting outside adversaries. And third is the problem of fifth

columns. When two countries which have the same average economic level go to war, if one of them is substantially more egalitarian than the other, the one that suffers from a higher degree of inequality will have a lower class which plausibly stands to gain from the other side's victory, and may view the other side as the liberator.

The authors found that their model correctly predicted the victor in 24 out of 34 conflicts for which they have contemporaneous data. Then extrapolating back into history, for 1716 to 1962 they reviewed 106 conflicts, and in 88 the more egalitarian country prevailed.

Examples include the North and the South in the US Civil War, in which the North was an agrarian society with an emerging free-labor middle class, whereas the South was a slave oligarchy. The Korean War is an interesting case in which a country was divided in two, and one can argue that both sides had comparable inequality measures; and the war, perhaps not surprisingly, was fought to a draw. In Vietnam the US, both militarily and economically far more powerful, was defeated by an agrarian but determined and highly solidaristic communist country.



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Dr. Galbraith finished by suggesting that his hypothesis has important implications and “as we allow the neo-conservative project to prevail in domestic economics [creating more inequality], we become progressively less effective militarily.” Additionally, it may apply directly to Iraq. One could say that the US invaded an extremely inegalitarian country, strictly divided between a small overlord group and a large sub-class that was extremely unwilling to die in the defense of the Saddam Hussein regime and put up no very serious resistance. The invasion dissolved that structure and now we face instead a small statelet in the Sunni homeland, which is substantially more egalitarian, much more solidaristic, and militarily much more effective. So, while we could very easily defeat the original country, we find we cannot defeat the Sunnis in their own heartland. Seen in that light, this theory is worth getting into the dialogue, because it has some very disturbing and sharp implications for the kind of policy choices that are presently being made.

Lloyd Jeff Dumas looked at how economic relationships can be a force for peace. “Bombs fall because, despite all of our technological prowess and intellectual achievements, we still have a lot to learn about getting along with each other. But they also fall because, especially when it comes to matters of security, we are stuck on the idea that argument, persuasion, and negotiation have their place; but violence is ultimately decisive. Bombs fail because this idea is dead wrong. Security is not now and never has been primarily a matter of weapons and violence; and violence is rarely more than temporarily decisive. Security is primarily a matter of relationships.”



Economists are especially well-positioned to understand and explore questions of security because, at its most fundamental, economics is not really about money, statistical analysis or mathematical or game theoretic models; it’s about relationships. The focus of economics is on behavior and the relationships that lie within the systems people have created to satisfy material wants and needs; but in that process we learn a lot about how relationships work that is applicable elsewhere.

In the market economists’ paradigm, behavior is most effectively influenced not by the threat or use of force, but by incentives. There’s no reason to believe that this insight into human behavior does not also have some currency in the pursuit of security. While interdependence does not prevent conflicts, it does create strong incentives to settle whatever conflicts arise as amicably as possible. Because ongoing economic relationships imply continued personal contact and interaction, they also tend to break down national and ethnic stereotypes that lower the threshold of violent conflict by picturing the people of some nations or ethnic groups as strange, untrustworthy, maybe even less than fully human. From this perspective the strengthening and expansion of economic relationships on a global scale may be the single most important force for world peace.

Unbalanced, exploitative economic relationships tend to increase the number and severity of conflicts, while balanced, mutually beneficial relationships tend to reduce the likelihood and intensity of conflict. When it comes right down to it, threat of force, or the use of force, is actually much less effective and a higher-cost way of getting others to do what you want them to do than building positive, cordial relationships.

Herbert Wulf argued that the current move towards the privatization of force poses a very fundamental challenge to the legitimate state monopoly of force. This is especially true in the context of two other trends: the internationalization of military functions (e.g. UN peacekeeping operations); and globalization, which also has an effect on the sovereignty of the nation-state.

This privatization of force is reversing a 300-year trend in which private armies have been dissolved and private citizens given up their weapons. This trend toward state monopoly of force reinforced the idea that the state is the only legitimate actor in applying force.

In promoting outsourcing of military functions, the most common argument used is economic. Standard economic theory says the private sector can do it better. Military and police skills are now offered on a contract basis on the global market, hence economic power can now be quickly transformed into military power. However, the evidence shows that often more gains in efficiency are promised, or hoped for, than are actually delivered.

The crux of the issue is not who exercises the force but how the application of force is organized. The private actors are operating in a gray area. They are largely unregulated, the contracting government hardly knows what they’re doing, and parliaments have almost no oversight.

Similarly, as many military functions are being internationalized, the control of the military has not developed in parallel. We have a highly politicized body, the UN Security Council, deciding about the deployment of the troops, but once the troops are deployed, they are not controlled by the UN, but rather by the individual nation-states. The military is the sector that is least controlled in most countries. The same is true for globalization. Globalization takes away national decision-making power, and in that context we have now a move for privatization.

In this light, Dr Wulf offers three policy recommendations. First, nations will need to develop regulations for control of private military forces. Secondly, the international community must develop norms which guide when to intervene or not. Thirdly, it will be necessary to reform the nation-state system of the monopoly of force, and think about a much more global context in which force is applied.



SESSION IV: Rethinking Post-Cold War US Security Policy

This session was co-organized by Carl Connetta, co-director of the Project on Defense Alternatives. Since its inception in 1991, the Project on Defense Alternatives has sought to adapt security policy to the challenges and opportunities of the post-Cold War era. Toward this end it promotes consideration of the broadest range of defense options. Central to its mission is the development of "transitional security policy," which would serve to create conditions favorable to the advent of regional and global cooperative security regimes.

Moderator:

Winslow Wheeler, Strauss Military Reform Project, Center for Defense Information

Presenters:

Michael Lind, New America Foundation

Carl Connetta, The Project on Defense Alternatives

William Hartung, The Arms Trade Resource Center, World Policy Institute, The New School



Michael Lind began by asking how did American Unilateralism become the prevailing post-Cold War strategy? Why not isolationism or a cooperative, multi-polar concert of power? Perhaps American foreign policy, and maybe domestic policy too, is determined to a large degree by irrational factors. In that case, what are those irrational factors, and how does this constrain our options in thinking about American grand strategy?



A survey of American wars going back to 1798 shows that the South was generally for the wars and the North(east) was generally against them. There are more militaristic and less militaristic sub-cultures in the country and these tend to be regional. As a number of historians have pointed out, these can be traced back centuries to the colonial cultures. The Southern colonies were founded by aristocrats, for whom the military was one of the few honorable occupations. And so even today, we find liberal arts colleges in New England, and you have military schools in South Carolina and Virginia.

Whatever may be the case with elites, who have considered ideologies, considered strategies, the mass public does not support or oppose wars on the basis of a theory of strategy. Dr. Lind believes that one of the reasons that this more militaristic, bellicose approach to US strategy prevailed in the 1990s was that Southerners took over the country in the 1990s. They controlled the Republican Party, which then controlled both houses of Congress, and then gained the presidency. For the first time since the 19th century you had conservative Southerners running all the political branches.

Finally, Dr. Lind suggests we forget the whole coastal-interior stuff. The Gulf Coastline of the South is longer than the Atlantic coastline. It's not a division between the red states and the blue states; it's a division between the North and the South, because the mountain and Plains states are fairly negligible in terms of population. Essentially the red states are the states of the old confederacy.

In China they talk about one country, two systems. Well, in the United States, we have one system, two countries. And it makes a difference whether the party of New England, and the Northeast, and the Midwest is running the government, or the party of the old Confederacy.

Carl Conetta began by defining the problem. Our security policy today evinces a disturbing paradox: that it's delivering and has been delivering for some time less and less security at increasing cost. The thing has been feeding, rather than mitigating, a process of global repolarization and remilitarization. We've certainly come a long way since the early 1990s, when you think back. We briefly contemplated a common home approach to security, which would have involved us reaching across strategic divisions and emphasizing cooperation and emphasizing traditional diplomacy - not just among our friends, but also across strategic divisions. However, rather than accept the cost and the risk of that approach, we succumbed to the temptations of being the world's only military super-power.

Mr. Conetta proposes that there is an axis of error guiding US security policy for the last 18 years. The first mistaken idea is that we can usefully sustain our present condition of military primacy, and that we must be reasonably secure. We seem to have dangerously overestimated both its extent and its usefulness. In light of the Iraq War, our power seems not so super.

The second error is "the hegemonic presumption," that the United States are the indispensable power, somehow enabled by superior insight or even called by history to carry out some set of missions. The way it's often stated is that we bear the burden of a special responsibility to act forcefully and unilaterally in the world in the pursuit of some high purpose, of course. Another indication of the hegemonic presumption is the fixation on American global leadership as a first and necessary goal. We're obsessed with extolling, asserting, extending, and defending it. Our intention



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to lead often overshadows the substance of what we propose to do. A different approach might be we carry out our policies and let others call us leader.

The third member of the axis of error is our doctrine on the use and utility of force. Three successive administrations have backed away from the idea that war should be an instrument of last resort. Today we increasingly use force for purposes of coercive diplomacy, which has more or less replaced traditional diplomacy. Associated with these ideas about the use of force is that we might actually prevent the emergence of threats—not just to deter or defend against threats that exist, but to actually prevent them from arising in the first place. This practice is not only provocative, but it leads us to scatter our attention and resources in every direction. It actually makes us more vulnerable to surprise attacks than less vulnerable.

Generally speaking, military power has proved to be less discrete, less manageable, less predictable in its effects than our policy has presumed for the past 20 years. The negative consequences of war have proved to be more far-reaching and more complex than we imagined. So Mr. Conetta suggests a corrective: henceforth, let's recognize that war itself is a weapon of mass destruction when we're thinking about launching the next one. Then, we can adjust our policy accordingly.

Bill Hartung very kindly did a survey of the prevailing Democratic-leaning think tanks and their various strategy proposals. Just looking at the names of some of these institutions gives an idea of the direction of their thinking. He reviewed The Truman



National Security Project, the Center for American Progress, the Third Way National Security Project, the Security and Peace Initiative, Center for a New American Strategy, the American Security Project, the Twenty-First Century Defense Initiative of the Brookings Institution, the Center for Strategic International Studies Smart Power Commission - all power is smart now, by the way, not hard, not soft, but smart - National Security Network, and the Democratic Leadership Council. Mr. Hartung noticed a common theme running through the work of this network.

The first recommendation they make is for a broader concept of security, which would involve not only terrorism and military threats; it can involve epidemics of disease, global warming, failed states, or a whole range of threats to life. There's also a notion of smart power and integrated power, which says you should use all the tools at your disposal—military intelligence, diplomatic, economic, and so forth. The Third Way National Security Project says, “[T]errorism is only one of several national security crises that cross borders. Organized crime, traffic in strategic materials, genocidal outbursts that demand intervention, and environmental threats such as famine,

disease, and water scarcity will have serious national security repercussions.”

