

Non-traditional Security Challenges. Assessing their Relevance

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John Swenson-Wright

Okay ladies and gentlemen, welcome back. We're running a little bit over time but I'm sure we'll find a way to finish on time. So having looked at the security challenges and the security environment, strategic environment in a sense conventionally defined in terms of those principle challenges, not least of which of course is China.

We now turn our focus to what might loosely be described as non-traditional security challenges and some of the thematic questions that we want to look at in this section. Particularly those that involve regional, institutional opportunities and in some ways solutions, as well as very importantly the question of economic risks and the limits to regional integration. And that's where we're going to start with our first speaker, Professor Yukiko Fukagawa who is Professor of Political Science and Economics at Waseda University. She's currently a visiting professor at my own university, Cambridge University and in particular at Clare Hall.

She has a long and distinguished career as an economist, specializing in particular in relations between Japan and South Korea, very relevant in the context of what we heard in the first section about the increasing political tensions between those two important common allies of the United States. She's worked with the Japan external Trade Organization as well as a long-term credit bank research institute. She has both advised the Japanese government on a number of issues and in particular, has provided advice to Prime Minister Abe. So she's extraordinarily well placed to talk on the subject of economic risks and the limits to regional integration.

Yukiko Fukagawa

Well, thank you very much John and I would like to also extend my sincere gratitude for the very hard-working young staff in the Chatham House and it's my great opportunity to have some presentations today. Actually, I just changed the title, the original title was The Economic Risk and the Limits to Regional Integration, but I change a little bit that title because for us the economic integrations is already the reality. So I just changed the title slightly.

So my point is, first, oh, okay, Asian countries or Asian economies do have risk but the integrations is already the realities and real goal forward mostly led by the market rather than institutional kind of framework. The institutional side, we have a kind of very shifted changed institutional framework in the way that we are going to integrate from virtually like an economic integration 2.0 rather than 1.0. My sense of 1.0 used to be, is a kind of competitive liberalization based on the bilateral negotiation. But now in 2.0 it's getting more like an open regionalism, more like a kind of multi plurilateral kind of regionalism in Asia.

In terms of risk, yes, risk definitely will exist, it still exists and it will exist. And especially the major issues that the rest of Asians are all very much worried about, China as a risk and also China is quite a potential. But there is a lot of short term and long term risk about the Chinese economies. So I just try to conclude from this perspective.

So integrations is quite a reality right now in Asia. If you look at the dependencies of intra-regional trade, it's almost more than 55 per cent which is nothing really smaller than European Union. And it's, the ratios is double NAFTA. So we've already gone beyond NAFTA and the major engine for the inter-regional trade is a supply chain mechanism just spread out in intermediary goods, not the finalized goods. The many people sometimes quite worried about the relatively fragile, looking fragile, institutional framework in ASEAN, but still in reality, ASEAN centrality do exist.

China, another engine is of course the China as the emerging China as the market rather than the production base. So these are the major point of the integration realities. And look at US, well, Obama Administration has been, while stressing they're rebalancing to Asia, but actually in terms of realities in trade US is not rebalanced at all yet.

So if you see the trade connectivity index that I calculated and if, this is to compare the major presence of certain trade, bilateral trade versus the rest of the worlds trade with certain countries. So if the figure exists more than one that means there is a strong bias, trade bias against the 13 countries and if you see that, all the ASEAN countries like Indonesia, Philippine, Thailand, Malaysia, Vietnam, Singapore, these parts are all green. That means they are over performing 1.0. That means they are very much connected already.

If you look at the US, well Japan is getting closer and also Koreans is getting closer but US figures is very small. So in terms of trade US has not rebalanced in this region yet. In terms of the institutional framework, there is a new phase in the economic integrations. Up until 2010 there is a lot of bilateral free trade agreement negotiations and ASEAN ten members almost finished the negotiation among the ASEAN ten and then there was an ASEAN+1. ASEAN plus Japan, Korea, China, India, Australia and New Zealand. These are all completed but unfortunately probably due to the political constraint there was no Japan, Korea, China FTA, even a Japan/Korea FTA failed and there was no plurilateral FTA in this region.

After the 2010 still the two countries sticking to the bilateral base, the negotiations of China and Korea, they are doing negotiations and finally Japan agrees to participate in Japan/Korea/China negotiations, so there is a trilateral negotiation still going on. But Japanese major interest has already shifted from the bilateral country based negotiations into more plurilateral regional kind of approach. So the typical case was the TPP Trans-Pacific partnership agreement including the US, Canada, Australia. And there is another round of negotiations going on based on the ASEAN+6 countries and that's, well of course, the extensions of ASEAN+1, Japan, China, Korea, Australia and New Zealand and India.

There is another round of plurilateral agreement that is like a WTO complementing kind of negotiation and if you look at the ITA. The ITA means IT related products are all tariffed zero in Asia. Why? Because everybody is a member of ITA, IT agreement. So they all agree to abolish the tariff in terms of the IT electronic products. So that's why this region has been very much prosperous in terms of trade.

So why don't we extend this? Because bilateral FTA is a lot of politics, of course. US never giving in terms of automobile opening towards Japan in a TPP negotiation and Japan is still sticking to the before port tariff of the US. So let's abandon it and let's take some interested kind of negotiation and that's the major interest of their plurilateral approach.

So this kind of negotiation has got very much prevailing in these days and it's open kind of characters because everybody can participate in the plurilateral network if you're interested in it. So in the time of open regionalism 1.0 there is always discussions like whether regional integrations should be only limited to Asia or should go Asia-Pacific and US has always said that we should be there as Pacific countries. Another thing is, while at that time still Asia was mostly the competitor for each other, to export something to outside the regions and another rationalizations of the bilateral FTA was this is to complement the WTO.

So we are very much dependent on export, so we never try to break the WTO. So these days are all gone and another side of the open regionalism 2.0 after 2010, this came back as typically the capitalism 1.0 versus capitalism 2.0. That means some of the countries are very much still intervened or subsidized by the government. While China or maybe some part of Malaysia and still Vietnam, of course, is very much have a large social enterprise, state enterprises.

So the question is, how are we going to compete those guys with such subsidized competitions. So that is the topic raised by TPP, especially by the US and there is some contrast among the participating countries. Another aspect is Asia finally has made their own market rather than be a producer and another issues is the complementing FTA kinds of plurilateral FTA.

So competitive liberalization based on the bilateral negotiations is almost gone. And one time it got very popular and ASEAN claims that, ASEAN centrality, China pursued for its negotiating powers and Japan was very much limited on the narrow sense of national interest in the FTA network. And Korea has stressed the Korean centrality but just ended up being just not minor players in rule making.

Also there is a lot of complicated relationships with each member countries, so that's why we just came up to the open regionalism 2.0 but so far US has never served as the real hubs in the open regionalism. The first characters of open regionalism is an FTA globalization, Korea, US FTAs were all established because Korea especially at the time of the [indiscernible] they tried to make the export environment better than Japan and that was the desperate desires for Korean policy makers.

So they even preferred the outside FTA rather than the regional integration and China, China has been always very desperate about the resource. So regional integrations is not secondary, well, is not their first priorities. As time goes by China is seeking more globalized FTA. There is another diversifications in FTA while Korea, China stick to the tariff negotiation, Japan is looking more for the FTA related issues or intellectual property right, competition, fair competitions or whatever. So there is a kind of different kind of FTA.

