

The Turkish Perspective

MARCH 2019 ISSUE 68

ECONOMY | BUSINESS | FOREIGN TRADE | ANALYSIS



**OVERCOMING
TRANSACTIONALITY &
TERGIVERSATE IN TURKISH - US
RELATIONS:
TRADE
IS
THE
ANSWER**

By Prof. Dr. Ahmet Kasım Han

agility

/ə'dʒɪlɪti/

noun

The productive and dynamic business culture of Turkish exporters which allows them to work with many of the world's leading brands.



Discover
the potential

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OVERCOMING TRANSACTIONALITY & TERGIVERSATE IN TURKISH - US RELATIONS: **TRADE IS THE ANSWER**

The relations can equally surely benefit from a boost in bilateral trade relations.

That is exactly the road not taken and exploited to the full extent of its potential in the two countries relations

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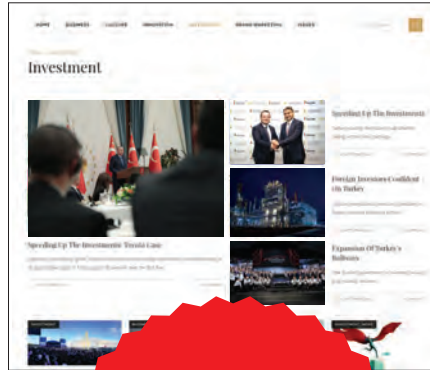
THE FIGURES OF TURKISH EXPORTS IN JANUARY, 2018

Online theturkishperspective.com

THE TURKISH PERSPECTIVE DIGITAL

The Turkish Perspective website is to be launched soon.

A NEW MEDIUM TO LEARN, ANALYZE AND MONITOR EVERYTHING ABOUT TURKISH ECONOMY AND BUSINESS, IS BORN. THE TURKISH PERSPECTIVE DIGITAL WILL SHARE THE LATEST NEWS, INTERVIEWS WITH DECISION MAKERS, PROVIDE IN-DEPTH ANALYZES AND WILL BE THE FOREIGNER'S GUIDE IN TURKEY REGARDING REGULATIONS AND LEGISLATIONS.



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as expected from
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Editorial



İSMAİL GÜLLE
CHAIRMAN (TİM)

INNOVATION IS ESSENTIAL FOR EXPORTS, AS EXPORTS ARE ESSENTIAL FOR TURKEY

With globalization, digitalization and internet revolution, the world has moved to another dimension. Industrial economies now have to be replaced by economies of knowledge and so on. As a result, all major economies have become a collective network economy, which are connected to each other.

CRITICAL ISSUES such as global trade wars and Brexit have brought risks to global economy and uncertainties are still on the rise.

However, Turkey has no other choice but to overcome these obstacles. The growth of Turkish economy relies on the export performance, and the strength of the export performance relies on R&D and innovation.

Turkey's increasing export performance brings along some new needs. Thanks to the Turkish government and our bureaucrats, all of these needs find a resolution in a short time period. Last month, we held the 2nd TİM Delegates Meeting with the participation of the Minister of Treasury and Finance, Dr. Berat Albayrak and the Minister of Trade, Mrs. Ruhsar Pekcan. TİM Delegates who represent our 27 exporting sectors had the chance to communicate and offer their sectoral demands directly to the authorities. The ministers reacted quickly to these demands. It is very efficient that private sector and public authorities are working in a harmonized perspective.

Thanks to Eximbank, reaching to financial resources are no longer a critical problem for our exporters. We are also looking forward to see similar applications from the private banks regarding the financing needs of exporters. It should not be forgotten that every source transferred to exports returns as employment, productivity



and foreign exchange inflow to our country.

As TİM, we are open to support every project that will create an increase in our exports. Because now, it's a well-known fact that exports are standing in the heart of our economy's future. Therefore, we continue to prepare new reports and organize new projects to improve the perception among public. For this purpose, we are organizing several different activities. One of our primary events is the Innovation Week which was launched 7 years ago. It is fair to say that "Innovation Week" has risen the perception of innovation among public significantly since 2012. From that time, projects such as InovaTİM, InoSuit, and InovaLeague were established by TİM with the

purpose of deepening this perception among industrialists, academicians, students and exporters.

With these in mind, we decided to redesign our flagship event, "Turkey Innovation Week" under a new name and context. In 2019, we will integrate "Knowledge Economy" into the Innovation Week, recreating it as the "Knowledge Economy and Innovation Week". With globalization, digitalization and internet revolution, the world has moved to another dimension. Industrial economies now have to be replaced by economies of knowledge and so on. Since technology has to rely on it, information is now considered a production factor. In other words, information is considered a tangible and visible property today. As a result, all major economies have become a collective network economy, which are connected to each other.

With the Knowledge Economy and Innovation Week, which will be organized in the first week of May, we will bring together the leading actors of science, technology and innovation, such as industrialists, scientists, technology leaders, university students, entrepreneurs, angel investors, non-governmental organizations as well as R&D and science and technology centers, with the public in Istanbul. We will discuss examples of not only local but also global success stories, and bring them to the attention of Turkish public.

More than 60,000 companies have INVESTED IN **TURKEY**



how about you?

average annual real
GDP growth rate

5.7%

2002-2017

13th largest
economy in
the world

GDP at PPP prices, 2017

800,000

university graduates
per year

average annual real GDP
growth rate forecast in OECD

4.9%

2015-2025

\$851 billion
of GDP at
current prices
2017

80.8 million

of population
with half under the age of 31

INVEST IN TURKEY

Presidency of the Republic of Turkey Investment Office, the official investment advisory body of Turkey, is a knowledge-center for foreign direct investments and a solution partner to the global business community at all stages of investments. It provides customized guidance and qualified consulting before, during, and after entry into Turkey.

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First

CONSTRUCTION, BUSINESS, FOREIGN TRADE, INVESTMENT...



Albayrak spoke at an event attended by representatives of the Turkish business world.

ECONOMY

THE RECOVERY IN THE ECONOMY CONTINUES RAPIDLY

"Turkey will be proceeding with an economic strategy based on balance and quality that does not allow for vulnerabilities" said Minister of Treasury and Finance, Berat Albayrak.

THE RECOVERY

in the economy continues rapidly" Albayrak said and he noted that in the second quarter, relief will be felt strongly in many areas.

Albayrak emphasized that measures taken so far have enabled the country to start preliminary work on

stronger financial structures and ramped up immunity against political and financial shocks.

"We have seen this period as an opportunity for rebalancing. We have experienced about 30 percent improvement in exchange rates. The Turkish lira has



become one of the top currencies positively decoupling compared to other emerging markets. 2019 will be an interesting year. The recovery has been stronger than we had initially anticipated. We do not see serious risks to growth. Thus, the 2.3 percent GDP growth target we

envisaged in the new economic program will be met. The economy will perform much better after the elections. We want an employment-oriented export-based growth. Tourism and export are the two main pillars supporting growth," Albayrak said.



CONTRACTION

17 TURKISH CONTRACTORS IN ENR 250

The World's Largest 250 International Contractors list has been published. 17 companies took place in the list from Turkey. It is noteworthy that most of these companies were Turkish construction companies, which had their mark on the Russian market.

According to the list, which published by the international construction sector magazine ENR (Engineering News Record) based on the revenues obtained from the activities of the contractors outside from their countries in the previous year, Turkish companies took the following order: Rönesans Holding 76, Alarko Holding 110, Limak İnşaat 121, Kolin İnşaat 152, TAV Havalimanları 153, Cengiz İnşaat 161, Gap İnşaat 163, Tekfen İnşaat 170, Mapa İnşaat 179, Enka İnşaat 185, Yapı Merkezi 190, Nurol İnşaat 206, Ant Yapı 207, İçtaş İnşaat 211, Bayburt Grup 231, Makyol İnşaat 233, GAMA İnşaat 246.

CONTRACTION

Turkish Contractors to Implement Kazakhstan's First BOT Project

The project, which costs \$480 million, will be completed and put into operation within 4.5 years.



TURKISH construction companies will carry out the Big Almaty Ring Road (BAKAD) project in Kazakhstan through the build-operate-transfer (BOT) model, which will be a first in the country. As part of the consortium agreement between Turkish companies Alsim-Alarko and Makyol and Korean company SK, the companies will build the BAKAD project 30 kilometers from the Almaty province. The construction of the road, which its foundations were laid last May, is scheduled to start this May. Within the framework of the project, a 66-kilometer long road consisting of six lanes will be constructed near the city of Almaty. The project, which costs \$480 million,

will be completed and put into operation within 4.5 years. BAKAD is expected to solve the traffic problem in the Almaty region.

The road will be a toll road, all vehicles on the road will be monitored with a smart road system, weather conditions will be transmitted to drivers with smart bots and smart technology will also be used in road maintenance and operation. BAKAD, which will have eight junction bridges, will intersect with the existing infrastructure at 240 points. BAKAD is the first project being implemented in

Kazakhstan with the BOT method. Companies will construct the project in five years and operate it for 16 years.

\$480
MILLION

THE PROJECT COSTS

BUSINESS

RUSSIA LIFTS VISA FOR TURKISH BUSINESS PEOPLE AND TRUCK DRIVERS

Russian President Vladimir Putin gave instructions to lift visa restrictions for business people from Turkey. However, in the meantime, visa restrictions for Turkish citizens outside these professions still apply. According to the decree signed by Putin, restrictions imposed on Turkish citizens as part of a visa regime that started in November 2015 will be lifted for individuals travelling to do business in the country.

Truck drivers engaging in international transport, service passport holders, business people visiting Russia on short-term business trips and Turkish diplomats will no longer be subjected to visa requirements. In the decree it is also noted that Turkey is expected to lift visa restrictions on Russian citizens from the same professions following the rules of reciprocity.



EDUCATION



RUSSIA-TURKEY ESTABLISHING JOINT UNIVERSITY

Turkey and Russia are exploring the idea of setting up a joint university to boost academic exchanges between the two countries.

The matter would be discussed during President Recep Tayyip Erdoğan's upcoming visit to Russia in April. According to the Turkish media, the university could be based in Istanbul or Antalya, a Mediterranean city popular with Russian tourists. The university would offer programs in physics, chemistry and computer technology, with a curriculum prepared by Russian academics. Turkish academics, on the other hand, would be responsible for the departments of agriculture, sociology and medicine. The university would offer courses in both Turkish and Russian and will have an academic exchange program.

FOREIGN TRADE

Relations with South Korea are developing

New deal to boost trade volume between South Korea and Turkey.



TURKEY and South Korea signed a free trade agreement on May 1, 2013, and with the Agreement on Trade in Services and the Investment Agreement signed last August, the free trade deal has become more efficient. "We expect more investments and trade in the service sector in the future," Ambassador Choi Hong-Ghi told Anadolu Agency in an exclusive interview.

Choi told more than half of Turkey's imported goods consists of spare parts in the automotive sector. Choi said Turkish investments in South Korea, which stood around \$100 million, should rise to match \$2.9 billion worth of South Korean investments in Turkey. Choi also added the focus should not be only on the efforts to close the trade gap between the two nations, but also on devising economic structures that complement each other.

SOUTH KOREA WANTS TO INCREASE TRADE WITH TURKEY



INVESTMENT

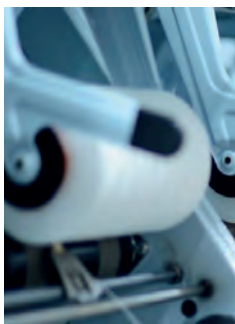


TURKEY INTENSIFIES IN THE JAPANESE MARKET

Turkey discussed issuance of samurai bonds with investors in Tokyo.

With intent of increasing the diversity of instruments, Turkey has authorized Mizuho, Mitsubishi UFJ Morgan Stanley and Nomura to organize a series of investor meetings in Japan's capital, Tokyo.

Minister of Treasury and Finance, Berat Albayrak, attended a meeting in Antalya on January 17th and had said, "We have started negotiations on the issuance of Samurai bonds of Japanese yen in order to increase instrument diversity. In December 2017, the Undersecretariat of Treasury had completed the issuance of 60 billion yen coins from the Japanese Yen market, equivalent to approximately \$ 545 million.



INVESTMENT

KORDSA MAKES NEW US INVESTMENT

Kordsa expanded its reinforcement areas and competencies with the acquisition of Fabric Development, Textile Products and Advanced Honeycomb Technologies that supply advanced composite materials for the aerospace industry.

In its continuous effort to support its organic growth with inorganic growth opportunities, the reinforcement leader has signed a definitive agreement to acquire approximately 96% share of US-based Axiom Materials that has total enterprise value of US\$ 181 million. Axiom Materials provides advanced composites for aerospace and industrial applications, while reshaping the composite industry with its R&D activities. The consummation of the acquisition is subject to customary closing conditions, including certain US government approvals.



INVESTMENT

NEW INVESTMENT BY SOCAR TURKEY

Turkey's largest foreign investor Socar Turkey is getting prepared for a new petrochemical investment.

Completing 14.2 billion dollars of the \$19.5 billion investment foreseen by 2020, Socar will now make another \$1.8 billion investment. Which targeted investment activation in 2023, Socar's partner will be the British oil company BP. This investment will be shared by a financial institution with a 10-15% share. Socar Turkey's CEO Zaur Gahramanov said "This investment will cover Turkey's current deficit of \$ 5-6 billion every year."

The start of construction of a new petrochemical complex SOCAR in Turkey is scheduled for the second half of 2019. The enterprise is expected to be commissioned at the end of 2022. The enterprise will be created in the Special Industrial Zone on the Aliaga Peninsula, where the STAR oil refinery and Petkim petrochemical complex also operate today, owned by SOCAR Turkey.

INVESTMENT

Turkey-Based Akpa Chemistry Plans Distribution-Warehousing In South Carolina

AKPA Chemistry Organic Peroxides and Initiators will invest \$2.6 million locate a new distribution and warehousing facility for organic products in Fairfax, South Carolina. The development is projected to create 13 new jobs in Allendale County.

Founded in 1997 in Istanbul, Turkey, Akpa Chemistry specializes in the production of organic peroxide, initiator, accelerator



and paint dryers used in the composite, petrochemical and paint sectors. With a wide range of products in the chemical industry, Akpa Chemistry provides fast and efficient product supply worldwide, including to North America, Asia, Europe and the Middle East. The company's new distribution facility is expected to come online in the second quarter of 2019.