Another common theme is a very broad range of scenarios for when force should be used: for humanitarian intervention, to deal with failed states, to deal with countries that are developing nuclear weapons. etc. Another says, “[T]he United States may need to enter stateless zones, capture or kill Jihad-ists taking refuge there, and staying long enough to begin rebuilding the state.” Mr. Hartung points out that our recent experience in trying to rebuild states has been less than stellar.

As a final recommendation, Mr. Hartung says we need to push Democrats harder to come up with more effective means of opposing the neo-con strategies, and most importantly, to hold the next president more accountable. If we don't do that, it will be very hard to deal with the broader issue of the US role in the world, and to work on issues like getting rid of unnecessary Cold War weapons systems. Many people think when you're at war, you need as many weapons as you can get, even if they don't know what it is or how it might be used.

Winslow Wheeler took the chair's prerogative to provoke the discussion. He summed up the presentations as follows: “Michael said that the decisions that we've been making are irrational; Carl said that many of the decisions we've been making on national security issues are misinformed; and one of Bill's points was that this whole process has been highly unsuccessful.” Mr. Wheeler's provocative remark was that each of those assertions is wrong. His assessment is that the people making these decisions have their eye on a very different ball, not the one we've been talking about.

Based on twenty years working as a staffer in the Senate, Mr. Wheeler says we need to think about how to make the law makers want to look at that data, and pay attention to it, and to understand why that is in their interests to do that. We can talk ourselves blue collecting data, being rational, and asking them to understand. But they feel that there is nothing they can do about most things. If we as activists and advocates can demonstrate why a particular action is in their interests, lawmakers are much more likely to respond.

Audio clips of the ensuing lively discussion can now be heard on our website.



SESSION V: Space Economics and the Dis-economies of Space Weapons

This session was part of a larger project on space weapons funded by the Arsenault Family Foundation. The project is in some ways a follow-up to a 2003 report entitled "The Full Costs of Ballistic Missile Defense," published by EPS, because many of the weapons being developed for space deployment are offshoots of the ballistic missile program. This current project, in addition to the papers presented here, will look especially at the possible costs and consequences of a war in space. The session was chaired by Richard Kaufman, who is heading the space weapons project.

Moderator:

Richard Kaufman, The Bethesda Research Institute

Presenters:

Richard Kaufman, The Bethesda Research Institute: The Arms Race in Space

Nancy Gallagher, Center for International and Security Studies at the University of Maryland: The Costs of US Space Dominance

Henry Hertzfeld, Space Policy Institute: Space Security and Economics

Laura Grego, Union of Concerned Scientists: Space Security: Capabilities and Limits of Technical Solutions



Some military experts argue that space is just another medium, like land, air, and the sea, and that war in space is inevitable. **Richard Kaufman** countered that his "... own view is that death and taxes are inevitable; war is a matter of choice. And if you believe in free will, war should not be inevitable in space or anywhere else."

The Bush administration simultaneously promotes the commercialization, militarization, and weaponization of space. It was asserted in conjunction with the release of the administration's national space policy last year that new arms control agreements for space are unnecessary because there is no space arms race. This new edict also changes the US's stated goals in space. Under Clinton, the primary goals were to enhance knowledge of the Earth, the solar system, and the universe, and to strengthen and maintain US national security. The Bush administration's goals are much more security oriented and state explicitly that the US will oppose the development of legal regimes or other restrictions that seek to prohibit or limit US access to or use of space.



China's recent use of an anti-satellite weapon can be viewed as a response to US policy. In turn, US officials have stated recently that Washington will increase efforts to negate Chinese anti-satellite capabilities. This action-reaction dynamic concerning anti-satellite weapons typifies an arms race.

Meanwhile, various bilateral agreements for cooperation on space projects are also developing, such as the Russian/European plan to replace the Soyuz space station. Of course, commercial and civil activities in the space sector have grown rapidly in recent decades, so much so that they are considered by some observers as indispensable to the economy as a whole, especially in areas

such as communications, navigation, weather forecasting, monitoring of the environment, resource exploitation, and scientific research.

It is extremely difficult to gather reliable information, particularly cost information, on space activities. In addition to classified information, a researcher has to deal with arcane government accounting systems. This lack of transparency, in the view of Mr. Kaufman, lends support to current military space policy and the development of new space weapons. His recommendation is for an official space indicators report. This document would be modeled after the economic indicators published monthly by the Joint Economic Committee of the US Congress. Space indicators would provide data on national and international trends. It would make it possible for government and non-government analysts, as well as policy makers in the executive branch and Congress, to get overviews and insights into the space sector based on accurate, timely, and reliable information.

Nancy Gallagher focused her remarks on four main points. Early US space policy emphasized cooperation over confrontation. The end of the Cold War and the rise of the global commercial space industry led most observers to expect greater international cooperation; but instead the Bush administration has decided that because the United States relies the most on space, spends the most on space, and has the most advanced space capabilities and expertise, it should be able to control how space is used. Current US aspirations for military space dominance are completely unrealistic for technical and budgetary reasons, and this quixotic policy would make space a much more difficult, dangerous, and expensive place to operate. Finally, international cooperation would be a much more cost-effective way to protect and promote beneficial uses of space; but that significant space cooperation requires equitable rules, not only about space, but also about terrestrial security.

The 1967 Outer Space Treaty established a supportive international legal context based on the principle that space is free for all countries to use. The treaty set up three requirements: first, that the



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purpose is peaceful; second, that the benefits are shared equitably; and third, that one country's use of space doesn't hurt anyone else's ability to use it now or in the future.

US policy began to change when the Reagan administration rejected the logic of reciprocal restraint in space because it was more concerned with space as part of a war-fighting strategy than as any attempt to stabilize deterrents. In addition to "Star Wars," the space-based missile defense system, plans also called for anti-satellite weapons and development of other offensive weapons. The end of the Cold War, economic globalization, and the use of space by an increasing number of countries for an expanding array of purposes created a widespread presumption that commercial uses of space would come to dominate military ones.

However, the Bush Administration has withdrawn from the ABM treaty, disregards large sections of the 1967 Outer Space Treaty, and rewritten policy to be much more aggressive. Dr. Gallagher thinks the net result is that the US is going to end up undermining the existing legal rules and protections in space; provoking other countries to start thinking about what they might do in space, or what they might need to do to counter US capabilities; but not being in a position to either get dramatic new benefits itself from space, or to be able to protect the space assets that it has.



Henry Hertzfeld spoke about what we know about the space economy and how and why it's important strategically and commercially. Estimates put the total space industry, including commercial and military usage, at around 180 billion US dollars per year. In a global economy of 45 trillion dollars that's a pretty small percentage. By comparison, ExxonMobile alone had revenues of 400 billion last year. So if the space sector is so small, why does it get so much attention?

First, because it has become the backbone of the economic infrastructure, both in the US and globally. Another important factor is the vulnerability of space assets. Satellites are vulnerable not only to deliberate disruption, as from war, but also to weather and debris. There are no backups or alternatives for most systems, and if they went down, we would be instantly put back to the 1950s, or worse.

In recognition of the importance of space, US policy makers wish to ensure a dominant competitive position, securing economic and commercial power. Space activities require very high up-front investments, so the larger the market potential, the better the profit opportunity.

However, economic policy and space policy have not been coordinated. Security policy has always trumped commercial space policy. Security policy trumps general fiscal, monetary, and regulatory policy on the economic side as well. Government economic policy trumps commercial space policy. Dr. Hertzfeld's recommendation is for the US to cultivate space leadership through commercial strength by maintaining technological leadership in space. Policies should encourage R&D in areas likely to advance commercial space; produce the best products to encourage worldwide purchase of US goods and services; achieve leadership and space power through market dominance; and eliminate regulatory disincentives without jeopardizing security or public safety.

Laura Grego gave some numbers to help flesh out the picture. There are approximately 850 satellites in orbit around Earth now. About half are owned by the US or US-based companies. The next two largest investors in space are Russia and China. Dr. Grego pointed out that different types of satellites occupy different orbits, so although we think that commercial satellite operators should be really interested in this question about space security, they consider themselves removed from it physically, and so they're not always as interested as they might be. The Union of Concerned Scientists has a dynamic database that lists all the active satellite orbits.

Dr. Grego defined the term space weapons as encompassing space-based missile defense, interceptors, ground attack weapons based in space and anti-satellite weapons, both ground and space-based. However, she believes they're far enough away technologically and economically from the present that we can set them aside for now and focus on the most pressing issue, the development of anti-satellite weapons.

Satellites are clearly valuable and vulnerable assets. How do we transition gracefully to a future where many more states have interests and assets in space without these assets becoming military targets? The choices made now will be setting the tone for space operations and strategic relationships for a long time to come.

Space systems now play tactical roles that are critical to the conduct of conventional war. The US has recognized satellite systems as "an integral part of the deterrent posture of the US Armed Forces." Of all nations, the US has the largest investment in military space and best exploits the military side of space for reconnaissance, targeting, communications, and surveillance. There is a strong incentive to develop technologies that can protect and defend these important strategic elements. Pursuing anti-satellite technology in an absence of any restrictions will likely increase not only threats that US satellites face from other anti-satellite weapons, but the environmental problem of debris.



SESSION VI: Avoiding War

Moderator:

Jeff Madrick, Challenge Magazine

Presenters:

Clark Abt, Cambridge College: Inexpensive Economics of Preparing for Terrorist Attacks and Disaster

Solomon Polachek, State University of New York - Binghamton: Democracy, Peace, and Trade

Charles Anderton, College of Holy Cross: Institutionalizing and Safeguarding Peace



Clark Abt began his talk with a few personal observations: he learned in the 1960s that deterrence requires escalation dominance. He learned from Ken Galbraith's strategic bombing survey that bombing doesn't defeat a determined and dispersed opponent. He learned from Vietnam that pacification of a large and hostile popular insurgency results in gains in security that are not worth the occupation forces and time required.



When a strategy of offense fails, such as retaliatory bombing, preemption, invasion, occupation, or pacification, a prudent strategist looks to active and passive defenses, ideally non-violent and peacefully productive. There are active defenses that can be taken, as for instance scanning every single container that is shipped into the country for radioactivity. These strategies are feasible but costly, and the current political climate makes funding these active strategies unlikely.

