

SHAPING THE FUTURE: BUSINESS, INNOVATION AND GROWTH

FINDINGS FROM THE 35TH ANNUAL
CONFERENCE ON U.S.-TURKEY RELATIONS

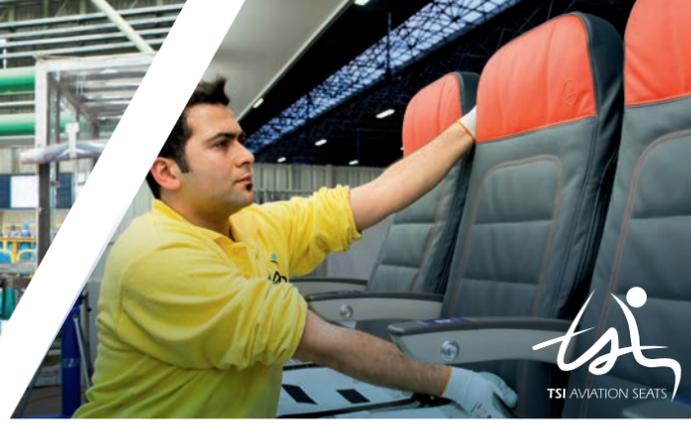


KIBAR'S LEADING COMPANIES ADD VALUE TO TURKISH ECONOMY

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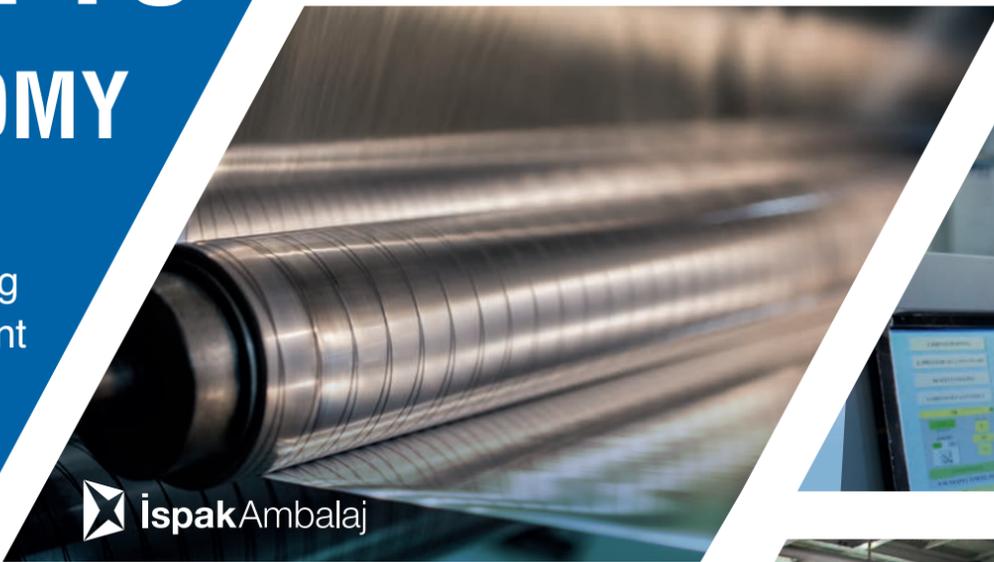
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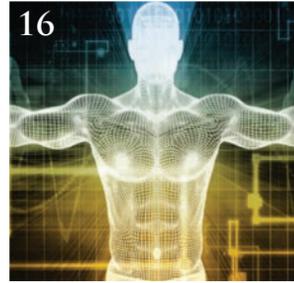
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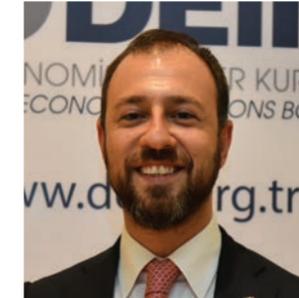
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GENERAL JAMES L. JONES
Chairman
American-Turkish Council



EKİM ALPTEKİN
Chairman
Turkey-U.S. Business Council

On behalf of the American-Turkish Council (ATC) and the Turkey-U.S. Business Council (TAIK), it is our pleasure to present to you the Post-Conference Report for the 35th Annual Conference on U.S.-Turkey Relations. Held from October 30-November 1, 2016, the conference, attended by over 400 thought leaders and stakeholders, addressed key issues and opportunities in the bilateral commercial relationship. Building off the momentum of the Annual Conference, we have created a Post-Conference Report to capture the main themes and proceedings of our premier event. We hope you will gain a greater insight into the value of the panel discussions and learn helpful sector-specific information. The Post-Conference Report is intended to provide insight and recommendations for positive strategies to increase commercial diplomacy and investment between the U.S. and Turkey.

This report comes at an important time in the U.S.-Turkey relationship. With the beginning of the new Trump administration, there is no doubt that significant changes in both the U.S. domestic and international policy spheres are afoot. We are confident, however, that the bilateral relationship between our two countries will continue to grow and thrive during the Trump administration, and look forward to being a part of it. Turkey and the United States will continue to be allies in the fight against terrorism as well as allies in the international business community.

We hope that after perusing this report you will come away with more information and a more fulsome understanding of the commercial relationship that binds us inextricably together. We also encourage you to keep an eye towards the future. From energy to cybersecurity to defense, the U.S.-Turkey relationship transcends multiple sectors and continues to grow every year.

We at the ATC and TAIK are working to advance and improve the U.S.-Turkey commercial relationship and offer this Post-Conference Report as a stepping stone to our goals and our year ahead.



DR. TAMER SAKA
CEO, Kibar Holding

We have been greatly honored to present to you this post conference report of the 35th Annual Conference on U.S.-Turkey Relations, which was successfully held from October 30-November 1, 2016 in Washington DC.

Since the mid 80's, ATC (The American-Turkish Council) and TAIK (Turkey-U.S. Business Council) have made notable and outstanding efforts to strengthen economic and commercial ties by facilitating cooperation between public and private sector leaders from both countries and by advocating for open markets. Most importantly, they have given their U.S. and Turkish companies a unique platform to engage with industry leaders and seize commercial opportunities to promote business development and deepen industrial and commercial cooperation.

This year's Joint Annual Conference was a successful premier occasion for leaders in business and government in both countries to focus on one of today's most critical agenda topic "Shaping the Future: Business, Innovation, and Growth". During this period of global low growth and international tensions, we need to understand the changes in the industrial landscape and establish our own capabilities to innovate and set new development opportunities. There are the disruptive impacts of digital technology, which are set to erode the comparative advantage of developing economies in labor-intensive manufacturing activities. With the reversal of these trends out of the question, adaptation of innovation and digital technology is the only option to fortify economical and industrial growth opportunities.

The U.S. economy fares strongly in a number of areas related to innovation and technology. It ranks in the top five worldwide when it comes to encouragement of ideas generation, ability to embrace disruptive ideas and build international brands. Turkey's innovation, R&D and entrepreneurship ecosystems have drastically improved in recent years with immense support by the Turkish government. Within this innovation ecosystem, which grounds on similar work cultures of the two countries, companies can improve their learning curve by opening channels for flows of information, ideas, expertise, and talents for development of new strategies against the changing nature of competitiveness. This will enhance their efforts and provide more power against headwinds in a time of disruption.

We believe that ATC & TAIK play a key role with the vision of fostering innovation for U.S. and Turkish companies seeking growth opportunities by bringing together private, public, and non-profit entities from the U.S. and Turkey while strengthening bilateral political and economical ties between the two countries.

In closing, we would like to wish you a prosperous 2017 full of peace and success.



THANK YOU!

THE AMERICAN-TURKISH COUNCIL
AND THE TURKEY-U.S. BUSINESS
COUNCIL WOULD LIKE TO EXTEND
THEIR GRATITUDE AND THANKS
TO KIBAR HOLDING
FOR THEIR GENEROUS
SPONSORSHIP FOR
THIS REPORT.



THE LONG VIEW

Key Themes from the 35th Annual Conference on U.S.-Turkey Relations

OVERVIEW

Throughout the 35th Annual Conference on U.S.-Turkey Relations, key themes such as Turkey's resilience in the aftermath of the failed coup attempt, the reasons for Turkey's economic success, and defense collaboration took center stage.

Turkey's resilience after the failed coup attempt is attributed to strong underlying fundamentals, effective communication, and active reforms.

Turkey's banking sector and overall economy are strong, showing sustained growth despite formidable headwinds.

Exports and trade have been and remain a key part of Turkey's economic strategy. Other economic strategies include continuing to work to attract foreign

investment, producing more technically sophisticated products, and building a flourishing entrepreneurial ecosystem.

Geopolitically and militarily, Turkey faces numerous challenges including the refugee crisis and the situation in Syria, threats from ISIS and the PKK. In this complex dynamic context, alliances and partnerships are more critical than ever. Both Turkey and the U.S. are firmly committed to NATO and continue to work together economically, politically, and militarily. This relationship is not a short-term transactional relationship; it is rather a long-term strategic relationship of vital importance to both parties.

Among the distinguished speakers discussing these overarching topics

were political and military leaders from Turkey and the United States, policy experts, and business executives from multiple industries.

THE FAILED COUP ATTEMPT

As the first conference on U.S.-Turkey relations since the July 15 failed coup attempt, the attempted coup was very much on everyone's mind and was mentioned in many sessions. It was termed a huge event and an extraordinary episode. The most significant facts highlighted during a special interview session, included:

- The coup was contained and suppressed in less than 24 hours.
- Turkey lost 241 citizens and roughly 3,000 people were wounded.
- All U.S. installations and personnel were safe at the time and are safe now.
- Fears of political polarization were inaccurate and overstated. The country was united and there has been significant political consolidation around the ruling party. >

"IN THE IMMEDIATE AFTERMATH OF THE COUP ATTEMPT, FEARS OF POLITICAL POLARIZATION, POLITICAL TENSION, AND ACCESS TO MARKETS WERE PROBABLY OVERSTATED. IT WAS SHOWN THAT ACTUALLY MARKET ACCESS WASN'T AN ISSUE, THAT THE COUNTRY WAS UNITED. PEOPLE FROM ALL WALKS OF LIFE, ALL SORTS OF POLITICAL ORIENTATION, WERE BEHIND THE GOVERNMENT."

H.E. MEHMET SIMSEK
DEPUTY PRIME MINISTER OF TURKEY





- Turkey's armed forces recovered very quickly. Within one month, Turkey's combat effectiveness was fully restored and the country was fully and actively participating in international military operations—notably Operation Euphrates Shield, which dealt a significant blow to ISIS.
- Turkey's government responded quickly and in a positive fashion to restore confidence and limit market reaction by pursuing reforms, which include:
 - Auto-enrollment in private pensions. This is a key reform in boosting savings and reducing reliance on foreign savings.
 - Reforms to enhance the investment climate.
 - Reforms to improve access to finance for small and mid-sized companies.

• Turkey has been open with communication. On July 17 the government had a conference call with over 800 investors explaining what had happened and what lies ahead. After the introduction of the state of emergency, another conference call was held with roughly 1,000 investors.

