



**Remarks and Q&A by the Deputy Director of National Intelligence
For Analysis & Chairman, National Intelligence Council**

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MS. ELLEN LAIPSON (President, Henry L. Stimson Center): Good afternoon, everyone. Thank you so much for coming. I'm Ellen Laipson. I'm the President of the Stimson Center, and it's a real pleasure to welcome you to this very special event. As you may have been hearing in the news, yesterday the National Intelligence Council issued its quadrennial report on global trends. This is an exercise that the NIC has been involved in since 1996, but each iteration of this report becomes more and more of a global conversation, and I know that Tom Fingar will tell us more about the inputs to this year's version of this Global Trends study. It's intended to try to help a new administration get the strategic picture of what the international landscape looks like and will look like over the early years of a new Presidential administration.

We're really honored to have Tom Fingar, the Chairman of the NIC, who is also the Deputy Director of National Intelligence for Analysis, join us to present the study, of which he really was the key supervisor and guider. Tom, to our sadness here in Washington, is going to be leaving Washington but he leaves on a very high note, a very triumphant note of having been able to produce this very impressive and valuable study.

We've invited Tom, who, as many of you know, has a deep Asia background and really served both in academia and earlier in the Department of State in important Asian analysis positions. We've asked Tom to particularly try to highlight for us what the report says about the future of Asia, rising Asian powers, other transnational issues that are taking place in Asia, and how Asia sits in evolving and emerging international systems. As many of you may know, Tom has an early academic career. He and I are both alum of Cornell University. He got his Ph.D. from Stanford, and has been associated with Stanford on and off over the years. But from the late '80s to the present he's been here in Washington performing very important roles in leadership positions in the analytic community.

I want to also say that the Stimson Center is proud to have been a minor player and contributor in some modest way to this year's Global Trends. We've had the opportunity to conduct some collaborative research with think tanks across Asia and in the Middle East, and we hope those kinds of conversations and that kind of analytic thinking from the regions, from outside the United States, is part of what this report is attempting to capture.

So with that I want to thank Tom for coming and turn the floor over to you.

DR. THOMAS FINGAR: Thank you, Ellen. Thanks to the Stimson Center for hosting us, and let me correct one aspect of the introduction. Nobody played a minor role in this. And the Stimson Center's involvement, as with that of the other sort of partners, were central in reaching out to different communities, channeling ideas to us. This is truly a collective undertaking, and I would be remiss not to knowledge Matt Burrows, who is sitting over here to the left, who really is the principal drafter and the one who tried to organize and did a very effective job of pulling it together, ideas from a great many places.

What I'd like to do this afternoon is to speak briefly about the purpose of Global Trends 2025, describe briefly how it evolved, what we have learned about the process, and then to highlight some of the themes, the drivers, the shapers, the dynamics, the factors depending on how social science-y you are in your approach. But the conditions that will shape the future will shape and require decisions made, not just in Washington but around the globe in the years between now and 2025, although we'll be focused on that 17 years into the future.

First a few words on what we were trying to do. The purpose of 2025, this Global Trends exercise, which Ellen was sort of present at the creation of the first and second iterations, is to stimulate strategic thinking. We time it for the advent of a new administration in Washington, to catch people in the window where they'd have a little more time to reflect on how their own responsibilities will fit into a broader national and global context. But we also target the audience of the informed public – academics, journalists, scholars and think tanks, foreign ministries around the globe.

The underlying premise is a simple one – acting on it is the hard part. The simple premise is that the world is so interconnected that developments occurring anywhere could have an impact everywhere else, that solving problems one place often and, arguably increasingly frequently, require collaboration, consideration, cooperation, in ways that transcend individual countries, that transcend divisions between issues, involve multiple countries in a single region, even multiple regions of the globe. And that the problems and the challenges, the opportunities that will arise between now and 2025 will be more or less apparent at different times to leaders in different parts of the world, but that if we tee them up and sensitize people to them, they're more likely to be confronted early enough to take action. Take action not just to prevent bad things from happening, but to take actions to keep positive developments on the right track.

What we're trying to do is to alert people to the signs that they should watch for, to know whether things are going in a good direction or a bad direction, from their own perspective. I think this will become a little clearer as I talk more specifically. But this is not a prediction. We do not have a crystal ball. We are not describing a forecast of what is going to happen, and we are certainly not laying out a preferred American future here.

As I get into the description of the drivers, in underscoring sort of their complexity, experience suggests that it will come across as pessimistic, as a future fraught with problems, big challenges, high hurdles to solving those challenges. That's not the impression I want you to take away. There are serious and complex problems, but they're all susceptible to management, to

adjustment, to overcoming, to utilization with good leadership. That if you take away nothing else from this talk, take away an appreciation for the importance of leadership in early anticipation, clear articulation of the problems, of the challenges, and thoughtful consideration, identification of potential partners, development of the partnerships, the coalitions to work them, that if we do that, these problems can be surmounted, the challenges can be overcome, the opportunities can be realized. Were we to take a sort of head-in-the-sand attitude, they would overwhelm us.

