

# Business Environment and Knowledge for Private Sector Growth



Istanbul, Turkey  
March 22-24, 2005



KNOWLEDGE ECONOMY FORUM IV

Organized by the World Bank and the Government of Turkey

Final Report

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## ACKNOWLEDGEMENTS

These proceedings attempt to summarize the key issues discussed at the three-day Knowledge Economy Forum IV (KEF IV) on *Business and Knowledge for Private Sector Growth*, held in Istanbul, Turkey on March 22-24, 2005. This report was prepared by Natasha Kapil, Valerie Stadlbauer, and Elif Yonca Yukseker, under the guidance of Marialisa Motta. The proceedings have benefited from the closing remarks made by Fernando Montes-Negret of the World Bank and numerous presentations made during the conference.

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The organizers value the continued involvement of the European Investment Bank, the European Investment Fund, the European Training Foundation, the Organisation for Economic Co-operation and Development and are particularly thankful for the expertise these international organizations bring to the Forum to support countries in their quest to improve the business environment and promote knowledge-based economic growth in their home countries. They also acknowledge the essential contributions to this discussion made by delegates from the 25 countries in attendance, including: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Czech Republic, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, FYR Macedonia, Moldova, Poland, Romania, Russia, Serbia-Montenegro, Slovak Republic, Slovenia, Tajikistan, Turkey, Ukraine, and Uzbekistan.

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## PREFACE

Knowledge Economy Forum IV on *Business Environment and Knowledge for Private Sector Growth*, held in Istanbul on March 22-24, 2005, is the fourth in a series of flagship events organized by the Europe and Central Asia region of the World Bank to promote knowledge-based economic growth in its client countries. The first such Forum took place in 2002 in Paris and focused on the definition of national knowledge economy strategies in European Union, henceforth EU, accession countries. The 2003 Helsinki Forum hosted discussions on the implementation of knowledge economy strategies and targeted both EU accession and EU candidate countries. The 2004 Forum, held in Budapest last year, focused on the role of knowledge in enhancing countries' competitiveness and included countries in the Balkans and Central Asia.

This fourth Forum in Istanbul was co-sponsored by the Government of Turkey, represented by the State Planning Organization, henceforth SPO, and the World Bank Vice-Presidency for the Europe and Central Asia Region, henceforth ECA Region, with significant contributions from international and Turkish institutions. Considerable effort was made to engage all client countries in the dialogue on improving the business environment and using knowledge to stimulate private sector growth. Consequently, this year's Forum hosted representatives from as many as 25 ECA countries, including first-time delegations from Belarus, Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan. As part of the World Bank's commitment to promote youth involvement in and ownership of national policy and program implementation, this year's Forum highlighted participation of youth delegates from the ECA region. A detailed list of over 200 participants, including representatives from key government ministries, industry, business, academia, think tanks, civil society and international development organizations is provided at the end of this report.

The 2005 Istanbul Forum built on the findings of previous fora by engaging delegates in a pragmatic discussion on selected thematic reforms to improve countries' business environments and firms' capacity to use and create knowledge. While acknowledging the importance of macroeconomic factors, **KEF IV focused on the need for governments to engage more deeply in microeconomic policies and reforms in order to increase private sector productivity and achieve sustainable growth.**

The main objective of the Istanbul Forum was to:

- Discuss how governments in ECA countries could devise and implement reforms to improve their countries' business environments and define policies to support better use of knowledge by firms;
- Stimulate a dialogue and exchange of experiences on these issues among ECA country representatives, particularly between the new EU member states and other ECA countries;
- Stimulate a dialogue within and among the various government ministries, research institutions and business constituencies on issues related to the role of knowledge, the enhancement of human capital, the investment climate, private sector productivity and growth; and
- Strengthen the dialogue between representatives of ECA countries and the multilateral agencies that participated in the event including the World Bank, the European Investment Bank, the European Investment Fund, the European Training Foundation, and the Organisation for Economic Co-operation

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and Development - and facilitate coordination among the agencies on all initiatives aimed at increasing productivity and growth in the Region.

To this end, the Forum plenary and panel sessions focused on three main themes:

- (1) the business environment;
- (2) firms' use of knowledge and role in innovation; as well as
- (3) learning and skills development.

These themes were reinforced during the site visits to leading Turkish public and private sector institutions in the Istanbul area. A novel interactive feature at this year's Forum was the country exercise, which enabled delegates to identify the key challenges their countries face in implementing knowledge economy strategies and provided them with an opportunity to develop relevant interventions along with the international experts present, based on the approaches and best practices deliberated during the Forum sessions. The 3-day Forum was structured around 2 plenary sessions, 6 thematic expert panels, 4 parallel site visits, and 2 country exercise sessions. This report highlights the key messages from the various sessions detailed in the Forum Agenda at the end of this report. We also hope that you will revisit the extensive archives that are available to you through the Knowledge Economy Forum website at [www.worldbank.org/eca/ke](http://www.worldbank.org/eca/ke)

At the time of the Istanbul Forum, Turkey was in the opportune position of having received the invitation to initiate negotiations on its terms of accession with the EU. Istanbul, therefore, served not only as a charming backdrop for this year's conference, but also exemplified the challenges and triumphs associated with reforms to enhance competitiveness; particularly to those ECA countries further East that aspire to improve their global positioning, and cautioned the more advanced ones that complacency is a costly strategy. Following the success of this fourth forum in Istanbul, the Government of the Czech Republic has extended an invitation to host the fifth regional Knowledge Economy Forum in Prague in the spring of 2006. Until then, our goal remains to promote specific activities discussed during the Forum to improve ECA countries' investment climates, stimulate greater uptake of existing international and domestic resources to stimulate innovation within the private sector and to strengthen innovation as an engine of national competitiveness and growth.

We dedicate this Report, as a small tribute, to the memory of Professor Sanjaya Lall, Oxford University, who contributed to the Istanbul Forum and sadly passed away on June 18, 2005. Professor Lall will be sorely missed at future Knowledge Economy Fora.



Fernando Montes-Negret  
Director

Private and Financial Sector Development  
Europe and Central Asia Region  
The World Bank

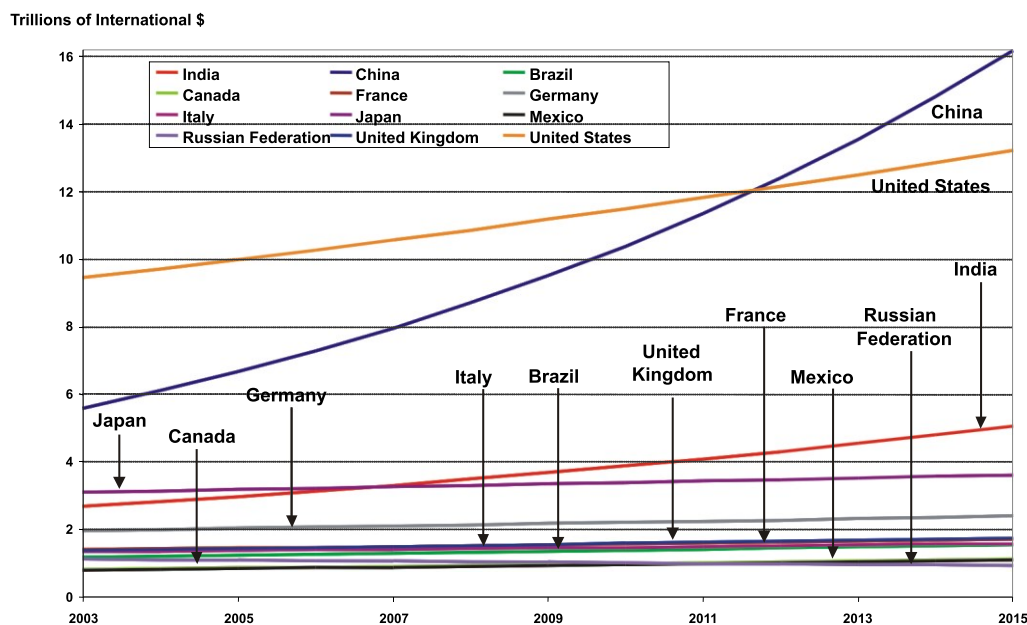
# 1. INTRODUCTION

## 1.1 Global Change and Implications for the ECA Region

Countries across the ECA Region have made marked progress over the past fifteen years in their transition to becoming competitive market-driven economies. Notably, 8 European countries from the ECA region have met the complex reform requirements to accede to the EU and 4 more are in the process of doing so. In his keynote speech former Dutch Prime Minister, Willem Kok, cautioned eligible ECA countries not to view EU membership as a goal, but rather as an opportunity to build local and national constituencies that will foster an environment in which change is embraced, learning and innovation is encouraged, and knowledge-based development can take root. Former Prime Minister Kok also emphasized that private firms play an essential role in facilitating the shift to applied research that results in economically-relevant innovation.