ECONOMIC SUCCESS

Turkey is a macroeconomic success story. Important statistics about Turkey's economy include:

- Turkey is the 18th largest economy in the world and the 7th largest in Europe. Turkey aims to become the 10th largest economy by its centennial in 2023.
- Turkey's GDP is \$720 billion, nearly \$10,000 per capita. Its GDP has increased nearly 5% per quarter for the last 27 quarters, which makes it one of the world's fastest growing economies.

• Since the beginning of the economic crisis, Turkey has created more than 7 million new jobs, while Europe has lost 4 million jobs.

• Turkey's international trade in goods and services exceeds \$450 billion, with exports of around \$200 billion and imports of about \$250 billion.

• Turkey's budget deficit is just slightly more than 1% of GDP, which compares favorably to other nations.

The World Bank is encouraged by Turkey's strong economic performance, where it sees sound macro, monetary, and fiscal policies, along with solid implementation of reform plans. Monetary policy had been tight, but has eased, which is helping liquidity in the market. Fiscal policy continues to be tight, which helps create space for Turkey to mobilize productive investments. The World Bank expects

Turkey's strong economic performance to continue and sees further untapped potential that can be realized. Reasons given for optimism include rankings that show it has become significantly easier to do business in Turkey, along with policy reforms, regulatory convergence, and major infrastructure projects. Turkey's Prime Minister has referred to 2017 as a breakout year.

Turkey's resilience and economic success has been based on adhering to democratic principles, the rule of law, and reforms. Turkey's economy has been reliant not on commodities, but on investing in human capital.

Several other major factors contribute to Turkey's economic success story.

- **Becoming more technologically sophisticated.** One of Turkey's ambitions is to move up the ladder in producing more technologically advanced products. Also, Turkey sees potential to evolve beyond production to focus on pre-production, which includes engineering and design, as well as post-production, which entails becoming a regional hub for logistics and management. This evolution will be aided by Turkey's young, well-educated population and will contribute to economic growth, and will create jobs.
- **Startups.** Turkey is seeing increasing entrepreneurial activity due to an emerging startup ecosystem. There are e-commerce companies, medical device startups, new automotive ventures, and companies in materials sciences. There is also a growing presence of venture capital.
- **Investment.** Turkey's government is focused on attracting even more investment into the country. Since 2008 there has been \$171 billion of foreign investment in the country. Over the past 14 years, the U.S. has been the

“NO MATTER WHAT HAPPENS IN TURKISH POLITICS; WHATEVER HAPPENS IN TURKISH REGIONAL AREAS, TURKEY IS ALWAYS HELD UP AS BEING AN ECONOMIC SUCCESS STORY.”

DR. JOSHUA WALKER, APCO WORLDWIDE



second largest foreign investor in Turkey. Political uncertainty is a concern to some potential investors. However, investors are encouraged by Turkey's strong market fundamentals, successful economic reforms, and modernizing economy. Also, Turkey is becoming a regional hub for many sectors, such as energy, R&D, logistics, transportation, manufacturing, and financial institutions.

Importantly, investment does not just go one way. In 2014 and 2016, FDI from Turkey to the U.S. actually surpassed FDI from the United States to Turkey. Turkish companies are internationalizing and investing abroad.

- **Trade.** Turkey strongly supports international trade, including trade with the United States, and exports have contributed to Turkey's economic growth. In the past decade or so, Turkish exports to the United States increased from \$3 billion per year to

\$6 billion per year, while American exports to Turkey increased from \$3 billion to \$12 billion during this time. However, while trade between Turkey and the U.S. has increased, Turkey's exports to the EU are \$64 billion, showing much potential for growth in the U.S.-Turkey trade relationships. Turkey is looking to increase its exports by forging trade agreements with countries such as Japan and Mexico. Turkey also wants to revise its customs union with the EU to include services, agriculture, and public procurement.

Leaders from Turkey expressed concern about the negative impact that growing nationalistic and populist sentiments in the U.S. and elsewhere could have on trade. One participant said that increased protectionism worldwide could dramatically decrease purchasing power and harm the working class. Turkey's view is that "Internationalization must continue."

- **EXIM financing.** The U.S. Export Import Bank (EXIM) provides financing and insurance for exports. In the United States, 90% of EXIM customers are small businesses. The financing provided by EXIM is often longer-term than what is available from commercial lenders. For example, financing might be for 12 to 18 years, depending on the sector, compared to 5 to 8 years from commercial banks. A new opportunity for U.S. and Turkish companies is co-financing from the U.S. EXIM and the Turkish EXIM banks. If an American company and a Turkish company are collaborating to bid on a construction project in a third market, the U.S. EXIM bank can provide financing for the U.S. portion of the project and Turkey's EXIM bank can provide financing for the Turkish portion of the project. This co-financing can help Turkish and U.S. firms to compete for bids. ▶

“THE EXPORT-ORIENTED DEVELOPMENT POLICY OF TURKEY IS WORKING. ALTHOUGH WE HAVE TRADE WITH THE UNITED STATES, AND ALTHOUGH FOR THE LAST 10 YEARS IT HAS INCREASED, WHICH IS ACCEPTABLE, IT IS NOT ENOUGH.”

HÜSNÜ DILEMRE, DEPUTY UNDERSECRETARY, MINISTRY OF ECONOMY, THE REPUBLIC OF TURKEY

› THE GEOPOLITICAL CONTEXT

Several of the conference's speakers attributed Turkey's extremely difficult geopolitical situation to its unique location. To the north, Turkey is closely watching Ukraine and Russia. To the south is Syria. Also nearby are Iran, Iraq, and Libya. At home, Turkey continues to confront terrorist organizations such as ISIS and PKK.

Just days before the U.S. presidential elections, some panelists were critical of recent U.S. foreign policy under President Obama. One participant commented that America's "red line" rhetoric, which was not enforced, did damage to a hawkish U.S. approach. Another commented that under the Obama administration the U.S. had two significant withdrawals: in Iraq and Afghanistan. These withdrawals created a vacuum for ISIS and in both cases the U.S. had to re-intervene. A panelist described the U.S. approach under President Obama as "a light footprint," which has resulted in a lack of political and military authority in the region.

The incoming U.S. President will need to deal with ISIS, Syria, the refugee crisis, and Russia. The U.S. will once more have to decide if it takes a more interventionist or a more constrained approach vis-a-vis these issues. An advisor to then-candidate Donald Trump predicted that a Trump administration would be "functionalists." If a threat required use of assets, then those assets would be used. The advisor also indicated that as president, Trump would continue America's alliance with NATO, would reorganize the alliance, and would make it better.

Panelists in multiple sessions also examined Turkey's geopolitical situation. Some members in the U.S. press have been critical that Turkey did not act fast enough to seal its borders to prevent the flow of foreign fighters into Syria. In response to this criticism, panelists noted that Turkey is in a very difficult situation, with its own national security interests. Fighting ISIS has been a top priority of President Erdogan, while at the same time dealing with the PKK and PYD. In addition, Turkey has taken in roughly 3 million refugees and spent nearly \$12 billion in doing so.

In general, Turkey and the U.S. have been aligned on geopolitical goals, but



at times have differed on specific strategies. One participant termed this "a very important moment for U.S.-Turkish relations." Some observed that tensions in the region may cause Turkey to be more open to engaging in some way with Russia or China, with discussions in Turkey for the first time about the possibility of acquiring missiles from China. This elicited a comment about "creating new wakeup calls for U.S.-Turkish relations."

Two other major geopolitical topics discussed were:

- **Russia.** Russia is becoming increasingly important in the region. Speakers observed that Putin is seeking to reshape the world order,

"I THINK ONE THING WE CAN AGREE ON IS THAT IT REQUIRES STRONG PARTNERSHIPS. THESE ARE NOT PROBLEMS THAT ONE COUNTRY CAN SWEEP IN AND SOLVE. I THINK THAT'S A POINT OF AGREEMENT PROBABLY BETWEEN ALL OF US."

ALICIA SLOAN, DUCO EXPERTS

Baltic countries fear a Russian invasion, and Russia's activities in Syria and elsewhere are designed to split NATO. It was noted that the Obama administration initially attempted to use negotiating tactics to maximize diplomatic engagement with Russia, but those efforts were rejected. Turkey's location makes it the only country that can serve as interlocutor between Russia and NATO. The future posture of Turkey, NATO, and the U.S. towards Russia is unclear, but concern is high.

- **Alliances and partnerships.** The consensus is that dealing with the challenges in the region requires strong partnerships. However, the prevailing view is that alliances are being reexamined and may be shifting. A strategist from Turkey believes that Turkey "needs to normalize relations with the classic anchors in the West, and also find new alliances in the region to survive."

THE DEFENSE SITUATION

In discussing defense cooperation between Turkey and the United States, panelists described the long, deep military alliance, which has existed for more than six decades, since Turkey joined NATO in 1952. The United States and Turkey have the two largest armies in NATO and have served together shoulder-to-shoulder as "brothers in arms" in many situations, including in Korea, Afghanistan, Kosovo, and Bosnia. Through the decades, a strong, trusted relationship has been built between political, military, and industrial leaders. This relationship is enduring and has transcended multiple administrations in both countries.

Sustaining this close alliance has never been more important. The threats faced today are unprecedented. Speaker after speaker described an increasingly complex, dynamic security environment with violent extremism, terrorist attacks, cyberattacks, threats from Russia, environmental issues, unprecedented migration putting pressure on civil governance, and more. As one participant noted, "We are living in the hottest spot in the world." Combatting these threats and challenges is not easy, and will go on for years, if not generations.

The discussion of defense cooperation focused on both military and industrial/procurement cooperation.

- **Military cooperation.** Military leaders have worked closely together during the years. Turkey has been an active supporter and participant in NATO, and the U.S. has supported Turkey's efforts to combat the PKK and other terrorist activities. In the short term, ISIS is the primary defense issue, with longer-term issues related to Russia, China, Iran, North Korea, and violent extremism.
- **Procurement cooperation.** In addition to political and military leaders, representatives from several leading defense organizations added their voices to the discussion, including senior leaders from companies such as Turkish Aerospace Industries (TAI), Lockheed Martin, Honeywell, Raytheon, Pratt & Whitney, and DowAksa.

Speakers offered comments on:

- The importance of listening to customers and bringing the best solutions.
- The outstanding quality of work provided by Turkish companies in supporting U.S. partners. This is seen through collaboration on initiatives such as the F-35.
- Significant investment by U.S. companies in Turkey's defense ecosystem. For example, Lockheed Martin has invested more than \$100 million in Turkish joint ventures and placed over \$2 billion with Turkish companies.
- The modernization of Turkey's military, being done mainly in conjunction with U.S. companies.



- TAI, which is already a major player in aerospace but wants to strengthen its position by leading the development of Turkey's aerospace industry, developing its own products, and becoming globally competitive.
- Military suppliers are now seeing the need and opportunity to have a balanced portfolio of both military and civilian business.
- Investments by U.S. companies in Turkey have included investments in human capital and have produced high tech jobs in Turkey. Over the last three decades Turkey has built and accumulated a well-educated, skilled workforce.
- Turkey is now increasingly focused on innovation, R&D, design, and development—not just production. One Turkish speaker talked about moving from contract manufacturers to joint development partners.