INVESTMENT

NETLOG TO GROW WITH ACQUISITIONS IN EUROPE, THE US AND THE BALKANS

With the investments it has made in recent years, Turkish logistics company Netlog has managed to become one of the major in the region. It has now expanded its target and is poised to grow with new acquisitions abroad besides its ongoing investments in Turkey.

Netlog is currently conducting purchasing negotiations with three companies in Europe, the U.S. and the Balkans in line with its global growth strategies, according to the company's Vice President Gökalp Çak. The goal, Çak said, is to turn Netlog into a Turkish company with a turnover of \$2 billion in the near and medium term.

"In this context, 2019 will be one of the years of historical importance for Netlog. We are currently negotiating to buy one of the largest logistics companies in the Balkans. In addition, we are in contact with companies in Europe and the U.S., which we see as the heart of logistics in the world. We will strengthen the presence of Netlog in the world with the right companies that will fit our strategies," Çak noted.

TRADE

PASSPORT-FREE TRAVEL BETWEEN TURKEY AND MOLDOVA

Citizens of Turkey and Moldova will be able to travel to each other's countries with only identification documents.

In line with the agreement inked between the two countries, citizens will be able to stay in Moldova visa-free with a new type of chipped identification every 180 days as of Feb. 19, 2019, provided they do not exceed a 90-day stay. Travel with identification documents, which is projected to positively effect the tourism volume between the two countries, is expected to increase the number of tourists, especially from Moldova.



The number of tourists from Moldova stood at 194,000 last year, with an increase of 13.25 percent. This year, the number of tourists coming from Moldova is expected to exceed 200,000. While 140,000 Moldovans visited Turkey in 2016, this figure rose to 171,000 in 2017. Moldovans with an identity card will be able to stay in the country visa-free every 180 days, provided they do not stay longer than 90 days.

FOREIGN TRADE

TURKEY'S FOREIGN TRADE DEFICIT SHRANK

Turkey's foreign trade gap in 2018 narrowed by 28.4 percent year-on-year, the Turkish Statistical Institute (TÜRKSTAT) announced.



THE FIGURE reached \$55 billion last year, down from a \$76.8 billion deficit in 2017, according to TÜİK. Turkish exports rose 7 percent on a yearly basis to hit \$168 billion, as imports dropped to \$223 billion, indicating a decrease of 4.6 percent.

In the New Economic Program, the government had forecast a foreign trade deficit of \$66 billion for 2018. It had forecast exports and imports at \$170 billion and \$236 billion, respectively.

The government expects the country's foreign trade shortfall to shrink to \$62 billion this year. Its export and import forecasts are \$182 billion and \$244 billion, respectively.

EU IS THE TOP EXPORT MARKET

Turkey's exports to EU, its main trading partner with a share of 50 percent, surged 13.7 percent year-on-year to total at \$84 billion last year. Shipments to Asian and African countries, other largest export markets for Turkish products, were \$41.8 billion and \$14 billion, respectively, in 2018.

Germany was the top export market of Turkey, with some \$16.1 billion worth of exports. It was followed by the U.K. with \$11.1 billion, Italy with nearly \$9.6 billion and Iraq with \$8.4 billion in 2018.

The top country for Turkey's imports was Russia with almost \$23 billion last year. China followed it with \$20.7 billion, Germany with \$20.4 billion and the U.S. with \$12.4 billion.

FOREIGN TRADE

TURKEY'S TRADE DEFICIT WITH EU FALLS

Turkey's trade deficit with the EU dropped significantly in 2018 compared to the previous year, EU statistical body Eurostat data. Turkey's imports from the EU fell to 77 billion euros (\$86.79 billion) in 2018 from 84.8 billion euros in 2017. Its exports to the bloc last year increased to 76.1 billion euros, up from 69.8 billion euros in 2017. As a result, Turkey's trade deficit with the EU, which stood at 15 billion euros in 2017, dropped to just 1.2 billion euros last year.

Meanwhile, the EU's foreign trade balance saw a 22.6 billion euro deficit in 2018, according to official figures.

Eurostat said the 28-member bloc's exports of goods rose 4 percent on a yearly basis, amounting to nearly 1.95 trillion euros last year. The EU's imports from the rest of the world totaled some 1.97 trillion euros, climbing 6.5 percent year-on-year. Intra-EU trade saw annual growth of 4.8 percent, reaching around 3.51 trillion euros in the same period. Last year the U.S. was the largest importer from EU with some 406 billion euros and 20.8 percent of the bloc's total exports, followed by China, Switzerland, Russia and Turkey.



TOP EXPORT MARKETS OF TURKEY





Turkey's New Entrepreneur Force

TİM-TEB Start Up Houses are intended to encourage, develop and strengthen **innovative entrepreneurs and start-up businesses** that generate high added value and have export potential.

Panorama



BY HAKAN GÜRSU



SICMs propose us a new hybrid system beyond the horizon for the future of Technopolis.

TURKEY'S INNOVATION SYSTEM-NEW MODEL SICM

As a model, SICM (Sustainable Innovation Center Model) aims to be a partner to develop new products for many SMEs by collecting qualified manpower in equipped centres.

COMPANIES OPERATING IN ANY EMERGING MARKET must continuously develop their skills and knowledge in order to successfully integrate to a global production process. The skills development capacities of SMEs should be strengthened with more creative and innovative tools for potential markets. Many of these dynamic global impacts and opportunities, both operate through increased competition and links with the foreign brands. Globalization always serves for the creation of new market opportunities but also it builds pressure for small and local domestic firms (SMEs) in emerging markets to improve their competitive position. Therefore, sustainable innovation is crucial for the small sized industry and also vital for their future development strategy.

What will be the alternative methodology for the SME structure in the emerging market conditions? The largest universal problem for SMEs is the lack of financing for product development, and this expenditure also brings high personnel expenses for researchers, engineers, designers. SMEs are considered as dynamic units with low-level management profile that can change flexible and quick production character

within a labor intensive production profile that requires low capital profile. SMEs, as well as all over the world, Turkey occupies a large part of the economic fabric, to fulfill a very important role in socio-economic development of countries are expected production units. The infrastructure of the Turkish economy in the late 2000's is still largely based on low-tech scale SMEs. High technology is mainly in the production, with an export share of up to a mere 4%. The industry is as effective as developing heavy industrial goods in developing countries. Although there are important work carried out by companies in techno-parks, high technology-based products produced here have a very low impact on the economy.

Silicon Valley, founded in the 1950s with the rise of semiconductors, is the first modern technology cluster in the world. After nearly a 50 year gap, the Technology Development Zone was finally established in Turkey in 2001. Turkey entered the race for development of technology parks as in many other areas and brought together those who want to develop technology in this area, with the belief that the interaction will help develop technology by providing opportunities and benefits.

Technology Development Zones

In the past 10 years, the technology parks in Turkey, which are hoped to establish a bridge between the university and industry, have not yet reached the desired size and functionality as well as efficiency. In fact, this building, which is called “Technopark” or “Technopolis” is trying to pass the first stage. Having said this, the Technology Development Zones Law No. 4691 could pave the way for the technology parks, as technology development; Increases competitiveness and export-oriented manufacturing power of the national industry in international trade. Still now, Turkey continues to transfer ideas and medium class technology from West to East as a partner in the technology transfer chain, rather than developing solutions that will enable the country to become a source of production. At the beginning of the 2000s, Turkey started to adapt itself to the model of TDZ (Technology Development Zones). There is a strong and courageous entrepreneurial culture in Turkey and its industry similar to other European countries. Millions of small and medium-sized enterprises (SMEs) form the strength of the character of the private sector – representing the largest percentage of companies and services in Turkey. Despite the great diversity of functions and technologies, these common sectors and their characteristics require a relatively high intellectual input for production possibilities. On average, the value of Turkey’s GDP per capita is easily comparable to the EU members Bulgaria and Romania. When the main sectoral and regional data is examined, Turkey’s economy is small but extremely well performing which is attributed to the major progressive sector. Agriculture in the western regions are productive but poor and large rural sector which may cover about half of the workforce still exists in the inner and eastern regions. The economic literature that defines the status of Turkey amongst the developing markets is therefore defined as a dual economy. When we talk about small enterprises, it should be mentioned that small-scale production units have not grown since they either fail or have insufficient capital. 99.9% of the number of enterprises in Turkey fall into the definition of SME. Approximately 81% of the employment in the manufacturing sector, 59% of added value and 60% of exports are provided by these enterprises. The SMEs in Turkey, instead of producing quality products, creating added value and export potential, are largely focused on creating their own brand and marketing issues by producing outsourced or intermediary products as the production trend suffers serious difficulties.

Sustainable Innovation Centre Model

As a model, SICM(Sustainable Innovation Center Model) aims to be a partner to develop new products for many SMEs by collecting qualified manpower in equipped centres. In this way, SMEs will spend more on their resources rather than on the infrastructure expenditures required for R&D. They will not

allocate resources to the employment of qualified labour but will provide financing for a living model instead of financing ineffective investments. SCIM is proposed as living industrial organism, as a cell which has a lot of functional parts that work in harmony. SCIM serves as a new processor for emerging local industries. It works as a communicator, controller, accelerator and memory for all development means. The proposed model of SICM fully integrates into to the problem-solving process of various SMEs in R&D, product development and innovation process. SCIM model will also be integrated with the related universities, institutions, and not profit organizations on global networks.

In addition, for all partner SMEs in SCIM models; employment costs of qualified human resources and R&D will be relatively reduced, while the number of projects that can be developed will gradually increase. All tests, reviews and prototyping processes required during product development will be undertaken by the functional units of this core structure, further saving time and resources. Government funding aids to these export potential products will then be met, which is also designed and tested. The products in SCIM model meet the global market IS* and IP** regulations before being introduced to new markets.

Turkey must come to terms with the fact that it must inevitably develop further creativity, strengthen its patience and increase its efficiency. Immediate objectives include improving country ownership, reducing the frequency of crises, increasing private sector capital flows, and achieving “investment grade” status. This means embracing improvements for higher economic growth and standards of living for the people in emerging market countries.

If the Turkish economy can improve competitiveness of industrial SMEs in order to make them real players in the global market, the economic output will be outward-oriented and their exports will naturally increase.

Finally, it is observed that the SME structure is still unable to realize the most needed change in mindset. Despite all the support provided in Turkey by extending the limited financial resources, the SME-based production has not moved beyond imitation and reverse engineering services. Performance of SMEs, which cannot realize revolution of thought, as an industrial infrastructure, negatively affects the economy of the country. Therefore, in conclusion, the SME problem appears to be focused on mindset change as much as financial support.



The transformation of knowledge to the value-added product will be the most decisive strategy for the global future.

Hakan Gürsu, Dr.

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Briefing

ECONOMY, AUTOMOTIVE, REPORT, INTERVIEW, ANGEL INVESTMENT, ARTIFICIAL INTELLIGENCE...



ECONOMY

It's time for an

UPPER LEAGUE WITH EXPORTERS

The second of Turkish Exporters Assembly (TİM) Delegates Workshop was held in Istanbul. Treasury and Finance Minister Berat Albayrak, Minister of Trade Ruhsar Pekcan and 450 delegates representing 83 thousand exporters of TİM from different regions of Turkey's attended to workshop.

IN his speech at the workshop, Minister Albayrak reminded that Turkey has accomplished a significant transformation last 16 years, and the export figures of 30 billion dollars has approached \$170 billion today, during in this period. Albayrak said all the economic stakeholders

especially the export family will be a hero of this story.

Emphasizing that they will work harder than ever in this period of uncertainty, Albayrak underlined that they will read this process as an opportunity period and will become the star of global trade by evaluating the prominent features of the country.

Stressing that Turkey has improved its range of source, currency and cost in many markets such as the Far East, Asia, Japan, China to further expand its investor base, Albayrak said:

"It's time to annihilate the fragilities of our economy, implementing structural transformations and lift

Turkey jointly to a higher league.

"EXPORTERS ARE THE LEADING WARRIORS OF THE FRONT"

Chairman of Turkish Exporters' Assembly İsmail Gülle mentioned in his speech about the vision and mission that they executed back in that period as the

new administration elected on June 30. Gülle said “We, as exporters, are the leading warriors of the front. As the field soldiers of Turkey’s trade diplomacy, we are aware of how important each \$1 is for our country. We follow the goal-directed work carried out by Turkey in policies and strategies of sustainable growth, sustainable employment, price stability and financial stability as the business world and export family, and we support until the end. We are also in this struggle with more than 83 thousand exporters and more than 3 million employees in these companies.” Gülle talked about their activities in areas such as innovation, R&D, target markets, export compass, entrepreneurship and publicity.

182 BILLION DOLLARS OF EXPORT IS POSSIBLE

Stating that at the beginning of year, they asked sectors about their annual projections to create the forecast for 2019, Gülle made the following statements:

“The results were extremely promising. It is possible to reach 182 billion dollars. All we have to do here is that; use our inactive capacity correctly with logical strategies by choosing the right target markets and to achieve much higher export revenue.



“All we have to do here is that; use our inactive capacity correctly with logical strategies by choosing the right target markets and to achieve much higher export revenue.”

In order to serve this purpose, we published ‘Export 2019 Report’ in January. In the report’s foreign trade analysis section, we discussed the 200 products that were imported the most in the world, and we saw that we had a competitive advantage in 47 of them.”



“As the field soldiers of Turkey’s trade diplomacy, we are aware of how important each \$1 is for our country.”

EXPORTS MEET FOOTBALL WITH TIM-TFF COOPERATION



Turkish Exporters Assembly (TİM), launched a new campaign with Turkish Football Federation (TFF) in order to bring football and exports, the driving force of Turkish economy, together. As part of the campaign, all teams of Turkish Super League took the field in week 19 with a banner that says “Turkey Will Rise with Exports”.

Commenting on the campaign TİM Chairman İsmail Gülle said, “We initiated such a campaign to bring the export culture to all segments of society. In Turkey, millions of citizens follow football



games closely. Our young population is the biggest competitive advantage in sports and in many other areas, if they are guided and supported correctly. This strong potential is extremely encouraging in terms of exports. I believe that through the fans who are committed to football, we will create an important potential by delivering export awareness to all segments of the society.”

AUTOMOTIVE

THE YEAR OF MERGERS IN THE AUTOMOTIVE INDUSTRY

KPMG Turkey discusses the recent developments in the Turkish automotive industry and the expected changes in the sector in 2019.



ACCORDING TO KPMG, mergers and acquisitions in the Turkish automotive industry will increase in the coming years, especially in the OEM and automotive supply industry.