In identifying what some of the key drivers and trends are, for this iteration, the fourth of Global Trends, we built upon lessons we had learned in the first ones. I won't rehearse them all, but the initial one was sort of a small group of analysts inside the intelligence community putting their heads together to really predict the future. Anticipation, prediction is what we do in our day jobs, and it was hard to break out of that and think 15 years out. We conferred with a relatively small group of other USG officials.

By the time we got to the third iteration, we were engaged with a much larger group of non-government officials in the United States, and for the first time sought out input from colleagues, partners, government officials, private citizens, academics around the world. We convened six seminars and conferences on five continents. By the time we were done, we had several hundred foreign participants. But again, we took that input, and a group of intelligence analysts internalized it, digested it, and produced a product.

This time our net was cast more widely. We involved more Americans, more foreign specialists, in a definition of problem, in identifying key trends, in discussions about how they would interact. We sought out particularly non-American views on the role of the United States. What did others think the United States would do? What would others want the United States and what did they fear we would do in the years ahead?

This time we worked several drafts and shared them on a website, which we gave access to essentially anybody who wanted it, to comment on. We had several drafts circulate around the groups, again inside the United States and around the world. I was fortunate enough to participate in discussion sessions in both Indonesia and Beijing. The one in Indonesia was all Indonesians. The one in Beijing had participants from nine countries. Those reactions to a draft were very, very helpful. We did that a couple of times.

So what we have here is a digestion, an interpretation, an integration of ideas that came from many places. I think no one would recognize their own input because it's been so intertwined. And it's probably not right. Indeed, I'll venture to say it's probably wrong in its details. But whether it's right or wrong is not important. What is important is, does it enable the right questions to be framed, to write a framework for addressing those questions, for identifying points at which what is done in one area of endeavor, of policy, spills over and affects other endeavors, where solutions and policies in one area will be shaped by politics and policies in another area, perhaps in another country.

We developed four scenarios in the Global Trends volume that you've picked up. These are to be mostly for fun, but to be illustrative of different ways in which some of the factors that we

discussed in the main text might interact. Some of them from the perspective of the United States, others from the perspective of particular countries in Asia, or Europe, might be thought of as optimistic or pessimistic. It's sort of in the eye of the beholder. But it helps to illustrate the way things interact.

Let me set the scene a little more by distinguishing between those aspects of the study that we judge to be relatively certain, those developments that are almost certain to occur, or almost certain to influence events, and those which are more indetermined. For example, demographic change, the rate of population increase, aging of populations, migration. They're actually quite predictable, or predictable within a narrow range. How nations respond to aging of their populations to the age structure of the populations, birth rates, and the like, can make a very, very big difference. I'll come back to that and illustrate it.

The point here is we're going to have a mix of factors that will shape events. How they shape those events is a subject of political and leadership intervention. We're describing likely trajectories, possible trajectories. Nothing that I say, nothing that you read should be thought of as either inevitable or immutable. It's the stuff that happens in life. It's what any leadership is going to have to deal with. And let me focus in on half a dozen or so of these briefly.

I mentioned demography. We accept the World Bank projection that 1.4 billion additional people will inhabit the world in 2025. That tells us something but not much that's useful. More significant is, only 3 percent of that increase will be in the West, as the West is traditionally defined, but to include Japan. Almost all of the growth will be in sub-Saharan Africa, the Middle East, portions of Asia other than Japan and China, and it will be in Central America. One of the consequences of that pattern of growth that will be immediately apparent when you look at the map is a lot of it occurs in what has been called the arc of instability, that runs from western Africa across the Maghreb, through the Arab heartland, and across Central Asia. A lot of it is in the Islamic world. A lot of it is in countries that are already somewhat to significantly unstable. It also occurs in a region that has some other problems that I'll fold into the equation in a moment.

So one is a magnitude of growth. Consequence of growth, the rapid growth are youth bulges. It's not just that it's a bigger population. It's a younger population. Young people everywhere exhibit certain kind of traits in common. One is impatience. It can be a healthy disrespect for authority, and characterized as raging hormones. They're eager for opportunity. Thanks to the communication revolution they know what their age cohort in other parts of their own country, perhaps in bigger cities, across the border, across the river, across the sea, what other people have access to. And often they want those same kind of opportunities. Not just the things but the opportunities – the education, the jobs. More of them making more demands because they know more what's available, make these demands on governments that may or may not have the capacity to respond adequately to those demands.

But a young workforce is also energetic, and those that are ambitious can be a great source of opportunity. For example, when we looked at the age structure in the Middle East out to 2025, it looks very similar to the age structure in the Republic of Korea and in Taiwan on the eve of sort of rapid industrial kick-off, rapid increases in prosperity, in education. The raw material, the

human capital will be there. It will be very important to know whether that youthful population has the education needed to move into a more industrialized world, and whether there will be sufficient educated workforce and stability, predictability to attract the capital that will be there. Korea and Taiwan as models on both education and good governance that was able to attract the investment leading to a take-off. If one looks at other parts of the world in 2025, there is the potential – there is the potential – to emulate these successful modernizers.