Among the issues raised in defense-related procurement were interoperability of different systems, export licenses, and technology transfer. Despite the complexity of these issues there was optimism that they can be favorably resolved.

Most conference speakers and participants deemed any differences in perspectives or tactics between Turkey and the United States as relatively small. The general consensus is that Turkey and the United States share common values and strategic objectives. Both countries benefit economically and militarily from having a strong partnership. In the face of growing threats, it is essential to sustain and deepen this partnership across many dimensions. ♦

"TURKEY IS INVESTING A LOT IN THIS SECTOR. TODAY WE HAVE A YOUNG AND WELL-EDUCATED WORKFORCE. . . WE HAVE DEVELOPED AN ECOSYSTEM FOR PARTNERSHIP. WE THINK IT IS THE RIGHT TIME TO MOVE INTO COLLABORATION, MUTUALLY PROFITABLE JOINT PROJECTS, INCLUDING DESIGN, RESEARCH, AND DUAL EFFORTS."

NADI KÖKLÜ, KALE AERO

Assessing the U.S. Market for Turkish Manufacturers

BY CEYHUN JAY DOGAN

The American-Turkish Council 35th Conference on U.S. - Turkey Relations took place in Washington D.C. on October 31st 2016. The annual conference's organizers TAIK and ATC, brought together the largest gathering of government leaders, entrepreneurs, business leaders, high ranking military personnel, and policymakers who focus on the U.S.-Turkey relationship.

Over 500 participants attended panels, workshops, and meetings to develop business contacts, exchange ideas, and share information on strategic issues, product marketing, and business development.

One of the panels was "Assessing the U.S. Market for Turkish Manufacturers" under the Retail and Manufacturing Committee.

Turkey's manufacturing industry is diverse and growing, and is increasingly looking to expand into the U.S. market. However, Turkish companies have traditionally preferred exporting to the Middle East and Europe. The large scale of the U.S. market is one of the main factors leading to this preference. Large scale creates low retail margins and the lack of logistical infrastructure makes it difficult to serve mass merchants with thousands of stores in the country. Yet, many companies from around the

world have successfully overcome these challenges and there is no reason why Turkish firms can't.

There are two paths Turkish companies can take to penetrate the U.S. market. Companies with time, strong financials, and good cash flow can start their operation in the U.S. and work on cultivating a brand name and prove themselves in the eyes of buyers that they are here long-term and ready for any kind of service. This requires attending trade shows, installing permanent offices in major cities, and working closely with merchants.

Another way of entering the U.S. market is to find importers from your

sector and let them introduce your products to the U.S. market. This approach is for companies with no time and limited cash flow.

Importers are already well-connected with U.S. companies to overcome the distribution obstacles and expenses, allowing you to focus on developing your product and maintaining the best pricing. Mass merchants require you to have a warehouse in the U.S. and ask you to distribute the products store by store to their DCs. In the current business environment, very few merchants would like to order containers upfront. They prefer to test the products in their test stores and then order containers. They also would like to get allowances, promotional discounts, and advertising allowances, costs that importers are absorbing on your behalf.

Each market entry strategy has its own pros and cons and many companies in Turkey have been exporting their products to Europe for a long time, which makes it easier to understand U.S. business practices such as sharp

"TURKEY'S MANUFACTURING INDUSTRIES ARE DIVERSE AND GROWING, AND ARE INCREASINGLY LOOKING TO EXPAND INTO THE U.S. MARKET."

deadline needs, packaging details, and certain product requirements.

At the panel, legal barriers to Turkish companies were also discussed. In the future, the possible legal barrier would be consequences of TTIP (Transatlantic Trade and Investment Partnership) and TPP (Trans-Pacific Partnership) agreements. As of today, the customs duty for Turkish made products range from 0% to 145% with an average of 6.02%.

If TTIP is successfully signed within the current scope, which means leaving Turkey out of the equation, then there will be some sectors that will not be

able to compete with many companies in the TTIP or TPP listed countries.

In order to boost competitiveness of the Turkish manufacturers, the Turkish government offers many incentives. Most recently, the Turkish government is set to declare a new set of reforms in order to encourage manufacturers to make better and less expensive products. If the government can accelerate structural reforms to enhance the business climate and strengthen intellectual property rights for more innovation and R&D-dependent investments, then the competitiveness will improve during the next few years for Turkish companies in general. ♦

About the Author

Ceyhun (Jay) Dogan is the co-owner and CFO of Tayse International, a fast growing home textiles and floor covering distribution company in the U.S. Tayse International sells 100% Turkish made products to over 25 mass merchants, 1800 independent retailers, many catalog companies, e-commerce giants, furniture top 100 companies, buying groups, and U.S. Army Exchange Services in the United States and Europe.



HEALTHCARE

Moderator:

Nicole F. Fisher, Founder and CEO HHR Strategies, Inc.
Cavit Avci, National Telemedicine Project, Istanbul University
Serhat Çiçekoglu, Founder, Sente Advisory Services
Matt Stanton, Senior Director of Distance Health and
Office of Clinical Transformation, Cleveland Clinic



THE FUTURE OF TELEMEDICINE Initiatives, Obstacles, and Collaboration

OVERVIEW

"Telemedicine is inevitable," declared Dr. Cavit Avci. Dr. Avci, of the National Telemedicine Project and Istanbul University, is one of the creators and leaders of Turkish telemedicine. He described the history and current state of telemedicine in Turkey, as well as obstacles faced. Serhat Çiçekoglu, founder of Sente Advisory Services, discussed his work with technology startups and opportunities in telemedicine. Matt Stanton, Senior Director of Distance Health and the Office of Clinical Transformation at Cleveland Clinic, shared insights and lessons from Cleveland Clinic's experience with telemedicine. This session was moderated by Nicole F. Fisher, Founder and CEO of HHR Strategies, Inc.

The panelists were in agreement: telemedicine is an opportunity and a necessity for Turkey. Telemedicine

leverages new medical and communications technologies to improve access to healthcare, save time, decrease costs, and improve the quality of care. Telemedicine can play a role in dealing with Turkey's shortage of physicians, as one clinician can efficiently communicate with multiple patients spread across disparate geographies. Telemedicine technology can be used to educate new physicians on best practices and how to use technology to improve the care delivered to patients.

But, for telemedicine adoption and use to increase, several challenges and obstacles must be overcome, including technical, financial, and legal obstacles. Continuing to make advancements in telemedicine requires even greater domestic and international collaboration between academia, government, business, investors, physicians, and patients.

KEY TAKEAWAYS

To care for Turkey's population of approximately 78 million, there are only 135,000 doctors and 1,500 hospitals, with roughly 200,000 hospital beds. About 75% of healthcare spending in Turkey comes from the government.

While general satisfaction with Turkey's healthcare system is relatively high at around 75%, for people on Turkey's east side, which is poor and rural, accessing medical care can be difficult. And, for people living in crowded Istanbul, it can take hours to get to a doctor's appointment. Telemedicine provides a way to leverage technology to connect patients with clinicians, regardless of where the patient is located. It can be used to transmit medical information for diagnosis and monitoring.

Initial efforts related to telemedicine began in Turkey in the late 1990s, with multiple initiatives, including >

"THE HEALTH SERVICE AND MEDICAL EDUCATION IS POOR IN THE EAST SIDE OF TURKEY. FOR THIS REASON, TELEMEDICINE IS IMPORTANT FOR TURKEY. A GOOD APPLICATION OF TELEMEDICINE MAY HELP CHANGE THIS SITUATION."

DR. CAVIT AVCI
NATIONAL TELEMEDICINE PROJECT,
ISTANBUL UNIVERSITY





the National Telemedicine Project, as well as conferences and symposiums focused on telemedicine. These efforts brought together multiple stakeholders to understand what telemedicine was, how it worked, and its benefits and challenges.

Today the most common clinical applications of telemedicine in Turkey include tele-radiology, tele-pathology, tele-dermatology, tele-cardiology, and even activities related to tele-surgery.

Telemedicine provides multiple benefits.

Increasingly, telemedicine relies on Internet connectivity and smartphone apps to transfer medical information from patients to clinicians. Benefits include enabling patients to access care, wherever they are, without having

to spend hours traveling to and from an appointment, and delivering more care on an outpatient basis as opposed to an inpatient setting. Telemedicine increases access, saves time, and increases productivity. Telemedicine can also decrease costs, increase efficiency, and improve the quality of care provided.

Matt Stanton sees great potential in using technologies to monitor patients with chronic conditions and those who have been discharged from a hospital after surgery through “virtual visits.” As a result of monitoring and data collection, patients can be provided with personal data on their condition, which empowers them to take action to improve their health. Stanton believes telemedicine will be demanded by patients, who will say to clinicians, “Why should I come in to

see you? Can’t you just FaceTime me?” Telemedicine will be driven by patients’ desire for convenience.

Increasing the adoption of telemedicine requires overcoming several key obstacles.

With broadband Internet technology and high rates of Internet connectivity, technology is no longer the barrier it once was. Remaining barriers include financial obstacles in paying for telemedicine, legal barriers related to securing and protecting information, and barriers that hinder collaboration.

Mr. Çiçekoglu has seen billions of dollars of venture capital invested in more than 600 U.S.-based healthcare technology and telemedicine startups in the past four years. He also sees active collaboration between U.S. physicians

and serial entrepreneurs. Turkey needs to emulate the U.S. by increasing its level of investment in entrepreneurial healthcare technology startups and fostering greater collaboration between innovative physicians and entrepreneurs.

In the U.S., adoption of telemedicine has been slowed because the parties that traditionally pay for healthcare services (mainly the government and health insurance companies) often do not pay for telemedicine services, as telemedicine services have not yet been approved for payment.

This is beginning to change as the government and insurers are increasingly open to paying for services that improve health outcomes and decrease costs, which favors telemedicine. Mr. Stanton sees a potential advantage for Turkey if the national healthcare system, which can move faster than the American system, would make the decision to pay for various telemedicine services.

Collaboration is a key to effective telemedicine adoption.

For telemedicine to work there must be extensive collaboration. This includes collaboration between technology and medicine; between government, academia, and business; and between the public sector and private institutions. Future telemedicine initiatives also benefit from international collaboration, where stakeholders come together to create critical mass, share data and

successes, and work together. Already, about 50% of all U.S. hospitals engage in telemedicine. From these experiences, institutions in Turkey can learn about practical applications and ways to use telemedicine to control cost and can share learnings with U.S. and international practitioners. As Mr. Çiçekoglu said, “I think that both ecosystems [in Turkey and the U.S.] can learn from each other.”

Telemedicine has the potential to play a role of supplementing physicians and enhancing medical education

In addition to treating patients, telemedicine technologies provide the potential to improve medical education by enhancing distance education. As an example, Dr. Avci described the use of tele-mentoring in Turkey as a way for experienced doctors to assist young surgeons.

Mr. Stanton observed that currently medical schools do not provide training on telemedicine tools. However, because telemedicine is clearly a key part of the future of healthcare, conversations about incorporating telemedicine tools into medical education are beginning to take hold. His work at Cleveland Clinic involves helping practicing clinicians understand and adopt telemedicine. Mr. Çiçekoglu sees an opportunity for Turkey to leverage technology, go beyond existing norms, integrate with the startup community, and adopt solutions as part of the medical training curriculum. ♦



“WE WILL SEE IN THE NEXT FIVE TO TEN YEARS, MORE AND MORE CURRICULUMS, INCLUDING TELEMEDICINE AS A SKILLSET FOR PHYSICIANS, NURSES, RADIOLOGISTS, AND TECHNICIANS.”