In terms of risk. Of course, we have lots of risk. One of the immediate risks is the coming back of the protectionism, especially in Indonesia or traditionally India which has been led rather by domestic demands, not by trade. Those countries are very proud of their domestic consumption, the economies and then why do we have to give in more to such a FTA negotiations and why the political, adjusting political cost seems to be so huge.

So there is a familiar comeback of the protectionism and some countries are suffering from their macro-instabilities like India in a massive exit, well at the timing of exit for US quantitative easing, they are pretty much unstable right now and some countries are piled up over the household debt like typically in Korea. While Korean economy seems to be doing so fine, but the employment rate has never picked up yet since almost, since 15 years ago, so they just piled up all the debt in a household sector rather than the corporate sector.

Social cohesion, while Thailand was a typical case of too rapid globalization, probably. China has different levels of risk. Financial instabilities, that's for sure and their major point is whether Chinese financial authorities is really grasping the necessary whole information, what is happening in Korea, Chinese financial market. China has started to erode the competitiveness because of the high rapidly rising rich and the consumption constraint, structurally very much difficult to shift into the consumption led economies in China and corruption. Somebody mentioned in the previous session.

Another thing is the cost for the success. Well there are many people who tried to stick to the vested interest. We've done this, gradually, in such a huge success why do you have to more and this kind of things are quite the Chinese risk.

In the midterm and long term economic risk, also exists as was mentioned in the previous session. Middle income trap, that has been very much plaguing some of the countries like typically Malaysia and another big pressure is rapidly ageing speed. And many people talk about China but actually even Vietnam, which is far poorer than China is also suffering from this kind of phenomenon. Since, well especially China, is very much have a distorted urbanization, there can be great potential for pandemic in Asia because the population density is so large, and the urbanization is going on without sometimes a proper physical infrastructures.

Environment risk, many people are talking about the water but it's a cycling environment program and some of the countries may suffer from the food shortage. China actually has almost everything for this long term risk but I'm personally somewhat optimistic about the short term obstacles that China is struggling with, but in the long term, I cannot be so optimistic about the Chinese future. Why? Because some of the problems has already turned to be reversible.

For instance China is ageing very fast but the problem is, what is, Asian countries are now trying to do is to extend the working hours or working age until a very long time. Maybe all the Asian countries will have to work until 70 or 75 or whatever because the social security has never prepared good enough. And China's lost generations are not well educated and almost 40 per cent of them has never succeeded in finishing up even the primary education.

So how you can sustain those people or to keep working until 70, competitively, so we don't know. Also distorted urbanization is as a potential for the pandemic is the problem and also the people are always talking about the water but the pollution in soil in China is getting very serious. Even Chinese government conducted the research from 2005 – 2013 and made a conclusion that more than 16 per cent of huge China land is already polluted more than the safety standard.

If you just simply calculate how much budget China is allocating to clean up the soil, it takes, well if they just continue to do that, it is expected that it would take 1 650 years until they clean up the whole soil. So it's very unsustainable right now. So people are quite worried about the future.

Another thing is, well, since so far still things are very much going on well at the surface. It's very difficult to make a surgery on your body, there's such a vested interest. So long term I think China is going to face a very serious situation but why still Asia try to deepen the integrations? Well, there is a strong consensus that growth solves many things, if not everything and many countries are still the developing countries that desperately need growth. The commitment for the growth is far higher, nothing to compare with the mature European countries.

Integrations is a business, not the kind of legal negotiation like US lawyers, sometimes are interested in and not the high politics like in European countries, so it's a business. If you see a good opportunity, things will continue and there's a common experience that pragmatism did work in these regions.

Finally, China is too big to fail, so, for everybody. So we try to continue these kind of efforts. So in the end there can be a lot of approach towards the integrations. Finally, now we are taking the five different, very different approach for integration. First ASEAN has an ASEAN economic community and RCEP is ASEAN+6 and TPP is US, Canada's and Pacific groups with a certain selective Asian countries, CJK and the WTO complementing one. There is no such a big wrapping up framework but still we'll try to find out what will work.

So we don't know, but still the efforts are all going on. And now the measure trend is more for the bilateral, not from the bilateral negotiations but into a more plurilateral one. So the approach seems to be like a bilateral plus regional plus global kind of approach. So how this is going to consist with the security logic, we sometimes don't know. It's really surprising that how economic logic is separated from the security kind of attentions in Asia but still, we are doing that. Thank you very much.

John Swenson-Wright

Thank you Professor Fukagawa. We now move to Tim Huxley. Tim is currently Executive Director of IISS Asia where he's held that position since April of 2007. In many ways his experience allows him to look at the overlap between area studies and strategic studies. Having served in academic positions both in the United Kingdom and Australia. He was reader in South East Asian politics, University of Hull and he's also many years of

experience in the think-tank policy environment having also worked for several years at the Institute of South East Asian Studies in Singapore.

So he comes directly from the region. He's going to talk about South East Asia, ASEAN and the limits of institutional cooperation. Tim.

Tim Huxley

Thank you very much John. ASEAN is a unique institution, the Association of South East Asian nations with ten members set up in 1967 with a core of five members in the first place and then expanded in the 1990s to its present 10 members. I think it's fair to say it's the second most successful example of institutionalized regional cooperation anywhere, after the European Union. The groupings success has mainly been in the economic sphere and its achievements have been really considerable.

Singapore's Kishore Mahbubani wrote in a recent op ed that by cultivating economic cooperation amongst its 10 members, ASEAN has helped lift many millions of South East Asians out of poverty. Per capita GDP in South East Asia, more than doubled over the last 12 or 13 years. The numbers of South East Asians living in absolute poverty has been halved over the same period.

It's rather harder to assess the contribution that ASEAN has made to security in South East Asia. It depends really on whether you adopt a 'glass half full' or a 'glass half empty' perspective on what ASEAN has been doing in the security sphere. South East Asian elite commentators tend to opt for the former approach, the 'glass half full' perspective. Outsiders, I think even sympathetic ones often tend to be not so positive in their assessments of ASEAN's security role.

I think ASEAN's main security related achievement has been to broker over the last half century almost an enduring modus vivendi amongst its diverse members that has enabled them to avoid outright conflict. It's been a, at least in one of its dimensions, ASEAN has been a peace project. And the success of that project has been based largely on the norm of non-interference. It's helped ASEAN's members to proceed with their own development without needing to worry seriously about being undermined by their neighbours. In other words, they've been able to get on with developing their own economies and social and political systems without worrying about their neighbours stabbing them in the back.

Of course, during the 1960s, before ASEAN was set up, actually the opposite was the case. South East Asia was riven by interstate insecurities and conflicts, typified by Indonesia's confrontation with Malaysia and Singapore in the mid-1960s. ASEAN has also provided the basis for a broad consensus amongst its members regarding the management of the role of extra-regional powers in the sub-region security and in that of the broader Asia-Pacific region. And this has been based essentially on the non-alignment of South East Asia in relation to major power competition.

I think it's clear that the security role of ASEAN faces some really, really major challenges. It's true, I think, that ASEAN has itself set the bar really very high in the security sphere.

It aims to establish a comprehensive political security community next year, in 2015, as an important element of a broader multifaceted ASEAN community which would also include socio-cultural and economic dimensions.