KPMG Turkey's new report on the automotive industry contains striking insights into what 2019 will bring for the sector that has undergone major changes over recent years. Reviewing the mergers and acquisitions transactions in the Turkish automotive industry since 2015, KPMG underlines that investor focus will be especially on the automotive supply industry in 2019.

KPMG Turkey, Head of Advisory, Ms. Hande

"Our goal is to become one of the leading countries in the field of digitalization" Ruhsar Pekcan said.

"The automotive industry offered significant opportunities for investors following a year of struggle due to increased foreign exchange rates."

Şenova says the automotive industry offered significant opportunities for investors following a year of struggle due to increased foreign exchange rates, increasing costs of borrowing coupled with the increase in supply costs. Companies that can export, can hedge the foreign exchange volatility and so benefit to maintain even increase its profitability. That type of companies with export portfolio are on the radar of strategic and financial investors. In addition, we think that due to the difficulty of financing in this high interest market, funding through equity investments would be a preferred alternative.

• OEM suppliers are trending

According to the KPMG report, for the period between 2015 and 2018, OEM suppliers are involved in the majority of the M&A transactions in the automotive sector in Turkey. In total there have been 23 mergers and acquisition transactions within that period. It suggests that foreign investors entering the Turkish market aimed to strengthen their positions in Turkish and European markets in the same period, and aimed to reach the leading manufacturers. Investment appetite is increasing within the OEMs in order to strengthen its position in the Turkish and European markets and access leading automobile manufacturers.

• The new R&D center

As in many industries, the automotive sector is one of the top sectors affected by the new digital transformation globally. Almost all of the players in the automotive industry has invested in R&D and so even seen that these industrial firms are buying boutique technology and digital solution companies.

• Leading industry in exports

Turkey's automotive industry, accounting for 19 percent of total exports alone, with 31.6 billion dollars of exports in 2018, contributed to 6 percent of the total employment created. It is projected that automobile production, which shrank last year, will have a few years for the 1 million threshold.

According to the report, the need for structural reforms is still ongoing in order for automobile

- Indian players are investing

Mahindra was one of the biggest investors in recent history in the agricultural machinery area with its acquisition of Hisar Makina. Tax incentives for products made in Turkey and the size of the domestic market will activate the interest of foreign investors and according to the report, Indians will continue to invest in Turkey.



23

MERGERS

IN TOTAL THERE HAS BEEN 23 MERGERS AND ACQUISITION TRANSACTIONS WITHIN 2015 AND 2018.

31.6%

**TURKEY'S AUTOMOTIVE INDUSTRY,
ACCOUNTING FOR 19 PERCENT OF TOTAL
EXPORTS ALONE, WITH 31.6 BILLION
DOLLARS OF EXPORTS IN 2018.**

1st

BASED ON THE ORIGINATION OF THE INVESTOR, USA IS THE NO.1 IN THE AUTOMOTIVE INDUSTRY FOLLOWED BY EU COUNTRIES, JAPAN AND INDIA.



TURKEY'S ICT SPENDINGS TO REACH OVER \$17B

Information and communication technology being spent by institutions in Turkey is expected to reach \$17.1 billion in size this year, according to an International Data Corporation (IDC) report.

The report highlights that telecommunication, finance, public, production and retail sectors come to the fore with the highest IT spending, while especially telecom operators are making significant investments toward becoming a digital service provider.

“Global spending and employment measures, increased competition and profitability measures; rapid depreciation and volatility of the Turkish Lira against the

Increasing investments in the big data and analytics area will reveal the importance of data architecture.



“The importance of digital transformation for companies is becoming clearer in such environments.”



IDC Turkey Country Director
Nevin Çizmeciogullari

U.S. dollar led the institutions operating in the public and private sectors to reconsider their IT investments,” IDC Turkey Country Director Nevin Çizmeciogullari said in her address at the event.

Despite all the negativity, Çizmeciogullari said, they have observed that businesses that want to obtain a permanent place in the Turkish market and that have a long-term perspective continue to invest in technology.

“The importance of digital transformation for companies is becoming clearer in such environments. In the coming period, with the contribution of the growing startup ecosystem, we anticipate that many new partnerships, new investments and projects will be realized in new technologies such as blockchain, cybersecurity, 5G and robotic process automation,” she added.

Besides Turkish telecom services, the rest of the IT market will reach \$8.3

billion this year. In the hardware-weighted market, IT services and sub-sectors of the software industry are the fastest growing areas with an estimated annual growth rate of 3.8 percent predicted by the IDC.

The financial sector is, on the one hand, shaping its investments within the framework of ensuring regulatory compliance, according to the report, while on the other hand, it focuses on improving customer experience and operational efficiency with new technologies such as blockchain and Open API.

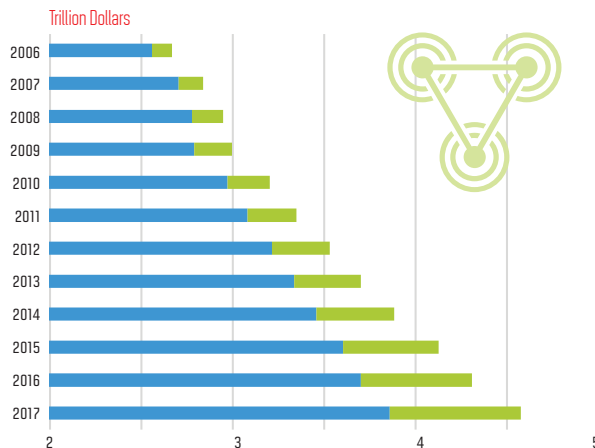
By becoming the most critical priority of CIOs in Turkey, innovation and the value provided to the company will have an effect on the future IT investments. Moreover, companies are said will interact much more with technology initiatives to become more innovative and agile.

The robotic process automation will turn into one of the most important solutions for reducing the labor cost of companies and increasing their operational efficiency.

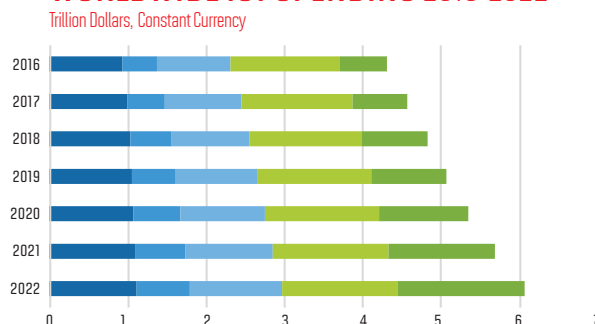
Increasing investments in the big data and analytics area will reveal the importance of data architecture. Also, cloud services will become one of the most important components of digital transformation projects with the flexibility they provide.

IDC is the global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,100 analysts worldwide, IDC offers global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries.

WORLDWIDE ICT SPENDING



WORLDWIDE ICT SPENDING 2016-2022





INTERVIEW

An Austrian Architect in Turkey

We talked with Austrian architect Brigitte Weber, who has been residing for over twenty years in Turkey and made a name for herself as the architect of Trump Towers along with many projects and her Turkey experience.

BY TAMER İŞİTİR - İREM GÜNSEN BY AHU SAVAN ARI - CEMAL EMDEN

WEBER, who first came to Turkey in winter 1994, tells that the first impression was bad in Istanbul for one week, the coal smell was very dominant in the city but for the second time, she could not escape the fascinating influence of Istanbul and decided to settle here. After her summer vacation in Turkey's Islands, Weber was literally in love with the beauty, for the next year she came to Turkey in order to settle this time. Let's hear Weber's story from her.

How did you start your Turkey adventure? After settling in Turkey what challenges did you encounter? How did the process develop?

In the first years I was in Turkey, I did interior design because conditions are inconvenient. In those years the sector was in the hands of contractors and very few architects could work. In my first years, I was not able to set up an architecture office because I was a foreigner. I met Arif Suyabatmaz and

started our partnership with him. I started my own business under the name of Suyabatmaz Architecture. There had been legal regulations in Turkey in 2005. Until that year, foreign architects were not able to be authorized signatory. After legal regulation, the process was not easy. Many documents were required, you had to have worked for at least 8 years in Turkey. I filled out the required working time and all of my documents were full and I applied for the right to sign up. I received my signature

Brigitte Weber was the first foreign architect authorized signatory in Turkey.



Brigitte Weber received the briefings after her presentation in New York and she returned to Turkey for drawings.



authorization shortly after my application. Thus, I was the first foreign architect authorized signatory in Turkey.

You were the architect of Trump Towers' Turkey Leg. Can you tell us about the arrival of the project and the ongoing process?

I first received a project from Doğan Holding and asked me to do a conceptual project for their land in Mecidiyeköy. Even if I made my application when the project came, I had no right to sign yet. After several weeks of negotiations, I received the news that my signature was authorized. In this way, things were in my way. At the end of the talks with Doğan Holding, drawings were made and even the base laid for a different project in Mecidiyeköy where Trump Towers was. Then I received a message and informed that Doğan Holding and Trump would do business and the project changed. I went to New York to make a

presentation for the Trump Towers project. I received the briefings after my presentation and I returned to Turkey for drawings. In 2012, I became the architect of Trump Towers opened by Recep Tayyip Erdoğan, the Prime Minister of the period. Being in the Trump Towers project, which acts with the principles of interdepartmental standardization, use of quality materials, luxury approach and building management, has added a lot to me.

Do you experience any difficulties as a female architect in Turkey?

There are few women architects around the world who are successful architects.

“Compared to the world in general, Turkey exhibits a much more positive attitude to the female architects. As long as I live in Turkey I had no problem with being a female architect.”

Compared to the world in general, Turkey exhibits a much more positive attitude to the women architects. As long as I live in Turkey I had no problem with being a female architect. Also, they care more about the qualifications rather than the nature of femininity and charm to get a job in Turkey, this is really a good development. My colleagues working in Europe are surprised about me to be so successful in Turkey. They are experiencing a lot of difficulties abroad and they are talking about being a woman is disadvantaged. However, I'm saying that this is not a problem in Turkey environment, here





I accommodated myself and I run my business as an architect, not as a woman. It really sounds amazing to them.

"A process that is contrary to the skyscraper philosophy is running"

The quite increasing number of high-rise buildings, skyscrapers, and residences in Turkey are intensively being discussed, grounding that they disrupt the skyline of the city in recent years. As someone who has signed projects like Trump Towers, how is your view of the skyscrapers?

As a matter of fact, the first purpose of the construction of the skyscrapers was very different. They provided the most efficient and most natural use for an empty land. Because when a skyscraper was planted on an empty land, it occupied a small footprint, and there were trees around it and benefited nature. The skyscrapers were more economical, heating and cooling systems were more compact and the social areas were common. In other words, the first idea was more social, but with the unconscious use, there was not much work left. Now many high-rise buildings



are being built side by side and a process that is contrary to the skyscraper philosophy is running.

What distinguishes Brigitte Weber Architects from other architectural companies?

We are a boutique office that makes big projects. The biggest factor in this is my desire to be involved in every project. I am delighted to be in the center of the projects and to be involved. I like to work in harmony with my employees and I try to keep my team minimal because I think that if there is an increase in the number of people in the team, the efficiency will decrease. That's why I work with a team of about fifteen. Happiness is very important to us. We, as Brigitte Weber Architects, produce projects with the aim of giving happiness to people, so we continue our successful progress in the sector.

Next Level project, which is 140 thousand m² and 450 apartments planned to be completed.

TURKS ARE VERY TOLERANT, FLEXIBLE AND ENTERPRISING

What can you say about the character of the Turkish people and Turkey's architecture sector? To what extent economic conditions affecting the general character of Turkey?

First of all, Turks are particularly tolerant in the business world. The Turks are differentiated by qualities such as finding a quick solution and acting in the face of problems. One of the most important advantages is that the construction sector stakeholders are extremely flexible. Having so many disciplines of the construction sector intertwined and a large number of entrepreneurs in this area makes Turkey more attractive. These dynamics also allow for fast progress. Turkey's and Istanbul's bustling pace and excitement are part of this high charm. In addition, although it is said that there is a crisis in Turkey, Turkey's economy is split as the pre-election and post-election. After the election is over, things are going at the same intensity, sales are going on, and the wheel turns like before.



Which projects are you working on nowadays?

Nowadays, we are continuing the Next Level and Next Level Loft projects in Ankara. We also assumed the architecture of the Next Level Çayyolu project, which is 140 thousand m² and 450 apartments planned to be completed in a short period of time. In addition to this, there is Dikmen project in Ankara, which has 1850 apartments and 450 thousand square meters.

"Construction sector should concentrate on industrial and production facilities projects"

As one now living in Turkey and closely recognizing the conditions of the country, how do you see the current state of the construction industry? What should the sector stakeholders expect in the coming period?

I think the construction sector will be stagnant in the next five years. There is a problem arising from the rapid progress of the construction sector. There are too many buildings in the market, but the demand is not the same. It doesn't seem possible to build new buildings before the inventories melt. Every building that will be made without melting is at risk of remaining unsold. The sale of existing buildings is not prioritized and if new buildings are tried to be added, the crisis will start after a while. These are my thoughts. After the second half of 2019, we can see progress more clearly. But housing projects have reached a saturation. I think it is now necessary to focus on industrial and production facilities projects.



WBAF considered in Istanbul.



ANGEL INVESTMENT

TURKEY IS EUROPE'S 5th LARGEST BUSINESS ANGEL INVESTMENT MARKET

The World Business Angels Investment Forum-WBAF, considered the “Davos” of the early-stage investment ecosystem, brought entrepreneurs and investors together for three days.

BAYBARS ALTUNTAŞ, Chairman of the World Business Angels Investment Forum (WBAF), told that angel investment market has \$50 billion volume in Africa, Asia, Europe, and America, during the WBAF 2019 in Istanbul. “340,000 business angels made €9.6 billion (\$11.33 billion) worth of investments in Europe, while 320,000 others invested \$26 billion in the U.S. last year. Turkey ranked fifth with €512 million (over \$600 million) worth of angel investment in Europe,” he said.

The business angel market will have \$250 billion global volume in five



The business angel market will have \$250 billion global volume in five years, according to Baybars Altuntaş.

years, according to Baybars Altuntaş.