SERHAT ÇİÇEKOĞLU, SENTE ADVISORY SERVICES

“TELEMEDICINE IS NOT GOING TO BE DRIVEN BY THE PHYSICIANS. IT’S GOING TO BE DRIVEN BY THE CONSUMER SIDE; THE PATIENTS ARE STARTING TO DEMAND THIS.”

MATT STANTON, CLEVELAND CLINIC

AGRIBUSINESS

Moderator:

Rint Akyüz, Chair, Agribusiness & Food Industries Committee, TAIK

Nurdan Erbug, CEO, Anadolu Hayvancılık

Philip H. de Leon, Director, Public Affairs
and Int'l Business Development, AGCO

Mark Newman, President, Market Solutions LLC

Demir Sarman, General Manager, Aep Anadolu Etap

Marcella Szymanski, Ph.D., Deputy Director,
Office of Agricultural Policy,
U.S. Department of State



THE FUTURE OF AGRIBUSINESS

The Fertile Ground Between Technology and Agriculture

OVERVIEW

Technology is transforming agribusiness, presenting exciting opportunities to increase the efficiency and productivity of the agricultural sector, along with improving the quality of food. Rint Akyüz, Chair of the Agribusiness and Food Industries Committee of TAIK, moderated this session.

In discussing the role of technology in agriculture and agribusiness, Demir Sarman, General Manager of Aep Anadolu Etap, described agriculture in the Turkish economy and explained how his company is adopting global best practices. Philip H. de Leon, Director of Public Affairs and International Business Development at AGCO, discussed trends affecting agriculture and challenges the industry faces. Dr. Marcella Szymanski, Deputy Director of the Office of Agricultural Policy at the U.S. Department of State, is responsible for developing and implementing U.S. trade

policy for new agricultural technologies; she discussed science in agriculture and policy development. Mark Newman, President of Market Solutions, examined drones in precision farming. Nurdan Erbug, CEO of Anadolu Hayvancilik, discussed use of genetics in animal breeding to improve the output.

The panelists see enormous potential in using technology to modernize and transform the agricultural industry through activities that include precision farming and automation. Turkey's agricultural sector is learning lessons from Europe and the United States, taking advantage of best practices, and adopting a wide range of new technologies.

KEY TAKEAWAYS

Agribusiness in Turkey is extremely important.

Turkey is the world's 18th largest economy, but is the 7th largest

agricultural economy and the largest agri-economy in Europe. Turkey ranks in the top 5 worldwide for more than 30 agricultural products and is the leading producer of many fruits, including cherries, figs, apricots, and hazelnuts. Yet, Turkey's agricultural sector has several structural problems including:

- **Fragmentation.** Turkey's farms are extremely small at 1/9th the size of farms in France.
- **Lack of capital.** Farmers in Turkey have difficulty accessing capital.
- **Lack of technology.** Farmers in Turkey lack modern technology, resulting in low innovation.

Some Turkish farm owners are modernizing by adopting global best practices.

Aep Anadolu Etap has established a joint venture in Turkey to concentrate on fruit farming and fruit juice production. The

company realizes that Turkish producers lack the productivity and efficiency of peers in Europe or the United States, and has focused on learning about and adopting best practices from around the world with a goal of transforming Turkish agriculture. Best practices include and have resulted in:

- **Extending the harvesting season** by investing in different plants and seedlings.
- **Improving yields** by 20% through better seedlings and harvesting technology.
- **Reducing labor costs** by 70% through high tech mechanization.
- **Acquiring hydraulic platforms,** which improve labor picking efficiency by 2.5 times.
- **Using modern drip irrigation technologies,** which consume 70% less water.
- **Adopting a farm ERP software program** that helps better manage inventories and analyze yields.
- **Installing climate satellites** to be able to react immediately to changing weather conditions.
- **Leveling the land** to better deal with rain. >

“BY USING MODERN PRODUCTION AND INFORMATION TECHNOLOGIES, YOU CAN ACHIEVE SIGNIFICANT EFFICIENCIES.”

DEMIR SARMAN, AEP ANADOLU ETAP





› **Several major trends are having a significant impact on the agricultural industry.**

An increase in the average horsepower of farming equipment is transforming agriculture, and machines are becoming commodities while technology, software, and consulting services become more important. Other key trends identified by Philip de Leon are:

- **Precision farming.** This leverages technology to optimize land use.
- **Automation.** Technology will play a larger role in managing farmers with less people.
- **Consolidation.** Farms and the entire industry will consolidate into larger units.
- **Professionalism.** Farmers will become more professional with greater technological expertise.

In addition to these macro trends, the government of Turkey has invested significantly in agriculture. This includes

billions of dollars for the privatization of 14 million hectares that are not currently cultivated, and the irrigation of much of this land, with financing solutions to be made available.

Challenges include a labor shortage, regulations, the need to make technology interconnected, and collecting and using data while overcoming issues related to data privacy and security.

Scientific and technological advancements are critical in agribusiness

Over the past 20 years, advances like precision farming and biotechnology have enabled farmers to produce the same amount of corn using less land, using less water and energy, causing less erosion, and reducing greenhouse gases by 35%.

Biotechnology has enabled the addition of vitamins to crops grown in developing countries, which helps millions of people with vitamin deficiencies. New technologies have the potential to

keep crops like apples, potatoes, and mushrooms from turning brown, which will be valued by consumers and reduce food waste.

Despite the profound impact of science in agriculture, there is a general perception among the public that genetically modified organisms (GMOs) are dangerous, with no evidence to support this. But, in today's world, perceptions drive policy, even if perceptions are inaccurate and not based on science. (Twice, the EU Food Safety Authority has looked at GMOs, and tens of millions of euros have been spent studying GMOs, with no evidence of safety problems.)

In the U.S. and Turkey, agricultural technologies are regulated. In Turkey, the biosafety law passed in 2010 has liability provisions in it, which has a potentially chilling effect for research and trade. Going forward, it is important to get regulation right, which means basing it on science and risk, not perceptions.

There is significant interest in drones



for commercial purposes, particularly agriculture. One study predicted \$82 billion in U.S. economic activity related to drones over 10 years, with agriculture accounting for 80%. The U.S. drone market has been estimated to reach 100,000 units in 2020, suggesting a potential market in Turkey of 15,000 to 30,000 drones.

The systems related to drones include the physical hardware, the payload (like cameras, sensors, or spraying equipment), and analytical tools. Users will also need software and data processing capabilities to turn data collected by drones into useful information. Drones in agriculture might identify locations where fertilizer, water, pesticides, or herbicides are necessary, allowing farmers to target specific areas, using fewer chemicals, costing less, and having less environmental impact.

For drones to take hold, there must be an enabling regulatory framework. In 2012, there was not a legal basis for

using drones commercially in the United States. In 2014, the U.S. passed rules allowing drones access to air space for commercial use. Those rules took effect in September 2014 and resulted in about 5,500 waivers allowing for drones to be used commercially; about half of those waivers were for use in agriculture. The rules required a pilot's license and a second observer to spot the drone, and required that drones stay several miles away from airports. The rules for drones were further refined in August 2016, with special rules for small drones (below 55 pounds). These rules allow use of small drones without a pilot's license and without a second observer. They do require a knowledge test, are limited to an operator's line of sight, and have to fly below 400 feet and less than 100 miles per hour. These rules, combined with smaller, less expensive drones, make the use of drones more feasible for small and midsized farms. Also, testing is taking place where

drones are being operated beyond the operator's line of sight.

Turkey implemented rules for drones in February of 2016. These rules are for drones over 25 kilos and require a pilot's license. Roughly 2,000 drones were registered in Turkey within the first few days after the regulations went into effect. As rules evolve, new opportunities for drones will be created in agriculture, such as surveying or spraying fields not within sight.

Use of genomics is helping animal breeders improve their production.

Over the past decade, Turkey has been investing to increase dairy and beef production. One step has been visiting U.S. universities and dairy farms to learn what is working in the United States. Also effective has been genomic selection of animals, which uses genomics to predict an animal's traits including longevity, fertility, and more. ♦

“THE REAL BENEFITS OF TECHNOLOGY [IN AGRICULTURE] HAVE TO DO WITH HELPING A DEVELOPING COUNTRY GET MORE NUTRITION IN THEIR FOOD, BE MORE SUSTAINABLE, AND PRODUCE FOOD THAT'S BETTER.”

MARCELLA SYZMANKI, U.S. OFFICE OF AGRICULTURAL POLICY

“OUR TEAM IS DEDICATED TO INCREASE THE YIELD, EFFICIENCY, AND SUSTAINABILITY OF DAIRY FARMS IN TURKEY. . . . GENETICS IS THE MOST IMPORTANT ELEMENT TO SUCCEED IN A DAIRY FARM.”

NURDAN ERBUG, ANADOLU HAYVANCILIK

FOOD INDUSTRY

Moderator:

Rint Akyüz, Chair, Agribusiness & Food Industries Committee, TAIK
Reed Blauer, Agriculture Economist, U.S. Department of Agriculture (USDA)
John Bode, President & CEO, Corn Refiners Association
Courtney Gainé, President & CEO, The Sugar Association



FOOD INDUSTRY

Trends and Opportunities in Turkey's Food Industry

OVERVIEW

Experts have predicted that due to population growth, by 2050 there won't be enough food to feed the world, putting tremendous pressure on the food supply chain. At the current moment one of the most significant challenges confronting the food industry is disinformation, with policies being formulated based on public perceptions, rather than scientific evidence.

This panel, moderated by Rint Akyüz, Chair of the Agribusiness and Food Industries Committee of TAIK, was

composed of experts on the global sugar industry. Reed Blauer is an agriculture economist at the USDA Foreign Agricultural Service, Office of Global Analysis. He monitors the supply and demand for major commodities across the globe, including sugar. Dr. Courtney Gaine, a scientist and nutritionist, serves as the President and CEO of the Sugar Association. She focused her remarks on science related to sugar. John Bode is the President and CEO of the Corn Refiners Association. He concentrated on America's constant and inappropriate

focus on seeking single-nutrient solutions to complex problems like obesity, and looked at how nutritional policies are developed.

KEY TAKEAWAYS

Sugar is one of the world's most important agricultural commodities.

Global consumption of sugar is about 175 million metric tons. Currently global demand and consumption is outstripping supply and production, which is causing the price to rise. In particular, growing



“WHY DO WE ANALYZE MARKETS? IT'S THE FOUNDATION FOR ALL ACTIVITIES WE DO. IT PROVIDES PRODUCTION, SUPPLY, AND DISTRIBUTION INFORMATION FOR THE U.S. INDUSTRY, HELPS MAKE INFORMED POLICY DECISIONS, BENEFITS U.S. PRODUCERS, AND HELPS AGRICULTURAL MARKET EFFICIENCY.”

REED BLAUER, USDA OFFICE OF GLOBAL ANALYSIS



consumption in China and India continues to set records.