Another dimension of demography is the graying of certain countries. Europe, particularly southern Europe, Japan, Russia, and toward the end of this period, China will have very, very significant dependency ratios. Smaller number of young people supporting larger numbers of old people, and the dependent children that are a part of any society. But project out four decades of the one-child policy in China. That's a very heavy dependency ratio if the family is to provide the sustenance for the over-65 population. Either the family gets much richer, or some other mechanism – social security, social safety net – needs to be put in place.

Another dimension of an aging population concerns the quality of the workforce, the availability of the workforce. Will there be enough people to provide the labor needed for produced goods and services? If the answer is no, as it increasingly looks like it will be for Japan, much of Europe, there are two broad possibilities – three broad possibilities. One is automation, sort of robots take over and perform certain tasks. Technology as a savior. The more likely and more frequent pattern is migration. Migration from areas with a lot of people to areas that have demand for people.

One of the reasons that the United States is not facing the same graying of the population that Europe does is because of the migration that we have had and will certainly continue to have. U.K. is the same. But large-scale migration into Korea or Japan would be a rather wrenching departure from historic patterns, from notion of what it is to be a Japanese. Same thing, what it is to be a Spaniard, what it is to be an Italian. In societies that have been more homogeneous, migration becomes a more problematic policy issue, stressing levels of tolerance. Choices for Europe – does the migration come from across the Mediterranean, from the Arab world, the Muslim world? Does it come from further down Africa? Does it come from Central Asia or Central Europe? It makes a big difference in terms of how it would fit in with the existing population.

Another of the near-certainties is that the effects of climate change will begin to be felt by 2025. The NIC did a study earlier this year on geopolitical effects of climate change – we didn't do the climate science; we don't know enough to do that, but we took as our starting point the judgments of the International Panel on Climate Change and American experts on it. For purposes of this study we accepted it as basically accurate the proposition that what was going to happen by 2030, and certainly by 2025, had already been determined. There was nothing that could be done beginning today that would change the impact of climate change from 2025 or 2030. Now, we might want to do things, but the impact is going to be felt further out into the future. And some of the impacts that we anticipate, although the magnitude is not great, the potential impact is substantial: water shortages, less water available in specific places; changes to agricultural production; more aridity, difference in the length of the growing season, difference in the temperature, seeds germinating. I don't pretend to the expertise to know how, but the

folks we had look at it identified several – indeed, several dozen countries that will be affected. The countries include the United States, the southwestern portion of the United States.

But most of those effects fall in the same regions where government capacity is already stretched. With the resources available, the quality of governance is already strained to meet slightly better than subsistence demands, the extra demands of increased urbanization, which by the way is another of the trends that we consider a near-certainty. Continued and accelerated movement into cities. Megacities, with all of both the potential advantages and the potential risks of concentrating large numbers of people in areas where everything has to come in from some place else – food, water, electricity, the wherewithal for heat, supplies of all kinds, subject to disruption. Where proximity can sort of fuel interpersonal tensions, particularly if people are unhappy because they don't have a job or can't get education, or are unhappy with government performance.

Climate change almost certainly will begin to have an impact in parts of Asia, including India and China. And water is the primary – competition for water in the riverine portions of south Asia. The depletion of subsurface aquifers in the north China plain, where hundreds of thousands of wells were drilled in the '60s are being depleted. And the magnitude of the impact is increased because of the size of the populations. That by 2025 we're looking at nearly 1.5 billion Chinese, probably almost as many Indians having to depend on less reliable sources of water.

Other parts of South Asia will have a mixed dilemma with respect to water. Changing patterns of the monsoon season disrupting agriculture. More rapid melt in the Himalayas changing water availability, where there are not elaborate water control mechanisms. The low-lying regions – Bangladesh, South Pacific islands – that will be vulnerable in this period, not to sea level rise significantly but a little bit of sea level rise and the predicted greater intensity and greater frequency of extreme weather that can produce flooding, requiring or affecting the movement of many people won't get anticipated, invest to protect the people, the houses, the other resources that are there, requiring choices in expenditure of resources. Do you invest available resources in the most vulnerable areas, or where there are most people living? They may be different places. Do you invest the resources, the effort with governments that are most capable of utilizing the help, or with the ones that are in most need of assistance to cope with the anticipated consequences? There are no obvious answers to these questions. They need to be resolved in the political mechanism.

Another of the near-certainties, at least as we have framed it, is that the international institutions that have shaped the world of today, the Bretton Woods arrangement, the San Francisco conference arrangements, the post-World War II World Bank, IMF, United Nations, the World Trade Organization as a successor to the GATT, the alliance structures, NATO, that were put in place, bilateral alliances between the United States and Korea, Philippines, Australia and Japan, they were formed in a different time, very different world, to meet purposes that no longer are the same, and they're not adequate for the kind of challenges that we face now and will face out to 2025.

Can they change? Maybe. Should they be replaced with something else? Maybe. How will the change come about? Who will lead it?

