ST. PETERSBURGINTERNATIONALECONOMIC FORUM

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Business lunch

TRAINING YOUNG RUSSIAN PROFESSIONALS AT THE WORLD'S LEADING UNIVERSITIES

Building Russia's Creative Capital

JUNE 18, 2011 — 12:00-13:15, Restaurant, Breakfast Area No. 2

St. Petersburg, Russia

Russian President Dmitry Medvedev has recently announced the introduction of a new support programme, developed on the basis of similar programmes implemented by the U.S., China, Brazil, Singapore and Kazakhstan, which will promote studies by Russian students and training of Russian specialists at the world's leading universities.

Moderator:

Sergei Guriev, Rector, New Economic School

Panelists:

Igor Butman, Saxophone Virtuoso, Bandleader

Leif Edvinsson, Professor of Intellectual Capital, Lund University

Andrei Fursenko, Minister of Education and Science of the Russian Federation

Albert Gilmutdinov, Minister of Education and Science, Republic of Tatarstan

Nikolay Murashkin, Cambridge University PhD student

Sayasat Nurbek, President, JSC 'Center for International Programs' of Kazakhstan

Ilya Oskolkov-Tsentsiper, President, Strelka Institute for Media, Architecture and Design

Konstantin Severinov, Head of the laboratory, Institute of Gene Biology (RAS); Professor, Rutgers University Department of Molecular Biology and Biochemistry (US)

Stanislav Shekshnia, Professor, INSEAD; Senior partner, Ward Howell **Konstantin Shevchenko**, Partner, Infrastructure Capital

Cao Xiaonan, Lead Knowledge and Learning Officer for the Europe and Central Asia Region, World Bank

S. Guriev:

Honoured colleagues, let's get started. We have many panellists. Please take your seats.

Honoured colleagues, this working lunch is devoted to discussion of a programme that would train young Russian professionals abroad. I remind you that President Medvedev has already spoken several times about Russia's intention to send young professionals to study abroad so that they can return home better equipped to assume positions in our government agencies, businesses, universities and research institutions. The President has set before us the task of formulating this programme. Similar programmes exist in many countries of the world, and today we are fortunate to have with us individuals who have been actively involved in the development and administration of these programmes. There are some present today who have studied abroad in the past while others present are studying abroad now. Unfortunately, we don't have much time, so our panellists will have to make their presentations concise. Nevertheless, it is my hope that we can have an open discussion, as the particulars of these programmes are quite important. It is critical that we design this programme well for several reasons. First, we want to design a program that would ensure the selection of the right candidates. We also want to set up funding in such a way as to attract the best universities and encourage the reintegration of returning students so that their training abroad will bring maximum benefit to the country.

Interestingly, although Russia does not yet have a programme like this in place, some of the Russian regions—one, to be more precise—actually does. That region is Tatarstan. Today we have with us the Minister of Education of Tatarstan, who will fill us in on how this programme was established and how it is run.

But first we will hear from our neighbours. We will begin with Sayasat Nurbek, who heads up the training abroad programme in Kazakhstan. Kazakhstan's experience is in many ways an example for us to follow. As a rector I have had occasion to observe the students who participate in the Bolashak programme. They study at the world's best universities. Many return home, and we have seen

that these students are, in fact, the people who are leading the country. Sayasat, please go ahead.

S. Nurbek:

Good morning, ladies and gentlemen. First of all, allow me to express my gratitude to our colleagues at the Ministry of Economic Development and, of course, the Ministry of Education, for inviting me here. Allow me to tell you briefly about our experience with the Bolashak programme. It is a unique programme. It has been a very positive and successful experience, and we have gained much from it.

The programme was introduced in 1993 by the President of our Republic, Nursultan Nazarbayev. The idea came from Singapore. In 1990 the Prime Minister of Singapore made an official visit to Kazakhstan. At a working breakfast, as he recalls, the President was asked, "How do you train your future leaders for positions in top management and government service?" The President's Scholarship was enjoying a good amount of success in Singapore at the time—it had been launched back in the 70s. So in 1993 it was decided that Kazakhstan, too, would introduce a training abroad programme for its most talented young students.

The programme evolved dramatically in the first 10 years. We sent our first group of students abroad in 1994. There were 26 students in that group. At that point in time, our students went abroad to study at participating universities in three countries—Canada, the USA and Great Britain. Five destination universities were approved in these countries—the University of Warwick, Harvard, Stanford, MIT, and a university in Canada—in British Columbia). The programme took off. In ten years' time, about 700 young people received training abroad and the programme was expanded to include ten countries. It was quite successful. In 2005, when the economy began to take off, the President of the Republic decided to send 3,000 people abroad. He announced this decision during his annual address, and in 2005 our company was born, our education fund established, and the Centre for International Programmes became a reality. The number of countries we partner with has increased dramatically. We worked hard

to expand our partnerships so that today our scholars are receiving training in 32 countries at 500 of the world's top-ranking educational and scientific research institutions. From 1993 to the present, a total of 7,611 scholarships have been awarded. In recent years, beginning in about 2005, we started to send 3,000 scholarship recipients abroad annually.

We developed very detailed selection criteria for our scholarship applicants. First of all, together with government agencies, national companies, government holdings and large-scale employers, we set up a specific system to assess human resources demand in the various sectors. How does this work? Each year we, that is to say our Centre and the Ministry of Education along with the Ministry of Labour and Social Development, conduct an assessment of human resources demand by sector. Every government agency and each ministry is required to provide us with specific information regarding their short-term, mid-term and long-term staffing needs. We work out individual programmes on the basis of these staffing needs. Short-term staffing needs are met by intensive training programmes lasting up to a year. This, for example, would include scientific training courses. We cover mid-term staffing needs, as a rule, with one-year or two-year Master's degree programmes. And long-term staffing needs are met through PhD and baccalaureate programmes. So the Bolashak programme functions at all levels: baccalaureate, Master's, and doctoral levels. And on top of that we also have one-year scientific training courses. In this sense we are quite flexible. As soon as we receive the information about these staffing needs from each ministry, we designate 70-80 specializations and begin the placement of our scholars abroad accordingly. With this in mind, we are very selective as we consider entering into partnerships with host universities. The selection of partnering institutions is based first and foremost on academic rankings—The Times Higher Education World University Rankings and the Shanghai ranking, for example—as well as university profiles and the ranking of individual programs of interest to us. For instance, our scholars pursuing academic programmes in agriculture study in Australia and New Zealand. We are now partnering with 32 countries. Because of similar climate conditions, Canadian agricultural practices are relevant to us, so we send scholars to Canada, too. Great Britain and the