Reminding that Turkey's economy was the 32th of Europe in terms of start-up eight years ago, Altuntaş said “The reason for this rapid development, after Turkey, the United Kingdom is the only country that has a law on this issue”. He continued as follows: “By the end of 2018, 471 angel investors are accredited by the Ministry of Treasury and Finance. They can deduct 75 percent of their investment from taxes. This is the highest rate in the world. Thus, Turkey has come a very quick way of start-up economy. Turkey

became an innovation hub in a region, that covers Southeast Europe, Middle East, and South Caucasus.” Pointing out Turkey's holding an important place in the market, he cited that “Best technology development zones and tax incentives for start-ups are in Turkey. Also, in Turkey, business angels, who invest in entrepreneurs' ventures up to 1 million Turkish Liras (over \$188,000), can deduct 75 percent of their investments from taxes.

Minister of Youth and Sports Mehmet Muharrem Kasapoğlu also stated that “To date, we have supported more than 50 thousand entrepreneurs, including 47 percent of women.” Asserting that they provide entrepreneurship training throughout the country Kasapoğlu said “In this context, we have contributed to the participation of more than 1.5 million citizens in these trainings so far” and added, “as a result of the Applied Entrepreneurship Trainings, we have helped many young entrepreneurs to open a business and add value to our country's economy and employment. Many of our young people have been employed on this occasion.”

ARTIFICIAL INTELLIGENCE

A New AI Approach From a Turkish Professor to Solve Problems:

THE ARTIFICIAL BEE COLONY ALGORITHM

Inspired by honey bees' intelligent search for food sources, the "Artificial Bee Colony Algorithm" is getting more and more popular every day, which was invented by *Turkish Professor Derviş Karaboğa*.

A IS ONE OF THE MOST popular topics in science and technology today. It is generally accepted that those countries that dominate the AI field will dominate the World. Although the initial definitions of AI were more human-centric, recent definitions expand the scope to include more intelligent beings. An example definition of AI is "A branch of computer science dealing with the simulation of intelligent behaviors in computers". As a natural result, the scope and perspective of AI studies evolves and expands every day. One of the significant sub fields of AI is problem solving. We can define problem solving as simply a process of searching for the optimum solution to a problem among all possible solutions. One of the more popular classes of AI problem solving algorithms are those that focus on swarm intelligence. In this context, The Turkish Perspective is proud to share with our readers the valuable contributions of the Turkish academic Prof. Derviş Karaboğa.

REAL HONEY BEES

In an intelligent swarm, the ability of individual members of the community to solve a



Derviş Karaboğa is currently a professor with the Computer Engineering Department of Erciyes University; his research interests include artificial intelligence and its applications to engineering problems, particularly swarm intelligence, evolutionary computation and machine learning; he has published many articles and two books on these topics; he is the first Turkish academician whose article was invited and published by Scholarpedia Encyclopedia in 2010, and in 2017 he was chosen for the list of 100 Turkish scientists in the world, who direct the Science."

given problem is equivalent to one another and relatively limited. However, members of the swarm interact with each other; in other words, they share information without any centralized control mechanism. This results in the entire swarm exhibiting high-level intelligence in the solution of a given problem. Swarm intelligence algorithms simulate the intelligent behavior of these intelligent swarms in the solution of problems. One of

the most popular algorithms in the swarm intelligence class is the artificial bee colony (ABC) algorithm.

To understand how the ABC algorithm works, let's take a look at how honey bees operate. In a colony of honey bees, there are approximately 20,000-30,000 bees in the winter, and over 60,000 - 80,000 bees in the summer. One of these is the queen, a few hundred are males, and the rest are worker bees. The lifespan of a queen bee is approximately 3 to 5 years, whereas the male bees live for about 3 to 4 months, and worker bees live for 4-6 months during the winter season, but only 5-6 weeks during the busy summer months. The honey bees that we see around us outside the hive are foragers, or mature workers. Their main objective is to fill the hive with the best quality honey as quickly as possible. In order to achieve this, they have to be able to find the most profitable food sources at any given point in time, make honey out of it and bring it back to the hive. Forager bees use a unique search strategy to find the most profitable sources (solutions) in a very intelligent manner. In a nutshell, these bees do a really good job of finding optimal solutions to their problem (among all the solutions) in an intelligent manner. That's precisely what we, as human beings, try to do in our everyday personal and Professional lives. We are all looking for optimal solutions to our problems, in other words the best solution to our problem among all possible solutions.

PRINCIPLE OF PROFIT FOCUS

From a honey bee's perspective, the profitability of a flower (food source for the bee) is determined by many factors, such as distance,

the ease with which the bee can extract nectar from the flower, and the aroma. The profitability of the flower will determine the probability that the bee will select it. For example, if a flower located 1 Km away from the hive is deemed more profitable than a flower that is located 100 meters away, the bee will select the flower that is located further away. If a flower's profitability is deemed far more than other flowers, the bee makes honey out of it, drops it off at the hive, and dances on the honey comb in a unique manner (see Figure 1) before returning to that flower. Such bees are known as "employed bees".

Figure 1 The bee in the middle dances in a unique manner to inform the other bees about its flower.

With this unique dance, the bees watching her in the hive are informed as to the flower's distance, direction and profitability. The angle between the sun, hive and the flower is used to describe direction (see Figure 2).

Figure 2 The waggle dance inside the hive is used to inform the onlooker bees about direction, distance, profitability of the flower.

The main purpose of the dance is to direct more foragers to more profitable food sources. That's how the amount of honey carried to the hive is optimized. The bees that watch the dance to determine their target are called as "onlooker bees". But some bees are not affected by the dance, and these will leave the hive to explore new food sources. These forager bees are known as "scouts". The mission of the scouts are also very important, as the nectar of the existing flowers will be depleted after a certain period of time. It is critical that new



food sources be uncovered before the existing food sources are exhausted. A simplified view of how these three classes of forager bees operate is shown in Figure 3. We have previously mentioned that the foragers are tasked with filling the hive with the best-quality honey in the shortest timeframe; in other words, they are trying to solve an optimization problem. An optimal solution to this problem depends on uncovering the most profitable food sources at any given point in time, an appropriate number of foragers being directed to these food sources, as well as uncovering new rich food sources before the existing ones run out.

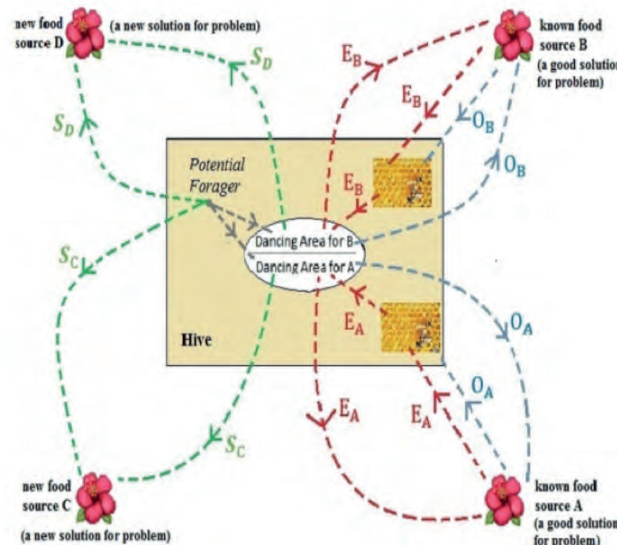
Figure 3. A simplified view of how employed, onlooker and scout bees operate.

ARTIFICIAL BEE COLONY ALGORITHM

The three forager groups mentioned above use the sun as a reference to orient themselves. As a result, their daily work routine (from sunrise to sunset) can be formulated as an algorithm:

Leave the hive to find the first food sources (scouts)

Repeat



Perform dance to share the information with onlookers (employed bees)

Watch dances and choose one of more profitable sources (onlooker bees)

Leave the hive to discover entirely new food sources (scout bees)

Until (sunset)

The alternative solutions that exist for any optimization problem that we encounter can be likened to flowers around the hive (see Figure 3). More profitable flowers correspond to high-quality solutions, and less profitable sources correspond to lower-quality solutions for our problems. We can use the same searching strategy that forager bees use to find profitable food sources (formulated as an algorithm above) for our own optimization problems. The ABC is a problem-solving algorithm that is inspired by the same intelligent strategy that forager bees use to solve their optimization problem. The ABC algorithm has been used, and continues to be used to solve challenging optimization problems in many diverse fields, ranging from different engineering fields (computer, civil, mechanical and electrical engineering) to pharmaceutical and medical, and even economics applications. As the algorithm is applied to these different classes of problems, it continues to evolve. Thus far, tens of new versions of the algorithm have been proposed. Besides just producing honey, honey bees continue to show us new methods of solving challenging problems. Of course, the universe is filled with many intelligent lifeforms, from which we can take inspiration in solving our own problems.

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AVIATION

Turkish Airlines Strengthens Its Presence in the German Market

Turkish Airlines and BVMW (Union of German SMEs) have signed a goodwill agreement for strategic partnership.

MAKING its first flight to Germany in 1960 to Frankfurt, Turkish Airlines brings its 60 years of experience in Germany to another dimension. Currently organizing flights to 13 different airports in Germany, Turkish Airlines is preparing a new collaboration in order to facilitate economic traffic between Turkey and Germany. Turkish Airlines, strengthening its place in the global market and its brand identity with international partnerships and contracts,

signed a goodwill agreement for strategic partnership with the German Small and Medium Enterprises Association (BVMW).

The signing ceremony between Turkish Airlines and BVMW was held on February 18 at the Annual General Assembly in Berlin. Chairman of the Board and the Executive Committee of Turkish Airlines M. İlker Aycı, President of BVMW Prof. Dr. Mario Ohoven, President of Albania Ilir Meta, President of Croatia Kolinda Grabar

Kitarovich, Federal Minister for Economic Affairs and Energy of Germany, Peter Altmaier, Turkish Ambassador to Berlin, Ali Kemal Aydın and leading names in the business, politics, arts and sports circles took part. In accordance with the signed goodwill agreement, Turkish Airlines will provide commercial logistics solutions and high quality transportation services to BVMW member companies with its wide flight network and quality service reaching 124 countries in the world. BVMW, which has

900 thousand members, will provide a suitable platform for Turkish Airlines operations. The objectives of the agreement includes increasing the popularity of Turkish Airlines Corporate Loyalty Program 'Turkish Airlines Corporate Club' among the German companies.

Commenting on the agreement, M. İlker Aycı, Chairman of the Board and the Executive Committee of Turkish Airlines said that no other foreign airline serves more German airports. He continued his speech as follows:



“The advantages we will provide to BVMW members in different areas on a global scale and our cooperation with them will further expand in the medium and long term. With this agreement signed with the German SMEs Association, we aim to increase our market share in the corporate travel segment and to become the most preferred airline in all business travels around the world.”

Attending the Union's Annual General Assembly as the keynote speaker, Mr. Ayçi went into detail on 'Turkish Airlines' relations with German market and its future plans both in Germany and the world in general. “A strong regional presence across Germany has always been important to us.” said Mr. Ayçi, “A bilateral agreement between our countries guarantees our access to a wide range of German airports. We currently fly to 13 airports in Germany, including smaller, regional airports such as Friedrichshafen, Karlsruhe/Baden-Baden and Bremen. The history of Turkish Airlines in Germany starts with our first landing in Frankfurt in 1960. Since then, Germany has become our most important market outside Turkey.”

Today, it is not only the large Turkish community in Germany, but also the growing number of German-Turkish Mittelstand businesses and German holidaymakers in Turkey who benefit from this.”

TURKISH AIRLINES FLIES TO OVER 300 DESTINATIONS IN MORE THAN 120 COUNTRIES

Underlining the importance of Istanbul as a transfer point on global routes, Mr. Ayçi asserted that “Turkish Airlines serves more international destinations than any other airline in the world. We already fly to over 300 destinations in more than 120 countries. This year, we will start flying to Mexico City, Cancun, Bali, Rovaniemi, Luxor and other

new destinations, resulting in an even wider flight network with our continent-spanning city of Istanbul at the center. In order to be able to offer time-optimized connections on today's important traffic routes between Europe and Asia as well as America, a geographically optimally

Turkish Airlines aims to become the most preferred airline in all business travels around the world.

“Turkish Airlines will soon start to utilize its full capacity following our relocation in Istanbul Airport, set to be the biggest in aviation history.”

located hub is required. From Istanbul, you can reach 66 countries with a 5-hour flight, meaning that a population of more than 1.6 billion people making up over half of the world's GDP, lies within easy reach. The brand-new Istanbul Airport is the central and strategically located hub which allows us to provide optimal connections across our wide network spanning the globe. Istanbul Airport is already operational and Turkish Airlines will soon start to utilize its full capacity following our relocation, set to be the biggest in aviation history.”

In addition to gaining the brand visibility of the flag carrier during the meeting held this year, there were various opportunities between the companies in order to improve the economic cooperation between the two countries.

Founded in 1933, Turkish Airlines carried 75.2 million passengers in 2018. Making a strong start to 2019, the flag carrier carried 5.7 million passengers in the first month of the year and aims to reach 80 million passenger number this year at its new home.



INVESTMENT

FDI INFLOWS TO TURKEY SURGED IN 2018

FDI inflow into Turkey totaled USD 13.2 billion in 2018, up 14 percent year-on-year at a time when the global appetite for FDI shrank a considerable amount.



This shows that despite all the adversities Turkey has undergone in the past two years, there has been no decrease in investor appetite in the country.

Figures for 2018 FDI and expectations for 2019 in Turkey were evaluated at a press conference hosted by the Investment Office and SOCAR Turkey. Investment

Office President Arda Ermut said that SOCAR Turkey's Star Refinery investment was one of the largest industrial projects and the largest single-location real sector investment in Turkey. "In 2018, when total global FDI experienced a very serious decline, Turkey's annual FDI performance marked an important achievement,"

said Ermut. "With this success, Turkey has once again demonstrated that it is a trusted country on a global scale with sound economic fundamentals. We previously said that we would exceed last year's figure before the end of the year, and we realized this with a 14 percent increase."

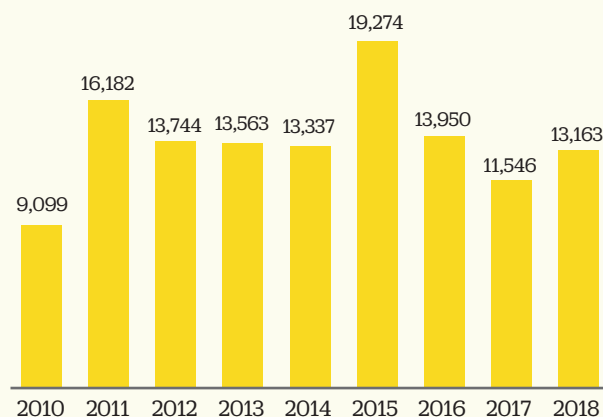
In 2019, a further increase

in FDI into Turkey is expected thanks in part to an improving global economy, the end of the recession concerns in Europe, and Turkey's transition to the executive presidential system, which strengthened the political stability in Turkey and saw the continuation of economic reforms.