Which brings me to the fourth of the shaping factors, and that's the diminished gap between the United States and other nations. In 1945, '46, '48, the U.S. preeminence is so great that you could play an almost unilateral clear, easy leadership role in rebuilding and shaping the world. It's not true now, it's not true in 2025. It's not because we have become weaker, less influential, less capable. It's because so many other nations have become more prosperous, more capable, more engaged in the international world. It's a good thing.

The report looks at the rise of the BRICs – Brazil, Russia, India and China – because of the size of the nations, the populations. Their impact on global affairs is much greater but there are many other nations that are rising. Indonesia, Turkey, Iran potentially. Very much more important players on the world stage in 2025.

One of the challenges here is organizing the activity to reform the institutions that have been critical to the increases in prosperity, the degree of peace and stability that we have had, particularly in Asia, over the last six decades by tackling the organizations that made that possible. Just generally, it's very hard to bring about change in institutions that are perceived to have been successful. If something has failed, then there's a clamor to change it, to fix it. But the international order doesn't yet appear to be sufficiently broken that there's likely to be an easy consensus on either the need to fix it or how to fix it.

The rising powers, and two of the biggest ones in Asia, India and China, arguably have benefited substantially from the status quo. They've been very successful. Much of the rest of Asia has been very successful in the existing international order. As defenders of the status quo, they are not inclined to change the system, to go to something that is unproven and uncertain, particularly if the change requires taking on additional burdens that a reordered world is likely to apportion responsibilities somewhat differently than was done 60 years ago. The diminished role of the United States, the attachment to the status quo of other key players is going to make it hard to find the mechanisms to come to grips with the institutional inadequacies.

And one of the things that actually troubled us as we were bringing this study to conclusion was the sense that our time scale might be wrong. We talked about erosion of the efficacy of the international financial institutions out to 2025, and over the last several weeks they've been collapsing all around us. The G-20 meeting here in Washington on the 15th of November, with the specific task of looking at ways to transform the international financial institutions. The future is now in some sense. That piece of the post-World War II system beginning to unravel a little faster, a little more visibly than other parts are. So now we've got a situation where things are out of sync. Components that were designed to be complementary are now increasingly are out of sync, without an obvious champion, or anyone with the ability to sort of propose or impose a solution.

What does this lead us to conclude by way of the nature of a system to 2025? The first judgment was that the world will be very different than it is today. Now, out 15 years, if we run things back 15 years, at how different the world is than it was just that short time ago, to say it will be

completely transformed may be obvious and never helpful. If we go one step further and say it will still be in the process of becoming. It will not have reached a new steady state. It will be in a situation of disequilibrium. All things breaking down and being replaced at an uneven rate, new replacements coming about unevenly, different portions of the world with different degrees of efficacy – some global, some regional, some sub-regional.

If you look at the cover, the world looks out of focus. That was deliberate. We don't know, and nobody knows exactly what the world is going to look like in 2025, but if we simply project the power relationships, the problems, the approaches to problem-solving will be the same, that's almost certain to be wrong. We're going to be into a new era, or off the map into an era of ad hoc changes, expediency, pragmatism – indeed, it's another of our judgments about the world of 2025 is that pragmatic approaches to real problems will be more important than ideology. We don't envision very significant ideological competition, but we do envision an awful lot of ferment centered on finding practical, pragmatic, workable solutions to real problems.

Those real problems are likely to include competition for resources – strategic minerals, energy, water, arable land – of a kind that we haven't seen for 100 years or more. That the old conventions of international law may be adequate, or maybe not. More rivalry.

We anticipate a world in which countries, nation-states, governments, will have less control over what goes on within their own territory than they do now and have had in the past, and less ability to influence the transnational kinds of interaction, whether it is migration of jobs, relocation of industry, dependence on food supply or energy from some place outside of the jurisdiction. The rise of nongovernmental organizations filling gaps that are not filled by governments. The strengthening of transnational networks, both licit, positive divisions of labor, production change, but also illicit, criminal organizations that are now and will continue to be a part of the world. Corruption won't go away. It will have other outlets that are not readily available now.

The world will be a multipolar one. It arguably is now. The U.S. unipolar moment is either over now already, my view; it certainly will be over by 2025. But we don't envision a new balance of power world, a new bipolar world. Multiple poles. The rising states, Europe, Japan will remain important and arguably be even relatively more important than they have been. Of course China, India, and we envision Indonesia within the region being very important. Historically multipolar systems, particularly multipolar systems that are in transition, are less stable than either bipolar balance of power worlds, or unipolar empire-dominated worlds. So a time of great transition, flux, new challenges, new rivalries, with erosion of the long, effective mechanism for managing problems, the fact that we will be in a multipolar world, the number of actors, not just a lot greater than it was in the 1940s when the new order – we have three times as many countries, but in addition to countries we have all these multinational corporations, nongovernmental organizations, multiple identities. We anticipate the sort of national identity will be less important as a determinant of self-identity than it is now, and there will be religious identities, racial identities or ethnic identities, tribal, regional, class identity facilitated by communication. We have communities that stay in contact through the Internet, moving around, and sort of a phenomenon of homogenization, albeit with lumpiness and some degree of tension that could go the other way, of increased awareness of identities other than that of the nation-state.