Given the security challenges facing South East Asia, of course the bar needs to be high. Because there are really very considerable challenges to be met if South East Asia is not to be dangerously weakened, ultimately with implications for its stability and its prosperity. The shortcomings in ASEAN's security cooperation are pretty self evident but I think they're also understandable. They're understandable in the light of several factors.

First of all the diversity of ASEAN's members in terms of their sizes. They range from Indonesia with 230 or 240 million people down to Brunei with only 400,000 people. They have extremely diverse political systems including authoritarian socialist states, feudal monarchy, democracy, semi-democracies, military dictatorships and diverse in the religions and cultures of their peoples. There's a lack of clear leaders within the grouping. Indonesia has always been reluctant to take up a leading role within ASEAN because of its experience of the 1960s when it's attempts to pursue a form of regional leadership brought it major problems.

Singapore perhaps has the intellectual and managerial horsepower to be a leader within ASEAN but has always been wary of offending and annoying its larger neighbours by assuming that role. Other countries in South East Asia have been pre-occupied with their domestic problems which has excluded them from taking a leading role. And at the same time there are some quite severe tensions among the members of ASEAN. For example, border disputes over the Ambalat Block between Malaysia and Indonesia. Border dispute between Thailand and Cambodia, insecurities on the border between Thailand and Myanmar and almost existential tension between Singapore and Malaysia and so on.

Most importantly, ASEAN members have diverse and to some extent divergent outlooks on broad regional security issues including relations with the extra-regional powers.

So those shortcomings have not only precluded significant multilateral cooperation in the defence and military sphere but have even in some cases prevented effective cooperation on so-called non traditional security challenges. It's true that ASEAN has established a Defence Minister's Meeting, but I think it's notable that almost as soon as the ASEAN Defence Minister's Meeting was established, it was expanded to the so-called ASEAN Defence Ministers Meeting Plus Eight format, ADMM-Plus, to include eight major dialogue partners.

I suppose a classic example of broadening rather than deepening collaboration on security. The ADMM-Plus over the last several years has put its emphasis on a supposed low-hanging fruit of non-traditional security issues, particularly in the sphere of HADR, Humanitarian Assistance and Disaster Relief and that led, last year, the middle of last year, to a so-called full troop exercise in Brunei to rehearse HADR procedures amongst the 18 members of the ADMM-Plus and that was greeted with a lot of fanfare. Then at the end of last year, Typhoon Haiyan very seriously afflicted parts of the Philippines and there was a substantial international response to that but very significantly ASEAN and

the ADMM-Plus played no part in that relief effort and that raised many eyebrows in the region and internationally.

If there had been real substance in ADMM-Plus cooperation on HADR, surely that would have been an ideal moment to put it into practice. I think the point is that cooperation on security matters within ASEAN and the ASEAN centred institutions is often more about process intended to engender mutual confidence rather than about substance. Another example would be the search for the missing Malaysian Airliner, MH370 earlier this year. ASEAN and the ADMM-Plus again, were nowhere to be seen in that search and rescue effort.

The apparent inability of ASEAN members to lend substance to their security collaboration I think should be a matter for concern, particularly as the regional strategic context becomes more fraught. As China increasingly asserts itself in the South China Sea and as doubts over the United States will and ability in the medium to long term to continue playing a central role in regional security comes to the fore, despite the rhetoric of the rebalance over the last two and a half years.

We are, I think, beginning to see signs of rather great ASEAN diplomatic assertiveness in relation to China and particularly China's role in the South China Sea. There's been a degree of convergence among ASEAN's more important members on the role of the United States in regional security and I think a number of the larger South East Asian countries, Indonesia, Malaysia, even Vietnam have come around to what has always been Singapore's view, which is the United States has a vital role to play in maintaining a stable regional distribution of power.

Whether though this means that ASEAN will be able to play a central role in managing the negative aspects of China's growing strategic extraversion is unclear. Closer ASEAN collaboration is going to be a long term project in the securities sphere and ASEAN member's economic ties with China are an important factor inhibiting their responses on the South China Sea in some cases. The regional security environment is going to go on evolving regardless of the constraints that ASEAN and its members feel in pursuing closer security collaboration. And it's not inconceivable that ASEAN could ultimately find itself less and less relevant in the face of the hardening positions of the major powers in the region.

So at the recent Shangri-La dialogue in Singapore we had a special session on the role of ASEAN and the emerging regional security order and what impressed me about that session was that there was a consensus on two points. One is that institution building has an important role to play in the evolving regional order. That regional order should not just be about a balance of power. That institutions are important to moderate and manage the balance of power and there was also consensus that ASEAN was probably the best institution to play a central role in that managerial role but also there was a lot of agreement that ASEAN needed to do a lot more. That ASEAN needed to take up this burden and ASEAN needed stronger leadership and that this was a considerable challenge that ASEAN was going to need to focus on, if the regional environment was not to deteriorate considerably. Thank you very much.

John Swenson-Wright

Thank you Tim and last but not least Christopher Dent, Professor of East Asia's International Political Economy, University of Leeds is going to talk to us on the broad question of energy and environmental challenges. Christopher is a prolific author, I think written some 13 books and over 90 academic articles. He's a regular consultant to the British, Australian, Chilean, German and United States governments as well as a number of institutions, including the ADB European Commission. The ASEAN secretariat, very relevant in the light of the last presentation, and is also an expert member of the Evian Group. Christopher.

Christopher Dent

Thank you John. Thank you very much. Can we dim the lights? People in the back? Okay, that's fine. Thank you very much indeed. Hello, very glad to be with you here today. Thank you very much to John for inviting me. I'm an international political economist who has done actually most of his, most of their work so far on trade, development and regional integration issues in East Asia and the Asia-Pacific but over time what I have seen is that energy especially is becoming increasingly relevant to those areas which define East Asia in many ways.

So this is going to be looking, this talk, as you can see, it's quite generic and I'm going to be looking at some deeper structural changes that link to other security sectors both old or traditional and new. So I'm going to try to link it to some of the things which arose in the first panel and also to my two fellow panellists here as well in this session.

Also you see that because I'm looking at quite deep structural changes and transformations relating to energy and the environment, environmental challenges, that it inevitably links the region to broader global challenges and challenges facing humanity in the 21st century. So, I want to just first of all start by just presenting with you certain graphics relating to mainly energy structures, consumption and also climate change related trends and issues.

This shows the past four decades trend of primary energy consumption by many parts of the world and also projected consumption trends up until 2014. You can see that Asia is on a completely different and extraordinarily significant trajectory compared to the rest of the world. The composition of that energy consumption structure looks like this, and you can see of course that China is the dominant factor in this trend. But over time in fact India will become increasingly relevant, largely because of its population increase and of course its rising material prosperity.

Now, seeing how this correspondingly maps onto carbon emission levels, again, this is the similar time frame, although this actually goes up back again four decades to the early 1970s and projected figures, this is courtesy of the International Energy Economics, Japan centre, so thank you very much for those great graphics you produced for us. This goes up to 2030 and you can again see Asia being by far the dominant impact region here.

Now, looking at carbon emissions by country as we currently stand. These are figures in millions of tonnes per year. Now you can see China now is the largest national emitter of carbon emissions over to the United States, in 2006/2007. But if you look at the historic accumulation of carbon emissions over the last say 150 years, it's still the industrial developed countries, long, historic developed countries like the United States, Germany, France, Britain, which are well ahead, still, of countries such as, like India and China, Indonesia.