In considering more economical passive defenses meeting the criteria of morality and utility, Dr. Abt has focused his work over the last several years on the inexpensive economics of preparing for terrorist attacks and other disasters, natural or man-made. Organizations like FEMA, the Department of Homeland Defense and the National Guard are inadequate against large-scale disasters. Dual-use strategies, such as preparedness training, which protect against both man-made and natural disasters, gain economies of scale and require less specialized, costly equipment, less warning and mobilization time, and contribute to overall non-crisis productivity. And because they are peaceful and domestic, rather than foreign and military interventions, they don't provoke greater hostility, expanded terrorist recruitment, or revenge attacks. In addition, mitigation of damages serves as an indirect means of deterrence of terrorist attacks if it is assumed that the terrorists' objectives are to bring down our economy and our political economy by damaging it enough so that people lose confidence in the survivability of our form of government. It should be kept in mind that terrorists are unlikely to completely "bring us down," even nuclear terrorism or biological terrorism will not achieve complete defeat.

Therefore, the best defense is preparedness. The best preparation is a combination of five inexpensive and commonly available essentials in both home and workplace: shelter in the home or workplace; communications access to media such as a car radio or a battery radio; non-perishable food for 30 days; essential medicines for 30 days; and access to backup labor to assist dependent children or the handicapped. Dr. Abt calls for 30 days worth of supplies, rather than the 72 hours worth Homeland Security suggests for several reasons. Both material supply chains and normal electronic two-way communications are likely to be interrupted for at least several days, and possibly, in the case of widespread nationwide or worldwide disasters such as humanly communicable avian influenza or a national cyber-terrorist attack, logistic supply chains and two-way communications may be disrupted for quite a while.

In conclusion, the most urgent and inexpensive corrective to the potential supply chains breakdowns in disasters is public education. The public needs to know where and how to shelter, and to have enough essential food and medical supplies stockpiled to sustain themselves without outside assistance long enough to outlast the worst part of the threat, be it deadly contagion, radioactive fallout, poisonous air, blizzards, or storms.

Solomon Polachek began with a quote from Baron de Montesquieu, "Peace is the natural effect of trade. Two nations who traffic with each other become reciprocally dependent; for if one has the interest in buying, the other interest in selling, and thus their union is founded on the mutual necessities." This relationship of trade between countries can actually serve as a root cause for peace, and the lack of trade could create conflict. Dr. Polachek makes the case for this argument in four steps.

The first step is that relationships are important. Mainly to understand peace, one has to examine what political scientists call dyads, or what economists would call bilateral relationships. Secondly, the important characteristic of dyads, or pairs of nations, is trade and the gains from trade. The third thing is that conflict will lead to the cessation of trade. Finally, the higher the trade and the higher the gains from trade, the higher the cost of conflict, and hence the lower the amount of conflict. There are several data sets that categorize relationships between country dyads as cooperative or conflictual. For instance, the Cooperation and Peace Databank, which draws its data from newspapers from 1948 to 1973, shows the US is cooperative with Canada, conflictual with China, conflictual with Russia at that time; but cooperative with Israel, cooperative with Japan; cooperative with the UK.

Using these data, Dr. Polachek showed a strong inverse correlation; that is, the countries that have the most trade, the most gains from trade, faced the highest costs of conflict, and hence engaged in the least amount of conflict. So there appears to be

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strong evidence that nations, or pairs of nations that trade with each other have less amount of conflict. Using the MIDS data (Militarized Inter-state Disputes), Dr. Polachek shows that there is an inverse correlation between the length of a dispute and the amount of trade, and that there is a much, much lower probability that the dispute will involve fatalities.

There is a body of evidence that asserts that democracies are less likely to get into violent conflict with each other. Using this same dataset, it can be shown that democracies do have a lower probability of conflict. However, when trade is added to this equation, this inverse correlation between democracy and trade essentially goes to zero. So it's the trade that is causing the democracies to have more cooperation, and not democracy per se.

There are some exceptions; why does this trade-conflict relationship not always work? Dr. Polachek believes it is because the wrong thing is being measured; economists and political scientists look at the levels of trade; but they haven't looked at the gains from trade. When one looks at consumer and producer surplus, that is, real gains from trade, the inverse trade-conflict relationship becomes much stronger. Thus, trade between countries and high gains from trade can actually lead

to peace, and can be an underlying cause for peace.

Alfred Marshall defined economics as "the study of mankind in the ordinary business of life." And of course violent human conflict is not ordinary. Therefore many economists tend to see conflict as lying outside the domain of economics, and thus conflict tends to be ignored in mainstream economic textbooks. Furthermore, economists who specialize in studying issues of peace and war and security are sometimes viewed as doing political science, which is fine, but they're not really viewed as economists. Hence, we see relatively few courses in fields in conflict economics in graduate and undergraduate economics programs.

In fact, said **Charles Anderton**, there are many ways that economics and conflict "go together." Conflict affects economic activities. Economic activities (such as trade) affect the risk of conflict. Conflict is an economic choice. Conflict is a mode of wealth acquisition. According to Nassau Senior, "Security is the most important of all services."

War leads to "the Three Ds:" diversion, destruction, and disruption; diversion of resources to military production, destruction of people and property, and disruption of economic activities. This leads to the dominant view among conflict economists that war is clearly very costly; therefore, whatever outcome arises from war, it could have been achieved without war at a much lower cost; therefore, players initiating war are either misinformed, or irrational, or possibly both.

However, in recent times there have been at least thirteen wars that lasted twenty years or more. Conflict is a norm for many countries, and so actual or threatened violence is the norm for many people in the world. So, Dr. Anderton's main questions were why, at least in some places, is conflict so enduring and what can economists understand about this phenomenon? What can be brought to the table in understanding these problems and how they might be in some way improved upon?

The Hirshleifer Model of Conflict demonstrates that both parties should prefer to settle rather than fight a war. Given the assumptions in a typical Hirshleifer model, we should not see war. But we do see war, and we see enduring conflict; so some aspects of this picture must be a poor reflection of the way things are, at least in some cases. Possible explanations are several. Divergent and optimistic expectations of returns for war - one or both parties perceive war as a source of gain - might lead to a higher risk of war. Alternatively, one or both parties might perceive the costs of peace as high, which could function as an obstacle to the resolution of war. There may be misperceptions of the returns from peace; parties may be habituated to conflict and not realize the benefits, say, of improved trade relationships. For this reason, Dr. Anderton believes that important work for Economists for Peace and Security would be to emphasize the gains from peace, as well as pointing out the costs of war.

Finally, there are a lot of vicious circles in conflicts in the international system, where conflict causes things to happen, which creates greater problems for further conflict. Here the entry-exit principle of economics, where firms enter into an above-normal profit opportunity, is a useful tool for breaking the cycle. Many inter-governmental organizations and nations focus on negotiation and mediation among players involved in conflict and try to find ways in which we can get these players to settle rather than fight. And all of that is very important. But if the underlying conditions of conflict remain, then entry of violence-producing organizations will occur. If there are conditions of above-normal profitability, firms will enter. In the conflict arena, violence-producing organizations will enter if the conditions for profit are there.

Dr. Anderton sees the need for inter-governmental organizations and nations and mediators to work "top-down" toward peace, focusing on the players and negotiation among the conflicting players. But there is also a role for non-governmental organizations to do "bottom-up" work, focusing more on the underlying conditions of conflict.



SESSION VII: Constructing Peace with Entrepreneurial Tools

This session, the full title of which was Constructing Peace in Post-conflict Zones with Innovative and Entrepreneurial Tools, was sponsored by a grant from the Ewing Marion Kauffman Foundation. This special session focused on innovative and entrepreneurial tools (such as micro-credit, alternative technologies, and the roles that NGOs are playing) currently being used to build stable developing economies and to create conditions for peace throughout the world. Participants were invited from post-conflict areas where significant success has been achieved in building peace through creative thinking. The three presenters were originally from Cyprus, Uganda and South Africa. Their work is as diverse as their backgrounds, including NGOs, the UN and an entrepreneurial enterprise.

Moderator:

Thea Harvey, Executive Director of EPS

Presenters:

Romina Laouri, Tech4peace and Ashoka Foundation: Using Technology to Promote Lasting Communication and Peacebuilding Activities in Cyprus

Amber Chand, The Amber Chand Collection: Working with Craftswomen in Conflict and Post-conflict Regions to Offer Business as a Potent Vehicle for Sustainable Development

Wim Naude, World Institute for Development Economics Research, United Nations

University Helsinki: Entrepreneurship Against the Odds: Fragility and Private Firms with Lessons from Africa



The case of Cyprus is an unusual one. It has been said that Cyprus is “a country that’s globally connected, but locally divided. It’s a land divided by bricks, concrete, barbed wire, and other barriers of all shapes and forms that compose the green line.”

Romina Laouri spoke about how information technology has been exploited in peacebuilding activities in Cyprus in two distinct ways: to break the communication barrier between the Greek Cypriot and the Turkish Cypriot communities, and to facilitate the creation of a sort of shared vision between the two communities and find ways to achieve it.



Since 1974 Cyprus has been divided into two parts through the use of force, with Turkish Cypriots in the northern part and Greek Cypriots in the southern part. Citizens have not been allowed to freely cross the border, which is controlled by a UN buffer zone. It is this communication divide that has really pushed peacebuilders in Cyprus to think about innovative uses of technology.

Peacebuilders in Cyprus have used a technologically-assisted structured dialogue, known as the Structured Dialogic Design Process, or CDDP, developed by the fathers of cybernetics. This scientific methodology is especially effective in resolving multiple conflicts of purpose and values, and it helps generate a consensus among the participants. The method incorporates several “laws,” such as: Ashby’s Law of Requisite Variety, which states that

when trying to solve a very complex problem, you need the widest possible variety in observers and participants in order to derive the best solutions; and Miller’s Law for Requisite Parsimony, based on the theory that short-term memory can only focus up to seven concepts at a time, so you need to make sure that you have an environment where participants can really focus on a specific question or a single idea at a time.

In 1994 there was a wave a peacebuilding activities in Cyprus using this method for face-to-face dialogues. However, in 1997 the Turkish government closed all borders and banned all bi-communal meetings within the UN buffer zone. In response, Tech4Peace was established to carry on the dialogues virtually. Technology allowed the channels of communication to stay open, continuing peacebuilding efforts and maintaining the momentum that was gained throughout those three years.

A couple of years ago a UN-brokered peace plan was defeated when put to referendum, which left a climate of discouragement and disempowerment. Tech4Peace made an effort to revive the peace process using the CDDP method, again virtually in order to be able to engage more people in the decision-making process. Using the latest technology, potential participants are invited by email, data is collected and collated via web surveys, meetings are facilitated by web-conferencing, etc. Using these technologies, greater numbers and physically remote people are able to participate, and a great deal of time is saved. Cost is much lower, and boundaries don’t matter; so whether the borders are closed or open, you can still have a dialogue. On the other hand, the organizers must be even more careful to include the right stakeholders and build trust among the participants.