USA are generally the destinations for students pursuing programmes in economics. When language is an issue, we send our scholars to Russia. Such is often the case with engineering and technical fields of study. Russia is the fourth most popular destination. About 10% of our scholars study in Moscow and St. Petersburg. Right now we have 26 scholars studying in St. Petersburg's top universities and at the Polytechnic Institute. And there are presently 260 scholars studying in Moscow. All Bolashak scholars go through a rigorous three-phase selection process. After graduating from high school or from university, they sit for the Unified National Testing examination, which is part of Kazakhstan's universal examination system. During this phase, we select the strongest students based on these test scores. They must meet a minimal score to move on in the process. It is the high achievers who are selected. They are also required to take an exam that tests their knowledge of a foreign language. Here we work closely with independent partners—the British Council, TOEFL and others. That completes the first phase. In the second phase of the selection process, scholarship candidates are required to take an exam to demonstrate their knowledge of the Kazakh language. This is an important requirement. They must have excellent command of Kazakh. During the third phase of the process applicants must undergo psychometric testing. The Myers-Briggs Type Indicator (MBTI) assessment was specifically designed to identify leadership qualities. That would include, first and foremost, emotional stability, and also the ability to withstand stress and adapt to change. There are a few hidden factors here ascertaining suicidal tendencies, for example. Imagine a young man 16-17 years old who has graduated from high school and is going abroad. He finds himself in an environment where nobody speaks his language. How will he handle the situation? We try to gauge this type of thing, too. During the third phase, students are also interviewed by a carefully organized selection committee. We have an expert committee consisting of government, business and NGO representatives. We also call in HR experts and psychological consultants. In this way, we are able to carefully scrutinize the eligibility of our scholarship applicants. The Bolashak scholarship programme is unique in that it is a full scholarship. All programme expenses are covered: tuition, room and board, visa-related

expenses and airline tickets. Beyond that, our scholars receive a generous stipend, somewhere in the order of USD 2,000 per month, along with a separate allowance for books. A life insurance policy is also included. If a scholar needs an additional mini-budget for research, special training or an internship undertaken during the period of study, this, too, is covered by the scholarship. We are constantly measuring quantitative results.

How do we ensure that our scholars return to Kazakhstan? After all, the theme of today's discussion is 'Leaving in Order to Return'. There is a very real temptation to remain abroad. First of all, the scholars are bound by a rather strict legal mechanism. We make them legally responsible. Family property is pledged as security. Furthermore, the parents—or, when necessary, guardians or next of kin—retain legal responsibility. In the event that a scholar does not return from abroad, the property in question may be legally confiscated, or the individual's parents or guardians will face prosecution. Although this measure is harsh and it has elicited a certain amount of criticism from within society, the experience of the past 18 years demonstrates that it is an effective approach to ensuring our scholars' return home. Additional obligations placed on the scholars include a five year commitment to service in the Republic of Kazakhstan. Whether in a company, a government agency or the private sector, this 5 year term must be served within the territory of Kazakhstan. About 45% of returning scholars work in the private sector, but they must remain in Kazakhstan for five years. We are now loosening this requirement a bit. For example, many companies in Kazakhstan are now aggressively expanding abroad. In the case of a Kazakh company opening a branch abroad, we are broadening the scope of the five year term to include service within that branch. Or if, let us say, one of our graduates is hired by an international organization of which Kazakhstan is a contributing member, we also make special allowances for employment abroad.

Another measure we take is follow-up. We track our scholars through their careers once they receive their degrees. This is perhaps the most important measure we are focusing on at this point. We have a large alumni association with a built-in system of accountability. During their five years of service, graduates are required to report back to the Centre. We monitor their job

placements and career advancement, where they find work, their social connections, and so on.

Not long ago we launched an innovative grant programme. If a scholar returns from abroad seeking to pursue further research, publish a book or scholarly articles, or conduct some type of joint research, we have a small fund specifically designated to accommodate such pursuits.

Regarding the effectiveness of the programme, I can say this much. Quantitatively speaking, 129 of our graduates are now high-level officials in the current Cabinet of Ministers, ranking as high as Deputy Minister. As yet none of our graduates has risen to the level of Minister, but we have a few Deputy Ministers, department heads and core committee directors, and a large number of managers of national companies among our alumni. As for private business, our alumni have established 50-60 successful start-ups. One more quantity indicator: only 1.7% of our scholars have not returned to Kazakhstan. With more than 7,500 graduating scholars, this is indeed a small percentage.

All of our returning graduates make a valuable contribution to our economy. Out of 7,500, 215 have gone on to receive their doctorate. In other words they have pursued additional training through research in their fields. This, too, is a quantitative criterion. And if we look not only at quantitative but also at qualitative criteria, then of course we must consider the social capital our scholars acquire while abroad. This is very important for us because they are studying in elite institutions, and the connections they make while at these institutions amount to social capital. We are talking about a whole new set of ethics, management skills, renewed vision and fresh ideas, all of which our graduates bring back with them when they return to our country. This, too, is closely monitored and noted. With that I will conclude my brief summary of our scholarship programme. I would be happy to answer any questions you might have. There is additional information about the programme at the book table—brochures and my business card. Please feel free to contact me at any time. Thank you for your attention.

S. Guriev:

Thank you very much, Sayasat. Now we will hear from Dr. Xiaonan Cao, one of the World Bank's leading experts, who will tell us about the experience with analogous programmes in China. Please go ahead.

C. Xiaonan:

Thank you all for being here, I just got here. I apologize for being late. And I am trying to collect my breath and collect my thoughts so I can share with you some Chinese experiences in this area.

First of all, I would like to thank the Chair, Professor Guriev, for his invitation. And also, I would like to thank the organizers of this event for inviting me.