Moreover if you look at the figures on the per capita basis, China, although it's rising very fast, is still about one-third of the level of the United States and about 80 per cent of the EU average. This is quite important in terms of climate diplomacy and negotiations at the multilateral level as to the distribution of culpability and responsibility for dealing with the issue. But why is China, in particular, having an increasing global impact on both climate change and global energy security?

A lot of it is to do with how it does energy. 70 per cent of China's electricity is generated from coal fired power stations. These are, of course, the most carbon intensive fossil fuel, the most polluting. China already has 40 per cent of the world's coal reserves, also in addition to that it imports a lot of coal and it has plans to build up to about, if you convert these figures into Gigawatts, another almost 600 Gigawatts of capacity over the next 20 or 30 years.

Now, put this in context. Currently China's installed electricity capacity, power capacity is around 1 250 Gigawatts. The UK's is about 100 Gigawatts. The Three Gorges Dam in China, the world's largest power station, is about 22.5 Gigawatts, so almost a quarter of the UK's total installed capacity for producing electricity. This will make China still very dependent on coal for its electricity generation and therefore continue to have a big impact on carbon emissions and climate change. But why does it need so much energy?

Well there are of course domestic and international dimensions to this. First of all, China, as we known, has brought hundreds of millions of people out of poverty but development divide still exist within the country and they're getting bigger, the gap between rich and poor. How do you improve the welfare, material welfare of people in China? Leadership believe it's still linked to providing electricity which in turn provides basic welfare services for the people. Education, schools, can't function without electricity. Utility services, fresh water, hospitals. All these things need large amounts of energy if they're going to continue to bring out further hundreds of millions of people out of poverty and also to address the growing rich/poor divide in the country.

Moreover, don't forget that China is key to the global system of capitalism. How do we get, how should we be able to maintain low levels of inflation and interest rates over the last 20 years, historically very low? It's because you've allowed China to become a competitive place to make things on this planet. So China's demand for energy is actually a function of how the global economy works as well. That's something I'd like to just mention.

In terms of climate change risk, how are East Asian countries calibrating climate change risk? This is a map showing you areas of South Asia, East Asia which are most at risk.

Dark blue indicates the highest risk zones. Now it is, of course, climate change, something which East Asian countries are taking very seriously but it's still seen as a very long term kind of strategic policy.

In the last seven or eight years most East Asian countries have introduced climate change strategies. China introduced its climate change strategy in 2007, the same year that it introduced its medium and long term plan on renewable energy as well. So I'll come back to this in a minute but this is just to show you which areas of East Asia, in particular, are most at risk from climate change. Extreme weathers, rising sea levels and so on.

Coming back to China again. If you look at China's projected future demand for energy, figures are quite, well, I would use the word 'scary', maybe that's being a little bit too hyperbolic but they are very, very significant and serious. So for example, China in the last decade has been responsible for about half the growth in the net new demand for oil. It's going to continue to hold that position of being responsible for demanding half the new growth in demand for new additions of oil.

The nuclear power has by far the most ambitious programme for expanding its nuclear power program. In fact Korea is the second most, has the second most ambitious programme in the world. Other types of energy, gas as well, very important, has quite ambitious plans to expand its gas fired power station capacity in addition.

Now if we look at how China is trying to mitigate its energy supply risks, because its increasingly had to import ever larger amounts of oil and gas and coal from foreign partners, connecting this to maritime security issues, for example, of course now, the Straits of Malacca, here, second most busy sea-lane in the world. It's the main oil and other energy supply line route into, well from the Middle East countries and also from Africa into East Asia and especially North East Asia.

Professor Lee mentioned earlier that according to his friends, China only has three friends, Pakistan, Myanmar and North Korea. Well, this map shows you that Myanmar has a gas and oil pipeline passing through it. This map is a little bit old. There is one also passing through Pakistan, it's trying to secure its oil and gas, oil mainly through other sources. Negating the need to go through the Straits of Malacca where, of course, the US 7th Fleet presence is very, very strong and dominant.

So it's trying different ways to diversify the supply risk and thereby it needs to develop new energy partners. Now energy is increasingly become linked to economic diplomacy and the regional economic affairs of East Asia in the Asia Pacific. I'll come back to that point in just a moment. I just wanted to have a kind of, consider kind of some of the key core drivers which are going to shape, I think, security challenges generally. Not just energy and environmental challenges but looking at this from the point of view, which way is humanity going over the next few decades. What will be the main kind of challenges which face us as we progress further into this century? Where would be the main source of security pressures.

Now this is quite a broad and maybe a little bit kind of generic and I'm looking at this mainly from an economic point of view. We mentioned earlier about the population

ageing. Well, of course that is very, very relevant to many of the security challenges facing the region but also the actual sheer number of people, not just in the Asia-Pacific region but elsewhere. The kind of anthropological pressures which we're putting on the planet. What are the kind of key security challenges which arise from that.

It's not just as well the number of people, it's the actual consumption patterns of those people. The rising demand, for example, for high protein food which is putting a lot of pressure on lands use; eating meat is a very energy intensive and water resource intensive process. What are the implications for that in terms of resource competition, in terms of how humanity meets its resource needs with depleting resource stocks.

The development challenges arising from gaps between rich and poor in the country, tensions, internal security tensions which then kind of spill over into international security tensions. So why is China seeking to secure territorial claims in the East China Sea and South China Sea. Of course it's to do with some of the hard security and high political kind of objectives but it's also to do with securing areas which are thought to have quite substantial oil and gas reserves.

The environmental impacts at the moment are somewhat kind of nebulous, not that well-defined. They're kind of seen as being quite long term challenges, not quite a political priority at the moment. But we can think about environmental impacts in three different levels: local, regional and global. And what we've seen in China's policy on environmental issues in the last two or three years is it's shifted from being increasingly concerned about global climate change to one where it's become increasingly focused on urban air quality. At the moment it's estimated that about 1.2 million people die prematurely from air pollution in China and the situation is getting worse. Just a few weeks ago the Chinese leadership formally declared war on pollution. It's not just an environmental issue, it's becoming increasingly politicized.

So I'm going to end this very quickly now. This just gives some overview points about how energy is becoming increasingly pervasive in economic diplomacy in Asia-Pacific states. You can see how energy clauses, for example, have increasingly crept into free trade agreements. Russia's relationship with North East Asian states and Russia's position in North East Asia and East Asia generally I think will become increasingly defined by its role as an energy partner. So energy is going to become an increasingly important area of economic diplomacy in the Asia-Pacific as energy security challenges become more acute both regionally and globally.

I think, John, I'd better leave it there because I know I've run out of time. I'm happy to take any questions on what I've gone through. Also, I was going to have a slide about how low carbon development is being used as some sort of solution to address in both energy and security challenges. Because, for example, renewables are inherently indigenous sources of energy. I could take some questions on that theme as well if you'd like to quiz me on that. Okay, thank you very much indeed.

John Swenson-Wright

Thank you very much Christopher. We now have about 5 minutes for questions and again, if I can remind you. Wait for the mic and if you could stand and state your name and institution and hopefully keep your questions relatively short. Starting in the front here.