Amber Chand is an entrepreneur, peace builder, global citizen, and mother. In early 2005 she launched the Amber Chand Collection of Global Gifts for Peace and Understanding. The online company features distinctive, beautiful gifts, handmade by talented and courageous craftswomen living in regions of conflict and post-conflict. The mission of the company is to support women who are the inadvertent victims of war, genocide, and civil strife by offering them an international viable market while creating a dignified livelihood for themselves and their families; and to support American conscious consumers who are looking for meaningful gifts that are affordable, beautiful, and tell a compelling story of the human spirit, the human capacity for strength, for resilience, for courage, and for beauty in the midst of extremely devastating circumstances.

SESSION VII: Constructing Peace with Entrepreneurial Tools



Ms. Chand decided to showcase women's capacity for peace and peacebuilding when she heard that ninety percent of the casualties of war are civilians, and seventy-five percent of them are women and children; two-thirds of the world's poor are women and children; eighty percent of today's refugees are women and children. The Amber Chand Collection is a for-profit company because Ms. Chand is committed to the vision of private enterprise, profit-making companies actually doing good in the world. She sees no paradox in a profitable, sustainable company that has a sense of compassionate commerce.

The inspiration for the company came from a journey to Rwanda. Three months after the genocide, thirty women got together under a eucalyptus tree, Hutu and Tutsi women, utterly traumatized by what had just happened. As these women looked at each other in their profound grief, they said to each other, "We are going to go mad. Our men have lost their way, and we must find the way. Otherwise we will die with our grief." Amongst these women were some weavers of traditional Rwandan baskets. They decided, as an experiment in healing, reconciliation and peace-building, that they would literally weave the traditional basket together, reed by reed, hand in hand. So this

vision of Hutu and Tutsi women, women on either side of the conflict coming together, creating a basket, had become a symbol of peace.

Ms. Chand bought a hundred baskets and sold them out in one day. Within eighteen months, the company had sold over 8,000 Peace Baskets. This offered an insight into the capacity and the power of private enterprise to move in very quickly when governments and bureaucracy cannot move. Two years ago, Macy's picked up the Rwandan basket and has since then sold 30,000 of them. Today, 2500 women in Rwanda are engaged in basket weaving for Macy's. This is a great model in which private enterprise went into a post-conflict country and literally made something happen.

Currently, Ms. Chand is working on similar projects in Israel and Palestine, Cambodia, Afghanistan, Iraq, Jordan, Guatemala and Darfur. In each case, the projects draw on skills the women already have to bridge cultural and conflict divides, and create livelihoods and a connection with the world market.

Wim Naude addressed entrepreneurship as an emerging engine of economic and social development throughout the world, and a mechanism by which people can enjoy greater prosperity and can consolidate their peace.

Entrepreneurship is often associated with innovation, risk-taking, and the starting of a new firm. But William Baumol defines entrepreneurs as "persons who are ingenious and courageous in finding ways that add to their own wealth, power, and prestige." Dr. Baumol distinguishes between productive, unproductive, and destructive entrepreneurship. In other words, the person who bribes officials, the person who's looking for legal loopholes, can also be an entrepreneur using the same kind of ingenuity and creativity in adding to their wealth, albeit very unproductive. So what we are looking for is ways and mechanisms of actually encouraging productive entrepreneurship.



Even during periods of war and conflict there is evidence of substantial entrepreneurship at work, fulfilling a threefold role. First, firms are sourcing funds to sustain conflicts; the Tamil rebels raise over US\$300million per year to maintain their war. Secondly, entrepreneurs are overcoming the adverse impacts of conflict, as in Somalia when the national airlines collapsed and five private firms filled the gap. Third, they are exploiting profitable opportunities arising from conflict like illegal mining and smuggling, preferential rationing systems, theft of humanitarian supplies, banditry and predation on civilians. Many war participants, including rulers, warlords, and smugglers, develop substantial business interests during the war. This not only makes the achievement of peace difficult in many cases (as these participants profit more from war than peace) but will also have a significant impact on the post-conflict economic success. There are three main channels through which the wartime economic effort impacts on the postwar. The first is that wartime entrepreneurial activities provide capital for postwar investment, and not necessarily in pro-growth activities. Secondly, it provides means for wartime actors to obtain political power after the war. And thirdly, it provides incentives for entrepreneurs to undermine government institutions, especially if it clashes with their own markets. And of course, the destruction of infrastructure and the flight of human and financial capital create substantial challenges for postwar entrepreneurship.

Entrepreneurship is ever present in fragile and post-conflict states. Unproductive and destructive entrepreneurship implies that the establishment of peace may not automatically result in prosperity, and might even cause a relapse into conflict. To prevent this, efforts to increase the supply of entrepreneurship itself may be less important than efforts to change the allocation of entrepreneurial effort into productive entrepreneurship.

More study is needed on the institutional transformation process. Entrepreneurship in developing countries is one of the least studied significant economic and social phenomena in the world today, and the difficulties are compounded in post-conflict situations where we do not have sufficient quantitative data. If we can get the institutional framework right, the prognosis for entrepreneurship to lead to a resurgent private sector in post-conflict countries is quite good.

SESSION VIII: Building a Secure America at Peace

Moderator:

James K. Galbraith, University of Texas, EPS Chair

Presenters:

Warren Mosler: Fighting for Jobs: War and Employment

Eban Goodstein, Lewis & Clark College: Global Warming Solutions for America

Marcellus Andrews: Global Warming, Hurricane Katrina and New Orleans



Warren Mosler was happy to get our juices flowing for the last session of the conference. He began by noting that to the general public, the war in Iraq seems to have had no costs. There's been no rationing. It started off with a tax cut. The economy improved by all public measures. Unemployment dropped. The stock market's boomed, housing prices have gone up, we've gotten free prescription drugs. Personal income and profits are up. The voter is not feeling any kind of a cost. He hears numbers of eleven trillion dollars here and there, but in the meantime his taxes are cut and he's got a job, and his kid graduated school, and he's working on Wall Street. There is an embedded message: War is good for the economy. In fact, we have set up institutional structures and economic incentives that move the voting public towards war



Why does the economy improve during wartime? Because during at peacetime we don't run it at full employment. It's really that simple. If we had a full employment policy, the real costs of war would become explicit. The military would have to pay high enough salaries to take workers from civilian jobs, not just give unemployed who can't find anything, desperate people, disadvantaged people an opportunity to eat. Conscription might be necessary when people have decent jobs somewhere else before the war starts. Domestic consumption will fall if we're at full employment to begin with

because then any resources that go the military are taking away resources from domestic consumption. Military purchases of arms and munitions will drive up prices and cause shortages. Well why don't they do that now? Because we have excess capacity now. If we're using our capacity, it's going to drive these things up. The Fed will respond to elevated inflation with higher interest rates.

So, how do we sustain full employment during peacetime? It is painfully simple. We only have to do one thing. The government offers a job to anyone willing and able to work at a fixed wage. This would have many ramifications. War costs would become obvious. The fixed wage for the new public service jobs would become the minimum wage. This new employed labor buffer stock would replace the current unemployed buffer stock and act as a better price anchor. Real and useful output would increase. Labor flexibility would be improved. Many of the disruptions of unemployment would vanish.

When things are tight, more people will show up for work in this labor buffer stock, raising the deficit. As they get hired away, the budget deficit goes down, because the government's not paying them, and it becomes a very powerful counter-cyclical force, much more powerful than the unemployed buffer stock, and much more effective. It's actually a market-based solution to the correct size of the budget deficit.

And what are the costs of unemployment? Less public and/or private output, family deterioration, neglected children, and last probably but not least, war. Unemployment doesn't cause war, but it does create a powerful economic incentive for war.

Eban Goodstein is directing a national educational initiative on global warming called Focus the Nation: Global Warming Solutions for America. It will be a national teach-in to be held January 31, 2008. Over a thousand colleges, universities, high schools, middle schools will be coordinated in a simultaneous one-day educational symposium on the topic of global warming solutions for America.

Over the next century the official forecast is a warming of between three and four degrees Fahrenheit at the low end, and 10? degrees Fahrenheit at the hot end. At the low end those impacts will be very serious for hundreds of millions of people around the planet. It will drive maybe 20 percent of the creatures on the planet into extinction. But it will be a manageable situation. The challenge that we face is to hold that warming to the low end and avoid what are potentially truly catastrophic outcomes.

One of the first security challenges to be faced will be lack of water. Disappearing summer snow pack in the high mountains means no water for several hundred million people, not just for drinking, but also no water for hydroelectricity, for agriculture, irrigation, fishing, recreation.

The British Home Secretary John Reed cites lack of water as one of the underlying causes for the troubles in Darfur. "Environmental change makes the emergence of violent conflict more rather than less likely. The blunt truth is that the lack of water in agricultural land is a significant contributing factor to the tragic conflict we see unfolding in Darfur. We should see this as a warning sign." Lake Chad has virtually disappeared over the last few decades and that is in many ways at the root of the conflict between the agricultural folks in Southern Sudan and the nomadic peoples there. It's not the only cause of the problem, but certainly a contributing factor.

Other security risks directly attributable to global warming will include spread of pests and disease and more heat-related illnesses and deaths, more intense hurricanes and typhoons, ocean acidification. As plants die off they will release billions of tons of carbon dioxide and as permafrost tundras melt there will be a large release of methane, contributing to further warming. Ris-

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ing sea levels from melting polar ice caps will create hundreds of millions of environmental refugees. Many of these disasters are unstoppable once they reach a tipping point.

So, what can we do? The US, as producer of one quarter of the world's warming pollution, must stabilize carbon emissions within a decade. We have to meet the Kyoto targets by reducing emissions about 90 percent by the end of the century. This seems impossible, but Dr. Goodstein urges us to think about what the main emission source was from the transportation sector a hundred years ago: horse poop. Horse poop emissions have been reduced by well over 90 percent over the last hundred years. So we just have to make that kind of a transition, to a completely different technology.

Speaking directly to the twenty-somethings in the audience, Dr. Goodstein said, "Here's what you have to push us [older folks] to do: We have to stabilize emissions this decade... But more than that, we have to invest tens of billions of dollars annually in the clean energy technology solutions that will allow you to fundamentally transform the world economy. So that in the years 2030 to 2040, your job is going to be to rewire the entire world with clean energy technologies, create millions and millions and millions of good jobs, and lay the foundation for a truly just and sustainable and prosperous future. This is imminently doable. There are really no economic or technical challenges to achieving this goal. It's affordable, certainly compared to the alternative.