Now, how might this affect concrete challenges? Imagine a world in which the demand for energy is up, energy resources – let's say oil, gas – is found in a region of the country that happens to be populated by members of a particular religious confession or ethnic group. Are they likely to view that resource as their resource, their patrimony, their heritage? Or as the inheritance of the entire country? Who should benefit? Taxes go to central government for redistribution around, or that wealth ought to stay where it came from? The jobs already go to the people who live there. Again, the answers are not obvious, but the kind of tensions that will result from that – and again, all traditional ones, access to water, access to land, opportunities to work in a different province or state within a country, to work across the border in a perhaps wealthier environment will produce new strains.

Just a final couple of points and I'll bring this to closure. Energy, in part because it has been so central to discussions over the last few years, the high energy prices and low energy prices, the volatility of energy prices, the increasing dependence on oil and gas from a decreasing number of places. By 2025 it's clear that the depletion of many existing fields will further concentrate the sources of supply. There is likely in our judgment to be a sustained effort to find alternatives to reliance on hydrocarbons. The technologies to do that may or may not come to fruition during – 25 years is the norm for one major technological system to replace another. Over the 15, 17 years of this study, the likelihood, for example, in the United States or Japan of replacing the system that brings oil in from fields halfway around the world, delivers it to refineries, sends it through pipelines, puts it in tanker trucks, sends it to gas stations so it can be put in your car and your car can be served at a series of garages – to replace that with something, that's huge infrastructural investment. That will take years, so at best we'll be in some transition here.

Efforts to move away from oil and gas will probably mean more reliance on nuclear power to generate electricity, increasing at least the concerns about diversion and proliferation. Requiring rehabilitation or enhancement, restoration of the capabilities for international control regimes. Nonproliferation treaty, IAEA, it's another of these mechanisms that doesn't appear to be up to the challenges of the 21st century. We now have four nuclear weapons states that are outside the conventions. Should Iran acquire other weapons or the break-out capability, it could trigger a nuclear arms race in the region, could involve outside powers in ways that would increase the need for, again, new conventions, new control regimes.

Energy and environment, continued rapid growth in the rising states. As they grow, they use more energy. That would drive up prices. Now, growth is a good thing. It's good for us, it's good for them, but it puts more demands on supplies of oil and gas. It puts more upward pressure on prices, it prices more people and places out of the market perhaps. It creates more incentives for burning coal. Burning coal without purification adds to the climate change problem. We know that. What are the alternatives? What are the mechanisms for either slowing the rate of growth, making growth more costly by agreement to environmentally friendly technologies? And what are the consequences of slowing growth even a little bit?

I'll use China as an example. If growth slows to less than 8 percent, by Chinese projections it's not possible to create enough jobs to accommodate those that will enter the job market in the cities annually. We would love to have 7 percent growth in this country. We're going to have a

lot less, at least in the near term. The potential for instability in countries particularly with youthful populations is really quite daunting.

The final point I want to make concerns terrorism. Terrorism happily has not been a major problem in East Asia. In Southeast Asia it's largely been confined to Indonesia. There's been plenty of terrorism in South Asia, in India, Kashmir, Pakistan, Afghanistan. But our anticipation is that terrorism of the al Qaeda variety, the transnational effort that has, over the last decade, managed to recruit people from many, many countries and have activity – fund-raising activity, cells, that that is likely to wane by 2025, perhaps quite significantly, in part because there's no positive program. There's no resonance for what it claims to seek in the Muslim world, or elsewhere. Public opinion polling, anecdotal evidence, commentary on websites makes clear that there's not a lot of favorable response to the extreme positions that are taken. And the revulsion against killing innocents, women, children, killing other Muslims is beginning to erode the tolerance or willingness to look the other way of this type of terrorism. So I think there's a chance of bringing that into – not eliminating it but a more manageable level.

But terrorism has always been, always will be the weapon of the weak against the strong. By secessionist groups, local animosities, and the Hamas, Hezbollah, Palestinian, Islamic jihad groups, Kashmiri separatists, others of that ilk will likely persist. How many will be attracted to this will be a function of the success or failure in accommodating population growth, in taking advantage of increased prosperity, in facilitating increased prosperity, that our projection is that though the number of people who can be recruited to terrorism will be smaller, that the narrow segment of any population that is susceptible to recruitment will be a narrow segment in much of the world, of a larger population, but that the number still will be small. But that because of technological diffusion, the potential for greater lethality in attacks, biologically based weapons being of greatest concern, or chemicals, so we could have fewer but more lethal attacks by terrorist groups.

Let me bring this back where I started out. These are illustrative. It's not sort of the most important interactions one could weave these – and I hope in the discussion we will begin together to weave these strands, and others you will ask, did you consider. And sometimes we'll say yes and sometimes we'll say no. But begin this process of thinking about the future, thinking about connections, and thinking strategically and thinking as leaders, and thinking as we would have leaders view the world, prioritize challenges, and tackle the problems.