Question 1

Thank you very much for very great presentation and I would like to ask to Professor Fukagawa about the Chinese risk and so recently World Bank mentioned about the scope for hard landing scenario, so how do you evaluate hard landing scenario and the second question is, China has another problem in economy as in its local government, corruption and over production and so how do you think and I wonder how the tension between a central government and local government struggle about corruption and over production issues because I saw the Bo Xilai scandal and it produced a huge struggle in Taiwan, how do you estimate that?

John Swenson-Wright

Sensei, want to take that?

Yukiko Fukagawa

Probably you should better ask somebody who is a real expert on Chinese economy. I'm not really the expert on China but actually I think in the short term China at this moment has personally enough capability to deal with very many complicated issues but it really depends on what kind of scenario that the situations will going to develop. For instance, as you mentioned, there is a lot of shadow banking related issues and that is very much related with the corruption between the local government and even the, probably the Communist Party inside. But one of the things that I can somewhat, a little bit optimistic about China, is that they are never really totally open the capital transactions and financial transactions and they're recording a huge trade surplus.

So that means everything is a Chinese problem, so far. Well as long as it just start to influence the real economic sector, like as you said, there is a massive track down of the unproductive and competitive plans, especially in state owned enterprises. That might be a little bit problems. So far I think China has time and money to deal with the issues but I think if it just go developed into a really hard power struggle within the party or within the central government and the local government, that may probably impose a tremendous political risk in China. So that's what we are quite worrying about right now.

John Swenson-Wright

Christopher, do you want to add anything on the China front?

Christopher Dent

No, I think I'll save myself, I'm not really an expert on this particular local government, thank you.

John Swenson-Wright

Right over here, front row.

Question 2

Thank you panel and the Chair for a very extensive presentation. Thank you Christopher for reminding us for Russia. I think the latest of the 400 billion gas deal is something to be thinking about because A) it's going to be much cleaner energy and B) in the long term the dragon would like to be more friendly with the boys up North. Now, what I'm thinking is, they do have a problem of trust, going back to the [Xu Liu] River Crisis. My [Sansu] way of thinking how to collude with your adversary without mistaking him for an ally. And Tim, when it comes to the nuts and bolts, China may think in terms of extending the purchase of the Sukhoi fighter-bombers if need be and much better air defence system, air to surface, aerial defence systems and joint naval exercises.

As we move on in terms of gas, in terms of military cooperation and simply because China may feel that they are being a little bit surrounded and Russia feels a little bit small after Ukraine and what have you. What do we see the relationship between the two big boys up North?

John Swenson-Wright

Tim, would you like to start?

Tim Huxley

Yeah, sure, so what you're, what you're asking about essentially is are we seeing a sign of Russian Alliance in the making. I would say no, I think I'd say no quite decisively. There are major, major uncertainties on Russia's part with regards to China that I think would preclude that option. I think those have been alluded to in some of the presentations that there is real insecurity on Moscow's part about potential security challenge from China in the long term in the Far East.

There was, I think the motivations for these recent deals on Russia's side are primarily economics and they're not, it doesn't point to a strategic partnership which has really significant security overturns. I mean you mentioned the sale of Sukhoi 35s and the modern air defence system, Russia to China. Well that comes after a hiatus that lasted several years because the Russians were very concerned that major items of equipment that they sold to China were then being reverse engineered and subsequently produced in China. I think in terms of the wellbeing, concerns about the wellbeing of Russia's aerospace industry and the need for major orders to keep the production lines going overcame those concerns.

So I think we may see some posturing by Russia and China, such as the naval exercise, but I wouldn't read too much into that.

Christopher Dent

Yeah, that's a very good point, thank you very much. I think if any relationships are going to be substantively developed between say China and Russia and also between Russia and Japan and Russia and Korea, I think energy is going to be very central to this. Of course, when we think about East Asia we think about factory Asia and it's an integrated kind of manufacturing system, which of course is extraordinarily relevant and significant globally and also regionally.

What we've seen, I think, over the last two or three years is that a lot of the relationships between China and it's kind of Asia-Pacific countries like for example China and Australia, have been defined by resources or Australia, sorry, China and Indonesia, Japan and Indonesia. It's almost as if we've gone back to a kind of pre-industrial imperial type of trade relationship where it's not kind of defined by modern manufacturing or kind of high tech industry. It's been based by very fundamental economic supply and demand issues. And so if Russia is going to become an important player in North East Asia or East Asia, I think energy is inevitably going to be at the centre of that process and relationship.

It will be interesting to see just how other relationships which resource hungry economies in East Asia, not just China, but also: South Korea, increasingly; Japan; Indonesia; Thailand; Vietnam, to what extent resources and resource competition would define those economic relationships.

John Swenson-Wright

We have the exciting prospect of a dialogue between our panellists. Tim, you want to ask Chris something I understand?

Tim Huxley

Oh right, okay. Chris, I was very taken with some of the points that you made about energy security and you pointed the importance of the Malacca Strait and China's concern about its energy supply vulnerability because of the passage, of the large percentage through the Malacca Strait. And this is what the Chinese call, refer to as the Malacca Dilemma. And you also talked about China's interest in the energy potential of the South China Sea. Do you think that those matters are really about energy security or do you think they're about economics?

So when we talk about a pipeline, are they actually making, are they building those pipelines because they're primarily concerned about energy security? Or are they building those pipelines because it's cheaper to send oil and gas through pipelines rather than in tankers? When they look at energy resources in the South China Sea, are they looking at those because they think, oh, if we can control those we'll have sovereign energy resources that will give us energy security or are they thinking, we can make a lot of money by selling that oil and gas?

We've done, in our office in Singapore we've done quite a lot of work on energy and security and we've sort of come around to the conclusion, actually, countries can get what they want on international energy markets. So we've become a bit puzzled by some of the things that are being said about energy security. You can buy the energy, except, except in

time of crisis and war where it changes, when the situation changes completely, but I just wondered what you thought about that.

Christopher Dent

Very good questions Tim. I don't think you can easily disaggregate the two, you know. Why are they interested in the South China Sea, East China Sea? It's partly to do with energy, but of course it may be more than, much more than that. Energy markets are internationalized to some extent, it depends on the energy market you're looking at. For example, oil, yes, it is of course on the spot market but gas, no. Gas is actually to do, how do you get gas, mainly? 93 per cent of it is through pipelines, gas pipelines and this is a very kind of bilateral regional relationship. You can't buy gas on the international market unless you're buying liquefied natural gas, which is only 7 per cent of the market, well, rising.

A lot of it is to do with also the structures of ownership of the oil fields which exist now. So back in the early 1960s 85 per cent of the oil fields were owned by the international oil companies. Big private companies like Exxon, BP, Shell and so on. Now 85 per cent are owned by national oil companies and it's very difficult sometimes to access foreign oil and gas fields when they are stitched up by the domestic national oil companies.

So this means that China, for example, has to go to pariah states like Angola and Sudan and Venezuela, increasingly, to get its oil, because it can't get access in those countries where the oil fields are already, either dominated by the national oil companies or the international oil companies have the concessions in countries which are not pariah states already stitched up. So the Chinese are having to find, be creative with where it gets oil and gas from and energy is quite exciting kind of expanding field and of course gas is, as our friend said, is cleaner than oil or coal and it's a transition fuel.