And in the next few minutes, I understand I only have about five to seven minutes, I am going to very quickly share with you a few points. I will share the highlights of the current situation in China in terms of sending students to study abroad, and having them come back to work for the country.

Before I do that, I would like to make a quick clarification, that the point of view I share here does not represent the government of China. Also, it does not represent the World Bank. This is purely my individual and personal reflection on this topic.

So, I probably missed a part of the beginning. But I am pretty sure that from the news you have heard that China has been doing pretty well in this area, which is true. And allow me to just give you a very quick picture of what is happening there.

China opened its doors and started reforming in 1978, and it seems to be a long time ago, over three decades ago. And so far, there are about 1.9 million Chinese students and scholars that have studied abroad. About 620,000 of them have come back. So, roughly about a third of them came back home.

But this fascinating picture mostly developed in the past ten years. It is not distributed evenly in the past three decades. Particularly, I will just give you one example. In 2009, about 229,000 Chinese students and scholars studied abroad. And about 180,000 of them returned home after they finished study. And this return rate is quite high.

I need to clarify. Not all the Chinese students and scholars who studied abroad were sponsored by the government. In fact, the government sponsors only a very small percentage of the students with a scholarship. And it is only about, probably, even less than 10%. I will give you an example. In 2009, of the number I just mentioned, about 229,000 student scholars studied abroad.

Only 13,000 of them were actually sponsored by the government. The rest were self-financed. And that could mean paying out of your own pocket, or you could be sponsored by your own organization. So I just want to make a clarification here.

And the return rate has increased over the years, particularly in the past ten years. In 1999, roughly about 92% returned, and by 2008 roughly around 98% returned. So, the return rate is quite high for those the government had sent overseas to study. And of these returnees, they have definitely made a great impact on Chinese socio-economic development. Just very quickly, I will share a few examples.

Among the leading universities in China now, 78% of the presidents are returnees. And in these universities, 63% of the professors who have doctoral students are also returnees. And 72% of those in national and provincial laboratories and research centres are returnees. And roughly about 10% of the ministry level government officials are returnees.

And in addition to that, there are about 10,000 start-ups initiated by the returnees, and a hundred of them are actually on the international stock exchange market.

And the returnees, they came back to China and they actually help the Chinese companies move into the international arena and make big brands like Haier in electronics and Huawei in telecom, and TCL in television sets. Now, looking at this, there are some trends happening over the years.

From one perspective, definitely, it shifted from a closed system to a much more open and competitive system. And from an elite group that goes abroad to study, to relatively a massive group of young people going abroad now. And over this period of time, the government had sponsored the majority of student scholars going abroad, and now most are self-financed.

And then also from a majority of visiting scholars, to a much higher proportion of study for higher degrees. So, there are a number of trends there. And I can go on and on.

On the returning side, trends also can be observed. That is, earlier, people returned in order to obey the order of the government of the party, to now where there is independent will and attitude. And while previously people returned to follow their single chosen career path like coming back to do research or teach at the university, they now work in a much more broad array of areas, like in business and the government. And of course, still, universities and research institutions.

And also, returnees used to be isolated amongst their peers, but now there is a very good support network to help them continue what they are doing. So these are broad trends. And in terms of motivation, why do these people come back to China?

Recent research in the U.S. and in Canada show that mostly, basically, it comes down to three factors. The most important one is career opportunity. The second is cultural family ties. And the third is business opportunities.

So these are the basic reasons that these people are coming back to China. And looking over the three decades, I think people would agree that it happened in stages, and it is not like China just landed here overnight. In fact, looking back, there are about five or six stages. During the first twenty years from 1978 to roughly 1998, a relatively small number of people went abroad and many of them came back and were in elite positions.

And in the next ten years, China's growth exploded, and then adjusted to maturity and growth, which is what is happening now. And it seems that I do not have time left.

Let me just quickly share with you, the reason that China arrived at this stage, in my own view, is a combination of deliberate government choices in policymaking, a much improved domestic environment and market trends.

And the government, which makes the policy, knows that most Chinese want to study abroad. They call it the twelve characters policy. This means that the government, at all the levels, starts supporting people studying abroad and encouraging them to return. And then the last is that they can freely travel in and out of the country as they wish.

So, this policy predominantly guided all the other regulations and policies in this area. And the Chinese government has set up a policy to encourage students to self-finance. And they set up regulations that operate, as the previous speaker mentioned, like bonding mechanisms. If you do not come back, all of these things are being set up and streamlined in different service centres.

The government has set up two major service centres. One is called the China Scholarship Center, which basically helps people to go abroad. The other service centre is trying to provide services to attract people to come back. So they are providing a lot of services and they make it easier for people to come back.

And in the past, the government has set up a lot of special projects. Some of them you have heard about. Project 211, project 985. All of these big projects, they are meant to help the country to build and develop world class universities.

So sending students and scholars to go abroad and encourage them to come back is pretty much a big component of this broad picture. So you should not lose sight of the broad picture. And this is also in the context of the recent past. The government came with a plan, which is very rare in other countries.

The Chinese government, in the last year, passed a basic regulation and government policy to guide the country for the next ten years in terms of developing and attracting talent, from not just the Chinese, but also from abroad. And lastly, you probably heard that recently, this year, the former dean of London Business School and the former dean of Harvard Business School, John Quelch, gave up those up positions and went to China-Europe International Business School in Shanghai to be the dean there. So these kinds of things are happening. So it is not just the Chinese going abroad and then coming back.

Also, a quarter of foreign students study in China, and also, a quarter of foreign experts work in China right now. And the U.S., based on a specific policy initiated by Obama, is to send a hundred thousand students to study in China. The Chinese government has responded to say that they are going to provide the ten thousand scholarships to support.

So all of these things are happening and I just want to put this in the broad context, in terms of the national development and also in terms of globalization. So I am here, I am happy to answer questions. And I am sorry, you know, just a few minutes, I cannot talk for long.

S. Guriev:

Thank you very much, Dr. Cao. At this point we will hear from Albert Gilmutdinov, Minister of Education and Science in the Republic of Tatarstan. As I mentioned earlier, although Russia does not yet have a federal programme, there is one region which boasts a programme of its own.