"It can be done, but we have to move quickly. Action must be taken in Washington within the next two to three years, or we will have passed a tipping point and we will no longer be able to assume we can keep the warming to the low end of the scale. The only way to overcome gridlock in Washington is by the creation of a social movement. We did it with Abolition, women's suffrage, labor rights, civil rights. It can be done, and we must now use all the tools available to work very quickly to engage Americans in what Americans do well, which is to embrace technological challenges and figure out how to solve problems."

Marcellus Andrews continued this passionate session, noting that even if we fix things, even if our coastal cities are able to deal with rising sea levels, and we learn the lessons from Hurricane Katrina, we are still going to shift the risk associated with the damage coming from climate change and other catastrophic risks, down the social hierarchy, given the way we have organized our economies. Dr. Andrews worries about the security of vulnerable populations in the context of climate change.

We already refuse to share risk across class and color lines. As we decide to repair our cities and figure out ways of dealing with the risks coming to us, our decision not to share simple risks (the equality risk, opportunity risk across class and color lines) is going to be reflected again in the way we refuse to protect vulnerable populations. The insurance industry and basic economics tells us that there is a certain economic logic to the abandonment of vulnerable people. As an example, Dr. Andrews cited the State of Florida, where the insurance industry believes it is a virtual certainty that there will be a couple of Katrina-scale storms over the next 25 years. The State of Florida has guaranteed its citizens that it will cover the costs of such storms that are not covered by their homeowners insurance. This coverage will have to come at the price of cutting funding for schools and other social spending, since Floridians are unwilling to raise their taxes to a level that would cover both sets of needs. This leaves poor Floridians doubly vulnerable: they do not own houses, and therefore won't benefit from the back-up insurance; and they rely (more than the middle class) on state-funded initiatives such as free public schools and access to health care.



Another serious issue will be that of climate refugees. When millions of people are forced out of their seaside homes by storms and rising sea levels, they will tend to migrate to large cities where they might have a chance of getting a job. Militaries are already thinking about how to deal with these mass migration movements. Dr. Andrews foresees that cities are likely to become fortified to make them safer, prices in these fortified enclaves will rise, and poorer people will increasingly not be able

to gain access to the safety of the cities.

Dr. Andrews tells of visiting of friend of his who had three young children die in the aftermath of Hurricane Katrina. The man had owned his home in New Orleans but had no homeowners insurance. He was forced to move to another state when his home and life were destroyed. This man, shattered by the death of his children, shattered by his expulsion from the city he loves, made clear to Dr. Andrews that the worst part of the whole thing was that he had learned that he had no home. He could look for comfort from God to help him with the death of his babies. He could not understand the country that was never going to let him go back home.

When we think about security, Dr. Andrews suggests that we consider the fact: if we do not share risk up front, if we do not give access to developmental resources from the time we're born as a citizens of this country and for the time we're expected to live independent, meaningful lives as voters and as earners, that we will create class of potential climate migrants who, when they come to be enlightened, will feel like his friend from New Orleans. They will feel abandoned. They will feel that the ever-stronger, safer cities are too expensive for them to afford, and that will leave them homeless. They will feel that the environmentally conscious haven't given a whole lot of thought to this question, and we will have created an army of rage. Dr. Andrews proposes marrying climate risk planning to deep equality, to the notion that each of us has equal right to survival and equal right to recovery.

PRESENTERS' BIOGRAPHIES

Clark Abt

The founder and past president of Abt Associates, Clark C. Abt served as Chairman of the Board of Directors from 1986 to 2005, when he was elected Chairman Emeritus and a Director. The author of ten books on social and economic policies and advanced technologies, as well as many articles, Dr. Abt is an Associate of the Belfer Center for Science and International Affairs at Harvard University and Distinguished Professor of Management at Cambridge College in Cambridge, Massachusetts. For the last six years he has served pro bono in full and part-time capacities, as a high school teacher and tutor for students at risk in the Boston public schools. For the last three years Dr. Abt's research has focused on domestic defense against biological and nuclear terrorism and prevention and control of emerging pandemic diseases.

Dr. Abt founded Abt Associates in 1965 - a company described by President Wendell Knox as "Clark's unique and original vision, a company with the feel of a university but one that also enables entrepreneurial efforts."

Dr. Abt has a PhD in Political Science from MIT. In addition to teaching at Boston University, he has taught at Harvard University, the Johns Hopkins University, the University of Massachusetts, and the State University of New York (Binghamton). Dr. Abt has written or edited numerous books.

Dr. Abt has been engaged in national defense research since 1957, when he conducted analyses of guided missile systems and electronic warfare equipment and operations for the US Air Force, Army, and Navy. From 1963 through 1965, while at Raytheon and continuing into Abt Associates' first year, Dr. Abt designed and developed the first world model of international conflict - the TEMPER computer simulation model (Technological Economic Military Political Evaluation Routine) - for the Department of Defense/Joint Chiefs of Staff. TEMPER was the first dynamic interdisciplinary mathematical model of long-term global Cold War conflict. In 1961 Dr. Abt conducted the Air Force's first study of space-based ballistic missile defense, followed by several other studies on space-based anti-ICBM defense.

In September 2001, Dr. Abt began pro bono work on a study of the economic impacts of bioterrorist and nuclear terrorist attacks on seaport-based cargo transport systems, both under current inadequate conditions and under near-future augmented preventive defense conditions.

Charles Anderton

Charles Anderton earned a BS degree in economics from the State University of New York at Geneseo in 1979. He was employed as a designer of computer systems for Eastman Kodak Company (Rochester, NY) from 1979-1981. In 1986, Dr. Anderton earned his PhD in economics from Cornell University. Since then he has taught economics at the College of the Holy Cross (Worcester, MA). Dr. Anderton's course offerings include principles of economics, intermediate microeconomics, international trade theory, mathematical economics, and economics of peace and conflict. His research interests include theoretical and empirical models of trade and conflict, arms race modeling, and theoretical models of appropriation possibilities. Dr. Anderton's conflict research has appeared in various refereed journals and edited books including *Conflict Management and Peace Science*, *Defense and Peace Economics*, *Economic Inquiry*, *Journal of Conflict Resolution*, *Journal of Economic Behavior & Organization*, *Journal of Economic Education*, *Journal of Peace Research*, *Review of Development Economics*, and *Handbook of Defense Economics (vols. I and II)*. He is married to Dr. Roxane A. Anderton (Clark University) and they have two sons.

Marcellus Andrews

Marcellus Andrews earned a BSBA from the Wharton School of University of Pennsylvania as well as an MA, MPhil and PhD in economics from Yale University. Andrews has been a full professor and chair of economics at Wellesley College and the first Lillian and Nathan Ackerman Professor of Equality and Justice in America at the School of Public Affairs, Baruch College, City University of New York. Andrews comments on public affairs and economics in the pages of *The Nation* and on National Public Radio's business affairs journal *Marketplace*. Dr. Andrews was formerly a senior Research Fellow at the New America Foundation and is currently a Senior Research Associate with the Center for Economic and Policy Research in Washington DC.

Andrews is the author of many academic articles published in specialist journals as well as "The Political Economy of Hope and Fear: Capitalism and the Black Condition in America" (NYU Press, 1999). His current book projects are "Economic Policy and the Road to Social Justice" (completed manuscript) and "Re-imagining American Freedom" (in progress).

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Barbara Bergmann

Barbara R. Bergmann writes on economic and social policy, with recent works on Social Security, child care, poverty, women's place in the economy and the family, and the labor market problems of women and African Americans. She is Professor Emerita of Economics at the University of Maryland and at American University in Washington DC.

She received her PhD from Harvard University. Dr. Bergmann served as a senior staff member of the President's Council of Economic Advisers during the Kennedy Administration. Other government experience includes service as Senior Economic Adviser with the Agency for International Development, and as an economist with the Bureau of Labor Statistics. She has served on advisory committees to the Congressional Budget Office and the Bureau of the Census. In the 1980s, she wrote a monthly column on economic affairs for *The New York Times* Sunday Business Section.

She has served as President of the Eastern Economic Association, the Society for the Advancement of Socio-Economics, the American Association of University Professors and the International Association for Feminist Economics, and is a Trustee of Economists for Peace and Security.

Linda Bilmes

Professor Linda J. Bilmes teaches budgeting and public finance at the Kennedy School of Government at Harvard University. Her current research topics include the cost of the Iraq war, federal workforce reform, and public pension liabilities.

She is the author of "Soldiers Returning From Iraq and Afghanistan: The Long-term Costs of Providing Veterans Medical Care and Disability Benefits." In 2006, she co-authored with Joseph E. Stiglitz "Encore: Iraq Hemorrhage," *Milken Institute Review* (Fourth Quarter) and "The Economic Costs of the Iraq War: An Appraisal Three Years After the Beginning of the Conflict."

During the Clinton administration, she served as Chief Financial Officer and as Assistant Secretary for Management and Budget at the US Department of Commerce. Previously, she spent 10 years with the Boston Consulting Group, where she focused on industrial finance and public sector industrial policies. Earlier in her career, Bilmes worked as a political campaign consultant for candidates in the United States and Latin America. She writes and broadcasts regularly on financial and budget issues in *The New York Times*, *The Washington Post*, *Financial Times*, *The Atlantic* and other publications. In 1998 she co-authored "Gebt uns das Risiko Zuruck (Give Us Back the Risk)," a best seller in Germany. Her recent book ("The People Factor," Brookings, January 2007) is on federal civil service reform. Bilmes holds a BA and an MBA from Harvard University.

Jurgen Brauer

Jurgen Brauer is Professor of Economics at Augusta State University's James M. College of Business. He holds an economics undergraduate degree from the Free University of Berlin (1979), and a doctoral degree in economics from the University of Notre Dame (1989). Prior to his present appointment, he taught at St. Mary's College and at the University of Notre Dame (1989-1991). Widely published, he has been a Peace Fellow of the United States Institute of Peace and is a member of the academic honor societies of Sigma Xi and Phi Kappa Phi. He has lived on four continents.

A teacher of undergraduate and graduate students, columnist, public speaker, and commentator, Prof. Brauer carries on wide-ranging scholarly activity in the fields of peace and conflict research, military affairs, economic development, and economic education. Another interest is the field of bio/neuroeconomics, especially as it relates to conflict and conflict resolution. Prof. Brauer's publications include "Arms Trade and Economic Development" (Routledge, 2004; with Paul Dunne), "Arming the South" (Palgrave, 2002; with Paul Dunne), "The Economics of Regional Security" (Harwood, 2000; with Keith Hartley), "Economics of Conflict and Peace" (Avebury, 1997; with William Gissy), and "Economic Issues of Disarmament" (Macmillan and New York University Press, 1993; with Manas Chatterji). He is now working on two monographs, "War and Nature: The Environmental Impact of War" and "Colonizing Military History: On the Economics of War" (with Hubert van Tuyll).