Carl Dahlman, Georgetown University, broadened this perspective by presenting worldwide economic growth projections. These estimations, illustrated in Figure 1, suggest that assuming average growth rates remain constant China's GDP (at PPP) can be expected to supersede the United States' by 2012 and India to overtake Japan by 2007. Considering such forecasts, clearly countries cannot base their growth strategies solely on free trade agreements or customs unions such as the EU. Future hurdles faced by ECA countries include challenges posed both by countries in the West and increasingly emerging economies in the East. Today competition is more global than ever.

**Figure 1. Real GDP (PPP): Projections 2004-2015 (Using 1991-2003 Average Growth Rates)**



Source: Carl Dahlman, Data from the Knowledge for Development Program, World Bank Institute.

While emerging economies, such as China and India, still compete today on comparative cost advantages, they continue to aggressively work on attracting foreign direct investment (FDI), tapping into global knowledge, investing in human capital, advanced skills and productive R&D. As global



communication and transportation costs decline, distances become less relevant due to the speed with which information is relayed globally, investors are becoming more aware and open to investing in emerging markets, placing additional strain on other countries, including ones in ECA to make progress in these areas.

In the long run, the key drivers of sustainable growth include a healthy business environment, innovation and advanced labor skills. Firms cannot attract and develop knowledge if the environment in which they operate is not conducive to business development and regulations create hurdles and increase the costs of doing business and exporting. Innovation and advanced labor skills allow countries and firms to create and use knowledge, adding value and diversifying the productive and export structure of the economy, ultimately driving productivity and fostering growth. Figure 2 shows the importance of these factors from firms' perspective and clarifies their impact on increasing sales (i.e., quality of supply) and reducing costs. The remainder of this note summarizes key issues discussed during Panel and Plenary sessions on each of these three topics.

**Figure 2. Firms' Perspective on Productivity and Growth**



*Source: Fernando Montes-Negret, World Bank, 2005.*

## 2. THE BUSINESS ENVIRONMENT

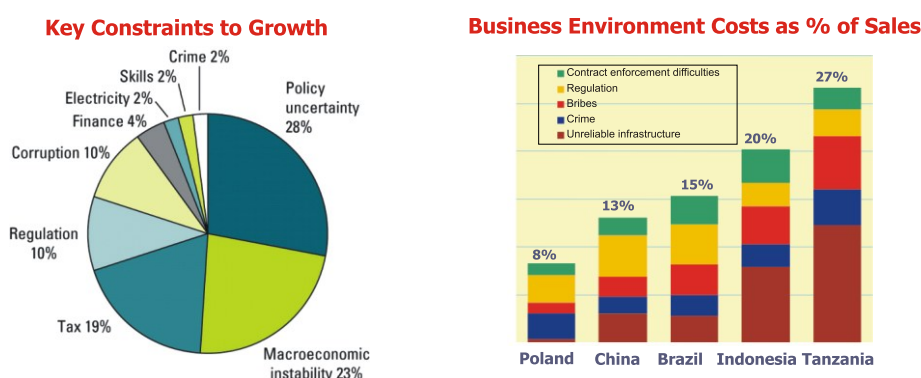
### 2.1 Importance of an Enabling Business Environment

The World Development Report 2005 on the Investment Climate presented by Warrick Smith, World Bank, heralds that a sound business environment fosters productive private investment, which is the engine for sustainable economic growth and poverty reduction in the long term. Therefore, sound microeconomic policies and the efficient provision of public services by governments are essential for stimulating the development of local firms, creating new jobs and opportunities for entrepreneurs, attracting foreign and local investment, stimulating skills development and innovation, and enhancing trade. An increasing body of evidence shows that excessive government regulation, limited enforcement of property rights, inefficient infrastructure and lack of access to finance stifle private sector productivity and growth. Therefore, defining the right set of microeconomic reforms is a crucial first step toward ensuring that firms can operate efficiently and freeing resources that can be dedicated to the creation and better use of knowledge. It should be noted that the message is not simply deregulation, but rather re-regulation in smarter less costly and more business friendly ways.

### 2.2 Costs and Risks of Doing Business

The discussions on the importance of a stable business environment focused on the multiple and varied nature of costs, risks, and barriers to competition that firms face in transition and developing countries. As evidenced in Figure 3 firms ranked policy uncertainty as a dominant concern. Econometric analysis indicates that an improvement in government policy predictability alone could increase new investments by as much as 30 percent. Firms also indicated that policy-related risks, such as macroeconomic instability, insecure property rights and arbitrary regulation, are detrimental to their growth. Finally, figures based on firms' surveys show that costs associated with contract enforcement, crime, corruption, excessive regulation and weak infrastructure can amount to as much as 25 percent of firms' costs, which is approximately three times what firms would ordinarily owe in taxes.

**Figure 3. Key Business Environment Constraints in Developing and Transition Economies.**



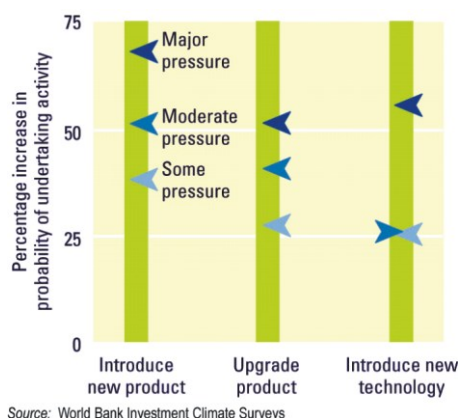
Source: Warrick Smith, *World Development Report*, World Bank, 2005.

World Bank research findings presented at the Forum demonstrate that certain ECA countries have significantly improved their business environments, notably Slovakia, Lithuania and Poland scored well on a range of indicators, including the ease of starting and closing a business and enforcing contracts. Slovakia, in particular, is a good model, given recent reforms that resulted in halving the time to start a business, in reducing the time to recover debt by three-quarters, and in facilitating the hiring of first-time workers. Additionally, compared to countries where firms face policy uncertainty, firms in Poland, Russia, Slovakia and Ukraine that believe their property rights are protected tend to reinvest between 14 to 40 percent of their profits into their businesses. The benefits of policy predictability go beyond a simple increase in the volume of investments. The increase in confidence and the willingness of firms to move forward to generate, adapt and adopt new know-how and technologies are of key importance.

### 2.3 Barriers to Competition

It is paramount for countries in the ECA region to create the necessary policy framework and to foster an enabling business environment in which firms can experiment, flourish, and when necessary be replaced by new and more innovative ones. In this respect, barriers to competition not only create disincentives for most firms to innovate or improve their productivity, but also result in higher costs being passed on to consumers. A comparison of survey results relayed that as many as 90 percent of firms in Poland, 80 percent of firms in Slovakia, but only 40 percent in Georgia reported high competitive pressures. As an illustration Figure 4 includes survey results from 27 ECA countries and confirms that in countries where competitive pressures were significant, firms tended to display a 50 percent higher probability of engaging in innovative activities. This included, for example, the introduction of new technologies and new products; the upgrading of old products; and the implementation of better production and organizational processes, such as improving supply chain management among other innovations.

**Figure 4. Policy-Related Competition Barriers Stifle Innovation and Productivity.**



Source: Warrick Smith, *World Development Report, World Bank, 2005.*

The Forum discussions on the business environment encouraged delegates to consider the feasibility of reforming policies to improve the investment climate in ECA countries, keeping in mind the varied goals of EU accession, further worldwide economic integration, and continued transition. Two key messages emerged from this session. First, taking into account the considerable differences in business environments within the ECA region, it is likely that countries will need to develop policy reform options to suit their individual needs. Second, in the long run persistence in implementation and not perfection in devising policies is most likely to yield the best results in reforming the investment climates across ECA countries.

### 3. INNOVATION

Technological adoption, innovation and development of advanced labor skills are necessary to increase firms' productivity and diversify firms' and countries' productive and export structures. Technological development and the skills of the labor force are also highly interrelated factors - it is impossible to develop one without the other. Firms are unlikely to introduce innovations and upgrade their technology if their employees are unaware of the needs of their clients (especially in the international market) and do not know how to use advanced technologies. The Forum addressed the role of these two variables in a single plenary session, followed by separate break-out sessions to address some of the most critical aspects of developing effective innovation and learning systems. On the innovation side, this discussion was advanced by expert panels on technology infrastructure, technology absorption, and finance for innovation.