A. Gilmutdinov:

Good day, honoured colleagues. Good day, Dr. Fursenko. Our Republic's grant programme has been up and running for five years already. It is called Algarysh, which translated from Tatar means "Progress". This programme has made it possible to send the brightest and best of our youth to many different countries and to the best research universities the Russian Federation has to offer. The Republic of Tatarstan covers all programme-related expenses. More than 2,000 individuals have participated in the programme, half of whom have received training abroad. This means that more than 1,000 people in the Republic of Tatarstan have received the highest quality education available in Europe, North America and Asia. Bear in mind that with a population of only 3.8 million, Tatarstan is a relatively small federal subject of the Russian Federation from the point of view of population. So, who do we send and for what types of training? First, I need to point out that the programme has changed over time. For the time being, however, it is structured as follows: we send our young people to study only in Master's programmes. Unlike the Bolashak programme, we do not pursue baccalaureate programmes for the simple reason that these four-year programmes are expensive and, more often than not, students do not know what they want from life at this early stage of the game. In order to encourage students to select the course of study that is right for them, we have limited Algaryshgrants to cover Master degree programmes only. We finance everything in full for up to two years. Additionally, we send postgraduate students and young academics to various countries for three-month training stints.

The Tatar programme is marked by one feature unique to our republic: we set up a programme specifically for school teachers. This is the programme's first year of implementation. An interesting programme, it is called Our New Teacher, the aim being to recruit our best graduates to provide instruction in our schools. This includes not only graduates offering teaching qualifications, but also postgraduate alumni and young PhD holders. This year there are 200 grants in the offing. Each grant winner automatically receives an invitation to study in an educational institution in some part of the world, whether in the United States of America or Great Britain, in Germany, another European country or Singapore. We have established a strong relationship with Singapore. We have our own unique emphasis. We stress the importance of teachers.

We have another programme—a training programme for our teachers of English. We invite a team of specialists from the USA and Great Britain who specialize in teaching English as a second language. For two to three weeks they provide intensive training to our English language teachers. The reason our programme has placed this special emphasis on the teaching profession in recent years is that we have initiated significant educational reform.

If we take a look at costs, education is rather expensive. One grant recipient costs in the range of RUB 500,000–1,500,000 a year. This is an expensive privilege. The cost varies, of course, according to the educational programme and country selected, and so on. Like the Bolashak programme, we cover nearly all costs. This includes tuition fees, travel expenses, a stipend, housing expenses, visa-related expenses, and so on—in other words, a complete packet that covers all financial expenses for our young people.

What obligations do these young people have? Their obligation is very simple: they sign a contract. We do not impose strict conditions as they do in Kazakhstan. We do not require a security pledge. Our young people simply sign a contract according to which they agree to work for any company in the Republic of Tatarstan upon graduation for a period of no less than three years.

Any company. It can be a private business or a government institution. After that there are no further obligations—our conditions are somewhat lax.

As far as fields of study are concerned, we generally aim to send people for training in the natural sciences and engineering. These fields account for about 52% of the grants. One in every three grant recipients pursues training of some kind in the field of economics. About 13% fall into the category of future teachers or current teachers, and the remaining 12% or thereabouts go the humanities route. That is roughly the distribution.

What risks are involved in the implementation of this programme? We have identified two risks based on our experience. The nature of the first risk is this. Whenever young people leave for a two year period and go into an entirely new environment, there is always the risk that they will not want to return. I cannot give you the exact percentage of those who choose not to return, but it is extremely small. I can assure you that more than 95% do return and are currently working in the republic. The second risk is more serious and more problematic. As Dr. Fursenko pointed out in the previous session, there must be a demand for youth in the country or the federal subject they return to—in this case, Tatarstan. It is often difficult for them to find employment commensurate with their level of education and talent. This is the problem we face today. But our programme is relatively new and it is still manageable. Only about 2,000 grantees have completed the programme thus far, and I will end on that note. Thank you.

S. Guriev:

Now that we have heard about the successful implementation of these programmes, I would like to invite our Russian colleagues to speak. I would like to address a question to Ilya Oskolkov, President of the recently established Strelka Institute for Media, Design and Architecture and Vice President of Yota. I think many people use Yota. Ilya, to what extent do we need a programme like this, and is it worth setting up?

I. Oskolkov:

Hello. Thank you. Our Institute came into being about a year ago, and in two weeks—June 28th, I believe—we will present our first graduates. Our experience is thus brand new. Since we could not take our students hostage, we have been concerned that all of them would leave us. Surprisingly, though, all of our graduates—not just the Russian citizens, but also those who came from abroad to study here—all of them would like to stay on to work. This does not include one student from China, who, understandably, has more interesting plans. Let me briefly tell you about what it is that we are doing and what we have learned over the past year.

The Strelka Institute for Media, Architecture and Design was set up a year ago. The idea surfaced two years ago, and we raised private funds to make it happen. Officially, the Institute is no more than an academic circle. We issue no state diplomas. We receive no state aid and no aid from the municipality. In this sense, all the mistakes we make are our own and, likewise, all the success we enjoy is ours. We accepted 35 students from Russia and abroad for a year-long programme of study in architecture, urban planning and design in the broad sense of the word. In order to study at our institute, you are required to have a high school diploma and speak English because training is conducted in English. We also have portfolio and interview requirements. For this first year, I believe there were 14 applicants for every opening. For this year upcoming, although we are still receiving applications, the competition has risen to 40 applicants per opening. This is not at all surprising in light of the fact that tuition is free thanks to Alexander Mamut and Sergei Adonyev, the institute's two sponsors. On top of that, we rent apartments in Moscow for those coming in from other towns and we make available a modest though reasonable sum of money so that students are able to focus on their studies during the year.

And last but not least, our team at Strelka boasts some very serious brain power from both Russia and abroad. The programme itself was designed by Rem Koolhaas, who is arguably the most influential architect in the world. He is currently one of our instructors at Strelka. Because we were driven by the desire to change the scenery—what we see out the window—we understood that in order to accomplish this, it was imperative that our students include not only

Russians, but also individuals from abroad. That way contact with other cultures, with other modes of thinking would allow our students to better understand themselves.