Prof. Brauer's work has been published in Dutch, French, Portuguese, and Japanese and, in English, in an array of research journals such as the *Journal of Economic Perspectives*, *Economic Development and Cultural Change*, *Defense and Peace Economics*, the *European Journal of Political Economy*, *Conflict Management and Peace Science*, the *Journal of Economic Surveys*, the *Cambridge Review of International Affairs*, and *Science*. In addition, he has authored and co-authored many book chapters, among others to the *Handbook of Defense Economics* (vol. 2), the *Encyclopedia of Arms Control and Disarmament*, and to a Festschrift in honor of Nobel- Laureate Jan Tinbergen.

Prof. Brauer serves as a reviewer for a variety of scholarly journals, book publishers, and grant-making agencies. He serves

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as a member of the editorial boards of *Defense and Peace Economics* (England), *Nação e Defesa* (Portugal), and the *International Journal of Applied Econometrics and Quantitative Studies* (Spain). He also co-edits (with Prof. Keith Hartley) the *Studies in Defense and Peace Economics* monograph series with Routledge, London, and, with Prof. J. Paul Dunne he edit his own journal, *The Economics of Peace and Security Journal* (www.epsjournal.org.uk).

Among professional societies, Prof. Brauer is a member of the American Economic Association and a Fellow, Economists for Peace and Security where he served as vice-chair from 1998 to 2005. He is also a Fellow with the Inter-University Seminar on Armed Forces and Society, a member of the Research Initiative on Small Arms (RISA), and a member of the academic honor societies of Sigma Xi and Phi Kappa Phi. Prof. Brauer has served as consultant to the World Bank, the United Nations, NATO, the US National Defense University, and to the Chief Economist, Office of the Comptroller, City of New York. For a time, he also served as Senior Research Consultant to the Council on Economic Priorities in New York City. He held Visiting Professorships at the Nelson Mandela Metropolitan University in Port Elisabeth, South Africa, in 2003, and at the Australian Defense Force Academy in Canberra, in 2005.

Tom Bundervoet

Tom Bundervoet is an assistant researcher/teacher at the Faculty of Economic, Political and Social Sciences of the University of Brussels, Belgium. His research interests include economic development; the dynamics of poverty and inequality; the political economy of violence and conflict; and civil war studies.

Published papers include: *The Micro-Econometrics of the Conflict Trap: Civil War and Economic Development in Burundi*; *Livestock, Crop Choice and Conflict: Evidence from Burundi*; *Estimating Poverty in Burundi*; and *Civil War and Economic Sanctions: An Analysis of Anthropometric Outcomes in Burundi*.

Carl Conetta

Since January 1991, Carl Conetta has been co-director of the Project on Defense Alternatives (PDA). Prior to joining PDA, Mr. Conetta was a Research Fellow of the Institute for Defense and Disarmament Studies (IDDS) and also served for three years as editor of the IDDS journal *Defense and Disarmament Alternatives*, and the *Arms Control Reporter*.

As co-director of PDA, Mr. Conetta has authored and co-authored numerous reports on security issues and has published in *Defense News*, the *Bulletin of the Atomic Scientists*, *NOD and Conversion Journal*, the *Boston Review*, the *Washington Post*, the *Boston Globe*, the *American Sentinel*, *Security Dialogue*, and *Hawk*, the journal of the Royal Air Force Staff College of the United Kingdom. Mr. Conetta has also made presentations at the Pentagon, US State Department, US House Armed Services Committee, Army War College, National Defense University, UNIDIR, and other governmental and nongovernmental institutions in the United States and abroad. He is a frequent expert commentator on radio and TV. He edits the *Chinese Military Power and Revolution in Military Affairs Webpages*.

Prior to 1986, Mr. Conetta was an editor for four years at South End Press and taught for two years at the University of Connecticut.

Lloyd J. Dumas

Lloyd J. Dumas is Professor of Political Economy, Economics and Public Policy School of Economic, Political and Policy Sciences, University of Texas at Dallas. Trained both as an economist and an engineer, Dr. Dumas' areas of expertise include: 1) National and international security; 2) Human fallibility, terrorism and technological disaster; 3) The environment and global climate change; and 4) Economic transition and development;

He has published six books and more than 100 articles in 11 languages in books and journals of economics, engineering, sociology, mental health, history, public policy, military studies and peace science, as well as in such newspapers/magazines as *The New York Times*, *Los Angeles Times*, *International Herald Tribune*, *Science* magazine, *Boston Globe*, *Technology Review*, *Defense News*, and the *Dallas Morning News*. His latest work, "Seeds of Opportunity: Climate Change Challenges and Solutions" was published online by the Civil Society Institute (www.civilsocietyinstitute.org) in April 2006. He is currently writing his seventh book, "Economics and International Security."

Dumas has been quoted as an authority in *Time*, *Business Week*, *Financial Times*, *Science*, *Der Spiegel*, *Chicago Tribune*, *Christian Science Monitor*, and *Washington Post*, among many others. He has addressed the United Nations, testified at city,

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state and federal government hearings, and discussed the policy implications of his work on more than 250 TV and radio programs in the US, former Soviet Union, Russia, Canada, Europe, Latin America and the Pacific.

Dumas attended Columbia College (BA, Mathematics, 1967), the School of Engineering and Applied Science (MS, Industrial Engineering, 1968) and the Graduate Faculties (PhD, Economics, 1972), all divisions of Columbia University. He taught economics for three years at City University of New York, and engineering for six years at Columbia University, joining the faculty of Social Sciences at University of Texas at Dallas in 1979. He is a Fellow of Economists for Peace and Security.

James K. Galbraith

James K. Galbraith holds the Lloyd M. Bentsen Jr. Chair in Government/Business Relations and is a Professor of Government at the Lyndon B. Johnson School of Public Affairs at the University of Texas in Austin.

Dr. Galbraith teaches economics and a variety of other subjects at the LBJ School. He holds degrees from Harvard (BA magna cum laude, 1974) and Yale (PhD in economics, 1981). He studied economics as a Marshall Scholar at King's College, Cambridge in 1974-1975, and then served in several positions on the staff of the US Congress, including Executive Director of the Joint Economic Committee. He was a guest scholar at the Brookings Institution in 1985. He directed the LBJ School's PhD Program in Public Policy from 1995 to 1997. He directs the University of Texas Inequality Project, an informal research group based at the LBJ School.

Professor Galbraith has co-authored two textbooks, "The Economic Problem" with the late Robert L. Heilbroner and "Macroeconomics" with William Darity, Jr. He is the author of "Balancing Acts: Technology, Finance and the American Future" (1989) and "Created Unequal: The Crisis in American Pay" (1998). "Inequality and Industrial Change: A Global View" (Cambridge University Press, 2001), is co-edited with Maureen Berner and features contributions from six LBJ School PhD students. His most recent book is "Unbearable Cost: Bush, Greenspan and the Economics of Empire," (Palgrave, 2006).

Galbraith maintains several outside connections, including serving as a Senior Scholar of the Levy Economics Institute and as Chair of the Board of Economists for Peace and Security. He writes a column called "Econoclast" for Mother Jones, and occasional commentary in many other publications, including *The Texas Observer*, *The American Prospect*, and *The Nation*. He is an occasional commentator for Public Radio International's Marketplace.

Nancy Gallagher

Nancy Gallagher is the Associate Director for Research at the Center for International and Security Studies at Maryland (CISSM). She co-directs the Advanced Methods of Cooperative Security Program, which seeks to address the security implications of globalization by developing more refined rules of behavior and more comprehensive transparency arrangements. Her recent research at CISSM has focused on ways to maximize benefits and minimize risks from the global spread of space capabilities, biotechnology, and nuclear energy.

Before coming to the University of Maryland, Dr. Gallagher was Executive Director of the Comprehensive Test Ban Treaty Task Force and worked with the Special Advisor to the President and the Secretary of State on recommendations to build bipartisan support for US ratification. She has been an arms control specialist in the State Department, a Foster Fellow in the Arms Control and Disarmament Agency, and a faculty member at Wesleyan University.

Dr. Gallagher is the author of "The Politics of Verification" (Johns Hopkins University Press, 1999), the editor of "Arms Control: New Approaches to Theory and Policy" (Frank Cass, 1998), and co-author of "Controlling Dangerous Pathogens: A Prototype Protective Oversight System" (CISSM, 2007). She has also written articles on space security, nuclear arms control and nonproliferation, and other topics related to global security. She received her undergraduate degree in history from Carleton College and her PhD in political science from the University of Illinois, Champaign-Urbana.

David Gold

David Gold is Associate Professor in the International Affairs Program at the New School. He is a Fellow of Economists for Peace and Security, an Associate Editor of *The Economics of Peace and Security Journal*, and a member of the Security Policy Working Group. He is a co-founder and co-chair of the New School Study Group on the Economics of Security and, with Sean Costigan, has edited "Terroronomics," which will be released by Ashgate Publishers on May 8,

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Prior to joining the New School faculty, Professor Gold spent fifteen years in the United Nations Secretariat, first in the Centre on Transnational Corporations and then in the Department of Economic and Social Affairs. Other appointments include teaching and research positions at Columbia University, the University of California, and Rutgers University. At present, Professor Gold is conducting research on economic aspects of terrorism and counter terrorism, the globalization of military production, and the political and economic determinants of military spending in the United States since World War II. His paper "Evaluating the Costs and Benefits of the US War on Terror" was presented at the 2007 meeting of the Eastern Economic Association at a session organized by EPS, and is available on the EPS web site (www.epsusa.org/events/eea2007papers/gold.pdf).

David is a Fellow of Economists for Peace and Security.

Eban Goodstein

Dr. Eban Goodstein is Professor of Economics at Lewis and Clark College in Portland Oregon. Goodstein is the author of a college textbook, "Economics and the Environment," (John Wiley and Sons: 2007) now in its fifth edition; "The Trade-off Myth: Fact and Fiction about Jobs and the Environment" (Island Press: 1999); and "Fighting for Love in the Century of Extinction: How Passion and Politics Can Stop Global Warming" (University of Vermont Press: 2007).

Goodstein's current research focuses on the economics of global climate change, a subject on which he has spoken widely. Articles by Goodstein have appeared in, among other outlets: *The Journal of Environmental Economics and Management*, *Land Economics*, *Ecological Economics*, and *Environmental Management*. His research has been featured in *The New York Times*, *Scientific American*, *Time*, *Chemical and Engineering News*, *The Economist*, *USA Today*, and *The Chronicle of Higher Education*.