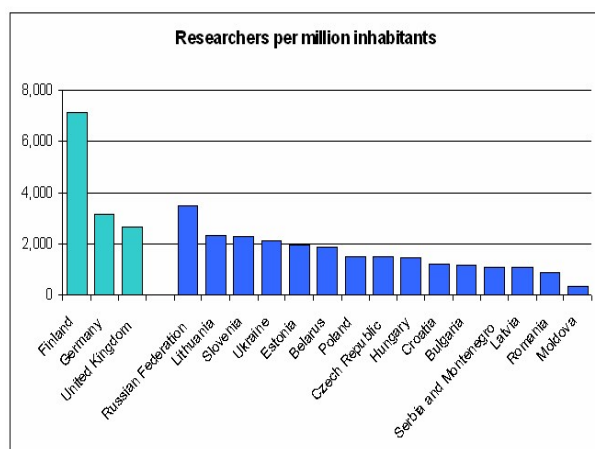
#### 3.1 From Science to Innovation in the ECA Region

Most countries in the ECA Region inherited a strong legacy of research institutes that have traditionally been geared towards conducting basic research. With the demise or privatization of most state-owned enterprises across the region, the few research institutions that did engage in industrially-oriented research lost the impetus to do so. As evidenced in Figure 5, despite the severe depletion of human and financial resources related to cutbacks in government spending on research and development (R&D), the scientific base remains fairly significant when compared to EU countries and, in general, is above other middle income countries. However, research institutes in the ECA region are struggling to collaborate with domestic firms and provide businesses with relevant R&D support to stimulate local innovation. **Therefore, the challenge that looms large in ECA countries is transforming science into market-relevant innovation.**

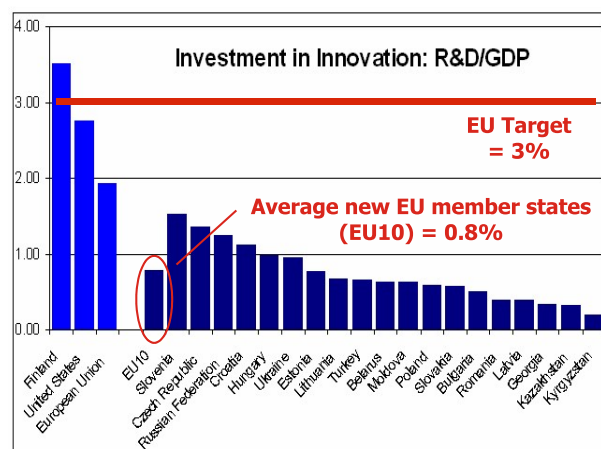
Figure 5. The Transition from Science and Technology to Innovation in ECA.

#### ECA has a Strong Scientific Tradition that Does Not Translate into Innovation

Large S&T base, well-educated workforce, culture of science...



... But limited R&D, innovation and entrepreneurship



Source: Fernando Montes-Negret, World Bank, 2005.

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Similar to the effects that stem from reforming the business environment, realigning the funding mechanisms and the objectives of R&D establishments to meet firms' innovation requirements is essential in order to sustain and improve the growth levels being observed across the ECA region. In his closing presentation, Fernando Montes-Negret, World Bank, identified the following three ways in which countries can promote the transition from being generators of science to becoming innovators: (a) technology absorption, (b) commercialization of domestic scientific and technological research, as well as, (c) increasing access to finance.

*a. Technology Absorption*

As highlighted by Professor Sanjaya Lall, Oxford University, multinational corporations (MNCs) account for a third of global production today and are increasingly globalizing their production and R&D efforts. Technology and R&D in non-OECD countries is largely brought in by MNCs, with the result that most technology-intensive investments bypass the ECA region and end up in South and East Asia and Latin America. In order to alter this trend, governments in ECA countries need to attract FDI into local technology-intensive and export industries and create incentives for MNCs to develop licensing, joint venture, supplier training and supplier development programs with local firms. Governments can focus locally on enhancing their investment climate, on developing skills upgrading programs for supplier SMEs, on improving transportation and logistics, and on liberalizing access to ICT services. Therefore, in ECA countries, technology absorption may be the prime way initially to acquire, upgrade and eventually create new technologies where countries have not yet developed the capacity to innovate locally.

*b. Commercialization of Science and Technology*

In order to support indigenous commercially-relevant scientific research, governments must prioritize the scope and level of public funding available for select themes that serve economic growth in their countries. In ECA countries that are struggling to establish a culture of university-industry collaboration, governments can make research financing contingent upon partnerships between the entities. Charles Wessner, U.S. National Research Council, indicated that the introduction of changes to the intellectual property (IP) framework giving universities IP rights would establish a healthy incentive regime for researchers who have been traditionally deprived of their IP rights in ECA countries. Certain countries have also supported applied research through the establishment of technoparks and incubator programs that provide the physical space in which this interaction takes place. However, it is extremely important that skilled and commercially-oriented managers with links to global investors and markets are engaged in the commercialization process to prevent these facilities from turning into real estate ventures where start-up firms and businesses are housed for extended periods of time. In summary, revisions to the IP system, made in tandem with strategic prioritization of public research funding, are more likely to stimulate interaction between research and business communities and create opportunities for the commercialization of resulting breakthroughs.

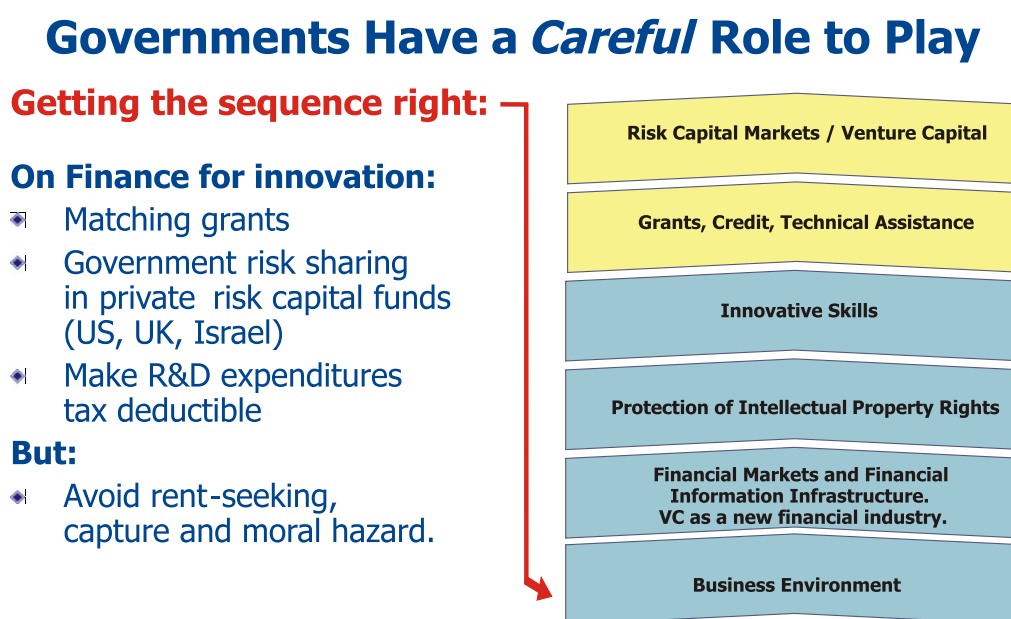
*c. Access to Finance for Innovation*

Before novel ideas and technological improvements can become commercially viable, innovations, entrepreneurs and researchers usually require financing to develop and test product prototypes. Due to the high risk of failure associated with such ventures, funding for early stage technological development (ESTD) is especially scarce not only in transition economies, but also in developed financial markets such as the United States where 34 percent of ESTD funding is provided by the U.S. Government, another 34 percent is invested internally by large corporations, and up to

25 percent from, so-called, “angel investors”. In ECA, governments can play an important role by creating incentives for corporate investors to increase in-house investments in R&D through matching grant schemes, by introducing competitive public funding mechanisms to build the “deal pipeline” or increase the number of bankable projects based on successful models implemented in Finland, Israel, Korea, and the United States, and by improving the investment climate to pave the way for greater venture capital (VC) participation in ESTD financing.

Governments tread a delicate path in promoting innovative activity as illustrated in Figure 6. As pointed out by Fernando Montes-Negret, World Bank, it is not only essential that governments get the sequencing right in terms of policies to enhance the business environment, protect intellectual property, develop financial markets, strengthen innovative capacity and skills development in research and industry, promote technology infrastructure development, attract FDI, but perhaps more importantly it is the government's responsibility to ensure that public programs do not create distortions in the fledgling VC markets in ECA. In order to prevent the misuse of public financing schemes by interest groups and to reduce the risk of capture and moral hazard, governments would have to establish transparent and independent committees to match investments made by entrepreneurs and private risk capital funds, as well as to monitor and evaluate project performance.

**Figure 6. Role of Governments in Financing Innovation**



Source: Fernando Montes-Negret, World Bank, 2005.

An important cautionary message that emerged from the session on Finance for Innovation was that venture capital cannot be relied on to provide all the necessary financing for innovative concepts in ECA. As Thomas Nastas, Innovative Ventures Inc., noted only 1 in 200 SMEs in emerging markets compared to 1 in 100 in the United States is able to secure VC financing. In his recommendations, Nastas advises governments to adopt a very pragmatic approach to build on existing comparative

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advantages to embed technology and innovation in traditional products, processes, and industries. The emphasis should be on increasing the pool of high quality bankable projects and to improve the performance of projects that are financed. Governments are advised to entice large corporate investors such as Shell in Russia or Ispat Karmet in Kazakhstan - rather than VC investors - to form industry consortia wherein MNCs co-invest to form public-private funds locally. Projects financed by such a consortium would be in specific sectors of the economy that the MNCs are active in and have made a long-term commitment towards and therefore may result in a higher rate of success.