End of the day, despite the list of, and the severity of the problems and challenges I have articulated, I'm very, very optimistic about the prospect of recognizing and realizing the opportunities that are out there. And there are arguably nowhere greater opportunities than there are in East Asia. We may not be moving to the Asian century, as some have predicted, but there is a very substantial capacity in almost every country in the region, and certainly in the region as a whole, to deal with these problems.

One of the unknowns is how they would be dealt with. It's going to be hard to do it on a global scale. Can they be tackled on a regional scale, and what is the region? Northeast Asia, where the organizing mechanisms for a very long time have been two – the bilateral alliance structure with the United States, and other bilateral relationships, mostly with the United States, and

market mechanisms. Now, the market is good for a great many things, but it's usually not a very effective basis for security arrangements, or for solving the kinds of climate change and sociological and demographic problems that I sketched out.

What would be the architecture? Who will be the leader of the effort to build a replacement architecture? What countries will be in and what countries would be left out? What are the criteria for inclusion or exclusion? Will the region want the Americans in or not? What we have found as we took 2025 around the globe is that there seems to be, including Indonesia, a pretty substantial desire for the United States to stay engaged and play a leading role. There was considerable dissatisfaction with specific things that we have said and done over the last decade or more. There's recognition, sometimes with an element of glee, that our levels of power and influence relative to others have decreased. But there's still a large desire for us to play a leading role, a balancing role, a stabilizing role in the world, and I'm sure we would be eager to do that. But we will have to do it in partnership. Many of those partners are going to be in East Asia and South Asia.

Let me stop there and begin the discussion.

(Applause.)

MS. LAIPSON: Thank you, Tom. For those of you who are new to this Global Trends exercise, I think you will well appreciate that this is a rather holistic and very comprehensive way of thinking about the world. One, it really is very cross-disciplinary, but at the very end I thought Tom really touched on a lot of the contemporary foreign policy and security dynamics that I think many of us are directly engaged in.

Tom knew that he was on the record. As you think of your questions or comments that you might want to make, you should be aware that our session is on the record today. And I have the pleasure of turning next to Alan Romberg, who directs the East Asia program here at Stimson, to see if he has a further reflection, or maybe just a first question to Tom. Alan?

MR. ALAN ROMBERG (Director, East Asia Program, Henry L. Stimson Center): Let me just actually ask you to go where this study perhaps doesn't go, but you've been thinking about the issues. And that is, a lot of the issues you raise, a lot of problems you raise have answers that lie in some kind of innovation – new institutions, new governance principles, new organizations, new technologies, and so on. To draw on something I heard on the radio this morning in terms of a presentation you did on this yesterday, you talked about how perhaps the American model might be supplanted by a model with greater government direction and less individual direction.

My reaction to that piece is to be somewhat skeptical that the initiatives can come from that model. I don't think your study is designed to address that. But anyway, I wondered if you could reflect a little bit on where innovation is likely to come from. I realize that's not your – you've raised the issues, but where do you see the impetus for a lot of this, and – well, let me leave it at that.

DR. FINGAR: Can people hear if I sit back here? Let me first sort of not correct but clarify the element on the alternative to the Washington consensus, liberal democratic market-driven system as we discussed it in the study. We pose as a question as to whether for a number of countries that have governance, problems that face developmental challenges, whether the success of China and the resurgence of Russia, and in similar ways success of some other rising countries will create at least the impression of the existence of an alternative to liberal democratic market societies, in terms of an authoritarian state capitalist model, where legitimacy is based on performance, governments deliver the goods and services, are accepted, there's not a perceived need for participation, involvement either as a safety valve or to make the government more responsive. We posed it as a question. I personally don't think so. I don't think it's a viable model that gets to the source of innovation.

But might it be an attractive model to countries of Central Asia, countries in the Middle East, some of the countries in Africa that have struggling governments and struggling economies. To look at the success of the economy, if you can get growth, prosperity, greater strength, without having to become democratic, that might have a certain appeal. It may be a chimera. It may be a short-term solution with long-term negative consequences.

Now the innovation question. Probably it's necessary to distinguish from all kinds of innovation. Technological innovation, a lot of it continues to come from the United States, from the industrialized world more generally. It will come from China, it will come from Japan. Again, the large modern economies with good education systems will have ideas. Where the money is to translate ideas into new industrial procedures, new products, that's going to be a function of where the venture capital money is. On the shift of wealth from West to East broadly, there will be more of the sovereign wealth funds in the Gulf, the sovereign wealth funds, Singapore, China, the large amounts of money in Japan – at least there's a potential there to fund innovation. The potential may not actually be realized. The willingness to take risks, the potential cost might exceed the potential gains of changing the system. Different cultures of course are less susceptible, willing to innovate.