But that is going to run out, eventually. It doesn't matter what your projections are, it's going to run out. So renewables are seen as an interesting alternative because they are kind of the indigenous, you know, hydropower, wind, solar, geothermal, biomass largely. So they're looking at a variety of different, it's mainly energy supply risk they're looking at but also the energy environmental risk, heavy on coal, it is killing people in the millions in China every year.

Question 3

I have two questions for Tim Huxley but actually I got two responses to the responses to the previous question, so let me deal with that briefly. First of all, Sino-Russian relations, you can also, what we have heard today was the 'glass half empty'. There is a 'glass half full' version of Sino-Russian relations as well. I've heard it said by a Russian General from the Russian Minister of Defence that at least in China they're not going to see an adversary for the next 20 years. They wouldn't say the same about NATO.

So although there is no love in the relationship, there is a sense that they can cooperate. There's that old phrase, 'same bed, different dreams', they may have different dreams but at least they're in the same bed. You can't say the same about Russia and NATO.

As far as pipelines are concerned, one of the things though about Russian, why Russia wants to have pipelines is because you can rake off money quite considerably when you can't, when the oil is being sent through tankers. So it has to do with the corruption in Russia as much as anything else.

Let me get around to the two questions that I have for Tim Huxley which are really about ASEAN. The first is, Japan's relations with states in ASEAN and the issues of the South China Sea. Michael Green in the presentation in the first session said that Japan, Prime Minister Abe carried out a lot of diplomacy in South East Asia. He certainly has and that it was pretty successful. I wondered whether ASEAN states feel the same way about it because I've certainly heard comments from people from South East Asia who are much more sceptical about the possibility of Japan and the states, at least in ASEAN that have territorial disputes with China, feeling that they have a common cause.

At least they, obviously there are a lot of similarities but I'm not sure that they feel so happy with the way that Japan has promoted the issue and so therefore I'm not sure whether they want to be seen as being in the same boat but I'm not going to put it on South East Asia, so the question is, what is the South East Asian response to that?

The second question about South East Asia relates to the last thing that Tim said in his presentation. People ASEAN agreed that ASEAN should have leadership. Yeah, that's fine, who is planning to provide it? People have been saying that for ages and unless and until somebody actually seems to be taking a lead, there won't be a leadership, so who is planning to do that?

John Swenson-Wright

Tim, very easy questions.

Tim Huxley

Thanks very much. Yes, as John said, easy questions. Right, the first one. Japan's relations with South East Asia. Well, I'd say it's a little bit too early to say because what we've seen over the last year or so is a major diplomatic offensive by Tokyo in South East Asia, which has sought particularly to find common cause with those South East Asian countries which I would describe as the front line states, Philippines and Vietnam. But more broadly, trying to revive Japan's all round relationship. I suppose you could say to exploit the insecurities that many, a number of South East Asian states have in relation to China. It's absolutely clear that China's policies in the South China Sea have been deeply counter-productive in terms of the overall tone of Japan's relations with the ASEAN members.

I would say that there has been a significant turnaround, I think, in the Philippines. The Philippines has been deeply alienated by China's pressure in the South China Sea and in the past the Philippines was the one country of the ASEAN countries which was really, I mean you could honestly say, at a popular level there was quite a lot of anti-Japanese feeling because of the second World War. And I think that's now begun to change in

terms of popular perceptions in the Philippines, I think there is more antipathy towards China and very little ill-feeling towards Japan.

Of course there's a great generational change but it's quite a different situation from the past. And the Philippines has no significant capability for external defence and Japan is now providing vessels for the Philippine coastguard, and is really alongside the Americans, is helping to boost the Philippines presently negligible paramilitary maritime capabilities.

Vietnam, I think it's just too early to say but I would say that at the Shangri-La dialogue recently that Prime Minister Abe's speech was, I think, was not found to be disturbing by South East Asians. But actually it was, and particularly the emphasis in Abe's speech on the importance of international law which he emphasized again and again in his speech as the proper means of resolving and managing maritime disputes. I think that really had resonance with South East Asians. The Chinese found that deeply troublesome, almost offensive, but I think in general South East Asians seem to be fairly content with that.

On the question of ASEAN leadership. I think you're exactly right and this has been one of the several major problems that has prevented ASEAN from having a more constructive security role. And I think this problem of leadership, not just in, at several different levels in the sense that I mentioned when I was talking about the difficulty of any particular country assuming a leadership role. I think there's also a problem in terms of the weakness of the actual structure of ASEAN. In the past ASEAN members have not particularly wanted ASEAN to have a strong organizational structure, particularly they haven't wanted it to have a strong secretariat.

There are now approximately 1 000 ASEAN meetings at various levels in various sectors every year and the present secretariat is really under-staffed, under-funded, over-worked, has a real capacity problem just managing the existing roster of meetings. But in the past none of the ASEAN governments has wanted a stronger centre in ASEAN because they saw that as possibly infringing their sovereignty and that wasn't really what ASEAN was meant to be about. I think there are now rumblings within some of the ASEAN members about the need to strengthen the secretariat, strengthen the role of the Secretary General and also to support whoever, whichever country is the ASEAN chair at a particular moment.

Presently Myanmar is the ASEAN chair and is getting, I think, considerable support from some of the other ASEAN members. So it's not going to happen quickly but I wouldn't give up on ASEAN in the security sphere. I think the question is whether the ASEAN can take up this burden of responsibility quickly enough and as I suggested at the end, my fear is that maybe it can't.

John Swenson-Wright

We are going to move to the centre. I'm also conscious that the podium obscures my view, so if there is anyone on the left, not politically! Just position yourself, if you would like to ask a question, please let me know. Starting here.

Question 4

Thank you. To be honest, I'm not certain whether environment is a security issue. It's more, in my opinion, a quality of life issue but I wanted to pick up on a point Christopher Dent made linked into something that Professor Fukagawa said. I don't know if you were implying it critically, but at the end you said that there had been a shift and there undoubtedly has in Chinese policy on the environment of recent years, away from preoccupation with global change, not completely, but anyway, much more towards local environmental quality issues.

Professor Fukagawa who picked up quite correctly on issues such as soil pollution, it does seem to me that this is a wholly appropriate process to be going on. I mean the critical issues as regards particularly China, but to some extent also Vietnam, do relate to local environmental quality and the impacts, if any, from climate change would be both remote in terms of time and also probably manageable and actually parts of China may actually, if you can put it like this, benefit from climate change, particularly North West China.

So the question is really, what should China be doing about addressing this critical quality of life issue? And the answer which is one of the things that worries me, given the nature of the bilateral relationship is that they have the answer sitting off the coast of East Asia namely in Japan. And Japan's experience in managing very, very similar levels, I don't know if anybody has actually seen it, but appalling levels of local environmental quality. What worries me, I don't have evidence of this, but whether, because of the tensions between China and Japan, they will be reluctant to recognize that Japan has taken the lead in this area and has basically got the technologies and the companies who are world beaters. And it will be a great tragedy for the quality of human lives in China if they don't very quickly adopt that Japanese world leading technology.

Question 5

Just very briefly because I don't want to hog the things here, but in terms of cradle to cradle management I believe Japan has said in the supply chains, if I could just link what you said that ASEAN has been very successfully supply chain coordination between various partners in East Asia and Japan has this record of being, as you said, quite rightly, the speaker of technologically very advanced in treating and looking at cradle to cradle management issues.