## **4. SKILLS**

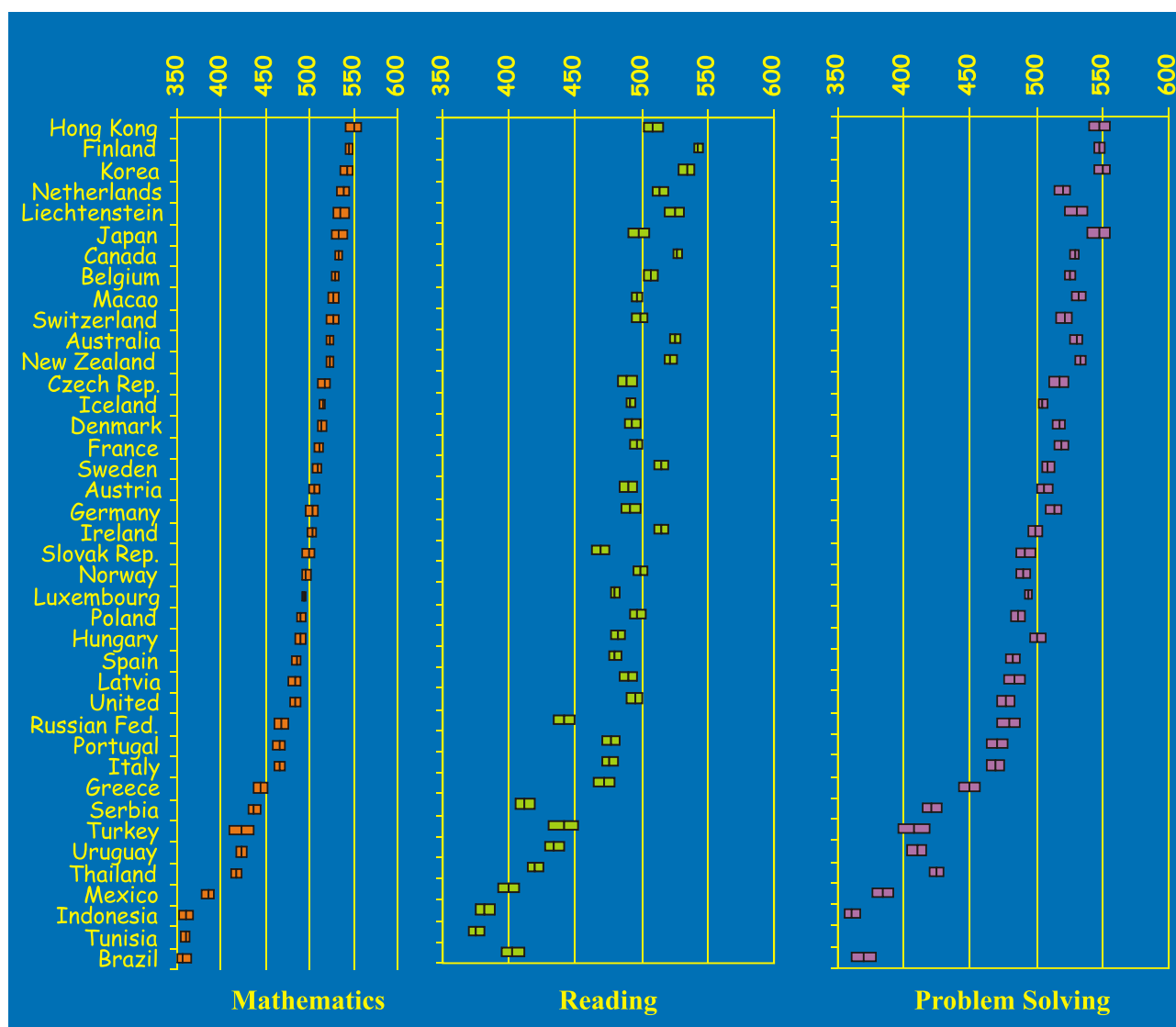
### **4.1 Human Capital “Crude Oil” for the 21st Century**

As the ECA region moves towards being more knowledge-intensive, human capital and human skills will become even more central for its development as drivers of growth. The World Bank study, “Closing the Gap in Education and Technology” demonstrates that skills and technology interact in important ways. New technologies are “skills-biased” in that they demand a highly-skilled labor force to unlock their potential to increase productivity and growth. With growth in knowledge-based industries, labor market demands are changing accordingly. In countries where new technologies have been introduced, demand for high-skilled workers has also increased. Mary Canning, World Bank, defined a highly-skilled workforce as one that is not only equipped with technical know-how but also with the ability to create, analyze and transform information and to interact effectively with others. Moreover, given the speed of change in modern economies, workers need to be able to upgrade their skills on a lifelong basis. Because skills and technology complement one another, strategies to boost growth via technological development and innovations will only succeed if they are synchronized with policies to build a highly-skilled workforce.

### **4.2 ECA Performance**

The quality of education and training systems remains a concern in the ECA region. In Figure 7 John Cresswell, OECD, presented evidence from the Program for International Student Assessment (PISA 2003), demonstrating that a large number of students in ECA countries have difficulties in applying the skills and knowledge they acquired at school to problem-solving in a job or real life situation. In several ECA countries approximately 20 percent of students have serious difficulties in applying reading literacy as an effective tool to advance and extend their knowledge and skills in other areas. These countries (in descending order) are Serbia, Turkey, the Russian Federation, Slovak Republic and Hungary. Concerning students' overall capability to solve problems in real-life situations, only the Czech Republic performed above the OECD average of 500 score points. Hungary is at the mean performance level for OECD countries, while Latvia, Poland, the Russian Federation, Serbia and the Slovak Republic all perform below average.

**Figure 7. Skills Application by ECA Youth**



Source: PISA Study, OECD, 2003

Thus, the transition from school to work in ECA is often difficult due to outdated curricula and a mismatch in skills. Moreover, Arjen Vos, European Training Foundation, noted that the ability of vocational training to respond to labor market needs remains limited because vocational training (unlike higher education) has not been accorded the necessary priority by governments and only very few links exist between training facilities and enterprises. Weak education and training systems and difficult transition from school to work life have severe implications. Eurostat and the European Training Foundation data illustrated in Figure 8 indicate that in many ECA countries, especially in Southeastern Europe, the level of youth unemployment is alarmingly high despite high levels of enrollment in education and training.



**Figure 8. Youth Unemployment Rates in South Eastern Europe.**

**Key EU Employment and Education Indicators**

|   | EU 25 (2004) | Candidate Countries (2004)                   | EU 2010 | SEE (2004)  |
|---|--------------|--|---------|---|
| Unemployment Rate   | 9.0%         | BG 12.2%<br>HR 14.3 %<br>RO 8.1%<br>TR 10.7% |         | AL 15.0%<br>MK 35.8%<br>BA 43.0%<br>MON 23.0%<br>SR 20.2% |
| Youth Unemployment  | 18.3%        | BG 24.5%<br>HR 35.9%<br>RO 20.7%<br>TR 23.7% |         | AL 35.5%<br>MK 61.0%<br>MON 51.3%                         |
| <b>The 3 EU Benchmarks in Education and Training</b>  |              |  |         |   |
| Early School Leavers (2004) % of 18-24 with at most lower secondary education (ISCED2) and not in further education | 15.9%        | BG 22.4%<br>Hr 8.4%<br>RO 20.7%<br>TR 52.9%  | 10.0%   | AL 61.2%<br>MK 36.2%                                      |
| Youth Educational Attainment % of 20-24 having completed at least ISCED 3 level (2004)                              | 76.4%        | BG 76.0%<br>HR 90.7%<br>RO 74.8%             | 85%     |   |
| Lifelong Learning (2004) % of 25-64 participating in education and training   | 9.4%         | BG 1.3%<br>HR 2.1%<br>RO 1.6%<br>TR 2.3%     | 12.5%   | SR 3.8%<br>MK 1.9%  |

Source: Arjen Vos, ETF, 2005.

### 4.3 A Holistic Approach to Skills Development

In order to create and use knowledge for economic growth, countries have to look at education and training systems in a wider socio-economic context. Given the changes in scope, content and delivery, the public sector can no longer be the sole provider of education and training. As highlighted by David Ashton, University of Leicester, transformation and reform efforts will only pay off if the public and the private sector effectively cooperate in the field of education and training. Moreover, for an integrated approach to education and learning, it is critical to engage all stakeholders in strategic coordination at every stage of the vocational education and training reform process.