Brazil and Thailand dominate global sugar production and global exports. Production in the U.S. is forecast to be 8.6 million metric tons, which is about 5% of global production. Production across Europe is expected to rise, but differs greatly from country to country.

There is a tremendous amount of misinformation about sugar.

The general perception is that sugar is harmful to people's health and that the

amount of sugar being consumed by individuals in the United States continues to increase. Both are incorrect.

Regarding health, sugar has been villainized as causing obesity, cancer, Alzheimer's, and multiple other diseases. But the evidence doesn't back this up. Since 1999, added sugar consumption has declined by 15% while obesity continues to rise.

Multiple reports, including a definitive report from Europe, have found that sugar consumption has no effect on cholesterol, coronary events, diastolic

blood pressure, blood glucose, insulin, or diabetes. Sugar-sweetened beverage consumption is moderately associated with Type 2 Diabetes, but the more sugars people consume, the more total calories they consume, including calories from sources other than sugar. In addition, people who consume a great deal of soda are also more likely to be smokers and exercise less. Thus, multiple factors affect health and obesity, not just sugar consumption.

This lack of evidence has not prevented a cascade of policies >

“THE SINGLE-NUTRIENT FOCUS IS A DISSERVICE.”

JOHN BODE, PRESIDENT & CEO
CORN REFINERS ASSOCIATION



› focused specifically on sugar. The World Health Organization (WHO) has suggested that only 10% of calories should come from sugar, followed by a similar recommendation in the U.S. by the Dietary Guidelines Advisory Committee. This recommendation translates to only 50 grams per day of sugar for adults and 25 grams for children. However, there was absolutely no science-based evidence for these guidelines.

Regarding consumption levels, in 2000, 18% of calories consumed in the U.S. came from added sugars. During the last 15 years, added sugar consumption has dropped dramatically and now accounts for just slightly more than 10% of all calories. One reason for this decrease is a decline in soda

consumption, which has hit a 35-year low. People today are drinking water instead of caloric beverages.

A single-nutrient focus is not a solution

In the 1970s and 1980s the developed world was focused on reducing cholesterol, seeing this as a way to improve health. In the 1990s, the focus shifted to fats. For a brief period, it shifted to a low-carb diet. None of these campaigns focused on a single nutrient led to improved health.

Now, the single-nutrient focus is on sugar. The reason for this focus on one nutrient is that people yearn for a simple silver bullet and want to pick one specific item to focus on. This single-nutrient focus, while inappropriate and ineffective,

affects public rules, guidelines, and labeling—and does a disservice to public health.

The real problem is that Americans today are eating almost 500 calories more per day than 40 years ago. Of that increase in calories, sugar accounts for only 7%; the majority of the increase in calories has come from fat. The key to improving health is not a single-nutrient focus, but diets with moderation and balance.

In addition, greater clarity is needed on labels, as there is confusion among consumers about the ingredients and nutritional content of food, especially as new nutritional guidelines force manufacturers to reformulate products. ♦

“CERTAINLY, WHILE ADDED SUGARS DO PROVIDE CALORIES, IT’S NOT THE PRIMARY DRIVER OF OBESITY. THE MAGNITUDE OF EVIDENCE SHOWS THAT ADDED SUGARS DO NOT HAVE ANY UNIQUE HEALTH OUTCOME THAT IS NEGATIVE.”

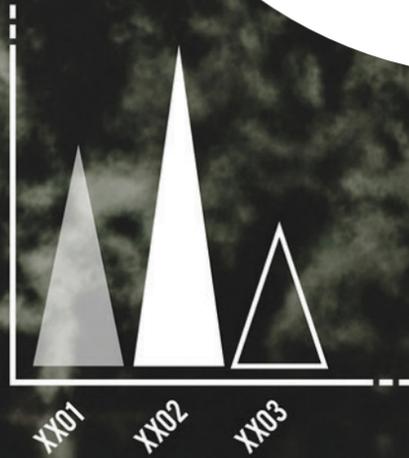
COURTNEY GAINE, SUGAR ASSOCIATION



FINTECH

Presenter:
Ihsan Elgin, Founder, Fintech Istanbul

FINTECH



The FinTech Ecosystem

OVERVIEW

Entrepreneur and financial technology (“fintech”) expert Ihsan Elgin described the hot landscape for fintech startups in Turkey. He explained why Turkey is an ideal setting for fintech startups due to the country’s strong banking system, supportive regulatory environment, rich talent pool, excellent location, robust investment community, and ecosystem of collaborative organizations.

KEY TAKEAWAYS

Fintech is a worldwide phenomenon.

The concept of financial technology isn’t new, as fintech goes back decades. But at the moment, fintech is extremely hot. This is driven by secure new cloud-based technologies, changing customer attitudes and preferences that emphasize the user experience, and the voracious appetite of private and corporate investors

to fund the next big startup. In the past five years Google has invested more than \$500 million in 42 fintech startups and in just the past two years Intel has invested in 24 fintech startups.

In Eastern Europe and the Middle East there are roughly 1,500 fintech startups and more than 900 venture capital firms in the region investing largely in fintech.



“THE KEY MESSAGE IS TURKEY HAS A BIG OPPORTUNITY IN FINTECH.”

IHSAN ELGIN,
FINTECH ISTANBUL

In Turkey in 2010, there were 11 transactions involving fintech startups representing 2% of all investments. In 2015 there were 88 fintech transactions in Turkey totaling \$75 million, and in 2016 there will be \$90 million invested in Turkish fintech startups.

Fintech startups are unbundling banking.

Going back 15 years the financial industry was mainly banks, capital markets, and insurance companies. Now, fintech is 21 different sub-industries, which represents an unbundling and a breaking apart of different financial products, services, and vertical areas.

Areas with significant activity include payments, consumer lending (including peer-to-peer lending), credit scoring, investment management, and global advisory services.

Turkey provides an excellent environment for fintech startups.

As of 2016, Turkey has almost 150 organizations as part of the country’s

startup ecosystem. This includes seed funds, incubators, venture capital firms, NGOs, government organizations, and universities with technology transfer capabilities. These organizations make Turkey attractive for entrepreneurial activity.

Other reasons why Turkey is attractive for fintech include:

- **A strong banking ecosystem.** Turkey has strong banks, and many European banks are coming to Turkey because of the opportunity and favorable climate. There is strong demand by consumers for financial services and high rates of penetration of debit cards (more than 100 million) and credit cards (58 million).
- **Good regulatory support.** Regulators convene fintech roundtables and listen to startup leaders. They try to create a climate that is hospitable to startups.
- **An excellent talent pool.** With more than 60,000 senior employees in banks in Turkey, there is an ample pool of experienced talent, with many

individuals interested in participating in an entrepreneurial venture. The average fintech startup founder in Turkey is 37 years old, with 9 years of experience working in the sector. Abundant talent is one of Turkey’s most significant advantages, and many Turkish people who previously lived in Boston or Silicon Valley are moving back to Turkey to start a company.

- **A convenient location.** Turkey’s great location make it easy to go to London, elsewhere in Europe, and to key locations in the Middle East, like Dubai.
- **Ambition to become a regional finance center.** Turkish leaders aspire for Istanbul to become the finance center for the region. Istanbul started on this journey about four years ago and is already well positioned. Within six years this vision will be much closer to becoming a reality. ♦

ENERGY

Presenter:
The Honorable Ernest Moniz
United States Secretary of Energy



GLOBAL SHIFTING ENERGY TRENDS

OVERVIEW

U.S. Secretary of Energy, the Honorable Ernest Moniz, discussed energy security, the global shift of energy markets, and the importance of clean energy. He touched on the Paris Agreement and described specific U.S.-Turkey collaborations in the energy sector, as well as future challenges.

Secretary Moniz sees three major areas of focus being energy security, the shift of energy markets—in oil, natural gas, and renewables—and progress in lowering the costs of clean energy technologies, including wind, solar, and batteries. Turkey and the United States, both of which participated in the Paris Agreement, are closely aligned in their goals to reduce carbon emissions.

This alignment is reflected in multiple clean energy projects.

KEY TAKEAWAYS

Three significant changes are shaping global energy. They include:

1. Energy security

The 2014 Russian incursion in Ukraine accelerated collective thinking about energy security in the 21st century. The Ukraine situation highlighted what most would call an over-dependence on Russian natural gas throughout Europe, from the Baltics to the Mediterranean. This led to a focus on increased Caspian gas supply to Europe through the Southern Corridor, and there is the possibility of significant Eastern

Mediterranean natural gas. Turkey is pivotal to how these initiatives go forward.

In addition to West-East, as the Southern Corridor would run principally, there is also a proposal for a North-South corridor for energy, telecom, and transport. This is known as the Three Seas Initiative, Baltic to Adriatic and the Black Sea. Turkey is again at a critical intersection point.

In May of 2014, the G7 energy ministers developed seven principles for energy security in the 21st century. Two of the key principles are development of functioning markets and the role of carbon-free clean energy, both of which are critical to energy security.



“TURKEY IS OBVIOUSLY A KEY PLAYER IN THE DEVELOPMENT OF INFRASTRUCTURE ALIGNED WITH ENERGY SECURITY, AND I WOULD ARGUE, THE U.S.-TURKEY RELATIONSHIP IS A KEY ENABLER FOR MOVING FORWARD.”

THE HONORABLE ERNEST MONIZ,
U.S. SECRETARY OF ENERGY

2. Energy markets

The U.S. energy scene has developed rapidly and has influenced global markets. Developments in specific markets include:

- **Oil.** In 2008, the United States imported over 11 million barrels a day of crude oil and petroleum products. In 2016, the U.S. imported just 5 million barrels per day. This has impacted the balance of payments by about \$300 billion a year and has impacted global oil prices, which is good for oil-consuming countries, including Turkey.

- **Natural gas.** It was anticipated that the U.S. would be a major importer of liquefied natural gas (LNG), but since March 2016, the U.S. has actually exported LNG in what is increasingly a global market for natural gas. As a result of changes in the natural gas market, there will be a need for more trading hubs, with potential for Turkey. In addition to work on physical infrastructure, work is also necessary on transparency and contract structures.

- **Renewables.** Since 2008 in the United States:
 - The cost of onshore wind has decreased by 41%.
 - The cost of photovoltaic solar has decreased by 54% for rooftops and 64% for utility scale.
 - There are now 50 projects larger than 100 megawatts each for photovoltaics.
 - The cost of batteries for electric vehicles has fallen by 74%.
 - The cost of LED lighting has fallen 94%.

These price reductions are reflected in dramatic deployment increases in the U.S. and other countries. Renewable energy has also been an incredible jobs

driver. In the United States, low-carbon electricity now accounts for over 600,000 jobs; over 200,000 of these jobs are in the solar sector. It is estimated there are 1.9 million jobs in energy efficiency, with a large number in construction jobs.

3. Clean energy

This has been an amazing year for clean energy and climate change. In December of 2015, the Paris Agreement was signed and recently went into effect. Also, in just the past few months in Rwanda, nations came together to amend the Montreal Protocol to address challenges of cooling. Also, 20 countries, including the U.S., have committed to doubling energy technology R&D over five years.