RIISING FDI VOLUME

According to data from the Central Bank of the Republic of Turkey, Turkey attracted USD 13.2 billion in FDI in 2018, an increase of 14 percent compared to the same month of the previous year.

FDI INFLOWS (USD MILLION)

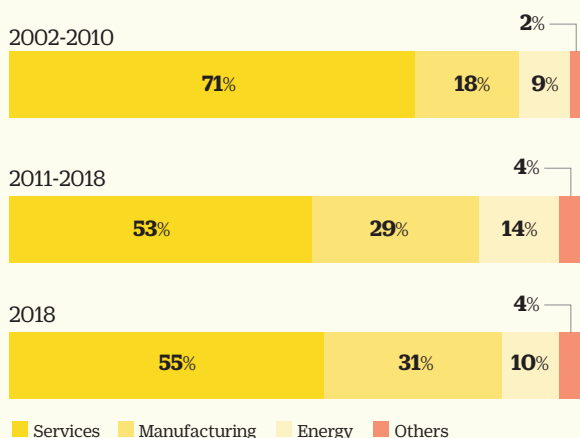


MORE QUALIFIED SECTORAL BREAKDOWN

Not only did the volume of FDI to Turkey increase in 2018, but also its quality rose. In overall, the share of the services sector decreased, while the share of

manufacturing increased. This can be interpreted as a sign that the added-value produced in Turkey has posted an increase. While the share of the services sector in total was 72 percent in 2017, it decreased to 55 percent in 2018. In parallel with this, the share of the manufacturing industry during the same period rose to 31 percent, up from 16.

SECTORAL BREAKDOWN OF FDI



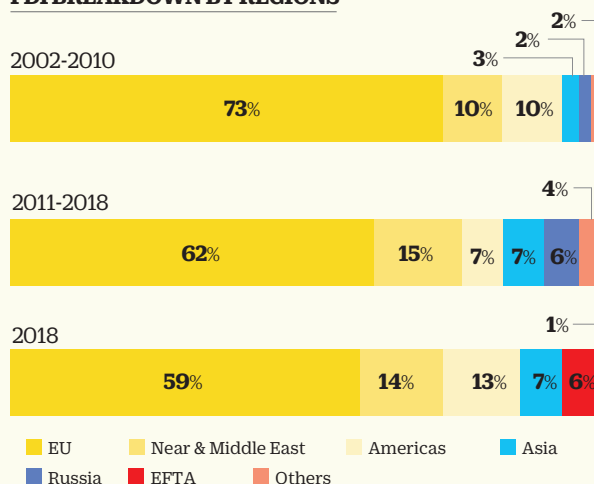
DIVERSIFIED FDI SOURCES

Turkey also diversified its FDI sources in 2018. While the traditional FDI investments continue to originate from European countries, which have a 59 percent share in total, Turkey is now seeing the Asian countries and Turkic Republics injecting large investments. By the end of 2018, Near and Middle

Eastern countries accounted for a 14 percent share, while Asian countries had 13 percent.

On a country basis, the Netherlands, Azerbaijan, Italy, Austria, the US, the UK, Germany, Luxembourg, France, and Taiwan contributed the most FDI to Turkey in 2018. The fact that there are seven European countries among the top 10 shows that European investors continue to increase their confidence in Turkey.

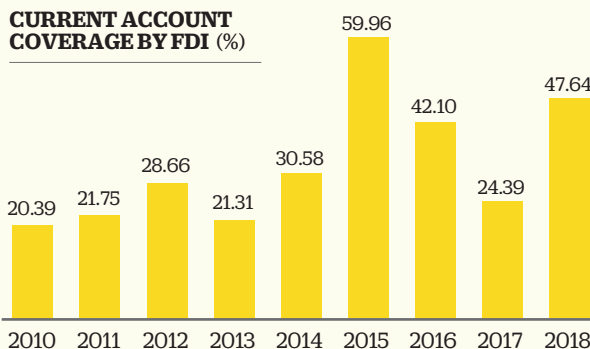
FDI BREAKDOWN BY REGIONS



INCREASING FDI/CURRENT ACCOUNT RATIO

Support from FDI is paving the way for positive financing of the current deficit in Turkey, with less reliance on portfolio and short-term inflows. FDI/current account ratio in 2018 has surged to 47.64 percent, up from 24.39 percent in 2017.

CURRENT ACCOUNT COVERAGE BY FDI (%)



PRESIDENT ERDOĞAN RECEIVES A DELEGATION OF US BUSINESSPEOPLE



A delegation of 52 US businesspeople visited Turkey to meet with their Turkish counterparts and discuss how to accomplish the USD 75 billion bilateral trade volume target set by President Recep Tayyip Erdoğan and his US counterpart.

President Erdoğan received and addressed the group at the Presidential Complex in Ankara. “Despite the fact we sometimes have ups and downs in our relations, there is a strong, comprehensive, and strategic relationship between Turkey and the US based on mutual interests,” said Erdoğan. Adding that Turkey attaches substantial importance to US investments, President Erdoğan invited US businesspeople to evaluate opportunities in Turkey on-site and said that the Investment Office and other institutions are ready to support US companies.

HYBRID VERSION OF ICONIC COROLLA MAKES GLOBAL DEBUT AS FIRST BATCH ROLLS OFF LINE

Japanese automotive giant Toyota marked the commencement of its new Corolla hybrid’s mass production in Turkey at a ceremony honored by the Turkish Vice President Fuat Oktay, Minister of Industry and Technology, Mustafa Varank, Investment Office President Arda Ermut, Toyota Turkey CEO and General Manager Toshihiko Kudo, and Toyota Motor Europe President and CEO Dr. Johan van Zyl.

During his address at the opening ceremony at Toyota’s Sakarya plant, Vice President Fuat Oktay said that Turkey is determined to boost the production of

hybrid and electric vehicles. “The support packages included land allocations and tax reductions among others, and we are prepared to introduce new incentives

when necessary. We believe Toyota hybrid’s production in Turkey is a great leap forward globally. The Investment Office has helped companies that

want to invest in Turkey, and we have made no discrimination against international companies that have put trust in the Turkish economy,” said Oktay.



JAPANESE SECOM ENTERS INTO TURKISH MARKET



Japanese technology giant Secom and Turkish financial technology company Aktif Bank, a subsidiary of Çalık Holding, have jointly announced the establishment of Secom Aktif Yatırım A.Ş., a 50:50 partnership that will offer end-to-end security solutions to companies and individual users with its turn-key project models.

Addressing the audience at the launch meeting, Investment Office President Arda Ermut said that the strong bonds of fraternity between Turkey and Japan will move one step closer with the Secom-Aktif Bank deal. “As of 2018, trade volume between the two countries stood at USD 4.6 billion. Japan’s total FDI in Turkey is around USD 3.2 billion,

and during 2011-2017, 45 M&As by Japanese companies took place around Turkey. Today, there are over 200 companies with Japanese capital in Turkey. We are cognizant of the need to bring in new companies, and we are more than pleased to be adding one more to the list today,” said Ermut.

Secom President Yasuo Nakayama also said;

“In line with our road map, we were in search of a potential country to which we could take our international operations. We ended up with Turkey as our 19th overseas destination as Turkey stands out not only with its geopolitical significance but also with the advancement in its economic growth potential stemming from the rise of its working population.”

BUSINESS OPPORTUNITIES IN TURKISH AUTO INDUSTRY ON THE SPOTLIGHT

The Investment Office and Turkey’s exports leader Ford Otosan jointly held an event focused on the existing potential and the business opportunities offered by the Turkish automotive industry. The two-day event, held in the Vehbi Koç Foundation Ford Otosan Culture and

Community Center, was attended by top executives of around 40 automotive companies. Also, among participants in the event were a number of companies

currently in talks to invest in the sector. The attendees were offered insight into Turkey’s incentives system, automotive value chain, and qualified labor force.

At the event, Samet Akyüz and Kağan Yıldırım from the Investment Office presented on what Turkey has in store to offer international investors and also shed light on the past two decades of Turkey’s experience and growing position as a manufacturing hub in the automotive industry.

FORD OTOSAN

IT'S TIME TO ACT

**THE RELATIONS CAN EQUALLY SURELY BENEFIT FROM A BOOST IN
BILATERAL TRADE RELATIONS. THAT IS EXACTLY THE ROAD NOT TAKEN AND EXPLORED
TO THE FULL EXTENT OF ITS POTENTIAL IN THE TWO COUNTRIES RELATIONS**



**OVERCOMING
TRANSACTIONALITY
& TERGIVERSATE IN
TURKISH - US RELATIONS:**

**TRADE
IS
THE
ANSWER**

By Prof. Dr. Ahmet Kasım Han
Atırbas University @Ahmet_K_Han

ITED

IN A COMPARATIVELY RECENT INTERVIEW FOR FINANCIAL TIMES HENRY KISSINGER WHO, DESPITE ALL THE CRITICISM -PROBABLY NOT TOTALLY UNDESERVED- TOWARDS HIM, REMAINS AS ONE OF THE LAST EXAMPLES OF RETICENT 19th CENTURY STYLE CONCERT OF EUROPE POWER POLITICS STATESMAN, REMARKED THAT WE WERE “IN A VERY, VERY GRAVE PERIOD FOR THE WORLD”. LOOKING AROUND THE WORLD, ONE FINDS IT HARD NOT TO THINK THAT THERE IS WISDOM IN THE COMMENT. THIS “GRAVE PERIOD”, OR THIS AGE OF TRANSITION, IS HAVING ITS TOLL ON ALMOST ALL ASPECTS OF HUMAN ACTIVITY, POLITICAL, ECONOMIC, SOCIAL OR OTHERWISE. IN A TRANSITIVE PERIOD, CRISIS TEND TO BECOME A DAILY ORDEAL, RISKS SURGE, ESCALATION BECOMES A HIGHER PROBABILITY WHILE LEADERS FIND THEMSELVES IN SITUATIONS WHERE THEY FREQUENTLY HAVE TO TAKE “*make it or break it*” DECISIONS. THE “WORLD AS WE KNOW IT” IS EXITING THE STAGE, WE HAVE MORE VISIONS OF OUR IDEALS ABOUT THE FUTURE THAN IDEAS ABOUT THE DEPTH AND EXTENT OF CHALLENGES THAT AWAIT US – AND POSSIBLY EVEN LESS ANSWERS AND SOLUTIONS.

WITH ANY AND ALL MILIEU OF HUMAN activity assuming an increasingly transnational character, the international relations of the states became one area that is hard hit by the times. The multi-dimensional pressures on the world order, the sweeping transformation introduced by technological and political change. The impact is also felt on the relations of states, get them bi-lateral or multi-lateral. The relations between Republic of Turkey and the United State of America (US) are no exception. Actually, these relations have been established much earlier in history than most members of the respective peoples, and some decision-makers, of these two countries realize. The modern-day relations have certainly been forged under the treacherous circumstances of the Cold War, have been hard-pressed and endured the duress of international and bi-lateral crisis, have managed to remain essentially impervious in the face of the cracks scathed by diverging opinions and policies, even on some key matters of interest and, most importantly, have proven to

be much more resilient than many do give them credit for. Throughout the 20th century the structural and geostrategic context provided by the shared values, interests and perceptions of threat (as defined by the time) held this otherwise not-always so festive relationship together, and even provided it with necessary boost after its troubled episodes. This does no more seem to be the case. As is growingly the case with all other existing interactions between various state and non-state agents of international relations, Turkish – US relations is becoming more complex, ambiguous and fluid.

To be sure the end of the Cold War came as an understandably welcomed development, at the least for most of those living in the West, organizationally represented mostly within the cohort of North Atlantic Treaty Organization (NATO), the political and military alliance that was formed as the backbone of cooperation between western democracies against the perceived Soviet threat. NATO was established in 1949 and Turkey became a member in 1952, following the Korean War that lasted from 1950 to 1953. The Turkish Brigade in Korea, codenamed North Star, was attached with the United States Army 25th Infantry Division and had lost 721 man, with an additional 168 reported as missing in action and 2111 wounded. As the Cold War came to an end Turkey was on the “winning” side with the other sixteen member states of the alliance.

However, the history of Turkish – American relations go as far back as 1795. As the US gained its independence in 1783 it was pressed between the necessity of establishing trade relations with the rest of the world and the requirement to build a navy to secure this effort. One key destination for the trade activity was the Mediterranean, on the African coast of which (where today parts of Morocco, Algeria, Tunis and Libya lay) the Berber States ruled. Yet, as the young United State had accrued immense amount of foreign credit to finance its war of independence against the British Empire, it was not able to fund a standing armed force. Hence in 1785 the last ship of the Continental Navy, the frigate Alliance, was sold. Thus, “the navy disappeared, and the army dwindled to a mere 700 men”.





◀ **Johnson** with 2nd Prime Minister of Turkey İsmet İnönü (on left side). The missile, which was given by US to Turkey called "İbrahim" (on right side)

THE RELATIONS BETWEEN THE OTTOMAN EMPIRE AND THE US

From 1785 onwards, the Berber States, that owed allegiance to Ottoman Empire, started preying upon the American shipping, forcing the US to pay an annual tribute for twenty years by an agreement that was signed in 1795. Nevertheless, the truce did not hold for long as the corsair activity started to extend to the Atlantic. It was in no small part to these developments that the United States was forced to go on with the "Act to Provide Naval Armament" of 1794 and, in the words of Secretary of War Henry Knox the Navy of the United States was commenced a second time. One of the very first actions that the US Marine Corps saw was also during this era of the first Berber Wars. This is commemorated in the first sentence of the Marines' hymn that stands; "From the Halls of Montezuma, to the shores of Tripoli".