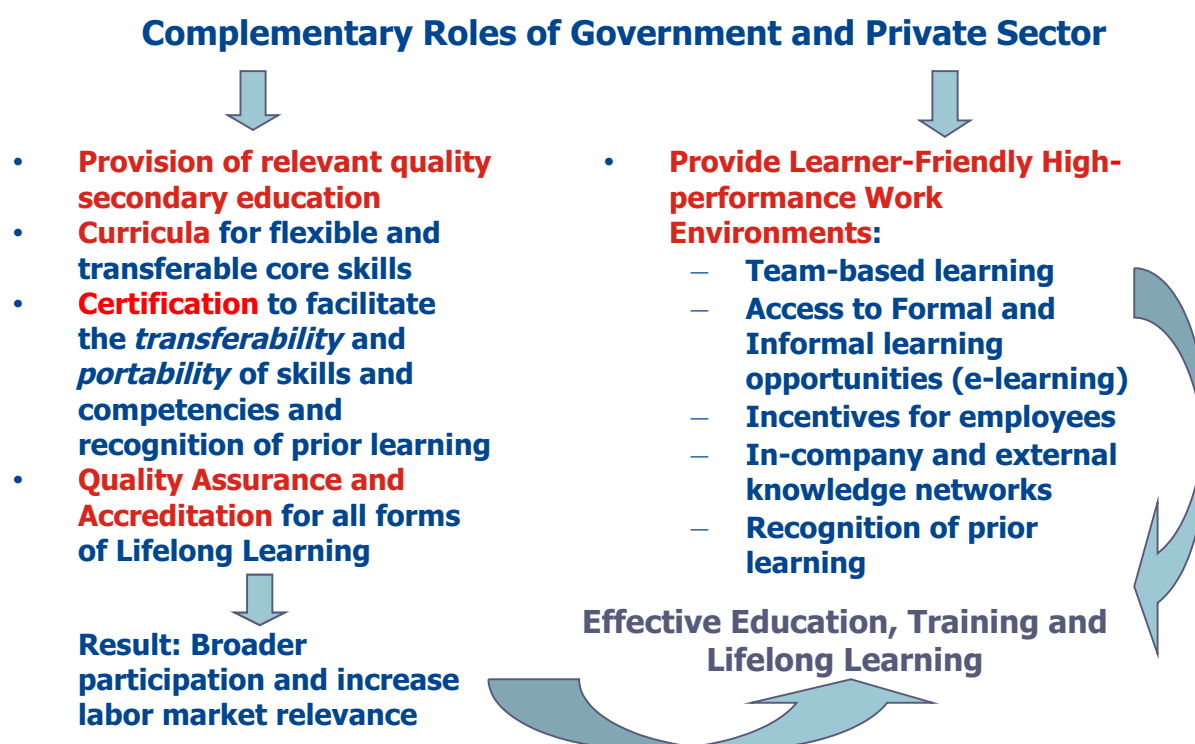
Particular attention should be given to developing viable lifelong learning frameworks. Currently, participation in continuing education and training in ECA is very low (see Figure 8) and unevenly distributed with highest participation rates among the better educated richer employed male population. Mary Canning, World Bank, highlighted that, in order to create effective and equitable lifelong learning systems and to address the issue of demographic decline, policies are needed to broaden access to learning for all groups within society, regardless of age or background. In order to make holistic education and training systems a reality, a transformation in the way these systems are financed, operated and managed will be required.

The state and the private sector together with civil society will need to form partnerships and have a clear understanding of their complementary roles in education and training, thus using comparative advantages and synergies. Policymakers need to create a level playing field between

public and private providers of education. One important element will be the formulation of multi-source curricula for flexible and transferable core skills. In a dynamic society certification systems must allow for the transferability and portability of skills and competencies as well as recognize prior learning. Governments need to introduce quality assurance systems that effectively monitor and certify the outcomes of learning and recognize the range of formal and informal settings in which learning takes place. Moreover, policy makers need to rethink accreditation of institutions to help learners move easily and efficiently between different types and levels of learning. During the Forum, participants discussed the concept of National Qualifications Frameworks (NQF) as a tool to develop a qualified workforce and increase labor market relevance in ECA. Peter Clack, British Council, emphasized that NQFs could help to relate qualifications with occupational and broader labor market needs while also establishing a coherent and transparent framework for large numbers of qualifications.

While it is the role of the public sector to design and implement the enabling life long learning framework, it can no longer be the sole provider of a society's education and training needs. Increasingly, the private sector has an important role to play as it is able to provide education and training in conventional (owning and operating private schools, providing in-house and on-the-job training) and new ways (private sector trainers, international providers, content brokers) to complement traditional institutions. The private sector possesses the skills and knowledge to develop web-based and multimedia courses and materials for new forms of distance i.e. distance learning and virtual universities. One particularly important role of the private sector is to provide a learner-friendly high-performance work environment. Ayse Oncu, Ernst & Young, pointed to the importance of continued professional education for the workforce while recognizing prior learning. It should be the private sector's responsibility to provide employees with incentives and access to formal and informal learning opportunities, as well as in-company and external knowledge networks.

**Figure 9. Government and Private Sector Roles in Skills Development.**



Source: Fernando Montes-Negret, World Bank, 2005

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## 5. CONCLUSIONS

The general recommendations emerging from the Istanbul Knowledge Economy Forum are summarized below. With regards to the business environment, discussions focused on the importance of stabilizing the policy environment and implementing microeconomic reforms to improve the predictability of the business environment in which domestic and foreign firms operate and innovate. While countries build their capacities to innovate; technology absorption enhanced by attracting FDI and creating linkages between foreign and local firms was discussed as an option to move into knowledge-intensive industries. Additional means to improve local innovation included strengthening university-firm collaboration, supporting commercialization of university research, facilitating access to finance and promoting technology start-ups, and considering public-private industry consortia as a viable alternative to VC in very early stages of technology development. For countries to maximize their innovation potential they will have to create the conditions where learning can be provided in coordination with and in response to the needs of the private sector. On the education side, this will require an alignment of general and vocational education systems not only to improve the skills of the labor force but also to develop and implement learning strategies that will enable lifelong skills upgrading and adult learning. Based on positive feedback received from Forum participants, it is expected that these issues will be addressed through a lens that places innovation systems at the center of next year's Forum in the city of Prague, Czech Republic.

## Annex 1. List of Participants

### Albania

|        |                 |   |
|--------|-----------------|---|
| Golik  | <b>Gjinushi</b> | Advisor to the Minister, Ministry of Economy                    |
| Sigita | <b>Gjoka</b>    | Specialist at the Macroeconomic Department, Ministry of Finance |
| Ilia   | <b>Kristo</b>   | Advisor to the Minister, Ministry of Economy                    |
| Gavril | <b>Lasku</b>    | Executive Director, SME Agency at the Ministry of Economy       |
| Andi   | <b>Sula</b>     | Advisor to the Minister, Ministry of Economy                    |

### Armenia

|        |                     |  |
|--------|---------------------|--|
| Ara    | <b>Avetisyan</b>    | Deputy Minister, Ministry of Education and Science                             |
| Raphik | <b>Haroutyunian</b> | President, NAREK Ltd.  |
| Gnel   | <b>Mayilyan</b>     | Deputy Head, Investment, Policy & Market Infrastructure Development Department |
| Gagik  | <b>Vardanyan</b>    | Deputy Minister, Ministry of Trade and Economic Development                    |

### Azerbaijan

|           |                    |   |
|-----------|--------------------|---|
| Elchin    | <b>Aliyev</b>      | WSIS Advisor, Ministry of Communications & Information Technologies           |
| Aliakbari | <b>Azer</b>        | Advisor to the Minister, Ministry of Communication & Information Technologies |
| Hamlet    | <b>Isahanli</b>    | Rector, Khazar University   |
| Aliaga    | <b>Ismayilzade</b> | Professor, Azerbaijan State Economic University                               |
| Rufat     | <b>Mahmud</b>      | Head of Division, Ministry of Economic Development                            |
| Namig     | <b>Mammadov</b>    | Lead Advisor, Ministry of Education   |
| Elmir     | <b>Valizada</b>    | Head of Center, Information Resources & Technologies, Office of the President |

### Belarus

|            |                    |   |
|------------|--------------------|---|
| Vladimir   | <b>Karyagin</b>    | Chairman, Minsk Association of Entrepreneurs & Employers                          |
| Konstantin | <b>Maerovich</b>   | Deputy Head, International Department, State Committee for Science and Technology |
| Sofya      | <b>Pavlut</b>      | Expert, Ministry of Foreign Affairs   |
| Nealina    | <b>Prokharchyk</b> | Certification Unit Manager  |

### Bosnia-Herzegovina

|           |                  |   |
|-----------|------------------|---|
| Merima    | <b>Baralic</b>   | Committee Member, AIESEC  |
| Zana      | <b>Djapo</b>     | Consultant, Economic Policy Planning Unit   |
| Jasmina   | <b>Ivosevic</b>  | Executive Director, Citizen Association   |
| Haris     | <b>Mesinovic</b> | Business Development Officer, South East Europe Enterprise Development                            |
| Ivica     | <b>Miodrag</b>   | Head of Department Development & Entrepreneurship, Ministry of Foreign Trade & Economic Relations |
| Brano     | <b>Vujcic</b>    | President, BAIT – Association for Information Technology  |
| Branislav | <b>Zugic</b>     | Chief of Staff, Ministry of Economic Coordination of Republic of Srpska                           |

## Bulgaria

|           |                 |   |
|-----------|-----------------|---|
| Eli       | <b>Anavi</b>    | Director of Enterprise Directorate, Ministry of Economy                     |
| Alexander | <b>Babinov</b>  | Deputy Executive Director, Small & Medium Size Enterprises Promotion Agency |
| Stefan    | <b>Pavlov</b>   | Member of Board, BD Berater AG  |
| Ruslan G. | <b>Stefanov</b> | Project Coordinator, Center for the Study of Democracy                      |