I'm not sure by 2025 some of the more cautious, conservative societies, including many in East Asia, will become hotbeds of innovation. To bring it full circle, it's back to sort of expectations of the United States to provide not just leadership but ideas, new things. Whereas once upon a time we had an idea for a new thing, it had a reasonably good chance of being welcomed or seriously considered. Now, if we have an idea, it may be thought of as more in our own self-interest than to the benefit of the larger community. We have to regain confidence.

MS. LAIPSON: But it seems to me that all of those ingredients for technological or innovative solutions to these transnational challenges – climate change, energy, et cetera – that nobody has all of the necessary attributes, that you've got the level of education in some places, the money in other places. But I wonder whether in the very mature democracies you also have established interest groups and regulatory frameworks that are less agile than in less democratic – so that when we think of transitions to green economic activities, it's not self-evident to me that the countries that have been the source of innovation in the past will necessarily move swiftly enough because of some of their domestic political culture factors than really is needed.

That's an interesting subject to begin on. Would people like to make comments or ask questions? Yes, please. I think we're going to bring you a mike, and if you could identify yourself, please. Thank you.

QUESTION: A lot of people are talking about a setback of democracy in Asia, you know, based on what happened in Philippines, Taiwan. In this report have you projected any projection of the democratization or consolidation of democracy in Asia?

And the second question is, on your report page 34, scenario four, indicating that if U.S. decided to have a cooperative relationship with China, Japan might move to that direction, seeking a more alliance and good relationship with China, including Taiwan and South Korea would follow suit. But we know that in Taiwan there is a very diversified, or even polarized point of view about their future. So I wonder that on a micro scale, will that be some important fact should be ignored in this report? Thank you.

DR. FINGAR: Let me take the challenges to democracy. We don't look at it in great depth, but as we look out, we see more challenges to the newer democratic states, the ones that have gone through pain, that have yet to realize a lot of gain, benefits of it. Rise of populism, and the need to manage competing demands. It's still relatively optimistic, if you will, about democratization, that it will continue. But less rapidly than it did over the last decade-and-a-half, that consolidation of democracies will be uneven and difficult, the difference between electoral democracies and liberal democracies being one that will persist.

The scenarios were intended, again, not to be projections of the future but ways of thinking about how trendlines will cross, how developments will interact, where opportunities for political engagement. And every one that we've got in there can be viewed in multiple ways, and say this will happen, it won't happen because. If it happens, what the consequences might be. And the one that you cited is the same – yes, of course there are differences in Taiwan and in everywhere else, some who will look favorably on these developments and some who will look with disfavor.

Matt, did you have anything on democratization?

MR. MATHEW BURROWS (Counselor, National Intelligence Council): No, I think you covered this. I mean, there are waves.

QUESTION: Thank you, Tom. I'd like to ask you about a variable that you didn't talk about in your presentation but there's an interesting little text box on page 17 concerning higher education. I wonder if you could unpack that text box a little bit and talk about the trends that those who composed the study see on the evolution of higher education on several dimensions. One, the growth in those attending university level education in different parts of the world. We've seen some interesting changes in recent years just in China and India. I think about 18 percent of the college age cohort is now involved in higher education, where just a decade ago it was down around five or 6 percent, so it's been a big growth in those countries. We've seen a similar growth in Europe to, I think, 30 or 32 percent over the same period of time, over the last decade, and it's been holding steady in the rest of the industrialized world.

But also questions of funding for higher education, which gets to Alan's question about innovation to a certain extent too. Certain countries are investing more. As the text box points out, Europe is investing much less, for example, and we note that there are no world class universities in Europe in the text box, which is a kind of interesting observation. But we now have in Asia a number of near world class, if not already world class universities, and you and I could both run through them.

So I'm just trying to think about the changes in higher education in these terms, both for participation and funding for, and mobility of students. For example in Asia, Asia has been a major feeder to U.S. and European universities for the postwar period. That's increasingly less the case. Asians are now staying in Asia increasingly for their education, and they're going to Japan, and China and Australia and Singapore for their college education. It's not to the U.S. – or less so to the U.S. and Europe. So can you unpack that text box a little bit and talk about some of the trends you've seen in higher education and the implications of them?

DR. FINGAR: Yes, it's less a matter of unpacking it than sort of drawing on what you said and the text box. Again, these are not sacred texts here. The increase in opportunities, higher educational opportunities, notably in Asia, that the opportunities are greater because of increased prosperity. There's more money to fund good educational institutions. There are jobs for those who graduate, and part of the magnet of the United States for a long time, Europe, was not just get the education but get the education and stay where the good jobs are. So those with good educational institutions were able to benefit from brain drain. But increased prosperity – and again, really notable in Asia – the jobs are there, so they train there. The money that comes out of the economy, government understanding of the importance of an educated workforce for entrepreneurial activity, competitive edge and so forth, has a self-reinforcing mechanism to it.

So I tend to think of it as producing multiple centers of excellence and innovation and smarter people better able to tackle the complex problems than a competition for the best brains in the world. There will be that kind of competition among companies. One of the aspects of globalization is what's the meaning of it's a Japanese company, it's an American company. And you've got alliances of, you know, a German company or French company and a Singapore or Korean company are allied in doing business some place in Africa. And it's hired a bunch of Moroccans to work in Kenya. I'm making that up, but that's increasingly the nature of the educated global workforce.