In the coming decades the relations between the Ottoman Empire and the US has developed. According to historical records the first visits by US merchant ships to Ottoman ports of İstanbul and İzmir were realized in 1786 and 1797 respectively. The first US fighting ship that has ever entered the Mediterranean, the frigate George Washington commanded by Captain William Bainbridge, has been somehow compelled to visit İstanbul by the Dey of Algiers. The first Turkish – US bilateral agreement was signed in May 1830 and it granted the United States the status of the "most favored nation" enabling the country to trade with the Empire on the best terms that were or would be granted to other nations. The agreement, which was in essence a capitulation granted to the US, included a secret article that enabled the Ottoman Empire to buy warships that were made in the United States at best prices, on par with the price charged to the US government itself, as well as technical assistance by American engineers and know-how transfer. This marked one of the only two instances on record that the US Congress was presented an agreement including a secret clause. Nevertheless, this clause was not ratified by the US Congress despite repeated efforts by the Administration of President Andrew Jackson. This was the case mainly as a result of members of the



▲ **The Legendary** Beauty Icon Marilyn Monroe, visiting Turkish Troops during the Korean War.



US Congress not being willing to be seen by the British as partnering with a nation whose navy has just been burned by a fleet participated by the latter in Navarino in 1827. The American side mostly did not want to provide Britain with a pretext for renewed aggression after the War of 1812 between those two nations.

Yet, the first American military sale to the Ottoman Empire came in the form of a naval vessels and know-how transfer related to the building of these vessels. Right after the 1830 agreement, seeing an opportunity in Ottoman Empire's quest for a modern naval force, a somehow defamed and grieving, but well experienced naval architect Henry Eckford, brought a corvette that he built to İstanbul, in his private capacity. This vessel christened United States was acquired by Sultan Mahmut II, who misinterpreted the arrival of Eckford and the ship as a make-up gesture orchestrated by President Jackson. The 26 gun corvette was renamed Mesir-i Ferah and joined the ranks of the new Ottoman Navy. Following the event, a new shipyard according to Eckford's specifications was constructed on the Golden Horn and he was employed by the Sultan. He also brought his fellow engineer Foster Rhodes and American workers with him. Upon his sudden death in 1832 in İstanbul, the job was carried on by Rhodes, who constructed ten more highly successful ships for the Ottoman Navy. The techniques and know-how such gathered has been put to good use by the Ottoman Empire and by the time of Sultan Abdülaziz the Ottoman Navy

According to historical records the first visits by US merchant ships to Ottoman ports of İstanbul and İzmir were realized in 1786 and 1797 respectively.



Both countries had catastrophic terrorist attacks in their history.

became one of the most formidable naval forces.

Expectedly in the aftermath of the 1830 agreement the trade relations between the parties also expanded, albeit slowly. While in 1816 only 8 American flagged ships had ported at İzmir, in 1830 this number had reached to 32. Whereas merely two of the 6286 ships that has passed Dardanelles in 1843 was sailing under the American flag, following the Crimean War of 1853-1856, there had been an American ship berthed in İstanbul port every week. As the 19th century came to a close, the Ottoman Empire's share in US exports were around 1.7 %. When it came to imports the figure represented almost 1 % of the total international trade of the United States. On the other hand, the share of goods that were exported to the US by the Ottoman Empire has represented 23 % of total exports of the Empire.

THE RELATIONS BETWEEN THE US AND THE YOUNG AND INDEPENDENT REPUBLIC OF TURKEY

The Turkish victory at the end of the Turkish War of Independence of 1919 – 1923 and the ensuing Treaty of Lausanne (1923) not only marked the final treaty ending the World War I, and the end of the Ottoman Empire, but it also witnessed the annulment of all capitulations. Alongside the European powers who has developed a habit of devouring the economic resources of the Ottoman Empire through such preferential agreements this was not well received by the US, too. After all, by their nature, these arrangements created relations based on dependence, and has provided the receiving end, in this case Europe, as well as the United States, control and dominated over the Ottoman Empire. The young and independent Republic of Turkey was in no position to extend such one-sided favors to foreign states and was determined to resolutely guard its freedom, sovereignty and national interests. This time the US Congress failed to ratify the Treaty of Lausanne. However, as with the others, the Turkish triumph did not leave much choice but to accept the circumstances. The 1929 Turkish – American Convention of Trade and Navigation brought a comparatively increased activity in trade relations. In 1939 a new Convention was agreed by the parties. As



Previous President of US Barack Obama in Grand National Assembly of Turkey, April 6, 2009

Today, almost after two and a half century has passed the fundamental issues and themes regarding bilateral relations are still viciously rotating around similar matters.

has been mentioned following the end of the Second World War, the relations have taken a turn towards being almost exclusively centered on security and strategic issues and priorities.

COURSE OF RELATIONS

Looking at the landscape of the history of relations outlined above, it is easily observable how surprisingly little has changed in the basic framework, context and, remarkably, main themes of Turkish – American relations. It is also hard to miss the vast opportunity for structural progress and change in these relations. Today, almost after two and a half centuries has passed the fundamental issues and themes regarding bilateral relations are still viciously rotating around similar matters. While the debate surrounding Turkey's bid to obtain a surface-to-air missile asset has some, not unimportant, reminding tones of the hapless secret clause of the 1830 Agreement, where Turkey was again trying to close a gap in its defenses facing existential threats; Turkey's bid for an autonomous foreign and security policy in the post-Cold War, post 9/11, post-coup, post Arab Spring and post Syrian Civil War environment and the US reactions to it has overtones reminiscent of the US Congress' decision not to ratify the Treaty of Lausanne in 1927. However, with the abundance of events, that are all nothing short of momentous in their own right, obligating the use of the prefix "post" to qualify them, a sea change in the relations is to be expected, and probably, inevitable. Sadly, at this point, almost the only permanent factor in the historical continuum of Turkish – US relations seem to be the meager volume and impact trade does have in the relations –with Turkey's share in US imports constituting a meager 0.4 %, representing a 50 % decrease compared to the 19th century end of siècle figure. As things stand, one cannot help but remember the adage attributed to Albert Einstein on insanity – that it is doing the same thing over and over and expecting different outcomes. All in all this might well have been a proper definition for infectivity too and perhaps, concentrating on the trade aspect of relations might enable us with the ability to break the present vicious cycle by providing us the opportunity to constructively pave a structurally sound way out of the present frictions and stalemate.



► The US's help to Kurdish militias in Syria and Iraq often causes to stress in relations with Turkey.

US'S ROLES IN TURKEY'S CRITICAL PERIODS

To be sure Turkish – US Relations has never been the proverbial “walk in the park” for any of the parties. The Cold War relations did indubitably present their fair share of challenges to the relations. The first such overt crisis in bilateral relations and the one that undermined Turkey's trust for US nuclear umbrella against the “imminent” Soviet threat was experienced during the Cuban Missile Crisis of 1962. At the time the United States had withdrawn 15 NATO commanded Jupiter PGM 19 medium range ballistic missiles, known now as “the other missiles of October”, deployed in İzmir's Çiğli air force base without Turkey's consent as part of the bargain reached with the Soviets on the withdrawal of their missiles in Cuba. Further blows to Turkey's relations with the United States include: the Johnson letter of 1964, threatening Turkey to be left out in the “cold” if the Russians decision to interfere against Turkey in case the latter chose to intervene in Cyprus, on behalf of Turkish Cypriot community, against Greek Cypriot atrocities; the opium crisis of 1974, where the United States pressured Turkey to stop cultivation of opium poppies in the country that were harvested for medical opiates; the arms embargo of 1974 following Turkey's military intervention in Cyprus based on its rights as a guarantor state as per Zurich Agreement of February 1959 against a coup attempt of Greek ultra-nationalists sponsored by the Greek junta of the time; the no-fly zone arrangements (1991 – 1996 and partly 1997 – 2003) in Iraq following the Iraqi invasion of Kuwait 1990 and the subsequent Gulf War (1990-91) that many in Turkey suspect had an important role in bolstering the terrorist organization PKK (Kurdistan Workers Party). In addition to that, and probably far worse in terms of their impact is the presumed role of the United States regarding the military coups in Turkey in 1960, 1971 and 1980. Indeed, all these events played a part in nibbling on the mutual trust and to an extent responsible for the present state of relations.

The international system is transforming in terms of its structure. With the end of the Cold War it has shifted from a bi-polar structure to a unipolar-moment. Now, it is passing through what seems to be an emergent “devolutive” mul-

The politico-military structure of Turkish – American relations is evidently not buoyant enough neither to meet the challenges of the day, nor astute enough to preserve the resilience of the said relations.

ti-polarity. It is also changing in terms of, what one might call its character – from a Westphalian system to a yet ambiguous set of principles and frameworks that will continue to be defining the contexts, priorities and processes. This is a development that would probably extend into the decades to come. For the state-actors of international relations, such metamorphosis and the inevitable childhood troubles of transition makes it extremely hard to find solace in grand bargains and widespread consensus on political issues. It imposes certain compartmentalization and transactionality upon actors as grand politico-military alliances are harder to forge and common values and interests to base such larger political unanimities are harder to reach. However, this modality of compartmentalized transactional relations surely does not come without their costs. When the political superstructures and values and ideas are no longer able to supersede divergent identities and differing interests they succumb, crumbling under the weight of pressures such a transition brings. It becomes harder to responsibly carry the burdens of partnership fundamentally because the underlying structure and surrounding framework becomes fragile to carry the weight of policies and associations necessitated by such collective grand agendas. When building, and more importantly, maintaining, common ground is so hard, creating interdependencies – not one-sided dependencies – might present a key. It is also imperative that such interdependencies should be based on a strong enough argument that can provide structural fortitude and can sustain the aforementioned factors. The politico-military structure of Turkish – American relations is evidently not buoyant enough neither to meet the challenges of the day, nor astute enough to preserve the resilience of the said relations.

Already dented by events like the rejection of 2003, March 1st motion by the Turkish Grand National Assembly that largely strained ties of the Turkish and American establishments; the July 4th, 2003 Hood Event when, in Sulaymaniyah in Northern Iraq, US forces, with the help of their local collaborators apprehended and interrogated Turkish special forces soldiers and in the face of deep disagreements regarding: the future of Syria, as well as their choice of allies in this

TOP 5 PRODUCTS IN 2018

Source: Turkish Statistical Institute (TurkStat)

EXPORTED TO USA PRODUCT	MILLION USD	IMPORTED FROM USA PRODUCT	MILLION USD
1 Vehicles other than railway or tramway rolling-stock, parts thereof	1.062	1 Boilers, machineries and mechanical appliances, parts thereof	1.786
2 Boilers, machineries and mechanical appliances, parts thereof	928	2 Mineral fuels, minerals oils and product of their distillation	1.330
3 Iron and steel	567	3 Iron and steel	1.310
4 Carpets, mats matting and tapestries	562	4 Aircraft and parts thereof	1.181
5 Mineral fuels, minerals oils and product of their distillation	380	5 Optical, photographic, cinematographic, measuring checking, precision	729

country and elsewhere post-Arab Spring; the Turkish decision to buy S-400 missile systems from Russia and the issue of the delivery of F-35 Lightning II aircraft to be the next generation fighter of the Turkish Air Force, the Turkish public opinion is at a point where, at least according to one study published in 2018, 81,9 % of Turkish citizens feel the United States as the primary threat to Turkey's security. The role of the turn the relations took after the attempted coup in 2016, over mutual disappointments on the reactions and rhetoric chosen by the decision-makers, has been profound in this deterioration.

In fact, since the invasion of Iraq in 2003, Turkey – US relations have undergone a significant transformation. The change of culture following the Cold War in the Pentagon coincided with a period in which a new generation of officers was raised to command positions in the US Armed Forces. This new generation of officers does not attach Turkey the level of strategic importance that was attributed by the Pentagon's Cold War generation. The experience of the rejection of the motion of March 2003, rightly or wrongly disrupted their organizational memory on, "Turkey's geopolitical and strategic importance". The "big brothers" who set the tone of foreign and security policy during the Trump Administration are mainly US

Since the invasion of Iraq in 2003, Turkey – US relations have undergone a significant transformation.

The Trump effect, the discordant outlook of the administration, and the domestic pressures that it seemingly finds hard to cope in a prudent manner.

Central Command (CENTCOM) veterans of the Iraq War, with field experience gained in Fallujah and elsewhere, and not in Korea. Their views, interpretations and sympathies on Turkey's strategic importance, priorities and interests are also shaped by these experiences.

Then again, a number of belt way decision-makers have taken a directly alienated, if not hostile, position against Turkey. Effective on this outcome is an observable impact of the lobbying activities of anti-Turkey groups, including but limited to the FETÖ organization that Turkey holds directly responsible for the coup attempt of 2016, whose leader still resides in the United States. Accordingly, some in Washington's decision-making circles seem to assess the relations as disconcerted beyond repair, thinking that there is a fundamental divergence of values between the parties, going beyond a transient disagreement of interests. Yet some are predisposed to question the credibility of Turkey as an ally, while others are inclined to inquire the value of an alliance relationship with Turkey either because of systemic changes or changing policies and politics. Finally, one might argue that the United States, is lacking in big picture strategists. People who, in Henry Kissinger's words, are concerned with key problems of order in world politics. Hence, it suffers a drought on strategic thinking. It might also be noted that the Trump effect, the discordant outlook of the administration, and the domestic pressures that it seemingly finds hard to cope in a prudent manner, undermines the ability of the US to come up with coherent strategies addressing global issue and relations. This leads key agendas and relations getting run by daily inputs and concerns. In this regard, it should go without saying that Twitter feed politics definitely does not help. It should be said that on the other side of the aisle, in Turkey, there is deep mistrust and discontent. There also is a mirror image situation. Turkish decision-makers, ironically basing their assumptions also on the structural changes in world politics, tend to question the value, gains and the rational of the alliance with the US.





There is deep mistrust and discontent in Turkey.

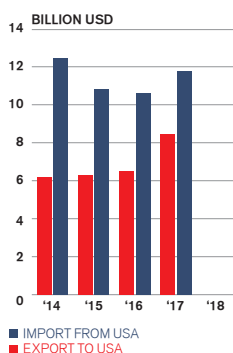
STARTING POINT : IMPROVING BILATERAL TRADE

In this respect, it is no secret that the bilateral relations of the two countries have come too close to a breaking-point during the court case related to the espionage and terror related charges brought against American evangelical preacher Andrew Brunson. At the time, leaving the anticipatable liking of the public for hyperbole aside, during the most of the second half of 2018, it seemed justified to invoke such concepts as “grievance”, “train-wreck”, “salvage” etc. in defining Turkish – US relations. However, it might easily be argued that the relations between these two partners and allies have been visibly deteriorating since the starting of the Syrian Civil War and the perceived American reactions, lack of empathy, cooperation and support following 15th of July 2016 coup attempt, that cost Turkey the lives of about 250 people, leaving an additional 2.193 wounded, functioned as an accelerator on the Turkish side. It is a fact that during most of their modern history the security and strategic issues have formed the backbone of the Turkish – US relations. Nevertheless, the above defined new environment and dynamics is not lending these factors a conducive environment for an easy fix that could be based on old dynamics, processes and patterns. As it stands, it probably is high time to reinvent these relations, that still remain critically and strategically important in order for alleviating the troubles of and challenges to future of the global order. Improving bilateral trade might just provide us with a starting point if not the opportunity itself.