There are several important collaborations between the U.S. and Turkey on clean energy

Roughly 70% of Turkey's greenhouse gas emissions come from the energy sector, which is similar to the United States. Turkey has put forward goals for 2030: a 21% reduction in greenhouse gases, 10 gigawatts of wind, 16 gigawatts of solar, increased hydroelectric, commissioning of a nuclear plant, and reducing transmission and distribution losses by 15%. These are all areas of possible collaboration. Specific areas of collaboration include:

- **Clean energy partnerships.** The U.S. Trade and Development Agency, USTDA, which has a memorandum of understanding with Turkey's Ministry of Energy and Natural Resources, has supported 18 clean energy partnership projects over the past six years, including Turkey's first geothermal plant, and pilot projects for smart grid development.
- **Wind.** GE will supply 22 wind turbines for a 50-megawatt wind farm in Turkey,

along with a maintenance agreement. They will also supply turbines to add 70 megawatts to another wind plant.

- **Solar.** First Solar is working with two Turkish companies on projects totaling 160 megawatts of photovoltaic power.

- **Nuclear.** President Obama believes nuclear power must be on the table as part of the portfolio of solutions for a low-carbon future. In working with Turkey, the U.S. can share information about safety standards through the Nuclear Regulatory Commission, and can share security information to safeguard against threats.

There is strong alignment between the U.S. and Turkey on energy, but challenges are significant.

The U.S. and Turkey are aligned on meeting the growing demand for energy and clean energy in Turkey. Both countries have committed to ambitious targets of reducing carbon emissions in the 20% to 30% range in the 2025 to 2030 time frame. This puts participants in the Paris Accord on a track for the kind of deep decarbonization that is essential. But being on the track isn't the same as delivering the needed results. Efforts are required on two fronts:

- **Longer-term commitments.** It is essential that commitments extend even further, beyond 2030.
- **Multi-sector efforts.** Tremendous progress has been made in low-carbon electricity technologies. This is important since there will be even greater electrification of the economy. But deep decarbonization also requires enormous progress in the transportation and industrial sectors, which will be challenging. ♦

TOURISM

Moderator:

Armin Zerunyan, Vice President, Hotel Association of Turkey (TÜROB)

Hannah Messerli, Chair, Institute of Tourism Studies,
George Washington University

Numan Olcar, Board Member, TURSAB

TURKEY'S TOURISM INDUSTRY

What Happens Next?

OVERVIEW

2016 was a difficult year for Turkey's tourism sector. The number of visitors is expected to decline and industry revenues have fallen. Hotel occupancy rates and revenue per room have also decreased. However, as a tourist destination Turkey has great appeal, which bodes well for the long term. To boost the tourism industry the government is investing in infrastructure (particularly, a new airport in Istanbul) and is offering incentives to tour operators.

To put the current situation in context, session moderator Armin Zerunyan,

Vice President of the Hotel Association of Turkey (TÜROB), described the recent history of tourism in Turkey and provided up-to-date statistics. Numan Olcar, Board Member of TÜRSAB, discussed government incentive programs. Hannah Messerli, Chair of the Institute of Tourism Studies at George Washington University, shared lessons learned from other countries' tourist sectors. All agreed that Turkey has many reasons to be optimistic about its long-term prospects as a tourism destination for both holiday and business travelers.

KEY TAKEAWAYS

Despite growth over the past 15 years, Turkey's tourism and hospitality industry is currently experiencing difficult times.

Armin Zerunyan set the stage with several statistics about Turkey's tourism industry:

- Tourism is important to Turkey's economy. Tourism contributes around 5% on average to Turkish GDP. When taking into account both the direct and indirect impact of tourism, the industry contributes 13% to GDP.



“THE TURKISH TOURISM SITUATION NEEDS TO BE MANAGED. THE INDUSTRY MUST PREPARE TO DEAL WITH THE CURRENT DOWNTURN, SINCE IT IS LIKELY TO CONTINUE FOR SOME TIME.”

ARMIN ZERUNYAN,
HOTEL ASSOCIATION OF TURKEY



- Tourism is important to employment in Turkey. Last year, tourism accounted for 4.6% of employment in Turkey. When both direct and indirect employment is considered, tourism is responsible for 8.3% of employment.
- After significant growth in visitors, Turkey expects a downward trend in 2016. In 2000, Turkey had around 10 million visitors, which grew to 41.6 million in 2015. But between January and September 2016, there were only 20 million visitors.
- Tourism revenues are experiencing a decline. In 2000, revenues from tourism totaled \$7.6 million. Revenues then grew, peaking in 2014 at \$34.3 million. However, in the first six months of 2016, tourism revenues were only \$9 million.
- Istanbul has become a popular tourist destination. The city saw a big jump in popularity starting in 2000. By 2014, it was the fifth most visited destination worldwide and the third most visited European city after Paris and London.
- Traffic at Istanbul's airports has grown. In 2015, over 51 million passengers passed through the Istanbul Ataturk and Sabiha Gokcen Airports, with most traveling through Ataturk.
- Hotel occupancy rates have been stagnant. The best year for occupancy was 2010. Over the last few years, average occupancy rates have been stagnant and dropping. In the last five to six years, occupancy ratios have averaged around 55%. Revenue per available room has also dropped significantly. >

› **To promote Turkey as a tourist destination, the government is offering several incentives.**

Turkey is an attractive destination. It is the 18th largest economy in the world, spans two continents, and has a diverse culture, friendly people, a developed infrastructure, and a rich heritage. The country's goal is to reach 50 million visitors and \$50 billion in revenue from tourism by 2023. Numan Olcar reviewed key information and metrics related to Turkey and tourism:

- **Demographics.** Turkey has 80 million people, with 15 million living in Istanbul. Approximately one third of the population is between the ages of 15 and 34.
- **Tourism infrastructure.** Turkey has 165 hotel chains and 15% are owned by international investors. Overall hotel capacity is 1.6 million beds. More than 500 aircraft are based in the country and Turkey has 55 active airports. A new airport is under construction in Istanbul that will support 150 million passengers per year. Turkey also has around 16,000 traditional yachts, called gulets, on the coast. The country has approximately 14,000 licensed guides.

Because 2016 was a difficult year for the industry, the Turkish government is offering incentives to investors. These incentives include public land allocation and tax exemptions. Also, the Turkish government recently announced a new incentive, offering \$6,000 per flight to tour operators who bring flights of foreign tourists to Turkey.

Turkey's tourism industry can learn from other countries.

The tourism sector is resilient. The industry in several countries has recovered from natural, manmade, and various health crises. The public and private sectors in Kenya, for example, addressed civil unrest and then promoted and grew domestic



“WE ARE SITTING ON A BIG TREASURE IN TURKEY. TURKEY IS ONE COUNTRY, TWO CONTINENTS, AND THOUSANDS OF COLORS. IT IS THE EAST OF THE WEST AND THE WEST OF THE EAST.”

NUMAN OLCAR, TÜRSAB



travel. Thailand worked with the private sector, the hotel association, and the government to overcome negative perceptions of tourism after the 2004 tsunami. One way Thailand boosted tourism was by portraying travel within the country as a patriotic duty.

Hannah Messerli discussed how lessons from various countries can be applied in Turkey and concerted strategies required at different levels:

- **Market diversification.** Countries with resilient tourism sectors avoid dependence on one or two source markets for visitors. For Turkey

opportunities exist to cultivate tourists from countries like Indonesia, Iran, Bulgaria, and others.

- **Product diversification and market fit.** To date, Turkey's tourism industry has largely focused on key cities and coastal destinations. Yet, Turkey has even more to offer. The country's 1,300 thermal springs could attract visitors interested in wellness and adventure. Other opportunities include business tourism and health-related tourism. Armin Zerunyan noted that health-related tourism is quite developed in Turkey but has been overlooked by many.

- **Attractive prices and value propositions.** The tourism industry must consider the cost of visiting Turkey compared to other destinations. It is essential to offer a high-quality product and a workforce trained to deliver a good price and value for all experiences from the low end to the high end. A mix of services and consistent delivery will enable Turkey to get back on track.

- **Short, medium, and long-term strategies.** The industry needs to take a holistic view and develop a portfolio of strategies over multiple time horizons. ♦

“TOURISM THRIVES WHEN COUNTRIES DELIVER ON A PROMISE OF SAFETY AND SECURITY. WHAT'S CRUCIAL IS DELIVERING ON WHAT YOU PROMISE. IN TURKEY, THIS WILL TAKE COLLABORATION WITH THE PUBLIC AND PRIVATE SECTORS AND LOCAL POPULATIONS.”

HANNAH MESSERLI, GEORGE WASHINGTON UNIVERSITY

CYBERSECURITY

Moderator:

Navroop Mitter, CEO, ArmorText

Prof. Dr. A. Arif Ergin, President; TUBITAK

Jonathon E. Monken, Duco Expert and Senior Director, System Resiliency and Strategic Coordination, PJM Interconnection

Todd Rosenblum, Senior Executive for WW BD, IBM i2 Safer Planet

CYBERSECURITY

International Cooperation for Mutual Progress

OVERVIEW

Cybersecurity is a significant national security concern. Yet, the technological expertise needed to combat cybercrime is beyond the expertise of most governments. The result is extensive cybersecurity outsourcing by governments to the private sector. Both governments and the private sector must

navigate issues related to privacy and security. Greater intergovernmental collaboration is needed worldwide to establish cybersecurity supply chain protocols, share cyberattack-related intelligence, and deal with security and privacy legal issues.

These insights and others came from a panel discussion on cybersecurity and

the role of collaboration moderated by Navroop Mitter, CEO of ArmorText. Professor Dr. A. Arif Ergin, President of TÜBİTAK, reviewed worldwide cybersecurity trends to set the stage for why this topic is so important for the U.S. and Turkey. Todd Rosenblum, Senior Executive for WW BD at IBM i2 Safer Planet and a former federal government

employee, offered his views on the roles of government and the private sector in cybersecurity. Jonathon Monken, Senior Director of System Resilience and Strategic Coordination at PJM Interconnection, shared cybersecurity insights from the perspective of a regulated energy company.

KEY TAKEAWAYS

Since cyberthreats are constantly evolving, cybersecurity measures must be flexible.

Dr. Ergin reviewed statistics underscoring the importance of cybersecurity for the U.S. and Turkey:

- In 2015, almost 46% of all DDoS attacks were directed at three countries. These were Turkey (22.5%), China (13%), and the U.S. (10%).
- The sectors targeted by cyberattacks change from year to year. In 2014, financial services, information and communication services, and manufacturing were most targeted. Since attackers' focus changes over time, precautions in any given industry will soon be obsolete.
- Worldwide, most attacks use unauthorized access and malicious code. Almost 75% of attacks capture someone's account and penetrate their information.
- Data must be protected from attackers inside and outside of an organization. Around two thirds of the time cyberattacks are an inside job. >



“CYBERATTACKS ARE FAST-MOVING. THE INTEREST AREAS DIFFER YEAR BY YEAR, AS WELL AS THE SECTORS AND COUNTRIES THAT ARE TARGETED. CYBERSECURITY SOLUTIONS MUST BE UPDATEABLE.”