My question really there again is, is really to Christopher here which is linked to this one to, and I think it's a very good question, how is China approaching these issues on what the speaker has called, the question of quality of life and I would probably think there is a security aspect there in the background because of the pollution rates and the Chinese fear of dependency really, on outside forces. Cradle to cradle management seems to provide one pathway to collaboration with Japan and with other Asian areas and also reducing perhaps the import of raw materials, the load which they have at the moment. So that's really just to piggyback a little bit on the erudite question.

Christopher Dent

Yes, that's a very, very useful point, of course Japan in the 1950s and the 60s went through something very similar to what China is going through today. Now, of course, we can look at China and Japan as political entities or we can look at them as having enterprises, companies, businesses which can work sometimes without government help. Especially of course the Japanese companies are mostly private, they are already investing heavily in this kind of energy efficiency, green kind of industry sector in China which is growing.

I should tell you that last year, was it the year before? No, last year, China became the largest investor in renewables and green energy in the world, overtook Europe as a whole. China is investing very heavily in green energy, but it's also investing very heavily in dirty energy. It's doing everything fast. It produces two-thirds of the world's solar panels, for example. Ten years ago it was just 5 per cent of the world's solar panels. It has more installed wind capacity of any other nation, overtook the US in 2010. Hydropower of course, controversial, socially, environmentally, it has been responsible for about 60 per cent of the growth in hydropower in the last 10 years.

So China is trying to do a number of clean energy things, fast, but also it is still doing dirty energy things fast. This is an area where China and Japan have already been actually collaborating on, clean coal technology agreements, for example. So this is an area, I understand what you mean about environmental security being a controversial security sector, so maybe the existential threats aren't that palpable at the moment.

Speaker

Climate change.

Christopher Dent

Climate change, okay, if, for example, an iceberg the size of Switzerland falls off Antarctica and sea levels rise by six metres, that's the kind of catastrophe or crisis that I think will make a sea climate change in more security terms because it does pose, you know, are we going to get to the 22nd century if we continue to go on with these same economics, industrial structures and consumption structures that we have maintained since the Industrial Revolution.

There is gradual change, of course and I kind of buy into a certain extent of the ecological modernization thesis that we can get there eventually through incremental change but not radical revolutionary change. I am still not 100 per cent sure that we will. Is it worth taking the risk? Because it's such a long way off, it's such a long range risk scenario, global existential threat through climate change related activities or events, catastrophe events. What do we do? Do we try to, it has to be a global effort, of course, okay, so we have to get China on board with the rest of the nation states, the rest of the international community. It has to lie on a multi global multilateral level because we can't do this, we can't solve this problem as a collective of 200 tribal nation states, it just won't work, in my opinion. So we have to bring China on board somehow because it's increasingly significant.

John Swenson-Wright

Fukagawa sensei do you want to add anything to this issue about energy policy and renewables post Fukushima? There has been a lot of debate about how local government in Japan.

Yukiko Fukagawa

Oh yes, of course.

John Swenson-Wright

Maybe embracing some of these ideas

Yukiko Fukagawa

So open societies and democratic states, we have a lot of dispute over the level of the information disclosures by the government and export and still we are discussing it and everything is all going on. But I think, what's interesting between Japan and China relationship in terms of the environment and energy is that finally China has realized, it is only Japan that can help us in two terms.

One is, Japan is the only country who has experience of such a massive, serious, public pollution. And one time China said, what the Chinese journalist tends to say or even the politicians say, oh, South Korea is now going to provide us anymore than goods. Or we don't need to cooperate with Japan. But they finally got the final value over their environment and that's one thing and that's why even though we have been a kind of very threatened atmosphere in the hard security, but still all the ministry meeting among the environment issues are all going on.

The second issue is the geopolitics, after all, we are under the downstream of the wind in the positions with China. And that means if the wind goes and the whole earth turns like this, we are the under stream, so we've got to prevent something Chinese for the pollutions and that's a very different geopolitics if compared to the further US or Europe. So that environmental logic is danger.

John Swenson-Wright

Since we're running against the clock, I'm going to take two questions.

Question 6

Thank you. A question primarily to Professor Fukagawa. I was fascinated by the slides you showed showing short term and mid-term risks and the examples you cited for each of those, Vietnam, China and so forth, Malaysia. But I didn't see Japan in any of those examples and as a 'Japanophile' I was happy about that. I contrasted with something that Chung Min Lee said in the first part of this afternoon when he was talking about depopulation and he cited the example of Japan and he cited an alarming drop in the population size.

I'm just wondering, in terms of security implications of this. Is Japan able to weather this better than China? Maybe because, I got the impression that because Japanese are smarter, I mean in the sense of, no, I'm sorry, in the sense of, you don't have a lost generation of people who didn't get educated, so you can weather it more or is it because of the energy, rising energy demands of the Chinese will make it more difficult to weather that population change?

John Swenson-Wright

Not remotely a culturally laden question and then.

Question 7

Thank you very much. My question is about, to Mr Huxley and also maybe to Fukagawa, the first question is that, well the other day the Chatham House, the issue, the changing of the United States in the Asia-Pacific where it says that maybe the Asians should be, had better be prepared to less active to US law in military. But maybe because of the kind of more and more serious to the non-traditional security issues, maybe facing the Asia-Pacific regions, maybe that the regional organization or maybe [indiscernible] meetings or the functions that should be maybe utilized.

Then just like the recent Shangri-La dialogue, and the ASEAN foreign ministers summit meeting, those regional voices were expressed. So in your opinion in which area that is most prominent, promising the kind of collaboration that they can make, those ASEAN or regional organization in tackling non-traditional or security issues, that's my question.

Also Doctor Fukagawa showed me how the United States is not maybe integrated in Asia-Pacific in terms of trade integration and I was a bit shocked but maybe that's why that maybe the TPP is really needed for us to get the United States in both, engaged in this Asia-Pacific region. But how do you see, what would be the benefit or how, for China, what, if we are successful, the TPP could mean to somehow to mitigate the challenges you mentioned.

John Swenson-Wright

Okay, let's start with Professor Fukagawa.

Yukiko Fukagawa

Okay, thank you. In terms of the ageing problems, I think Japan is quite a leading country in this aspect and in the meantime every mature economy is going to be aged, even including the US, only the speed is a little bit milder than Japan. The real issue about Asia is the speed is too fast, especially from the shifting speed from ageing society into super ageing society. In Japan it took almost 20 or 30 years, but in Korea it's only eight years and in France probably nearly 100 years.

So that's the problems and I think after all, you're getting older but still you need growth, then what we can do as growth theories is just to increase the total factor productivities.

And that means you had better depend on the knowledge or the innovations and that's the only resource to keep growing. So that's why I think in that terms Japan, recent policies as well, as long as they can do it, it's quite right in opening up the countries to invite all the knowledge from all over the world. In that terms Japan is the very fortunate country in terms of their acceptance of the globally competitive countries. The FDI ratios versus Japanese capital formations is below 1 per cent, which is actually below North Korean level. So in that terms we have many things that we can do and probably the knowledge sharing must be the most important issues for the mature economies.

In terms of TPP. One strategic way, values of TPP for Japan is, well since TPP demands such a high level of opening or the high level of opening including agriculture sectors, that has provided an image that Japan is serious about market opening. And then that's a sort of leverage that still has been working, properly on the outset, regional closed economic partnership and even China and Korea said yes to the opening FTA negotiation with Japan, say, oh, it looks, finally Japan seems to be something serious. So we have to negotiate with Japan.