## Czech Republic

|           |                   |  |
|-----------|-------------------|--|
| Pavla     | <b>Bejckova</b>   | International Organizations Department, Ministry of Finance                |
| Miroslava | <b>Klirova</b>    | International Organizations Department, Ministry of Finance                |
| Radim     | <b>Petratur</b>   | Economic Analyses Department, Office of the Government                     |
| Pavla     | <b>Spidlenova</b> | Department of Human Resources Development Policy, Office of the Government |

## Georgia

|           |                     |  |
|-----------|---------------------|--|
| Ekaterina | <b>Avaliani</b>     | Head of Department, Foreign, Economic Relations & International Programs, Ministry of Economic Development |
| Dimitri   | <b>Gulisashvili</b> | Head of Financial, Economic & Logistic Service, Georgian National Investment Agency                        |
| David     | <b>Natroshvili</b>  | Director, Georgian National Investment Agency  |

## Hungary

|          |               |   |
|----------|---------------|---|
| Gabor    | <b>Eszes</b>  | Ministerial Commissioner, Ministry of Economy & Transport |
| Agnes V. | <b>Kozma</b>  | Counselor, Ministry of Employment & Labor                 |
| Zoltan   | <b>Loboda</b> | Head of Department, Ministry of Education                 |

## Kazakhstan

|         |                 |   |
|---------|-----------------|---|
| Gosman  | <b>Amrin</b>    | President, National Innovation Fund   |
| Mariyam | <b>Erdenova</b> | Chief Specialist, Division for Investment Cooperation, Ministry of Industry & Trade         |
| Miras   | <b>Kassymov</b> | Division Head, Scientific & Technological & Innovation Policy, Ministry of Industry & Trade |

## Kyrgyz Republic

|           |                   |   |
|-----------|-------------------|---|
| Asel      | <b>Albanova</b>   | International Finance Organization                          |
| Maksatbek | <b>Ishenbaev</b>  | Deputy Chairman, National Bank                              |
| Sanjar    | <b>Mukanbetov</b> | Head of Investment & Policy Department, Ministry of Finance |

## Latvia

|        |                |  |
|--------|----------------|--|
| Maija  | <b>Bundule</b> | Ministry of Education & Science                      |
| Valdis | <b>Egle</b>    | Ministry of Education & Science                      |
| Anrijs | <b>Matiss</b>  | Deputy State Secretary, Ministry of Economics        |
| Una    | <b>Vanaga</b>  | Head of Innovation Department, Ministry of Economics |

## Lithuania

|                    |                   |  |
|--------------------|-------------------|--|
| Vaidotas           | <b>Abraitis</b>   | Undersecretary, Ministry of Interior                                 |
| Renaldas           | <b>Gudauskas</b>  | Advisor to the Prime Minister  |
| Antanas<br>Zenonas | <b>Kaminskas</b>  | Chancellor of the Prime Minister's Office                            |
| Darius             | <b>Maikstenas</b> | Head of Strategic Communications, UAB Omnitel                        |
| Aurimas            | <b>Matulis</b>    | Director of the Committee, Information Society Development Committee |

## Macedonia

|        |                           |   |
|--------|---------------------------|---|
| Suzana | <b>Arsova-Kostadinova</b> | Deputy Head, Department of Attracting FDI, Ministry of Economy    |
| Natasa | <b>Jovonoska</b>          | Advisor Analyst, Financial System Department, Ministry of Finance |

## Moldova

|           |                    |  |
|-----------|--------------------|--|
| Gheorge   | <b>Efros</b>       | Executive Director, ARIA CPC ProEra Group  |
| Petru     | <b>Gaugas</b>      | Vice-Rector, Moldova State University  |
| Alexandru | <b>Ghiduleanov</b> | Chairman, Chamber of State Registration  |
| Roman     | <b>Lazu</b>        | Deputy Director, Center for Productivity and Competitiveness                       |
| Liviu     | <b>Oboroc</b>      | Academy of Economical Studies of Moldova Business Administration Department        |
| Olga      | <b>Ponomariov</b>  | Head of Project Office, Project Implementation Unit for Private Sector Development |
| Ion       | <b>Tighineanu</b>  | Professor, Academy of Sciences of Moldova  |

## Poland

|              |                   |  |
|--------------|-------------------|--|
| Grzegorz     | <b>Gorzalak</b>   | Professor, Warsaw University   |
| Krzysztof    | <b>Gulda</b>      | Director, Department of Innovation, Ministry of Economic Affairs & Labor |
| Marcin Tomsz | <b>Hejka</b>      | Senior Investment Manager, Intel Capital                                 |
| Krzysztof    | <b>Krystowski</b> | Undersecretariat of State, Ministry of Economic Affairs and Labor        |

## Romania

|                    |                  |   |
|--------------------|------------------|---|
| Lucian             | <b>Cioalan</b>   | Counselor to the Minister, Ministry of Education & Research                                   |
| Viorel             | <b>Cristea</b>   | Director, Ministry of Administration & Interior   |
| Marcel             | <b>Duhaneanu</b> | Rector, Institute for Business & Public Administration, Bucharest-Asebuss                     |
| Alexandru<br>Mihai | <b>Lazescu</b>   | President, "eRomania Gateway" Association   |
| Julian             | <b>Marea</b>     | Communications Officer, Ministry of Communication & Information Technology                    |
| Diana              | <b>Voicu</b>     | Director, Knowledge Economy Project, PMU, Ministry of Communications & Information Technology |

## Russia

|         |                |  |
|---------|----------------|--|
| Tatiana | <b>Ershova</b> | Director General, Institute of the Information Society |
| Yuri    | <b>Hohlov</b>  | Deputy Chief Architect, E-Moscow Program               |
| Oleg    | <b>Sokolov</b> | Consultant, Department of Science                      |

## Serbia-Montenegro

|        |                   |  |
|--------|-------------------|--|
| Dragan | <b>Povrenovic</b> | Deputy Minister, Science & Environmental Protection                                      |
| Sreten | <b>Skuletic</b>   | Chairman, Council for International Science Cooperation, Ministry of Education & Science |
| Tibor  | <b>Sabo</b>       | Deputy Minister, Science & Environmental Protection                                      |

## Slovakia

|        |                  |  |
|--------|------------------|--|
| Martin | <b>Bruncko</b>   | Chief Economic Advisor to the Deputy Prime Minister, Minister of Finance |
| Renata | <b>Kralikova</b> | Ministry of Labor, Social Affairs & Family of Slovak Republic            |

## Slovenia

|      |                |  |
|------|----------------|--|
| Ales | <b>Mihelic</b> | Ministry of Higher Education, Science & Technology |
|------|----------------|--|

## Tajikistan

|          |                  |   |
|----------|------------------|---|
| Ittifok  | <b>Akhmedov</b>  | Chief Specialist, Economic Reforms & Investments Department |
| Ravshan  | <b>Karimov</b>   | Chief Specialist, Financial Department                      |
| Safarali | <b>Saidshoev</b> | Deputy Minister, Ministry of Finance                        |

## Turkey

|               |                 |   |
|---------------|-----------------|---|
| Ural          | <b>Akbulut</b>  | Rector, Middle East Technical University                |
| Halil Ibrahim | <b>Akca</b>     | Deputy Undersecretary, SPO                              |
| Erkan         | <b>Akdemir</b>  | Turk Telekom  |
| Haktan        | <b>Akin</b>     | Assist. Secretary General, Istanbul Chamber of Industry |
| Naci          | <b>Akin</b>     | Director of Business Development and Investment, TOBB   |
| Lutfihak      | <b>Alpkan</b>   | Professor, Gebze Institute of High Technology           |
| Anil          | <b>Altunay</b>  | Assistant Expert, SPO                                   |
| Ahmet         | <b>Apan</b>     | Ministry of Labor and Social Services                   |
| Cemil         | <b>Arikan</b>   | Director, Sabanci University                            |
| Mustafa       | <b>Ates</b>     | Secretary General, SPO                                  |
| Kamil         | <b>Ayanoglu</b> | Head of Department, SPO                                 |
| Mehmet Turgut | <b>Ayzit</b>    | Abant Izzet Baysal University                           |
| Savas         | <b>Barkcin</b>  | Advisor, TUBITAK  |
| Ayse          | <b>Bener</b>    | Board Member, Forum Istanbul                            |
| Aysel         | <b>Binler</b>   | Assist. Expert, SPO                                     |
| Omer          | <b>Bolat</b>    | President, MUSIAD                                       |
| Ibrahim       | <b>Bukel</b>    | Ministry of National Education                          |
| Recep         | <b>Cakal</b>    | Head of Department, SPO                                 |