Improving trade relations by keeping their respective markets open to the goods and services of each other; by granting favorable regulatory environments to businesses; by improving mutually hurting tariffs, duties and taxes; by identifying key areas of investment and trade cooperation; encouraging the formation of joint ventures and co-investment projects in both their countries and Turkey’s regions; by cooperating in the development of large-scale projects, including but not limited to a possible collaboration on energy projects in the Eastern Mediterranean basin, the two countries might easily improve their relations on a

TRADE FIGURES

USA was Turkey’s 5th largest export partner and 4th largest import partner in 2018.



Source: Turkish Statistical Institute - TurkStat *Provisional

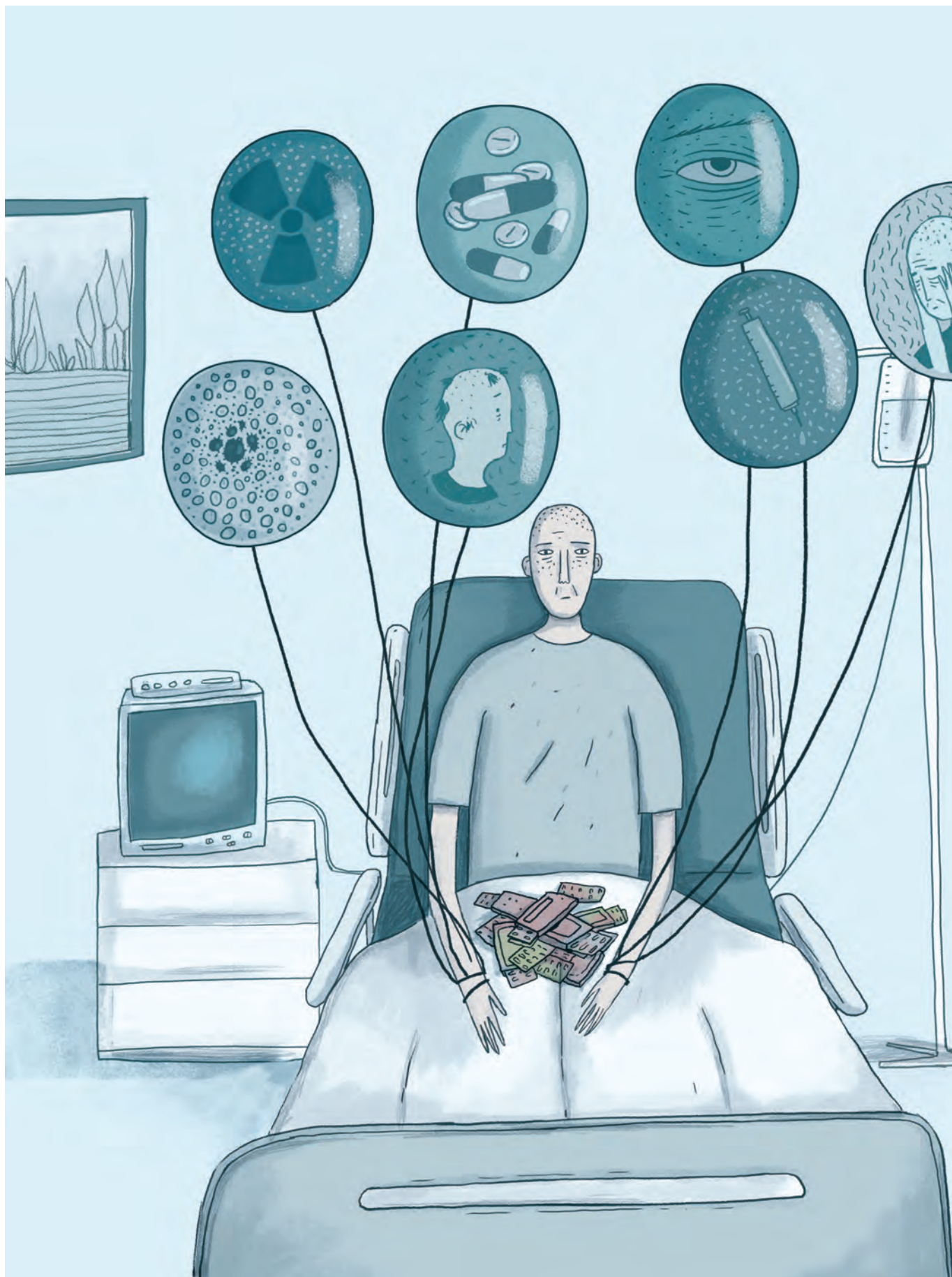
mutually beneficial track. The opportunities seem lucrative and the upside potential is credibly huge.

IT IS NEEDED TO SAY NEW THINGS

One thing is clear, the reconstruction and renewal of relations between Turkey and the United States should be based on the regeneration and invigoration of structural ties that are strong enough to carry the relations of these two heavy weights, both of whom are members of the G-20. To this end, in this day and age, relying simply on politico-military relations simply will not do the trick. The new phase of Turkish – US relations requires more independent, civil society networks, based on mutual interests, with governments assuming the mantle of facilitators, and an infra-structure that is based on economic ties. As a matter of fact, the parties have walked the politico-military road in their relations with mixed success so far and those issues are surely still critical for the future of bilateral relations and could possibly not be let to their own devices. However, the relations can equally surely benefit from a boost in bilateral trade relations. That is exactly the road not taken and exploited to the full extent of its potential in the two countries relations. Probably it is high time to learn from the wisdom of the 13th Century Muslim saint and Anatolian mystic Mevlânâ Celâleddîn-i Rûmî: “Everything about yesterday has gone with yesterday. Today, it is needed to say new things”.

Donald Trump’s senior adviser Jared Kushner (right) and Turkish Finance Minister Berat Albayrak meet in Ankara, on February 27, 2019.





The World's Healing Power **TURKEY**

Turkey makes progress in the health sector quite uncommonly. It stands out as one of the rare sectors where public, university and industrial components perform successfully, both individually and cooperatively.

In particular, in this file that you get ideas about Dr. Rana Nomak Sanyal and her team that work on the side-effect cancer drug and the Turkish pharmaceutical industry's most R & D investment company Abdi İbrahim's production can be shown as the most obvious examples of successful domestic work.



Turkey has invested in especially public health field in response to the needs of citizens since 2004. In addition to this, it has also succeeded in production of vital medicines that the rest of the world would benefit in addition to many of medical devices and products.

Local research and studies of the Turkish health sector are undoubtedly integrated with the world and progressing in accordance with global production standards.

Domestic work in the pharmaceutical industry will continue global moves

While Turkey's pharmaceutical market volume was 13 billion liras in 2010, it has reached the volume of 25 billion liras and became the 17th of the pharmaceutical market in the world in 2018.

Conventional drugs record a turnover of approximately 5.5 billion dollars in Turkey.

The world's largest 10 pharmaceutical companies make production in Turkey.

Capacity utilization rates and productivity increased as a result of localization studies in production. There are globalization stages in the pharmaceutical industry.

Developments in the pharmaceutical sector are also supported by medical device manufacturing

Turkey works on the projects like magnetic resonance, ultrasound, patient monitors, in the production of medical devices such as digital X-ray and computed tomography. It develops vaccines such as tetanus, diphtheria, adult type Hepatitis-A as well as domestic plasma products. It plans to produce 2.4 billion euros of blood products annually. Turkish government plans health investments worth 65 billion liras in 2019.

According to the Tufts Center for the Study of Drug Development (CSDD) Report, average cost to develop a new drug became \$2.6 billion. Details of the Tufts report show that the total cost of discovery and development, preclinical studies and phase-1 clinical trials is around 500k USD. On the other hand, according to data from FDA, between the years 2009 and 2018; 179 out of 334 newly approved drugs have been developed (up to the end of phase-1) by small sized enterprises. It is obvious that these companies do not burn such an amount in order to develop new drugs. These companies are



usually backed by modest venture capital funding.

Another paper exhibits that the R&D efficiencies (total expenditure per FDA approved NME) of 13 major research based multi-national pharmaceutical companies were in the range of USD 3.2–32.3 billion (2006–2014). It is self-evident that the high average cost mentioned in the Tufts report is caused by the low efficiency of big pharmaceutical companies against the dynamic and smart start-ups. As in all sectors; “It’s Not the Big That Eat the Small... It’s the Fast That Eat the Slow”.

> The win-win business model developed by **Boğaziçi University's Center for Life Sciences and Technologies (LifeSci)** and **RS Research** maintains a favorable relation for both sides.



Paradigm Change in Drug Development: VC Funded RS Research starting Clinical Trials

The idea that caused the establishment of RS Research is ignited by this paradigm change. The start-up has been established by Prof. Rana Sanyal and Sena Nomak in Istanbul in March 2015. The founders are passionate to show the industry that new drugs can also be developed in Turkey; with extremely low costs compared to USA or even European countries; thanks to the university-industry collaboration. The win-win business model developed by Boğaziçi University's Center for Life Sciences and Technologies (LifeSci) and RS Research maintains a favorable relation for both sides. The start-up takes advantage of the established infrastructure while the center collects additional funds for the sustainability of this platform. The same game plan can be followed by all entrepreneurs or academicians, who intend to develop new drugs; as the center is willing to become a hub, supporting this process. After the establishment in 2010, LifeSci gathered academic members of the Center and interested parties from state and private institutions to create the Center's Strategic Plan. In accordance with the

Prof. Rana Sanyal (on the right) graduated from Boğaziçi University, Department of Chemical Engineering and obtained her PhD from Boston University, Department of Chemistry. She started her professional career as a researcher in California-based Amgen Inc. Dr. Sanyal has been an academician in Boğaziçi University since 2004 and is also the Director of Boğaziçi University Center for Life Sciences and Technologies, an international center of excellence. Sanyal is the Founding Partner and Chief Science Officer of RS Research.

Sena Nomak (on the left) graduated from Istanbul Technical University, where he continues his studies towards his PhD. After 15 years of experience in executive and entrepreneur positions in different industries, Nomak is now the Founding Partner and Chief Operating Officer of RS Research.

plan; clean room, vivarium and test/analysis units have been built and this infrastructure is being used more and more intensively by both academic and private researchers, making the facility a center of excellence in its area of expertise.

RS Research utilizes LifeSci's infrastructure to develop its globally patented, novel nanomedicine platform by using polymer technology. This proprietary drug delivery platform consists of a tunable polymer and biodegradable drug linkers, enabling tailor made designs with targeting units. The drug candidates in the pipeline target a broad range of cancer types. This approach basically combines the effectiveness of chemotherapy with the precision of tumor targeting in order to maintain a "targeted smart chemotherapy".

In 2017, the start-up succeeded to receive the highest venture capital investment in a company that develops drugs in Turkey. With this seed investment, the team started to work on its pipeline and successfully completed the pre-clinical studies of the first drug candidate. In order to move into the clinical trial phase, RS Research announced a new investment round. While RS Research increased its investment capital to 2 million Euro since its foundation, the total amount of the investment round is expected to reach 3 million Euro.

Following promising results from its initial pre-clinical studies, before the end of 2017 the start-up received Investigational New Drug (IND)



>Prof Rana Sanyal is currently working on five drug candidates, with different indications in oncology.

approval from the Turkish Ministry of Health for the leading candidate of the pipeline, RS-0139. Not only for the company, this approval is also a milestone for the history of Turkey, as it is the first ever nationally developed drug starting from lab-bench, moving into clinics. Prof. Rana Sanyal, RS Research co-founder and CSO underlines the characteristics of the lead candidate: "We chemically modify the clinically proven chemo agents to develop our prodrugs so as soon as the drug reaches the tumor, we are sure that it will be effective." The prodrugs are targeted to the tumor and do not cause the side effects like the traditional chemotherapies. That's why, the company's motto is "Cure with a smile!"

The company is currently working on five drug candidates, with different indications in oncology. The most advanced one has completed pre-clinical studies with phase-1 trials planned to start within 2019. Sena Nomak, RS Research co-founder and COO said: "We are very motivated with the promising results achieved during pre-clinical studies of our lead drug candidate. Our studies have been accelerated by the venture capital investment in 2017. This funding enabled us to carry our pre-clinical drug candidates into clinical phase in line with our road map. We act with the awareness that every achievement we celebrate encumber us a new responsibility".

Although biotechnology is seen as a very high-risk investment; if the venture succeeds in replicating the pre-clinical results in human; the early investors can anticipate a very successful exit, that cannot be seen at any other industry. According to GlobalData's figures, within the last 5 years, a total of 129 transactions have been reported for licensing or acquisition of drug candidates with positive phase-1 results in the area of oncology. Among these, average contract value is 1.1 billion USD while upfront payment average is 78 million USD.

NOT ONLY FOR THE COMPANY, THIS APPROVAL IS ALSO A MILESTONE FOR THE HISTORY OF TURKEY, AS IT IS THE FIRST EVER-NATIONALLY-DEVELOPED-DRUG STARTING FROM LAB-BENCH, MOVING INTO CLINICS

Leading pharmaceutical company in R&D

Assuming a pioneering role by establishing Turkey's first accredited pharmaceutical R&D Center, Abdi İbrahim boasts over 180 brands and more than 350 products across 13 treatment areas.

Continuing its journey of 107 years with a 100 percent domestic capital, Abdi İbrahim boasts over 180 brands and more than 350 products across 13 treatment areas. The company has maintained its leadership position since 2002, and today, 1 out of every 12 drugs used in Turkey is one of Abdi İbrahim's products.

Assuming a pioneering role by establishing Turkey's first accredited pharmaceutical R&D Center in 2008, Abdi İbrahim has invested TL 700 million in R&D since 2005.

With an R&D spending of TL 52 Million, Abdi İbrahim ranked #20 in the gross list and ranked #1 among the pharma companies in the "Turkey R&D 250 Survey 2017", which is Turkey's only official inventory by the Turkish Exporters Assembly. According to 2017 TURKSTAT data, Abdi İbrahim accounts for 17% of R&D expenditures within the pharmaceutical industry.