So that's a sort of strategic alliance between Japan and the US and of course as you put it correctly, US is going to have a big stake over the, about the TPP, especially in relationship with China. If you look at the figure, the only country that US has getting more bias in terms of trade in Asia is China. So Japan, China and the US integrities is getting bigger and bigger and that's why it be a strategic value for TPP, also will remain in the US side. Finally, can I just say that the long term predictions that we did about two years ago and that's a very interesting result. We just see according to some growth theory, we put more emphasis on the change of demography and the importance of institutions including openness, gender or the rule of law etc and we just put everything into the index and calculated it.

We just projected what countries is going to survive in such chaotic situations and the result is in even 2030, still US remains as number one and China is number two and interestingly, India will come up as number three because of the, mostly by demographic change, but still the rule of law and democracy and number four is Japan, fortunately. Well if we really make a success in all and number five is interestingly the UK and actually, UK is going to -

Speaker

I'm in shock, take my temperature.

Yukiko Fukagawa

UK is going to be even bigger than Germany, thanks. So it really depends, but this is very interesting.

John Swenson-Wright

Christopher Dent I have never seen a panellist so quickly win the support of their audience. Tim on this issue of regional structures.

Tim Huxley

Thank you very much for that good question about the relevance of regional structures and institutions to non traditional security issues. I think you're exactly right that it has to be regional institutions that take the lead in promoting cooperation on these issues. And ASEAN has made some efforts, there has been an ASEAN process for many years aimed at enhancing cooperation in relation to natural disasters and then through, the ARF has taken an interest in these matters and now the ADMM+ with particular emphasis on HADR. But the problem has been that there has been too much process and not enough substance and not enough leadership and there are other important non-traditional security issues that ASEAN could conceivably play a role in handling.

For example, trans-national air pollution, smog, which is know by the euphemism 'haze' in Singapore and every morning in Singapore we wake up to the smell of Sumatran forests burning. And this has been going on for 15 or 20 years and the problem seems to be getting worse but there's very little cooperation within South East Asia on this. It comes back, I think, to the problem of leadership, the problem of a weak secretariat and the tradition of non-interference among the ASEAN members and it would also raise the question of enforcement. Who would enforce rules on air pollution?

Singapore has been particularly concerned about ASEAN's lack of progress on some of these issues and behind the scenes has been trying to assert an agenda but for all of the reasons that have prevented Singapore from taking a leadership role for the last 40-45 years, it's unable to take on the leadership role itself. So it's going to be a long-term process.

John Swenson-Wright

We are almost out of time but I know that our friends on the left need to be well represented so we'll take two questions, one question each, starting here and then at the front.

Question 8

Professor Fukagawa perhaps one question. You mentioned a lot of pressure but you didn't mention perhaps an opportunity or maybe it is a pressure in this region, which is the rise of shale in the US and perhaps in some of the nations in Asia. What does that produce in terms of the impact on relationships between the various places and also in particular, the use of coal or the lesser use of coal in China, thank you.

Question 9

Hi, a question to you Christopher, you said earlier that China has been forced to turn to pariah states for its oil supply, I think you mentioned Angola and Venezuela, why does it try to simply go to the international markets and secure oil supplies through buying sufficient futures and options and perhaps playing the spot market, or does that not satisfy its needs? Thank you.

John Swenson-Wright

So you have the final word, I think.

Christopher Dent

Okay, thank you, yes. Shale gas revolution of course is, well I was talking about energy market structures. This has been the game changer in the last seven or eight years, okay, so this has revolutionized the US's position in terms of energy markets and energy geopolitics because now it's found itself as a net exporter of energy whereas before it was a very significant net importer of energy. So the technology has been developed and of course it's been applied through other parts of the world but we just don't know whether, how successful say Europe or Asia is going to be at emulating the amazing revolution which the US has achieved in the last 10 years.

Now this is, of course, unconventional gas, is helpful in terms of, it is less carbon intensive than oil and gas and you can even, I've been talking to energy technologists about how you can even produce oil from shale gas, there's a process whereby they're developing this as an alternative source of generating oil and there are the, of course, controversies with shale gas. The hydraulic fracking process involves messing with the water table and pumping chemicals into it. We don't know what the long term environmental effects are, the seismic effects of drilling for shale gas.

There are a lot of question marks about, first of all, the sustainability of this technology but no doubt they'll probably learn how to get around these issues as humans do, we adapt but also to what extent it can game change gas supply structures or energy supply structures worldwide. We just don't know that for sure but obviously it does open up a new kind of scenario of where we're going to be in terms of energy supply and climate change in the next say 10-20 years at least.

The Chinese, yes, they buy a lot of oil, they're the second largest importers in the world after the United States, US is still the largest. It's about strategy really. Of course they buy up a lot of oil now on the international spot markets but China is not just thinking about now because of the figures which I went through earlier. They have to think about this structurally and strategically. It's not just about the securing supply of oil, it's not just about that, it's about for now. It's about securing supplies for the next 20, 30, 40 years and moreover the price risk. What happens if on the international spot markets the price of oil actually goes up a lot, how will that impact on China's very delicate, we talked about earlier, financial position, the mounting debt at \$24-25 trillion of debt, at the moment in the Chinese economy.

The price risk of relying just on spot markets for oil. They have to try to, these national oil companies are going worldwide to try to secure as many oil fuel gasses and gas concessions as possible. The room for manoeuvre is actually narrowing to some extent, it depends on how far offshore they're to going, exploit for oil and gas, Deepwater Horizon explosion a few years ago in the Gulf of Mexico showed how risky that can be.

Energy is a very kind of new frontier in many ways of geopolitics and development and sustainability. It's a total field really, you know, all economic activity to some extent depends on electricity. I'm using it now to talk to you in this projected voice, the lights that are coming on come from some power station nearby where we are located. Everything depends on energy essentially and as energy security predicaments become more acute, and I can only see them becoming more acute, energy is going to really spill over into so many different parts of relations between states, societies, communities, human beings generally in the next few decades. That's my personal view, thank you very much.

John Swenson-Wright

Thank you Christopher. We are out of time. We do have a few minutes which are dedicated to summarizing all of the proceedings, I am not going to do that, you'll be pleased to hear, partly because I think we've demonstrated in the course of our discussion just how diverse the challenges are in the region and the contrast between the first panel and the second panel, obviously much of our attention focused on China. The few conclusions I think we can perhaps derive from our discussion, the centrality of the United States, both in terms of its historical presence and the expectations of partners in the region.

The, I think, debate over models of international relations and competing notions of where we draw our boundaries, very important in the context of China's political and its territorial presence but also in terms of the nature of cooperation between the different actors in the region. Mike Green said in his remarks in the Q&A session the importance of consistency. I think rules of the game, if you like, both in terms of confidence building measures, but also shoring up deterrents, that seems to be another very key factor to think about.

Also the absence of a very clear and immediate and obvious mediator in managing these tensions and creating the basis for cooperation is clearly a field where we need to do more work and this is the first of three meetings that we hope to hold on this broad question of security challenges in the region. We will report back to you the findings of this session, but also indicate when we will be meeting again.

I'd like to end by thanking you, the audience and thanking the members of this panel and ask you to show your appreciation.

We now have a drinks reception upstairs where we had coffee.