Goodstein received his B.A. from Williams College and his PhD from the University of Michigan. He serves on the editorial board of *Environment, Workplace and Employment*, is on the Steering Committee of the Center for the Applied Study of Economics & the Environment, and is a Member Scholar at the Center for Progressive Reform. Currently, Goodstein is directing a national educational initiative on global warming, Focus the Nation: Global Warming Solutions for America (www.focusthenation.org).

William Hartung

William Hartung is Director of the ArmsTrade Research Center and a President's Fellow at the World Policy Institute of the New School University. He is an internationally recognized expert on the issues of the arms trade and the economics of military spending and American foreign policy.

He has served as the Director of the Project on the Control of the International Arms Trade at the World Policy Institute; Research associate and project director at the New York-based Council on Economic Priorities; speech writer and policy analyst for New York State Attorney General Robert Abrams. He has appeared as a guest on national television and radio programs including *CBS 60 Minutes*, *NBC Nightly News*, the *MacNeill/Lehrer Report*, CNN's *Inside Business* and National Public Radio's *Talk of the Nation*.

Hartung is the author or co-author of numerous books and studies, including "The Changing Dynamics of US Defense Policy and Budgeting in the Post-Cold War Era" (co-author; Greenwood Press, 1999); "Welfare for Weapons Dealers 1998: The Hidden Costs of NATO Expansion" (World Policy Institute, 1998); "US Weapons at War" (World Policy Institute, 1995); "And Weapons for All" (1994). His articles on the arms trade and the economics of defense spending have appeared in *The New York Times*, *Newsday*, *The Nation*, the *Christian Science Monitor*, the *Bulletin of the Atomic Scientists*, the *World Policy Journal* and numerous other publications.

Mr. Hartung is a member of the International Studies Association; a recipient of a research and writing grant from the Program on International Peace and Cooperation of the John D. and Catherine T. MacArthur Foundation, and a member of the Security Policy Working Group. He holds a BA in philosophy, magna cum laude, Phi Beta Kappa, from Columbia University.

Henry Hertzfeld

Dr. Henry Hertzfeld is a Senior Research Scientist at the Space Policy Institute of the Elliott School of International Affairs, George Washington University. He holds both a doctorate in economics and a law degree. Before joining the Institute, Dr.

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Hertzfeld was Senior Economist at NASA from 1976 through 1983. He then established his own consulting business specializing in financial, economic, and legal aspects of space and science and technology activities. He has also served as a Senior Policy Analyst at the National Science Foundation. Dr. Hertzfeld is currently a Professorial Lecturer of Economics at George Washington.

For a list of publications and conference presentations, please visit: <http://www.gwu.edu/~spi/biohertzfeld.html>

Michael Intriligator

Michael D. Intriligator is Professor of Economics at the University of California, Los Angeles (UCLA), where he is also Professor of Political Science, Professor of Policy Studies in the School of Public Affairs, and Co-Director of the Jacob Marschak Interdisciplinary Colloquium on Mathematics in the Behavioral Sciences. He is also a Senior Fellow at the Milken Institute in Santa Monica.

Intriligator received his undergraduate SB degree in Economics at the Massachusetts Institute of Technology in 1959; his MA degree at Yale University in 1960, where he was the recipient of the Woodrow Wilson Fellowship; and his PhD in Economics at the Massachusetts Institute of Technology in 1963.

Intriligator is the author of more than 200 journal articles and other publications in the areas of economic theory and mathematical economics, econometrics, health economics, reform of the Russian economy, and strategy and arms control, his principal research fields. Dr. Intriligator is Vice Chair and a member of the Board of Directors of Economists for Peace and Security and was President of the Peace Science Society (International) in 1993. He was elected as a foreign member of the Russian Academy of Sciences in 1999 and inducted in 2000, and he was elected an AAAS Fellow of the American Association for the Advancement of Science in 2001. He was elected President of the Western Economic Association International (WEAI) in 2006.

Richard Kaufman

Richard Kaufman is a member of the board of directors and a vice chair of Economists for Peace and Security, and Director of Bethesda Research Institute, which he founded. He was formerly a staff economist and general counsel of the Joint Economic Committee of the US Congress. At the Joint Economic Committee he directed numerous investigations of the Pentagon and its spending and contracting practices. As he would point out, that was at a time when there was more rigorous and relevant congressional oversight than we have had over the past six years, and when oversight meant to look hard, not to hardly look.

Alan Kuperman

Alan J. Kuperman is Assistant Professor at the LBJ School of Public Affairs, University of Texas at Austin. He is author of one book, "The Limits of Humanitarian Intervention: Genocide in Rwanda" (Brookings, 2001), and co-editor of "Gambling on Humanitarian Intervention: Moral Hazard, Rebellion and Civil War" (Routledge, 2006). His articles have appeared in journals and newspapers including *Foreign Affairs*, *Political Science Quarterly*, *Security Studies*, *The New York Times*, *The Washington Post*, and *The Wall Street Journal*. He also has chapters in books including "Bosnian Security After Dayton: New Perspectives" (New York: Routledge, 2006), "The Media and the Rwanda Genocide" (London: Pluto Press, 2006), "Clashing Views on Controversial Issues in American Foreign Policy" (McGraw-Hill/Dushkin, 2005), "Genocide Perspectives, Volume III" (Brandl and Schlesinger, 2005), "American Foreign Policy: Cases and Choices" (Foreign Affairs Books, 2003), "Yugoslavia Unraveled: Sovereignty, Self-Determination, Intervention" (Lexington, 2003), "Nuclear Power & the Spread of Nuclear Weapons" (Brassey's, 2002), and "The New American Interventionism: Successes and Failures" (Columbia University Press, 1999).

He holds a PhD in Political Science from MIT (2002) and has received fellowships from Harvard University, MIT, the University of Southern California, the US Institute of Peace, the Brookings Institution, and the Institute for the Study of World Politics. Prior to his academic career, he worked as legislative director to Congressman Charles Schumer and legislative assistant to Speaker of the House Tom Foley.

Michael Lind

Michael Lind is the Whitehead Senior Fellow at the New America Foundation. He is the author, with Ted Halstead, of "The Radical Center: The Future of American Politics" (Doubleday, 2001). He is also the author of "Made in Texas: George W. Bush and the Southern Takeover of American Politics" (New America Books/Basic, 2003) and "What Lincoln Believed" (Doubleday,

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2005). Mr. Lind has been an editor or staff writer for *The New Yorker*, *Harper's Magazine*, and *The New Republic*. From 1991 to 1994, he was executive editor of *The National Interest*. He has also been a guest lecturer at Harvard Law School. Mr. Lind has written for *The Atlantic Monthly*, *Prospect* (U.K.), *The New York Times Magazine*, *The Washington Post*, *The Los Angeles Times*, *The Financial Times*, and other leading publications, and has appeared on C-SPAN, National Public Radio, CNN's *Crossfire*, and PBS's *The NewsHour with Jim Lehrer*.

Mr. Lind's first three books of political journalism and history, "The Next American Nation: The New Nationalism and the Fourth American Revolution" (Free Press, 1995), "Up From Conservatism: Why the Right Is Wrong for America" (Free Press, 1996), and "Vietnam: The Necessary War" (Free Press, 1999) were all selected as New York Times Notable Books. He has also published several volumes of fiction and poetry, including "The Alamo" (Houghton Mifflin, 1997), which *The Los Angeles Times* named as one of the Best Books of the year, and a prize-winning children's book, "Bluebonnet Girl" (Henry Holt, 2004). His ground-breaking study of American grand strategy, "The American Way of Strategy: US Foreign Policy and the American Way of Life" was published by Oxford University Press in October 2006.

Jeff Madrick

Jeff Madrick is editor of *Challenge Magazine*, visiting professor of humanities at The Cooper Union, and director of policy research at the Schwartz Center for Economic Policy Analysis, The New School. He is a regular contributor to *The New York Review of Books*, and a former economics columnist for *The New York Times*. He is the author of several books, including "Taking America" (Bantam), and "The End of Affluence" (Random House), both of which were New York Times Notable Books of the Year. "Taking America" was also chosen by *Business Week* as one of the ten best books of the year. His most recent book is "Why Economies Grow" (Basic Books). He has served as a policy consultant for Sen. Edward M. Kennedy, and other US legislators. He has written for many other publications, including *The Washington Post*, *The Los Angeles Times*, *Institutional Investor*, *The Nation*, *American Prospect*, *The Boston Globe*, *Newsday*, and the business, op-ed, and magazine sections of *The New York Times*. He has appeared on *Charlie Rose*, *The Lehrer News Hour*, *Now With Bill Moyers*, *Frontline*, CNN, CNBC, CBS, and NPR. He was formerly finance editor of *Business Week Magazine* and an NBC News reporter and commentator. His awards include an Emmy and a Page One Award. He was educated at New York University and Harvard University, and was a Shorenstein Fellow at Harvard.

He is currently at work on a biographical history of the American economy, to be published by Alfred A. Knopf, and a brief work on the purposes of government, to be published by Princeton University Press.

Warren Mosler

Warren B. Mosler is the founder of AVM, L.P. a broker/dealer that provides advanced financial services to large institutional accounts; founder and principal of Illinois Income Investors (III); chairman and majority shareholder of Consulier Engineering, which produces race cars, including the MT900s is currently underway at Breckland Engineering, UK. (www.mt900.com); director and major shareholder of the Enterprise National Bank which donates 25% of its profits to the American Cancer Society; co-Founder and Distinguished Research Associate of The Center for Full Employment And Price Stability at the University of Missouri in Kansas City; Senior Associate Fellow, Cambridge Center for Economic and Public Policy, Downing College, Cambridge, UK; and Associate Fellow, University of Newcastle, Australia.

In 2006, Warren ran for Congress, hoping to represent the US Virgin Islands.

Wim Naude

Wim Naude is a Senior Research Fellow at the World Institute for Development Economic Research (UNU/WIDER) of the United Nations University in Helsinki, Finland. Originally from South Africa, his current research interests include: new economic geography, spatial inequality and growth in developing countries; local and regional economic development; foreign direct investment and investment promotion agencies; small business and entrepreneurship; and evolutionary psychology and development.

Dr. Naude holds an MSc in Quantitative Development Economics from the University of Warwick, UK, and a PhD in Economics from Potchefstroom University. He has served as lecturer and research officer at the Centre for the Study of African Economies, University of Oxford, UK; visiting Professor, Addis Ababa University, Ethiopia; Senior Associate Member, St. Antony's College, Oxford, UK; and as Professor and Director of the WorkWell Research Unit, Faculty of Economic &

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Management Sciences, North-West University (Potchefstroom Campus), South Africa.