This is what we have discovered. We just finished interviewing our students at the end of the year. We asked all of them the same questions: what do you intend to do two weeks from now when your time with us comes to an end? How can we help you? Who would you like us to put you in contact with? Where can we help you get a job? And so on, and so forth. This is what we learned. The magnitude of the problems facing Russia and the opportunities to work on existing projects here are such that the vast majority of our graduates are not only agreeable, but have an overwhelming desire to stay and work here. Moreover, the same is true for our students from Poland, Lithuania, Turkey, India and other countries. I have forgotten somebody. They do not want to go back to Poland to build small houses or work some second-rate job in a large company for the next 20 years. What we have here, and it is nothing to be ashamed of, is a wide open space. Yes, we have huge problems, but we also offer huge opportunities. They want to stay here and work here. We employ a certain number of these individuals at Strelka, as we have taken on some design and urban consulting. You may have heard, in fact, that we are the chief consultants for the project currently unfolding in Moscow for the development of Gorky Park, Neskuchny Sad and Sparrow Hills. Because we now need researchers for such projects, we can employ our students. But, in my opinion, the main challenge as far as the effectiveness of this educational experiment goes, is how to encourage these people to put down roots in Russia or Moscow. Rather than forcing them to work in any given physical location, we need to give them the opportunity to apply their new knowledge. This is precisely what our colleague from Tatarstan was talking about. We must give them the opportunity to become involved in the type of projects for which we have actually trained them. I think this serves as an example of the real challenge before us. Thank you.

S. Guriev:

Thank you very much, Ilya. It truly is the case, as it turns out, that people pursuing an international education are interested in staying in Russia rather than going home. This is true not only for those studying in the field of economics, but also in media, architecture and design. I would like to give our saxophonist, Igor Butman, opportunity to speak to us about the current state of affairs in music and the arts.

I. Butman:

Hello. I am very pleased that music and culture—the fields to which I am dedicated—are also being accorded significance, and I am delighted to speak here today.

As far as training and education go, the situation is not good at all for the type of music I represent. This, however, does not imply that we do not need to take action. Quite the opposite. We desperately need to establish new schools, but in order to do so, it is imperative that we send people to study abroad—to the States, to England and to France. Finland has tremendous jazz schools to offer. But if we take a look at Gnesin Academy, we find only 85 students of jazz. Berklee, by contrast, where I studied for three years, currently boasts 5,000 students. Despite a large number of talented people in our country, despite a certain deference to classical music, ballet and the visual arts, everything in the domain of jazz, theatre and rock is oriented towards the commercial market, and that is that. We are virtually unknown in the world.

For this reason, my experience at Berklee School of Music in Boston made it clear to me that training here should be happening on a different level. Training at Berklee is oriented in such a way that if you do not become a master, you simply become yourself, an independent thinker and creative individual. Training there is directed towards discovering your creative individuality. They do not train you to become a saxophonist like John Coltrane or some other famous saxophonist. They train you to become Igor Butman, or John Albert, whoever you are. This is vastly different from what I was taught in the Soviet Union.

Now we are dealing with the following situation. It is true that young people are leaving to study in America and other countries, and we need to make it

attractive for them to return. We want them to return first and foremost because there is a colossal audience eagerly waiting to embrace their art right here. Mind you, I am not talking about the whole world. But we must somehow convey to them that they have a future in our country. And in order for this to happen, I think the Ministry of Education needs to do something. I have met with Dr. Fursenko, as well as with many teachers who would be happy to collaborate with individuals who have received their education abroad.

We are familiar with the example of the man who built Petersburg. Peter the Great left, studied, returned and built an astonishing city, not to mention the country. Accordingly, everyone has a chance. I think this is a very important task, particularly considering we offer superb education here in some fields, as well as quality, interesting and talented instructors. It is vital, however, that we study abroad and gain the experience we need to live in a world which has become, thanks to the Internet and communications, very small. Russia is already involved in all global processes. This is all the more reason for us to go and study, gain experience and create conditions which will make it clear to those artists and musicians who have left that we need them here, that they are more valuable to us here, and that they can produce their best creative works here in Russia for all the world to enjoy. Thank you very much.

S. Guriev:

Thank you very much, Igor. There is another example of a famous man from Petersburg. Vladimir Putin also left, presumably learned a lot in Germany and came back. At this point we will hear from Leif Edvinsson, Professor of Intellectual Capital at Lund University.

L. Edvinsson:

Thank you, spasibo, and happy future. Happy Saturday, I am leaving you soon. I am very grateful to be here. I have four or five major bullet points. I will make my points very quickly. I brought one slide with this on the statistics, but before going into that, I would like to say that I am also chairman for something called the 'New Club of Paris'.

The New Club of Paris is working with the knowledge agenda for nations. So, we have been working in Africa, Europe and Asia on that. I am an old Berkeley student, I am working with the Karolinska Institute, on Stress Medicine. So therefore, I know that music very good. Music has a direct impact on cortisol, and cortisol is energizing you. So, play more music. Very good.

I am also working in China and in Hong Kong, so I enjoyed the earlier speeches. I have recently started a database in Taiwan, illustrating the intellectual capital of 40 countries during 15 years. You can find it on www.nic40.org; it shows, among others, the situation of Russia.

So, just imagine that you are sailors, and you are starting on the lower-right corner and you end up in the lower-left corner. Have you moved forward then? That is the situation of the value of renewal of the human capital of Russia during the last 15 years. And if you combine that with a capability in commercial knowledge, the situation is somewhat better but it is not a very a good straight line.

So, with such statistics from a database, which we have now in Taiwan, we can have a dialogue on laying out the knowledge agenda for nations. And it is extremely interesting to ask questions such as, why is the situation the way it is? How can you change the knowledge agenda? One solution is cross-disciplinary and that is what we are doing right now, that is my second bullet point. We are having a training camp with the Aalto University of Innovation in Finland. It is a camp on societal innovation, not product innovation, not service innovation, but societal innovation and it is mainly focused on politicians.