PROFESSOR DR. A. ARIF ERGIN, TÜBİTAK



- Big data centers will be replaced by distributed nodes. With 5G mobile applications, data is stored in hundreds of millions of distributed nodes worldwide. Protecting data on nodes is challenging. It changes the definition of how powerful nations are in terms of cybersecurity. Big data centers protected by physical and cyber means are becoming less relevant.

Given the dynamic nature of cyberattacks, cybersecurity solutions must be flexible and capable of updating themselves quickly.

In the realm of cybersecurity, private sector and government roles are inextricably linked.

Due to the private sector's technological expertise, cybersecurity outsourcing has become the norm for governments. Todd Rosenblum and Jonathon Monken discussed the positive and negative aspects of this dynamic:

- Companies have a fiduciary responsibility to shareholders, not to national security interests. For example, companies that aggregate data to sell advertising have competing interests when it comes to cooperating with governments and meeting the firm's worldwide interests.
- The private sector has more cybersecurity technological capability, but governments must determine the appropriate response to attacks. In the cyberdetection sphere, the private sector is the dominant actor. As a result, government outsourcing of cybersecurity makes sense from a technical perspective. However, governments have relevant information that puts intrusions into a broader context. This helps governments determine how best to respond at a national level.
- Private sector cybersecurity vendors are hyper-specialized and few end-to-end providers exist. Companies must contract with multiple firms for tasks like intrusion detection or kill chain protocol execution. Even the government's cyber capabilities

“THE MORE WE CAN EVALUATE THE CYBERSECURITY SUPPLY CHAIN, THE MORE EFFECTIVE THE SOLUTIONS WILL BE. IT MUST BE A COLLABORATIVE EFFORT BETWEEN THE GOVERNMENT AND THE PRIVATE SECTOR.”

**JONATHON MONKEN,
PJM INTERCONNECTION**

depend on private sector capabilities. This represents a cybersecurity supply chain vulnerability.

- The cybersecurity supply chain is a significant opportunity area. Collective work is needed to determine supply chain security protocols. The U.S. needs intelligence from Turkey's DDoS attacks to identify cyberattackers' tactics.

Governments must establish cybersecurity regulations, while the private sector focuses on execution.

According to Dr. Ergin, the government's primary role in cybersecurity is establishing regulations and standardization. Governments are investing heavily in IoT, automation, and Industry 4.0 initiatives. As incentives flow to the private sector, governments should have a say in what is done and monitored.

Although Rosenblum agrees that the government's role is establishing foundational principles, he is pessimistic that the U.S. lawmaking system can keep pace with cybersecurity technology. One promising model is relying on the insurance industry to improve nations' cybersecurity infrastructure. The U.S. insurance industry is starting to evaluate the cyberhygiene and cybersecurity of companies it insures. A potential business opportunity is assembling a global panel of experts that provide insights across insurance companies and analyze how industries will be insured in the future.



“OUR GOVERNMENT CLIENTS AND CRITICAL INFRASTRUCTURE CLIENTS ARE OPTING OUT OF MAXIMUM CLOUD POTENTIAL TO GET MORE SECURITY. THEY DON'T WANT TO CO-MINGLE THEIR DATA IN LARGER STORES AND INSTEAD WANT A HYBRID CLOUD OR CONTAINER CLOUD.”

TODD ROSENBLUM, IBM

Striking a balance between security and privacy is all about tradeoffs for the private sector and governments.

In the United States, people want privacy, but IoT devices seem contrary to that. For example, many accept Google's tracking and monitoring because people have opted for a "free system." Giving up some privacy is the price of getting something for free.

Companies must consider security and privacy tradeoffs, and proactively assess the risk of holding consumer data. The value of consumer credit information, for example, must be weighed against adding more attack vectors to the company. The energy industry is offloading as much personally identifiable information as possible. A potential business opportunity is for entrepreneurs to develop solutions that address privacy concerns while enabling the IoT user experience.

The government operates under different constraints from the private sector. If society wants the government to be precise in investigations, it needs access to data. In addition, security and privacy concerns are now cross-border. Governments worldwide must cooperate and deal with security and privacy matters in a unified way. ♦

INFRASTRUCTURE

Moderator:

Nizamettin Derbil, Energy and Infrastructure Co-Chair,
American-Turkish Council

Thomas A. Boyle, COO, Buffalo & Fort Erie Public Bridge Authority

Robert A. Morin, Senior Vice President, EXIM Bank of the U.S.

William Pegues, Director, Structured Finance & Insurance, OPIC

Burak Talu, Executive Board Member, TAIK

CEO, Dogus Construction Company



PAVING THE WAY

The Future of Turkey's Construction Industry

OVERVIEW

The American-Turkish Council's Co-Chair on Energy and Infrastructure, Nizamettin Derbil, provided background information on the construction industry and moderated this session. Dogus Construction's CEO Burak Talu provided the perspective of a leading Turkish construction company, and Thomas Boyle—previously the managing director of Parsons in Turkey—offered a U.S. perspective. In discussing financing, William Pegues shared the perspective of OPIC, the development finance institution of the U.S. government, and Robert Morin offered insights on behalf of the EXIM Bank of the United States.

The panelists were in agreement on the importance of the construction

industry in Turkey and globally, the expertise of Turkish construction companies, and opportunities for collaboration between Turkish and U.S. construction firms. U.S. construction companies have evolved to focus more on engineering and program management, while Turkish companies have expertise in the actual construction. Together, they are a good fit. Keys to success include understanding the other's culture, forming strong relationships, and collaborating in securing financing.

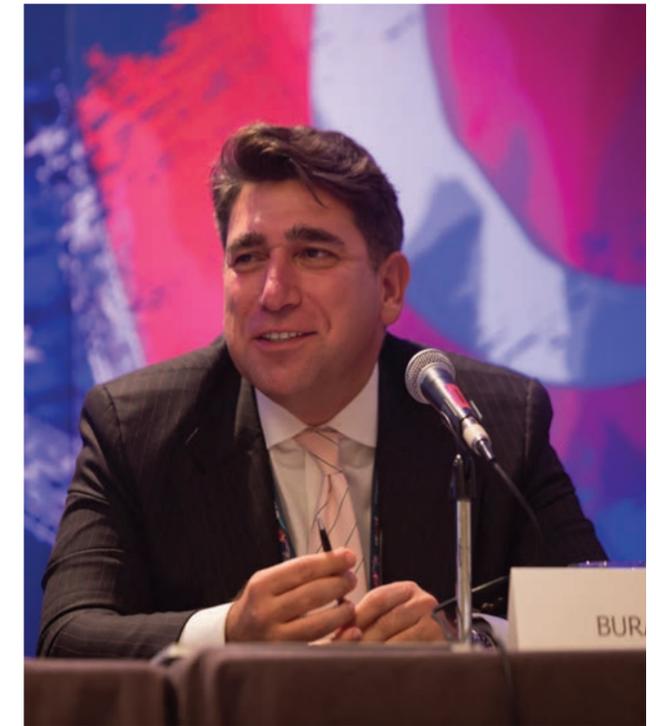
KEY TAKEAWAYS

The construction industry is critically important in Turkey.

Construction makes up 10% of the global gross domestic product and employs

12% of the world's workforce. Construction underpins the world's residential, social, and economic infrastructure. Without construction, there would be no roads, factories, schools, hospitals, power plants, bridges, tunnels, or homes.

Burak Talu said the construction industry represents about one third of the Turkish economy. Turkey's growing population and economy means the country needs new housing, schools, and infrastructure. Over the past decade, many large-scale projects have been unleashed, with no signs of slowing down. This includes tunnels, bridges, airports, canals, dams, ports, pipelines, power and petrochemical plants, railways, metros, stadiums, and more.



Turkey's construction companies are among the best in the world.

Last year Turkey had 40 of the top 250 construction companies were Turkish firms. Turkish companies account for around 5% of all global construction. Over the years, Turkish construction companies have done more than \$330 billion of work abroad, with 26% of that work in the Middle East, 20% in Russia, and a significant amount in Africa. Other countries where Turkish construction firms have done significant work include Turkmenistan, Kazakhstan, Iraq, Libya, Tunisia, Morocco, and Algeria. Mr. Talu sees attractive future opportunities for Turkish firms in the Middle East, Latin America, and Africa.

Mr. Talu also sees significant opportunities for partnership between Turkish and U.S. construction firms. He sees major U.S. construction firms as having evolved into program managers, engineers, and designers, while Turkish construction companies are on-the-ground contractors. Together, U.S. and Turkish firms are a good mix. Advantages of Turkish firms include a wide range of construction experience, a qualified workforce, strong technical capabilities, and a reputation for cost-effective service that meets international quality standards. Turkish construction companies are also good at forming joint ventures with local firms and cooperating with local subcontractors. An area where Turkish construction firms could use assistance is in financing.

In partnering it is important for U.S. and Turkish firms to understand the other's perspective.

In his earlier role as managing director of Parsons in Turkey, Thomas Boyle often formed partnerships with Turkish construction companies. He agreed with Mr. Talu that American firms are often focused on program management, which is a strength that is attractive to lenders. American construction companies bring global experience and strong brand names, as well as technology and innovation.

Based on his experience in Turkey, Mr. Boyle shared some comments on how Turkish firms perceive U.S. firms. Construction companies from the U.S. are seen as having high cost >

“WE BELIEVE TURKISH CONTRACTORS ARE IDEAL PARTNERS FOR U.S. COMPANIES . . . TURKISH COMPANIES ARE CONTRACTORS ON THE GROUND. WE ARE THE ONES WHO BUILD. I THINK THAT'S A VERY GOOD MIX. IT HAS ALWAYS BEEN A GOOD MIX. IF WE CAN ADD SOME FINANCING ELEMENTS INTO THAT PARTNERSHIP WE WILL BE SUCCESSFUL. THAT IS HOW WE SEE THE RELATIONSHIP.”

BURAK TALU, DOGUS CONSTRUCTION COMPANY

› structures, and being slow, bureaucratic, and risk averse. In contrast, U.S. construction firms tend to view Turkish firms as capable and cost competitive, and willing to explore different markets and opportunities. They are also knowledgeable and adaptable. However, Turkish firms have often shown an attitude of going it alone, where they have shunned external expertise. As Turkish firms seek to grow further with large international projects, they may benefit from the expertise and financing capabilities of American firms.

In order to partner and work together, both U.S. and Turkish firms will need to adapt and work to understand the other's culture. Both parties will need to invest time and money, and significant effort will be required on relationship building. Mr. Boyle sees opportunities for collaboration in the United States, Turkey, the Middle East, and Canada.

OPIC facilitates U.S.-Turkish partnerships in construction via loans and political risk insurance.

The Overseas Private Investment Corporation (OPIC) is the development finance institution of the U.S. government. OPIC began in 1971 as a political risk insurance organization, but since political risk insurance is now a commercial market, OPIC's main business is lending. OPIC works in middle- and lower-income emerging markets, facilitating long-term investment relationships. All projects OPIC finances must have a U.S. connection. OPIC's current portfolio is around \$20 billion, in more than 100 countries.