I think this is a good thing for understanding complementarities, realizing the advantages of divisions of labor, bringing everybody into the process. The best are going to have to invest more to get the best students. Even Americans won't automatically go to American institutions. I would predict – and I've been not on campus for a long time but that given the choice of going to a first-rate foreign institution, where they might be able to gain admittance under the we-ought-to-have-some-foreigners here, rather than going to a second-tier institution in the United States – and part of the price of doing that is learning another language, people will pay that price, I would think. In some numbers. And over time this would become a very important element of glue, uniting aspects of the global economy, global business, global culture.

MS. LAIPSON: Yes, in the back.

QUESTION: How, if at all, will the series of military power as a component of national power change in the period that you are looking at?

DR. FINGAR: We deal with it a little bit. That the U.S. has its preeminence in the military realm will persist, but exactly how meaningful that will be for dealing with the problems, the challenges, the opportunities that are out there – massive military capability for dealing with sort of localized instability, it's a sledgehammer when you need a fine adjustment tool. The inability of either weak states or weak actors within states to challenge very impressive conventional capabilities will drive in two directions. A poor man's deterrent is terror. Mess with me, I'll make your life miserable. You can't protect all your people everywhere all the time. The Iranian model now. And the other is nuclear or advanced biological kind of weapons, bang for a buck, perceptions of, again, don't intend to use them but intend to deter, which could have more destabilizing than stabilizing.

Large-scale global conflict we're seeing as not very likely, but small scale conflicts over resources, over migration, flowing of people seeking opportunity, being inhospitably received by those who were there previously, that what might begin as a police force operation, sort of escalating into call out the reserves, call out the militia, bring in the military to restore order, that we see as more likely.

Matt, did you want to answer that?

MR. BURROWS: No.

MS. LAIPSON: I think we have time for one more question. Please, in front.

QUESTION: You spoke earlier about you were wondering whether you had the time frame right, whether the timeline was correct. I was curious why exactly do you go with 2025 rather than, say, 2011? One of the most useful things about the Global Trends series is that it provides essentially a status check on the trends, which seem to make up the current world order, and that aspect provides a useful warning to me. So I was wondering why –

DR. FINGAR: First, it's Ellen's fault – (laughter) – because she and John Gannon started every four years. First we looked out 15. A logical instrument was five more years rather than four more years, and we could have gotten that pattern. It's actually become something we have to reconsider because, yes, 17, the next time would be 18 years. That's getting almost too far into the future.

The more serious aspect of it is the desire for strategic thinking. After 2011, that really is worrying about today's problems, that you can see them, should have anticipated. That's going to be within the tenure of our administration that takes office on January 20th. People will be coming in with agendas and skills to deal with those problems.

Part of what we're trying to get at is for those who come into office in our new administration, but more broadly around the globe, why are you pursuing your agenda and working your problems inside this short a time scale? You ought to be aware of the broader context within which that will be occurring. You ought to be sensitive to how that might affect positive and negative developments down the road, and you might want to do some things different now to bring about a different outcome in the future.

QUESTION: I guess I'm really asking why are we illustrating the context for the next 10 years instead of the broad context for the next three to five years?

DR. FINGAR: Again, the broad context for the next three to five years isn't very – and there's lots of it. I mean, there's lots of people write about what the administration will face in the next couple of years, the sort of where do we carve out a niche that so far has been left largely to us, to do this kind of global comprehensive in scope look out 15 years.

One of the striking and gratifying comments that we heard a lot, and I think you did too in taking this around, is a combination of thank you, Americans, for doing this. We couldn't do this, we wouldn't do this, but it's very useful that you did it, even if we don't agree with it. Again, a lot of people look at, correctly, the four, five years. Not many look out that far.

MS. LAIPSON: Remember, even though the current administration or one coming into office soon won't be in power at the endpoint of this study, there are certainly some of these problems that play out over time that an intervention now could prevent one of the less desirable outcomes that the study identifies.

I want to thank you, Tom. This has been great fun. It's a very stimulating – this is just the beginning. I hope you all will spend time looking at the study, shaking your head and disagreeing with points in it. But the point is, it provokes a conversation. It makes us think. It makes us think about big trends, impacts on individual countries or regions that we care about.

I appreciate the effort to kind of channel us in the direction of Asia, but I think Tom also very correctly gave us a much broader view than just an Asian-only perspective. I hope you will all stay in touch with us. I hope you will stay in touch with us, even though you're moving to the West Coast, but we'll welcome you back here at any time to come and talk to us about U.S.-Asian relations and other strategic topics.

I would like personally to thank Tom for his great service to the government, to know that he'll remain part of the intellectual community that we're all part of. And thanks to Matt so much for the pleasure of collaborating with you and for being able to be part of these conversations.

Have a good weekend and a good Thanksgiving holiday to everyone. Thanks a lot.

(Applause.)

(END)