Because where does the Minister of Education go for training? Where do we have a training camp for the ministers; there is no training camp for political positions so therefore, Finland initiated that last year. We will have a second round in August, and you are most welcome to have a look at www.aalto.acsi.fi and we can talk about how you can contribute, because I do think you can contribute a lot.

The third bullet point is actually that the question for this afternoon session is slightly wrong. You have to focus on multiplication of the human capital, and talent, as you know, is a silver asset. So the question is, "What is the potential of

the human capital of Russia?" And that is not only young people at universities. It also goes for people with silver moustaches like myself. So, it is the colour of your moustache that might hide or show the potential of your brainpower, and that is why I got an award some years back called, "The Brain of the Year," so I am proving that.

But the platform for multiplication of the human talent is ICT and that was the morning session today. It was very good, but the multiplied effect is most important and that is not training. It is another tool.

Training might actually increase the situation like you see in Greece of today. There is a lot of input economics in training and knowledge, but there is very little output and impact measurements, and that is why we started to work on this.

The final bullet point is that we know that architecture is extremely important. We know that architecture is actually creating or destroying endorphins of the talent. So, we need knowledge cities. We need to design the cities so that you multiply the talent, and you need to design the offices in the same way as well as campus areas.

So therefore, architecture, and this can be measured as a process of how you increase the endorphins of the students, which goes back to cortisol. So, it is not about economics any more. It is about neural science. It is about how your brainpower is leveraged into the future and that is why I say, 'happy future'.

Thank you very much.

S. Guriev:

I would like to give Dr. Andrei Fursenko, Minister of Education and Science of the Russian Federation, opportunity to speak.

A. Fursenko:

Thank you, Sergei. I have apologized to Sergei. I had really hoped to be the last to speak, but since there is another event going on, I have been asked to speak now.

I shall very quickly present my perspective. These truly are fascinating programmes. They are important and necessary. But I would like, first of all, to

explain my position about certain specifics, which I shall enumerate. Perhaps the simplest is the actual creation of such a programme. We can find money for this, and we are currently in the process of doing so. We already have programmes in existence organized by our universities—not private but state universities. According to various calculations, between 1,500 and 2,000 people take part in these programmes annually.

The problem lies ahead, in the future. There is the issue of responsibility, which our colleague from Kazakhstan raised earlier. This pledge of property, not strictly one's own property, but that of relatives or friends, of course, quickens one's sense of responsibility. It would be very difficult not to return home under these circumstances. But this issue is secondary. The first question is, what are we doing this for, and for what are we preparing these young people? And here I concur with Dr. Gilmutdinov. If attractive jobs are available, there should be no need for pledges, no need for special measures to encourage them to return: they will return of their own accord.

That is what makes the step we are now taking, as we put together the programme, so fundamental. We are looking to set up specific obligations and encourage a desire on the part of employers to partner with the programme so that they will actively recruit and offer these people satisfying and interesting positions. There are not that many positions like that in Russia today, at least not in the technological sphere. Certainly there are not enough for people to be interested or to recognize that these positions are for them. They cannot be confident that if they do what is required of them and successfully complete their training that they will end up getting these jobs.

I would like to say one other thing, which is perhaps only indirectly related to the programme. First, in my opinion—and I stress that this is my personal opinion—this programme in and of itself will not play the vital role we are hoping for unless it is carefully integrated into a much broader approach to the situation. This approach should include the invitation of top-ranking professors from other countries, who could teach at our sending universities, that is at the universities from which we are sending our students to pursue a Master's degrees or baccalaureate degrees elsewhere. This would make possible actual exchanges

of postdoctoral students between universities. So we need work, and we need movement in both directions. Because there are positions—I can't say there are very many—but there are positions and schools in Russia which are attractive not only to Russian students, but also to students coming from abroad. This reality is supported by what our first two speakers said. Young people are sent both from Tatarstan and from Kazakhstan not only to schools abroad, but also to leading Russian universities. The issue is that our work on the programme will prove worthwhile only if it encourages a restructuring of our higher education system. If we send out 10, 100, 1,000 or even 10,000 people without changing anything in Russia's higher education system, believe me, this concept will either peter out or produce a greater number of highly-trained individuals who, unable to find gainful employment in our agencies and businesses, will end up working for foreign firms in Russia or for individual transnational companies—or they will go abroad. It is very important that specialists come here to study. Not only to work, but to study. Even on a temporary basis. If these people, with all their experience and knowledge about how education should be set up—which is what Igor Butman was talking about—and what should be taught, stop saying that we have the best musical, mathematical and philological education in the world and begin to say, well, yes, we have some interesting things to offer, but there are some things which are inadequate and others in need of fundamental change; this will have a synergistic effect, not only on education, but also on Russia's economy and infrastructure. If these people are not offered interesting positions in our universities, in our Academy of Sciences, then, I repeat, the effect of this programme will be minimal. This is the challenge that lies before us, the task facing our Ministry. Under no circumstances will I look to pass this political hot potato on to someone else. But this challenge is not strictly ours. It is a challenge that faces society as a whole. If this change, this progress if you will, is imposed wholly or even in part by civil servants and ministries, it will certainly be rejected in the same way any reform imposed from above is rejected. Reform cannot be accepted simply because the authorities think it should be: what is suggested by civil servants and ministries is always bad. This is the case by definition. We all know it, and no one can refute it. I hardly think this is unique to Russia. It is for this reason that I have taken advantage of the opportunity to speak to this audience. In my opinion, it is extremely important that these ideas are suggested and moved forward not by the Ministry, but by academia, by employers, and by those who are most committed to the success of such a programme. I hope that those participating today are in agreement with me on this.

S. Guriev:

Thank you very much, Andrei. I suggest that we take one or two questions for our speakers or for Dr. Fursenko. While the microphone is being passed, I would like to say that, unfortunately, we are well acquainted with the problems associated with people returning to Russia. Our university only hires professors in the international market. One of the obstacles is that Western qualifications are not recognized in Russia. They need to be verified, which, loosely speaking, means they need to be translated. In the case of a Harvard degree, the entire dissertation must be translated into Russian, and so on, and so forth. We discussed this problem a year ago, we have made a lot of progress since then. In fact, if I am not mistaken, as of next year—the bill has already been drafted and President Medvedev spoke about this in his speech in Davos—we will unilaterally recognize degrees awarded in other countries by the best universities in the world. Yes, go ahead.