|              |                    |   |
|--------------|--------------------|---|
| A. Mete      | <b>Cakmakci</b>    | Coordinator, Turkish Technology Development                           |
| H. Ibrahim   | <b>Canakci</b>     | Undersecretary, Treasury  |
| Yavuz        | <b>Canevi</b>      | President of the Board, Forum Istanbul                                |
| Sinem        | <b>Capar</b>       | Assist. Expert, SPO   |
| Ibrahim      | <b>Demir</b>       | Expert, SPO   |
| Mehmet       | <b>Demirel</b>     | Advisor, TUBITAK  |
| Reha         | <b>Denemec</b>     | Member of the Parliament  |
| Omer Faruk   | <b>Dogan</b>       | Deputy Undersecretary, Foreign Trade                                  |
| Faruk        | <b>Eczacibasi</b>  | Chairman, TBV   |
| Havva Ozgul  | <b>Erdogan</b>     | Expert, Prime Ministry  |
| Ustun        | <b>Erguder</b>     | Sabancı University  |
| Yildiz       | <b>Erkmen</b>      | Assist. Expert, SPO   |
| Emine        | <b>Etili</b>       | Director, American Business Forum in Turkey                           |
| Gul          | <b>Gokcek</b>      | Gebze Organize Sanayi   |
| Cahit        | <b>Gokcelik</b>    | Deputy Director General, Trade Logistics, Undersecretariat of Customs |
| Ismail       | <b>Gumus</b>       | Expert, Turkish Patent Institute                                      |
| Umut         | <b>Gur</b>         | Expert, SPO   |
| Necla        | <b>Haliloglu</b>   | Director, Entrepreneurship Development Center, KOSGEB                 |
| Biröl        | <b>Hasdemir</b>    | Head of Section, Ministry of Industry and Trade                       |
| Murat        | <b>Ince</b>        | Expert, SPO   |
| Ipek         | <b>Incesulu</b>    | Head of Department, Undersecretariat of Treasury                      |
| Adem         | <b>Karabayir</b>   | Head of Department, Ministry of Finance                               |
| Ali Riza     | <b>Karacan</b>     | Professor, Ege University   |
| Haluk        | <b>Karadogan</b>   | Vice Rector, Istanbul Technical University                            |
| Basak        | <b>Kayiran</b>     | Expert, Press Relations, SPO  |
| M. Akif      | <b>Koca</b>        | Assist. Expert, SPO   |
| Kemal        | <b>Madenoglu</b>   | General Director, Social Sectors and Coordination, SPO                |
| Hayri        | <b>Maraslioglu</b> | General Director, SPO   |
| Ebubekir     | <b>Memis</b>       | Expert, SPO   |
| Huseyin Avni | <b>Metin</b>       | Expert, SPO   |
| Ayse         | <b>Oncu</b>        | Human Resources Director, South East Europe, Ernst & Young            |
| Emrah        | <b>Ongut</b>       | Assist. Expert, SPO   |
| Nuri         | <b>Otay</b>        | Ford Otosan   |
| Bilgehan     | <b>Ozbaylanli</b>  | Assistant Expert, SPO   |
| Sibel        | <b>Ozdemir</b>     | Coordinator, TUBITAK-MAM  |
| Kadir        | <b>Ozer</b>        | Assistant Expert, SPO   |
| Ahmet Fahri  | <b>Ozok</b>        | Dean, Faculty of Management, Istanbul Technical University            |
| Orhan        | <b>Oztaskin</b>    | Expert, SPO   |
| Ozgur        | <b>Pehlivan</b>    | Department Head, Undersecretariat of Treasury                         |
| Serdar       | <b>Polat</b>       | Assit. Expert, SPO  |
| Hanzade      | <b>Saricicek</b>   | Cyberpark   |
| Songul       | <b>Sirin</b>       | Secretary General, Forum Istanbul                                     |



|            |                  |  |
|------------|------------------|--|
| Abdullatif | <b>Sener</b>     | State Minister and Deputy Prime Minister, Turkey |
| Duygu      | <b>Tanrikulu</b> | Assist. Expert, SPO                              |
| Ahmet      | <b>Tiktik</b>    | Undersecretary, SPO                              |
| Ismail     | <b>Tohumcu</b>   | Deputy Undersecretary, National Security         |
| Latif      | <b>Tuna</b>      | Head of Department, SPO                          |
| Cemal      | <b>Tura</b>      | Head of Labor Markets Department, Is Kurumu      |
| Fatih      | <b>Turkmen</b>   | Expert, SPO                                      |
| Ozgur      | <b>Uckan</b>     | Advisor, TBV                                     |
| Semra      | <b>Ulku</b>      | Director, Izmir Technology Institute             |
| Elif       | <b>Unal</b>      | Director, R&D, Ministry of National Security     |
| Erhan      | <b>Usta</b>      | General Director, SPO                            |
| Bulent     | <b>Yaniktepe</b> | Engineer, Ministry of Industrial Trade           |
| Nuket      | <b>Yetis</b>     | President, TUBITAK                               |
| Cevdet     | <b>Yilmaz</b>    | Director General, SPO                            |
| Adnan      | <b>Yilmaz</b>    | Ministry of National Defense                     |

#### Ukraine

|        |                    |  |
|--------|--------------------|--|
| Sergiy | <b>Gerasymchuk</b> | Head of Department for Coordinating Foreign Economic Activity, National Space Agency of Ukraine (NSAU) |
|--------|--------------------|--|

#### United Kingdom

|         |                |   |
|---------|----------------|---|
| Craig   | <b>Belsham</b> | Head, Enlargement & Wider Europe Unit                       |
| Michael | <b>Harvey</b>  | European Business Executive, Department of Trade & Industry |
| Tom     | <b>Leney</b>   | Quality & Curriculum Authority                              |

#### Uzbekistan

|            |                      |  |
|------------|----------------------|--|
| Biloloddin | <b>Nuriddinov</b>    | Head of Department, Development of Entrepreneurship & Business, Chamber of Commerce & Industry     |
| Rustam     | <b>Shoymardonov</b>  | Legal Department, Chamber of Commerce & Industry   |
| Shokhrukh  | <b>Sharakhymetov</b> | Deputy Head, Department for Forecasting & monitoring Macroeconomic Parameters, Ministry of Economy |

#### British Council

|       |               |  |
|-------|---------------|--|
| Peter | <b>Clarck</b> | Education and VET Development Manager              |
| Ozan  | <b>Dincer</b> | Deputy Library and Information Services Manager    |
| Arhan | <b>Isin</b>   | Customer Service Manager                           |
| Snica | <b>Smic</b>   | British Council South East Europe, Network Manager |

#### CELA

|           |                 |                          |
|-----------|-----------------|--------------------------|
| Karlygash | <b>Makatova</b> | Koc University, Istanbul |
|-----------|-----------------|--------------------------|

#### European Investment Bank

|         |               |  |
|---------|---------------|--|
| Stephen | <b>Wright</b> | Projects Directorate, Head of Human Capital Division |
|---------|---------------|--|

### European Investment Fund

|             |                 |  |
|-------------|-----------------|--|
| Marc        | <b>Schublin</b> | Head of Policy and Strategy                  |
| Maria Luisa | <b>Ferreira</b> | Projects Directorate, Human Capital Division |

### European Training Foundation

|         |                |   |
|---------|----------------|---|
| Arjen   | <b>Vos</b>     | Head of Enlargement of South East Europe Department |
| Vincent | <b>McBride</b> | Expertise Development Coordinator                   |

### France

|       |                 |                                      |
|-------|-----------------|--------------------------------------|
| Peter | <b>Lindholm</b> | Expert on Technoparks and Incubators |
|-------|-----------------|--------------------------------------|

### Georgetown University, USA

|      |                 |                                      |
|------|-----------------|--------------------------------------|
| Carl | <b>Dahlmann</b> | Professor, School of Foreign Service |
|------|-----------------|--------------------------------------|

### Innovative Ventures Incorporated

|        |               |                 |
|--------|---------------|-----------------|
| Thomas | <b>Nastas</b> | Founder and CEO |
|--------|---------------|-----------------|

### National Academy of Sciences, USA

|         |                |  |
|---------|----------------|--|
| Charles | <b>Wessner</b> | Director, Technology, Innovation, and Entrepreneurship |
|---------|----------------|--|

### Netherlands

|        |            |                       |
|--------|------------|-----------------------|
| Willem | <b>Kok</b> | Former Prime Minister |
|--------|------------|-----------------------|

### Nottingham Trent University, UK

|      |               |           |
|------|---------------|-----------|
| John | <b>Varney</b> | Professor |
|------|---------------|-----------|

### Oxford Innovation Ltd. UK

|          |              |  |
|----------|--------------|--|
| Alistair | <b>Brett</b> | Senior Associate, Oxford Innovation Ltd. (UK). |
|----------|--------------|--|

### Oxford University

|         |             |           |
|---------|-------------|-----------|
| Sanjaya | <b>Lall</b> | Professor |
|---------|-------------|-----------|

### OECD

|      |                  |   |
|------|------------------|---|
| John | <b>Cresswell</b> | Administrator, EDU Indicators & Analysis Division |
|------|------------------|---|

### Technological Institute & Rand Institute, Denmark

|       |                |   |
|-------|----------------|---|
| Hanne | <b>Shapiro</b> | Center Manager for Competence, IT & Analysis, Denmark<br>Technological Institute & Rand Institute |
|-------|----------------|---|

### University of Leichster

|              |               |           |
|--------------|---------------|-----------|
| David Norman | <b>Ashton</b> | Professor |
|--------------|---------------|-----------|