In addition, he has served as a member of the Statistics Council of South Africa since 2005 (appointed by the Minister of Finance, Republic of South Africa); as a member of the Economic Advisory Council of the Premier of the North-West province of South Africa since 2005; and as a councillor on the Southern District Municipality of South Africa from 2000/2001 – 2006. He has been on the Boards of Invest North West, the official investment promotion agency of the North-West Province of South Africa, 2000 - 2006; the International Council for Small Business, 2001 -2003; board Member and Founding Chairman of Afriforte (Pty) Ltd, 2005 - 2006 (www.afriforte.co.za). He is a member of the editorial boards of : *South African Journal of Economics*, *Journal of Small Business and Entrepreneurship*, *Journal of Small Business Management*, *Journal of Economic and Financial Sciences*; guest editor of the first edition of *Journal of Development Perspectives*; and has received grants from South African National Research Foundation, South African - Netherlands Programme on Development (SANPAD), and the Volkswagen Foundation, Germany.

Eleanor Nillesen

Eleanor Nillesen holds an MSc in Agricultural and Environmental Economics from Wageningen University. She did course work for her Masters at the School of Economics, University of Queensland, Australia and was a Socrates exchange student at the Agricultural University of Norway. She is working on her PhD at the Environmental Economics and Natural Resources Group, Department of Social Sciences, Wageningen University. She has served as a lecturer and researcher in environmental economics, and done field work in the Wet Tropics World Heritage Area, Queensland Australia and in the Machakos district of Kenya.

From 2002 to 2004, Ms. Nillesen served as an environmental economist at Witteveen+Bos Consulting Engineers, Rotterdam. She has presented papers at the International Conference on the Economics of Poverty, Environment and Natural Resource Use; the 10th Conference of the International Consortium on Agricultural Biotechnology Research (ICABR); and the 26th Conference of the International Association of Agricultural Economists (IAAE). She is a member of the International Association of Agricultural Economists and the International Federation of University Women.

Dimitri Papadimitriou

Dimitri B. Papadimitriou's areas of research include financial structure reform, community development banking, fiscal and monetary policy, employment policy, and distribution of income, wealth and well-being. He heads the Levy Institute's macro-modeling team studying and simulating the US and world economies. In addition, he has authored and co-authored studies relating to Federal Reserve policy, fiscal policy, employment growth and social security reform.

Papadimitriou is president of the Levy Institute and executive vice president and Jerome Levy Professor of Economics at Bard College. He has testified on a number of occasions in hearings of Senate and House of Representatives Committees of the US Congress, was vice-chairman of the Trade Deficit Review Commission of the US Congress (2000-2001) and a member of the Competitiveness Policy Council's Subcouncil on Capital Allocation. He was a Distinguished Scholar at the Shanghai Academy of Social Sciences (PRC) in fall 2002. Papadimitriou has edited and contributed to eight books published by Macmillan and Edward Elgar and is a member of the editorial board of *Challenge*. He is a graduate of Columbia University and received a PhD in economics from New School for Social Research.

Solomon Polachek

Solomon W. Polachek is Distinguished Professor at the State University of New York at Binghamton (Binghamton University) where he has taught since 1983. He holds appointments in the Economics and Political Science Departments, and from 1996-2000 he served as Dean of the Arts and Sciences College. In 2005 he received the State University of New York Chancellor's Award for Excellence in Teaching. His PhD is from Columbia University where he wrote his dissertation "Work Experience and the Difference Between Male and Female Wages." Polachek has had post-doctoral fellowships at the University of Chicago, Stanford, and Princeton. He coauthored "The Economics of Earnings" with Stan Siebert, published over 100 articles and book chapters, and presented seminars and workshops at over 50 universities. In addition, he visited Bar-Ilan University, Catholic University of Leuven, Erasmus University, Tel Aviv University, and the Tinbergen Institute for extended stays. Polachek is editor of Research in Labor Economics, on the editorial boards of a number of academic journals, and a Research Fellow at the Institute for the Study of Labor (IZA) in Bonn. His research spans two main areas. First is the application of life-cycle models to understanding worker well-being. Second is the integration of economics and political science to explain political conflict and

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cooperation among nations. This latter research has been widely received in the political science field leading to over 20 publications and conference presentations, as well as to being chosen to serve on the editorial boards of *Conflict Management and Peace Science* (1989-), the *International Studies Quarterly* (1989-1995) and *Peace Economics, Peace Science and Public Policy* (1993-). Polachek was elected President of the Peace Science Society (International) serving from 1999-2000. Although primarily devoted to applying economics tools to international relations, this research has implications regarding industrial relations, particularly union wage negotiations and strike activity.

Maeve Powlick

K. Maeve Powlick graduated from Wells College in 2002 and is a student in the Economics PhD program at the University of Massachusetts, Amherst, studying with James K. Boyce. She is a member of the faculty at Skidmore College, teaching Economics and interdisciplinary classes with Women's Studies and Mathematics. Her main areas of interest are the political economy of violent conflict, focusing on intrastate wars, and community-based economic development in situations of long-term poverty and violence. She is writing her dissertation about the role of young people in economic development in communities of multigenerational poverty in New York State, using quantitative and original qualitative research in urban and rural communities.

Philip Verwimp

Dr. Philip Verwimp obtained his PhD in Economics from the Catholic University of Leuven in January 2003 with a dissertation on the political economy of development and genocide in Rwanda. He specializes in the economic causes and consequences of conflict at the micro-level. Philip has done quantitative work on the death toll of the genocide and on the demography of post-genocide Rwanda. He currently works on poverty and health in conflict-affected countries. Philip was a Fulbright-Hays Fellow at Yale University and worked for the World Bank as a Poverty Economist. He received the Jacques Rozenberg Award from the Auschwitz Foundation for his dissertation. Philip taught Development Economics at the Institute of Social Studies in The Hague and at the Universities of Antwerp, Leuven and Utrecht. He is currently affiliated with ECARES at the Université Libre de Bruxelles.

His work has been published in *Journal of Development Economics*, *Journal of Peace Research*, *Journal of Conflict Resolution* and the *European Journal of Political Economy* among others. In 2006 he received the Award for the Best Paper published in the *Journal of Peace Research*. Philip is the president of the Dutch/Flemish Chapter of Economists for Peace and Security and he co-directs the Households in Conflict Network (www.hicn.org).

Winslow Wheeler

Winslow T. Wheeler is Director of the Straus Military Reform Project of the Center for Defense Information in Washington DC.

From 1971 to 2002, he worked on national security issues for members of the US Senate and for the US Government Accountability Office (GAO). In the Senate, Wheeler worked for Jacob K. Javits (R, NY), Nancy L. Kassebaum (R, KS), David Pryor (D, AR), and Pete V. Domenici (R, NM). He was the first, and according to Senate records, the last Senate staffer to work simultaneously on the personal staffs of a Republican and a Democrat (Pryor and Kassebaum).

In the Senate staff, Wheeler was heavily involved in legislating the War Powers Act, Pentagon reform legislation, and oversight of the defense budget and weapons programs. At GAO, he directed comprehensive studies on the 1991 Gulf War air campaign, the US strategic nuclear triad, and Pentagon weapons testing. Each of these studies found prevailing conventional wisdom about weapons to be misinformed.

In 2002 when he worked as the Senior Analyst for National Defense for the Republican staff of the Senate Budget Committee, Wheeler authored an essay, under the pseudonym "Spartacus," addressing Congress' reaction to the September 11, 2001 terrorist attacks ("Mr. Smith Is Dead: No One Stands in the Way as Congress Lards Post-September 11 Defense Bills with Pork"). When senators complained about Wheeler's criticisms, he resigned his position.

Wheeler joined the Center for Defense Information in 2002. There, he wrote "The Wastrels of Defense" (US Naval Institute Press, 2004), which explores Congress' involvement in US national security issues and has been the subject of interviews or reviews on *60 Minutes*, C-SPAN's *Book Notes*, and various newspapers and radio stations.

He has also authored commentaries on Congress and national security, which have appeared in *The Washington Post*,

PRESENTERS' BIOGRAPHIES

Proceedings of the Naval Institute, Government Executive, Defense Week, Defense News, Barron's, Army Times, UPI, Mother Jones, Nieman Watchdog, CounterPunch, Politico and elsewhere.

He lives with his wife, Judy, and son, Matthew, in Maryland. Another son, Winslow B., lives in Florida with his wife and their three sons.

Herbert Wulf

Herbert Wulf was Director of the Bonn International Center for Conversion (BICC) from its foundation in 1994 until 2001. He is presently a research associate at BICC and a visiting scholar at the Australian Center for Peace and Conflict Studies at Queensland University, Brisbane, Australia. Herbert Wulf has served as a consultant to various international organizations, among them the Parliament and the Commission of the European Union as well as to the United Nations Department for Disarmament Affairs, the Human Development Report of UNDP. He served as consultant to the United Nations Development Programme in Pyongyang, Democratic Peoples' Republic of Korea on capacity building in disarmament between 2002 and 2007.

In his previous research positions he was Deputy Director of the Institute for Development and Peace at the University of Duisburg, Senior Researcher at the Stockholm International Peace Research Institute and at the Institute for Peace Research and Security Policy at the University of Hamburg.

The government of North-Rhein Westphalia, Germany awarded professorship to Herbert Wulf in 2002. He studied at the Universities of Cologne (economics), Mannheim and Hamburg (sociology) and wrote his dissertation at the Free University of Berlin in international relations. He taught at several Universities in Germany, Scandinavia and the United States. Prior to his work in research, he was Director of the German Volunteer Service in India. In February 2007 the Center for Conflict Studies of the Philipps-University in Marburg, Germany awarded the Peter-Becker price for peace and conflict research Herbert Wulf.

His research fields include governance, with UN peacekeeping and the future of the monopoly of violence, internationalization and privatization of conflict and the privatization of the armed forces, arms production, arms trade, arms industry conversion and arms control and disarmament, especially within the UN system. A particular regional interest relates to India (in development cooperation theory) and North Korea (the nuclear ambitions).

Economists for Peace and Security is an international network of economists with affiliates in seventeen countries. The Board of Trustees seats 11 Nobel Laureates, two former Cabinet Secretaries, and a President of a Federal Reserve Bank. Another 4 Nobel Laureates were Trustees before their deaths. Worldwide membership is 1000, mostly academic economists, but increasingly concerned citizens, members of the media, staff of other NGOs, and government representatives. EPS is accredited with special consultative status to the Department of Public Information and the Economic and Social Council of the United Nations. This combination creates great potential for influence from a global vantage.

Since 1989, Economists for Peace and Security, with the support of members, has been the voice for economists on issues of war, armaments, and conflict reduction, serving as a clearinghouse for research on these issues. EPS works to inform social scientists, citizens, journalists and policy-makers about the full costs of war and conflict, and to propose feasible alternative approaches to building international security.

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