A. Dolinsky:

Thank you very much. Dr. Fursenko, my name is Alexander Dolinsky. I am Assistant to the Dean of the Faculty of Governance at MSU. I studied abroad, returned to Russia and now work here. I support the programme to send Russians for study abroad. I believe you are right to speak about the need to promote the reintegration of those returning. It is very important that they have competitive jobs to come home to.

My question is brief. Dr. Fursenko, have I understood correctly that all of the complications which you mentioned will not prevent the Ministry from moving forward with this programme and we will soon begin sending people to study abroad?

A. Fursenko:

That is correct. They will not. The programme is nearly ready to be launched. And, as Dr. Guriev just mentioned, legislation which would allow for the unilateral recognition of degrees has also been introduced. If I am not mistaken, it is now under discussion by the government. But I repeat: when it is passed, if we fail to address the other issues at the same time, if it is not supported by society, colleagues, this programme will be finished. It will run for a year, maybe two or three, and that will be it. It cannot enjoy success under certain pretexts, nor will it be successful without them.

S. Guriev:

Thank you very much. I think the matter of societal support for the programme is critical. And we discussed the idea at the youth forum. I recommend we consider creating a public association in support of the programme. The thing is—as you have correctly pointed out—as long as academia does not change, these jobs will not surface. But in order for academia to change, its representatives need to be present with us. Because as rector of a university, I am sure of one thing: if we employ teachers from abroad, they understand things very differently from our instructors who were trained in Russia. We train instructors in the regions and, of course, they cannot understand that one and the same academic programme should be presented differently. They have not had occasion to see this in action. This is why we need to bring people in if we want to change academia. We have another question. Yevgeny Yuriev, please go ahead. Adviser to the President.

Y. Yuriev:

Dr. Fursenko, I would like to know what you think the prospects are for training government employees. That includes, perhaps above all, those of the upper echelons.

A. Fursenko:

I would have to say that the last time I was a student, 11 years ago, I took a course of study at the European Private Equity and Venture Capital Association. I was not yet a civil servant at the time. For me that was incredibly useful. Having undertaken a business venture by that point, in taking that course, I came to understand many things I had not known previously. The courses turned out to be very helpful, but there are two problems. The first is this. Sending a highly effective civil servant for training presents significant challenges in that there is nobody to step in for him. And sending out those who are ineffective is even more dangerous because we then create the potential for the civil servant who isn't all that effective to advance higher and higher thanks to academic pedigrees and the credibility of the credentials he earns. Nevertheless, we need to devote time to this and, as you know, the ANE courses offered to civil servants are in fact short-term training programmes. The question is, would it be possible to extend them? I know about the example of Kazakhstan. I have several friends who went through training courses. They were sent for training after they were advanced to relatively high positions. As a rule, they were called back before having finished the course. But even this was effective since even such a short immersion lasting a few months had a significant impact on their approach and changed them as people. Colleagues, my apologies, but I really must run.

A. Gilmutdinov:

I have a brief comment, Dr. Fursenko. Very briefly, if I may. I would like to say we make a special programme available to high level public employees in the Republic of Tatarstan. All the Ministers of the Republic of Tatarstan have undergone several weeks of training at the Lee Kuan Yew School of Public Policy in Singapore, and now all of us government employees are receiving training at the ANE. So, we have the experience and can testify that it is actually effective if things are done sensibly.

S. Guriev:

Thank you very much. Actually, there is another answer to this question. We heard from our Chinese and Kazakh colleagues that we need to send people

abroad to study and open positions in the government to them upon their return. That is to say, that answer also exists. We are running out of time, but for the little time remaining I would like to open the discussion up to those who have studied and taught abroad. Konstantin Severinov is employed on both sides of the ocean. Konstantin, please go ahead. Konstantin runs a laboratory both in Moscow and at Rutgers University.

K. Severinov:

Dr. Fursenko has, as they say, 'stolen my show'. First, in my American guise I am, among other things, a host of the Kazakh youth who work for us through programmes organized by the Republic of Kazakhstan. Here is the good news: Despite the fact that these young people have graduated from the Universities of Astana or Almaty, for example, they are actually quite well trained. A two-year Master's programme can certainly bring them up to speed with your average American student on the same level.

Another positive thing I would point out is that the pledges are effective—all of these students return home. What I hear from them, however, does trouble me a bit. I represent the life sciences. This is hardly all of science, but it is an important branch of science nevertheless. It is an undeniable fact that we all get older and, in the end, we die. And everyone wants to postpone that end as much as possible. Life sciences, as a matter of fact, is all for that. So here's the thing. Most of the students who return after their training with us experience problems with reintegration. This, in fact, is directly related to what has already been stated. Simply put, if there is little to no science happening there at home, it will continue to be difficult for them to be reintegrated into the existing set-up. That's it, the end of the story.

Now a bit about the Russian situation. I have been running a laboratory in America for 15 years. During this time, I have worked with no less than 30, perhaps more like 40 young Russian academics. For the most part, this has come about as the result of a training abroad programme in the sense that these individuals have been trained not at the expense of the Russian government, but of the American taxpayer on grants from national health institutions. They came

to work for me, all the while remaining enrolled students in Russia. Later they returned and defended their theses. So only one of these individuals has returned to Russia. That'll be me. All the others sold their apartments if they owned them, and stayed in America. There they fully integrated, becoming professors, working in companies, and so on. The question arises, why does this happen?

In my own case, my return to Russia is directly related to the fact that I am guaranteed a high wage in the West, and in that sense I am not risking much. Additionally, many recipients of massive grants have become high profile figures, as I have, and in this sense they can afford to do something here because if something were to go wrong all of a sudden, their grant providers would be able to turn things around for them. So, they recently approached Dmitry Medvedev and explained to him how bad everything is. But the young people know that everything is bad, and that is why nobody wants to return home, of course. And on this note I am prepared to finish because as long as there is nothing for people to return to, they are not going to return. And there are probably simple mechanisms which could alleviate the situation. Again, I am talking about basic, fundamental science. One such mechanism, which is widely used in America, is the Pathway to Independence Award. In addition to the guarantees the government provides to those who leave the country for training abroad, the Award grants an additional two to three year period of financial support once these individuals return home. There is the carrot and there is the stick. The pledge of an apartment is more likely the stick, while the carrot could be the guarantee of a teaching position at a university, or not even the guarantee of a teaching position, but of funding which the individual could use to attend the university of his or her choice.