OPIC has been active in Turkey since the mid-1970s, when it offered political



risk insurance. Since the early 1980s OPIC has extended more than \$2.5 billion in loans. In addition to making loans in Turkey for projects such as power generation, airports, hospitals, and hotels, OPIC has facilitated partnerships between U.S. and Turkish construction companies, and has brought together multiple lenders and investors. (Since OPIC is limited to loans of \$250 million per project, very large projects require multiple financiers.) Challenges in many emerging markets include legal and institutional foundations, as well as regulatory and tax consistency.

OPIC's William Pegues sees growing opportunities for U.S. and Turkish construction companies to work together in Africa. He lauded Turkish contracts as "leading edge" and "best in class," and he concurred with Thomas Boyle that relationship building is the key.

The EXIM Bank of the United States is collaborating with the Turkish EXIM bank on projects that create jobs.

The Export Import (EXIM) Bank of the United States is America's official export credit agency, and is extremely focused on supporting U.S. jobs, in goods and services. In April 2016, the EXIM Bank of the United States signed an agreement with the Turk EXIM Bank to capitalize on potential synergies between Turkish construction companies and U.S. engineering firms. For borrowers, the idea is to provide one-stop shop assistance.

While politics in Washington has slowed initial collaboration efforts, there is optimism about multiple co-financing projects in the near future. ♦

"EVENTUALLY IT ALL BOILS DOWN TO RELATIONSHIPS."

THOMAS BOYLE, BUFFALO & FORT ERIE PUBLIC BRIDGE AUTHORITY, FORMERLY OF PARSONS



"FROM THE BORROWER'S PERSPECTIVE AND THE FUNDING BANK'S PERSPECTIVE, THIS IS EASY. IT'S AS IF THERE WAS A SINGLE EXPORTER, A TURKISH-AMERICAN EXPORTER DEALING WITH ONE EXPORT CREDIT AGENCY."

ROBERT MORIN, EXIM BANK OF THE UNITED STATES



FINANCE

Moderator:

Baris Öney, Founder & Managing Partner, Globalturk Capital

Hasan Hepkaya, Head of Project Finance,
Türkiye Sınai Kalkınma Bankası (TSKB)

Michele Small, Director, Washington D.C. Representative
Office, European Bank for Reconstruction and
Development (EBRD)

Zeynep Yenal, Executive Director,
Turkey, Goldman Sachs



Financing Turkey's MEGAPROJECTS

OVERVIEW

Turkey has multiple megaprojects of all types underway, including a major airport, roads, tunnels, bridges, hospitals, and more. These projects are being financed largely by private investors, both domestic and international, through a combination of debt and equity. While investors acknowledge risks related to regulation and currency, as well as political risk, the fundamentals of Turkey remain strong and attractive.

In discussing Turkey's megaprojects, session moderator Baris Öney, the

Founder & Managing Partner of Globalturk Capital, provided an overview of the environment in Turkey and posed investment questions to the panelists. Hasan Hepkaya, Head of Project Finance at Türkiye Sınai Kalkınma Bankası (TSKB), described many megaprojects underway in Turkey. Michele Small, Director of the European Bank for Reconstruction and Development (EBRD) discussed project financing options in Turkey, and Zeynep Yenel, Executive Director of Turkey for Goldman Sachs, explained how companies raise equity capital and shared the perspective of equity investors.

KEY TAKEAWAYS

Turkey has numerous megaprojects underway, requiring significant capital
Three groupings for megaprojects are:

- **Infrastructure.** A major new airport is being built in Istanbul at a cost of \$10 billion, with the ambition of being the busiest in the world. There are also new bridges, roads, tunnels, and subways being built, requiring billions of dollars in capital.
- **Energy.** Turkey is involved in building major pipelines, dams for hydropower,



two nuclear plants with a total budget of more than \$40 billion, and power distribution. Also, major investments are being made in natural gas and renewable energy.



- **Other sectors.** This includes major projects in areas such as healthcare.

Local banks in Turkey provide significant megaproject financing

The Turkish banking system is the second largest in emerging Europe after Russia, and local Turkish banks are a primary source of capital for many of the country's megaprojects, contributing about 75% of all capital and representing tens of billions of dollars.

The local banking system has been healthy, local banks are liquid, and they have been supportive of the country. Because these banks are local, they understand the local context, know the businesses, are comfortable taking sponsor risks, and are comfortable with Turkish law, which many international investors are not. The local banks are very happy financing local projects.



For EBRD, providing capital to projects in Turkey is a priority

For countries in Europe, the European Bank for Reconstruction and Development (EBRD) is an important source of capital. EBRD decides how it is going to invest in a country and establishes clear and specific priorities. EBRD began investing in Turkey in 2009 and in 2015 Turkey was EBRD's top country for investment. EBRD has set priorities for investing in Turkey from 2015 to 2019, which include financing megaprojects in energy, >



"I DON'T KNOW OF ANY COUNTRY UNDERGOING THIS MANY MEGAPROJECTS AT THE SAME TIME."

BARIS ÖNEY, GLOBALTURK CAPITAL



› infrastructure (such as a port and an airport), and hospitals. EBRD is able to provide debt or equity, but limits the amount it can invest at 35% of a project; this limitation makes it important to form investing partnerships, including many public-private partnerships (PPPs). EBRD is also assisting in deepening the capital markets in Turkey and local currency money markets.

It is a great time for institutional investors to invest in Turkey.

International markets are dominated by one theme: there is a lot of capital. This includes capital in equity funds, debt funds, and capital that trickles down to emerging markets money managers. Turkey wants to diversify its sources of capital and attract additional international investors.

A few keys to attracting international investors are timelines that provide

international investors adequate time to evaluate all of the risks involved; structuring of guarantees; and legal frameworks that give international investors comfort. Most megaprojects are financed under Turkish law, which is a barrier for some international investors. Michele Small of EBRD said that foreign investors look at Turkey and know it makes sense to invest there, but can't see how. She said organizations like EBRD need to do a better job of telling the story to explain exactly how to go about investing.

A few Turkish investors have attempted to access the international bond markets with high-yield bonds, but this hasn't been a primary source of funding as Turkish companies do not personally know these lenders.

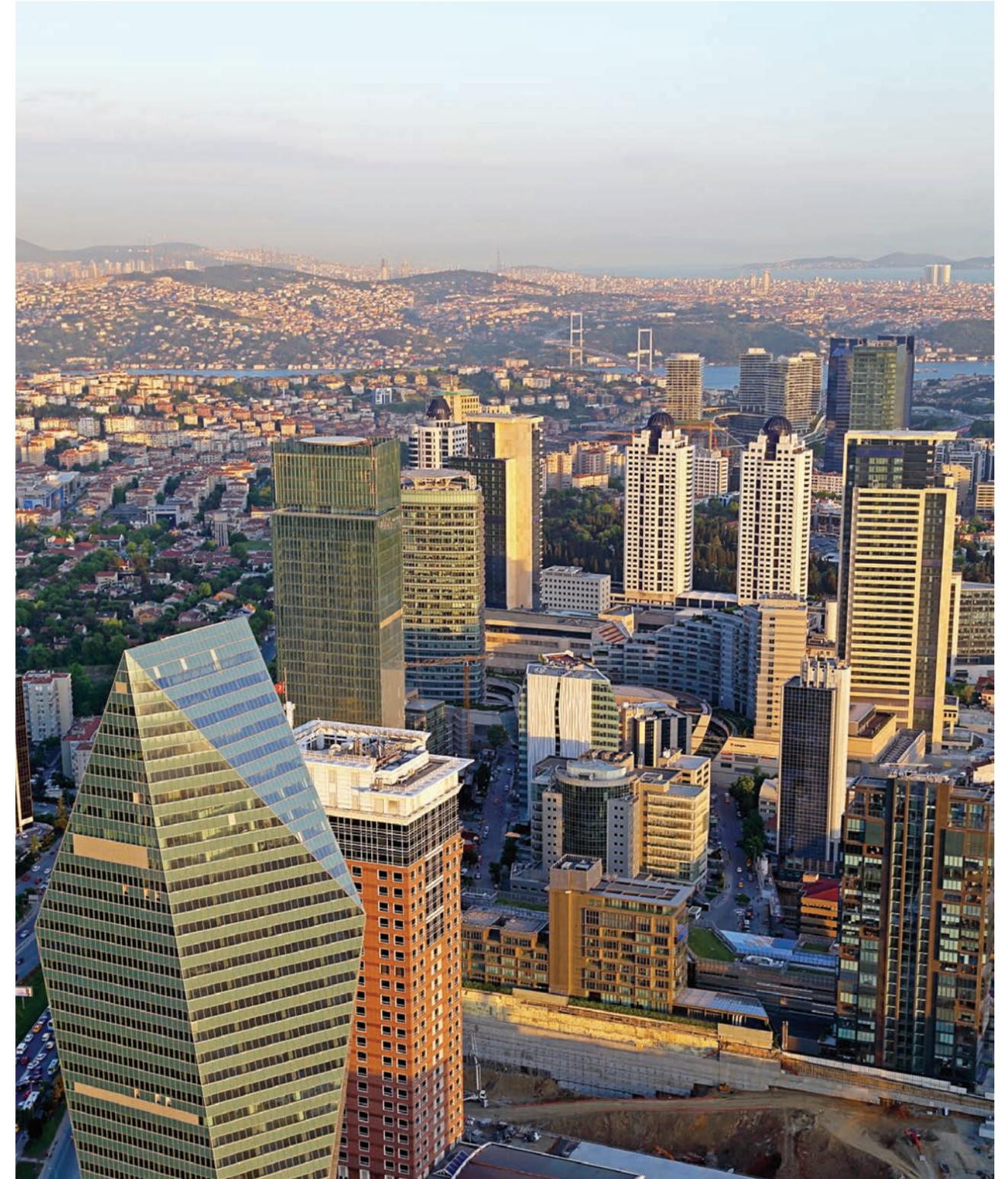
For international investors, key risks are geopolitical risks, currency risks,

and regulatory risks. Some investors see potential opportunities in Turkey, but feel the downside risks are too large. Others simply try to price these risks into their investment. Some international investors are scared by the political environment in Turkey, but they are the exception, not the rule. Many investors continue to believe in the fundamentals of the country, and businesses continue to perform well.

An example of the optimism about investing in Turkey is seen through three Turkish private equity funds, which all closed on new rounds of capital shortly after the July 15 coup attempt. One fund was more than \$500 million and two others raised more than \$100 million. Even in the aftermath of the attempted coup, investors have had no trouble raising investment capital and there has been no effect on megaprojects. ♦

“I CAN EASILY SAY THAT MOST OF THIS FINANCING [FOR MEGAPROJECTS] HAS COME FROM THE LOCAL BANKS.”

HASAN HEPKAYA, TSKB



“IT'S MUCH HEALTHIER FOR THE ECONOMY AND FOR THE LONGER-TERM GROWTH OF TURKEY TO DIVERSIFY THIS LENDER BASE . . . INTERNATIONAL BANKS AND CAPITAL MARKETS ARE TWO IMPORTANT SOURCES.”

ZEYNEP YENEL, GOLDMAN SACHS



THE LUXURY OF EFFICIENCY

SAVE

THE DATE

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36TH ANNUAL CONFERENCE ON U.S.-TURKEY RELATIONS

MAY 21-23, 2017

TRUMP INTERNATIONAL, WASHINGTON, DC



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