### United Nations Development Program

|        |              |                                |
|--------|--------------|--------------------------------|
| Hansin | <b>Dogan</b> | Program Associate, UNDP Turkey |
|--------|--------------|--------------------------------|

## World Bank

|            |                      |  |
|------------|----------------------|--|
| Jean Eric  | <b>Aubert</b>        | Lead Specialist, Europe and Central Asia                               |
| Saida      | <b>Bagirova</b>      | Operations Officer, Azerbaijan Office                                  |
| Toms       | <b>Baumanis</b>      | Communications Officer, Latvia Office                                  |
| Mapi       | <b>Buitano</b>       | External Affairs Officer, Europe and Central Asia                      |
| Mary       | <b>Canning</b>       | Lead Education Specialist, Europe and Central Asia                     |
| Tunya      | <b>Celasin</b>       | External Affairs Officer, Turkey Office                                |
| Annette    | <b>Dixon</b>         | Director for Strategy & Operations, Europe & Central Asia              |
| Vinod      | <b>Goel</b>          | Lead Specialist, Europe and Central Asia                               |
| Itzhak     | <b>Goldberg</b>      | Lead Specialist, Europe and Central Asia                               |
| Natasha    | <b>Kapil</b>         | Consultant, Europe and Central Asia                                    |
| Ionel      | <b>Lumezianu</b>     | Information Analyst, Romania Office                                    |
| Maureen    | <b>McLaughlin</b>    | Sector Manager, Human Development Sector, Europe and Central Asia      |
| Fernando   | <b>Montes-Negret</b> | Sector Director, Private and Financial Sector, Europe and Central Asia |
| Marialisa  | <b>Motta</b>         | Senior Private Sector Development Specialist, Europe and Central Asia  |
| Aslan      | <b>Sarinzhypov</b>   | Operations Officer, Kazakhstan Office                                  |
| Warrick    | <b>Smith</b>         | Manager, Policy & Strategy   |
| Valerie    | <b>Stadlbauer</b>    | Consultant, Europe and Central Asia                                    |
| Olga       | <b>Sulla</b>         | Consultant, Europe and Central Asia                                    |
| Andrew N.  | <b>Vorkink</b>       | Director, Turkey Country Unit, Europe and Central Asia                 |
| Alfred     | <b>Watkins</b>       | Lead Specialist, Europe and Central Asia                               |
| Robert     | <b>Whyte</b>         | Senior Investment Promotion Officer, MIGA                              |
| Elif Yonca | <b>Yukseker</b>      | Program Assistant, Turkey Office                                       |

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## **Annex 2. Agenda**

### **TUESDAY, MARCH 22, 2005**

- 09:00-13:00**      **Registration**
- 11:00-11:45**      **Press Conference**
- 12:30-13:30**      **Lunch**
- 13:30-14:30**      **Welcome Address and Opening Ceremony**
- Moderator: Andrew N. Vorkink, Country Director, Turkey Country Unit, World Bank
- Abdullatif Şener, Deputy Prime Minister, Turkey
- Ahmet Tıktık, Undersecretary, State Planning Organization, Turkey
- Annette Dixon, Operations Director, Europe and Central Asia Region, World Bank
- 14:30-14:45**      **Coffee Break**
- 14:45-16:30**      **Plenary Session**
- Business Environment**
- Moderator: Andrew N. Vorkink, Country Director, Turkey Country Unit, World Bank
- Overall Introduction  
Warrick P. Smith, Director of World Development Report 2005, World Bank
- Turkey Case  
H. İbrahim Çanakcı, Undersecretary, Undersecretariat of Treasury, Turkey
- Questions and Answers
- 16:30-18:00**      **Country Exercise**
- 19:00**              **Dinner at Esma Sultan (Sponsored by World Bank and SPO)**
- Whirling Dervishes Performance
- Dinner
- Keynote Dinner Speaker
- Willem Kok, Former Dutch Prime Minister
- Speech on the Lisbon Agenda Progress Report and Lessons Learned

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## WEDNESDAY, MARCH 23, 2005

**09:00-10:00 Plenary Session**

**Education and Innovation**

Moderator: Annette Dixon, Operations Director, Europe and Central Asia Region, World Bank

Ural Akbulut, Rector, Middle East Technical University, Turkey

Carl Dahlman, School of Foreign Service, Georgetown University, USA

**10:00-10:30 Question and Answers**

**10:30-11:00 Coffee Break**

**11:00-13:00 PANEL A: Secondary Education**

Moderator: Maureen Mclaughlin, Sector Manager, Human Development Sector, World Bank

Tom Leney, Quality and Curriculum Authority, UK

John Cresswell, Administrator, EDU Indicators and Analysis Division, OECD

Arjen Vos, Head of Enlargement and South East Europe Department, European Training Foundation

**11:00-13:00 PANEL B: Demand for Skills Upgrading**

Moderator: Mary Canning, World Bank

David Ashton, Professor, University of Leichster

Ayşe Öncü, Regional Human Resources Director for South East Europe, Ernst and Young, Turkey

**11:00-13:00 PANEL C: Finance for Innovation**

Moderator: Fernando Montes-Negret, Sector Director, Private and Financial Sector, World Bank

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Thomas Nastas, Founder and CEO, Innovative Ventures Incorporated, Russia and Eastern Europe

Nüket Yetiş, Acting President, TUBITAK, Turkey

Marc Schublin, Head of Policy and Strategy, European Investment Fund

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- 13:00-14:00**      **Lunch**
- 14:30-16:30**      **PANEL A: Technology Absorption**  
Moderator: Robert Whyte, MIGA, World Bank  
Sanjaya Lall, Professor, University of Oxford  
John Varney, Nottingham Trent University, UK  
Charles Wessner, National Academy of Sciences, USA
- 14:30-16:30**      **PANEL B: National Qualifications Framework**  
Moderator: Peter Clack, British Council  
Peter Clack, British Council, Turkey  
Hanne Shapiro, Center Manager for Competence, IT and Analysis, Denmark  
Technological Institute and Rand Institute  
Vincent McBride, Expertise Development Coordinator, European Training Foundation
- 14:30-16:30**      **PANEL C: Technology Infrastructure**  
Moderator: Alfred Watkins, World Bank  
Discussant: Maria Luisa Ferreira, European Investment Bank  
Alistair Brett, Oxford Innovation  
Peter Lindholm, Expert on Technoparks and Incubators, France and Germany  
Hanzade Sarıçiçek, Cyberpark at Bilkent University, Turkey
- 16:30-18:30**      **Country Exercise**
- 20:00**              **Dinner at Rahmi Koç Museum**

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## THURSDAY, MARCH 24, 2005

### Site Visits

#### Site Visit I

**8:30-15:30**

#### **Gebze Organized Industry Zone (GOSB) and Sabanci University**

GOSB is the first Industrial Park that was established without any revenues from the State in Turkey, and its modern infrastructure and services provided are at par with those found in developed countries. Established in 1986, GOSB has a turnover of \$10 million, with 8600 people actively working in the zone.

Sabanci University Under the direction of one of Turkey's leading family-run foundations, the Haci Ömer Foundation (VAKSA), the Sabanci Group established Sabanci University in July 1994. The groundbreaking ceremony for the Sabanci University campus took place in 1997 led by the key philosophy of a "world university". Sabanci University is committed to being an innovative institution responsive to the needs of their constituents through a participatory, team-based culture. They envisage an interdisciplinary educational infrastructure that will create and disseminate knowledge, in addition to becoming a global reference point for educational innovation.

#### Site Visit II

**8:30-15:30**

#### **TUBITAK (National and Scientific Research Council for Turkey), Marmara Research Center (MAM)**

The TUBITAK-MAM, one of the research and development (R&D) units of Turkey National Scientific and Research Council, TUBITAK, was established in 1972.

TUBITAK-MAM currently has 700 trained and experienced personnel, including about 400 researchers.

#### Site Visit III

**8:00-15:30**

#### **Ford Otosan Automotive Industry**

One of the pioneers of the Turkish automotive industry, Ford Otosan was established in 1959 as Otosan Inc., which in 1998 developed into a partnership with Ford under the new name, Ford Otosan. Ford Otosan has three outstanding production facilities, with remarkable premises to showcase Turkey's potential in terms of attracting foreign direct investment.

#### Site Visit IV

**8:00-15:30**

#### **SAKOSA (Tire Yarn Producers)**

Started production in 2000, as an equally shared joint venture between Kosa (USA) and Sabanci Holding (Turkey), SAKOSA's operating as a fully Sabanci Holding owned company, with nearly 300 employees since 2002. SAKOSA is the second largest HMLS (high modulus low shrinkage) polyester yarn producing plant in Europe and the Middle East.

**16:00-17:30**

#### **Country Exercise Presentations**

Moderator: Annette Dixon, Operations Director, World Bank

5-6 Countries Present Result of Country Exercise

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**17:30-18:15**

**Closing Remarks**

Moderator: Annette Dixon, Operations Director, World Bank

Fernando Montes-Negret, Sector Director, Private and Financial Sector Development,  
Europe and Central Asia, World Bank

Halil Ibrahim Akca, Deputy Undersecretary, State Planning Organization, Turkey

**20:00-22:00**

**Boat Dinner**







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