Generally speaking, people who have gone through the Western educational system have learned the meaning of a very important concept: freedom. They have learned to value freedom, and that is what makes it so difficult to force them to work in one place or another for a three year term. Thank you.

S. Guriev:

Thank you very much. In Russia we have an old tradition of arresting people who know freedom.

I would like to give some time for a brief comment to Konstantin Shevchenko, who studied abroad and now works in the private sector.

K. Shevchenko:

I returned at some point in 2002 after graduating from a business programme in America. What I would like to say is basically two things. First, probably 90% of the people I knew returned. I work in the financial sector, so that was, maybe, 200 people. Ninety per cent of the people who worked in the scientific sector did not return. It really is true that there is not an environment in the scientific sector to which they can return. But what I would like to say—unfortunately the Minister of Education is no longer here—is that political willpower is absolutely imperative. If the Ministry tries to pass over responsibility to society, then not a single problem will be solved. Second, we need to start somewhere. And, of course, we have to start with the executive branch of government. It would be good to begin with the legislative branch, too, but it is generally better to begin with the executive government. We need to train people and send them back to work in the executive government, in the administrations of our governors, in ministries and agencies. We have a ton of agencies with a relatively low number of employees. That is all. What we need is political willpower. We need to do something.

S. Guriev:

Well, we have seen political willpower in Tatarstan. Nikolai Murashkin, PhD student at Cambridge University.

N. Murashkin:

Thank you very much for giving me opportunity to speak. Much has been said, and much of it is accurate. I totally agree with both Konstantin and Dr. Fursenko. What PhD students abroad are thinking about goes beyond the issue of money. There is also the question of environment. I would simply like to give a historical

example. My university has a long history of accepting students from Russia. The first to be accepted came during the reign of Tsar Boris Godunov. He did not return. Thank God there is such a programme, or plans in the works for such a programme at Medvedev's initiative. What we have heard today shows that times have obviously changed here. That is why we can hope for the return of students. But really, what has been said with regard to broad funding, in my opinion, there should be grants not only for Master's and doctoral programmes, but also for short-term training courses. There should also be assistance for reintegration into universities upon return. I have in mind not only financial assistance, but also assistance in terms of reception, which is not always enthusiastic. But I am optimistic.

S. Guriev:

Thank you very much, Nikolai. There are green and red cards on the table. I suggest we vote. If you think that we need this programme, raise the green card. If you think that there are too many problems to implement such a programme, raise the red card. We have run out of green cards. Well, someone must be voting red? They left, they didn't come. Is that a red card? Excellent, excellent. What do you say, democracy and freedom? Excellent, thank you very much. We have counted the votes. I actually do not entirely agree with the notion that we either need to or that we cannot hand over responsibility to society. It seems to me that without the support of society, it is very difficult for the executive government to do its work. Now we have totally run out of time, but we are prepared in theory to open the floor to discussion. So, if you would like to make a comment or ask a question, we will write them down and pass them on to our high officials. A few officials from the Ministry of Economics are still here along with mayoral officials and some of the civil servants from Kazakhstan who have studied abroad. So, feel free. Would anybody like to speak? Yes, go ahead.

A. Fokin:

Artem Fokin, Stanford School of Business. In the presentation made by the representatives from the Republic of Kazakhstan, we saw that government

employees are involved in a selection process consisting of a minimum of three phases. The first is an interview, the second a test aimed at assessing command of Kazakh, and the third is the MBTI test. I don't know how things work in Kazakhstan, but when I see that government representatives are involved in the selection process, the potential for corruption of legal norms becomes an issue. For this reason, I think the selection process for the Russian programme should be simplified for candidates. If someone was accepted at Cambridge, Stanford or Harvard, I think we can safely assume their selection committees have done their homework.

S. Guriev:

...that it is simply in order that there is no consensus. For freedom. I think this is a very important principle. Any more observations? Comments, questions? Yes, go ahead.

S. Nurbek

Our colleague from Stanford has actually not quite understood. This psychometric test is completely independent. The government cannot influence it in any way. Independent experts and psychologists from a wider circle administer the testing. As far as the test involving the Kazakh language is concerned, there, too, we have a special centre for testing involving a computer programme created on the basis of TOEFL. Perhaps I did not explain this clearly: the core experts from core ministries amount to about 30%, and beyond that we are talking about a scientific development and production centre, independent experts, and so on, and so forth.

S. Guriev:

Yes, thank you very much. I hardly think there is any need for justification. Such tests are in fact used in many countries, and as a researcher, I know that these data are incorporated in research. Stanislav is telling the truth. These tests are administered to better predict, for example, what will become of any given individual, whether he will become an entrepreneur, a civil servant or an

academic. It truly is interesting information, and the fact that the test is administered by an independent organization serves to demonstrate the political willpower Konstantin was talking about, that everything must be done correctly and honestly.

Any more questions? No? Well, it looks as if there is such a broad consensus, I think we have nothing more to discuss. Everyone who thinks we need this programme is here. Everyone who thinks we do not is absent. So here is what we need to do. We need to remember that our task is to convince the hearts and minds of people beyond the confines of this room. That means we have our work cut out for us. We need to explain why we need the programme and why it is possible to bring it about. Truly we recognize that our neighbours in Central Asia, our neighbours in China and our own citizens in Tatarstan are doing very good work. It is fully possible for us to do the same. Dr. Fursenko has indicated that the legislation pushing for the recognition of degrees has been drafted, though only a year ago he was convinced that it was unnecessary. We had a similar round table discussion then, and he heard from all the rectors of ordinary universities that it was in fact necessary. That discussion was rather difficult. But now, it has happened. It is entirely possible that a year from now we will gather at this Forum, and we will be hearing from individuals who had been accepted in this programme. Thank you very much.