With 180 in-house R&D experts, Abdi İbrahim is actively engaged in pharmaceutical development, analytical development, pre-formulation research, clinical trials (predominantly in Bioavailability/Bioequivalence Studies), patenting, development, preparation of the product license file, project management, cooperation management and continuous improvement of processes (QbD - Quality by Design).



>Launched with an investment of TL 900 million in 2018, the Sterile Injectable and Oncology Production Facility

>Abdi İbrahim has launched investments and opened the largest biotechnological pharmaceuticals production manufacturing facility in Turkey, AbdiBio



Abdi İbrahim is making new investments for biotechnology and innovative projects, and carrying out external collaboration efforts. It cooperates with universities and “teknoparks” that are focusing on R&D in the pharmaceutical industry.

As part of its collaboration with Ege University, the clinical studies of a new product that is patented in the USA and Europe and used for wound healing have reached their final stage. Abdi İbrahim, which highly values university-industry collaborations, also cooperates with start-ups overseas for its R&D efforts on new molecules.

STRONG SUPPORT FOR TURKEY'S LOCALIZATION MOVEMENT

In parallel with the global transformation within the pharmaceutical industry, Abdi İbrahim has launched investments and opened the largest biotechnological pharmaceuticals production manufacturing facility in Turkey, AbdiBio.

Focusing on the areas that will add value to the sector and the Turkish economy, particularly on localization, the company established AbdiBio with an investment of TL 450 million. Equipped with state-of-the-art technology to allow for all manufacturing processes from cell bank to end product, AbdiBio will manufacture products for the treatment of cancer, diabetes, rheumatism, as well as central nervous system, blood and eye diseases. In addition to the rollout in Turkey, Abdi İbrahim aims to export the drugs manufactured in AbdiBio to the countries in which it operates and expects biotechnological drugs to account for 20 percent of its total exports in 2020.

Starting production at its hormone production facility which was launched with an investment of TL 15 million last year, the company will address a significant demand in this field in Turkey.

Launched with an investment of TL 900 million in 2018, the Sterile Injectable and Oncology Production Facility is planned to commence operations in 2020 and produce various types of sterile and oncology products. In addition to producing its own products in this facility, Abdi İbrahim aims to meet the industry-wide demand for production services.

In addition to establishing new facilities, the company continues to invest in its conventional pharmaceutical manufacturing facility. By 2020,

Abdi İbrahim's investments for capacity increase will have totaled TL 163 Million.

EXPORTS TO MORE THAN 50 COUNTRIES AROUND THE GLOBE

As a global player in the pharmaceutical industry, Abdi İbrahim continuously strengthens its presence in the countries where it operates and continues to expand in international markets while consolidating its investments in Turkey. Having launched numerous investments in international markets in line with its goals, Abdi İbrahim took the first step to globalization by opening its first representative office in Algeria in 1999. Then in 2010, the company established Abdi Farma in Portugal for its European sales operations. In 2012, Abdi İbrahim Global Pharm was established in Kazakhstan, and Abdi İbrahim Otsuka was established in Istanbul through a 50 percent partnership with the Japan-based Otsuka Pharmaceutical, one of the largest pharmaceutical companies in the world. In 2014, the company launched its factory investment with the establishment of Abdi İbrahim Remede Pharma in Algeria. At the end of 2015, Abdi İbrahim's factory in Kazakhstan started its operations with a production capacity of 24 million boxes per annum. The production plant in Algeria, which commenced its operations in 2017, has a production capacity of 51 million boxes per annum.

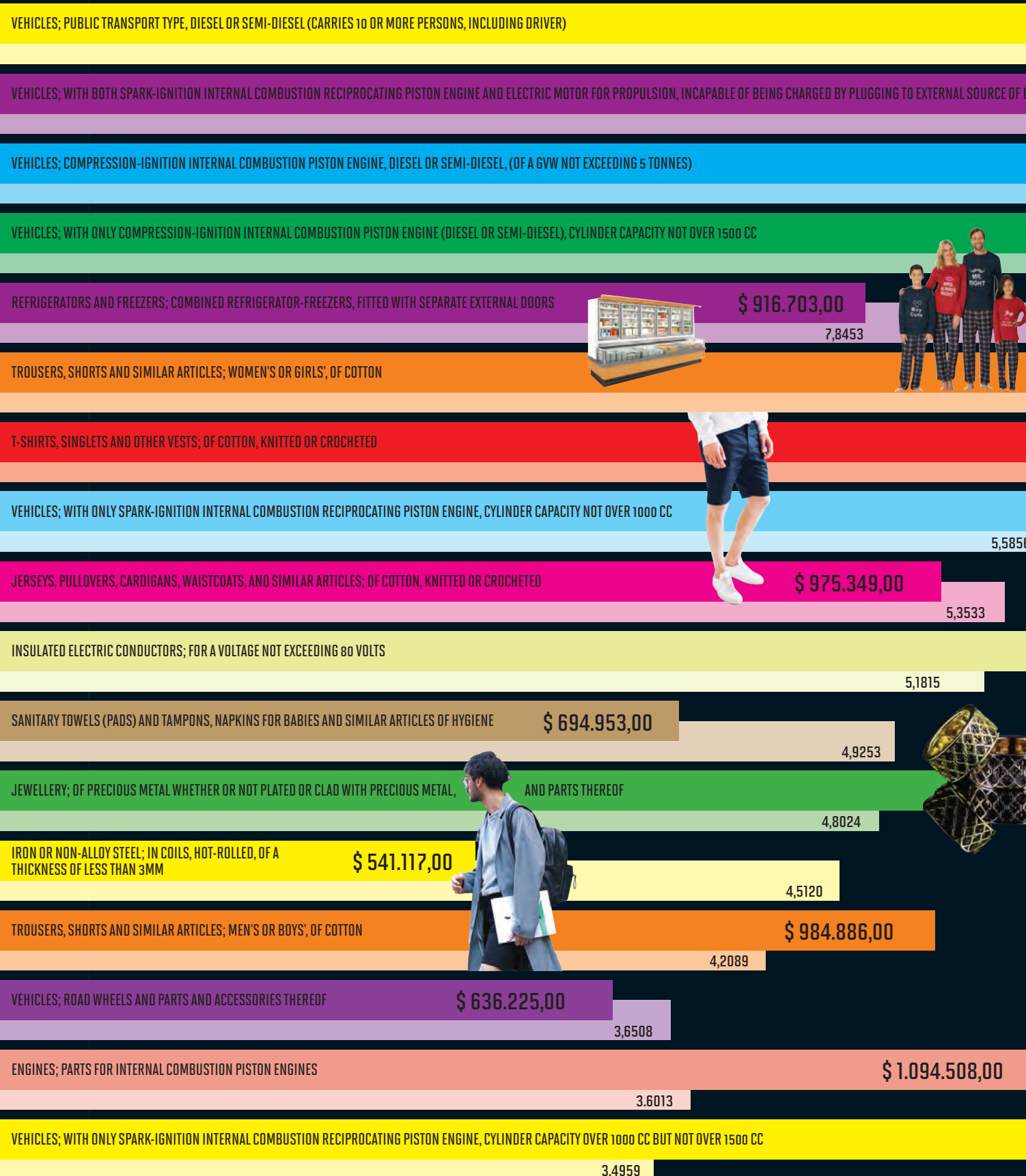
With operations outside of Turkey, Abdi İbrahim boasts the most modern production facilities in Kazakhstan and Algeria and currently carries out its own operations in 13 countries around the world. The company exports to a wide range of export destinations from EU member states to Canada, North Africa to Asia, encompassing more than 50 countries.

AIMS TO BECOME A MANUFACTURING BASE IN TURKEY FOR INTERNATIONAL COMPANIES

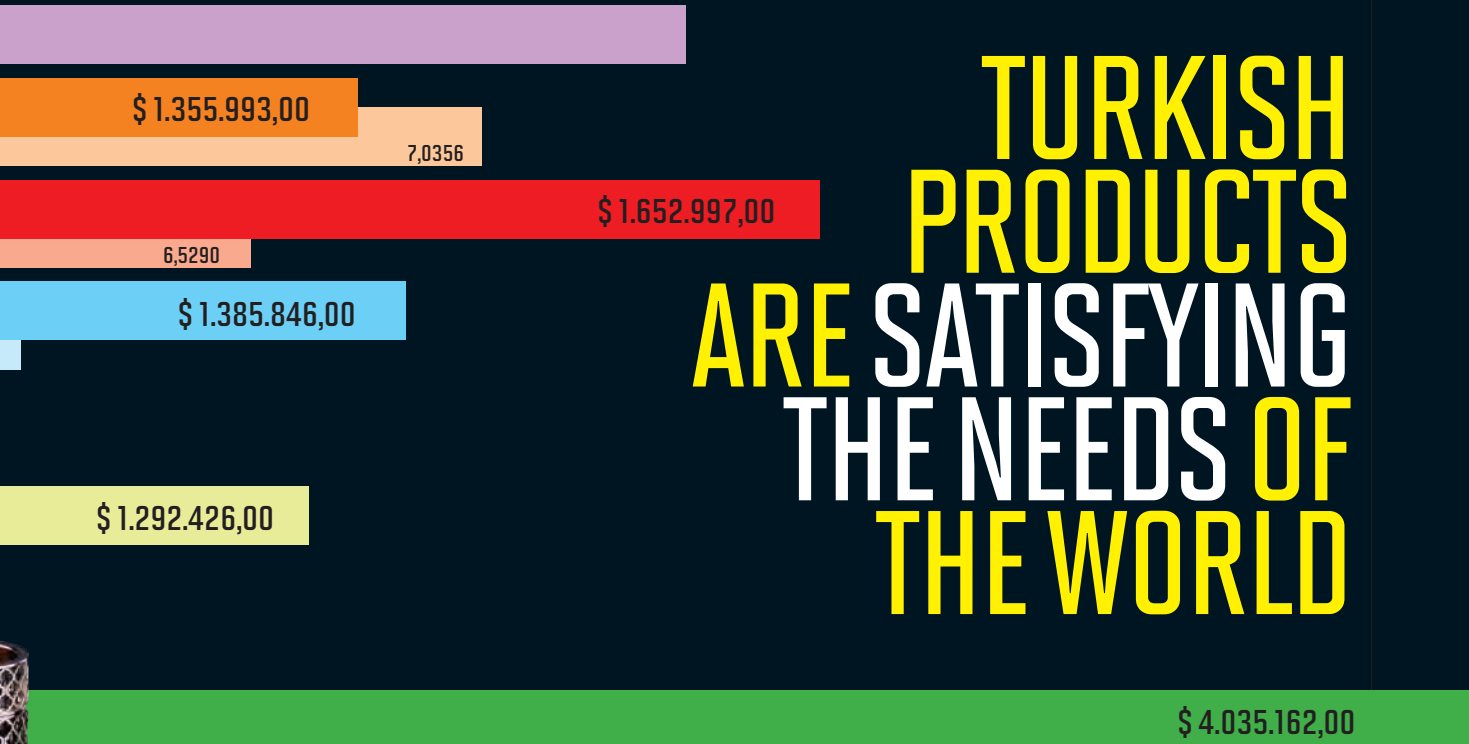
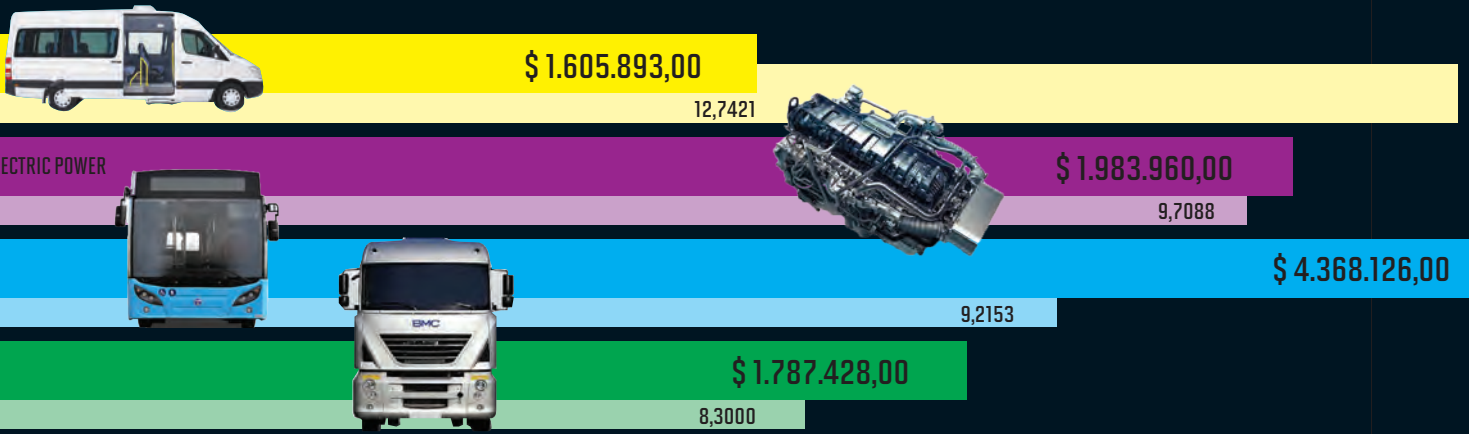
In 2019, Abdi İbrahim is planning to launch its Sterile Ophthalmology & Sterile Inhalation production operations within the same year while still furthering its investments. The company is committed to reinforcing its manufacturing infrastructure to achieve its goals of becoming a production base in Turkey for international companies and achieving more growth in production services through new international collaborations.

AS PART OF ITS COLLABORATION WITH EGE UNIVERSITY, THE CLINICAL STUDIES OF A NEW PRODUCT THAT IS PATENTED IN THE USA AND EUROPE AND USED FOR WOUND HEALING HAVE REACHED THEIR FINAL STAGE

44 CHART OF THE 17 MOST EXPORTED PRODUCTS OF TURKEY BASED ON WORLD'S HIGHLY IMPORTED PRODUCTS



According to the Revealed Comparative Advantage (RCA) index, if the share of the relevant product in a country within a year is higher than the world average in the total exports of the country (if the ratio of the same product to the share in the total world exports is greater than the unit value), the relevant country has comparative advantage (RCA). If the ratio of the same product to the share in the total world exports is lower than the unit value, the country is disadvantaged in the world market. RCA values can be seen in the lower bars of the products in the graph.



TURKISH PRODUCTS ARE SATISFYING THE NEEDS OF THE WORLD

ANALYZING THE TARGET MARKETS FOR CERTAIN PRODUCTS AND COUNTRIES BY USING THE REVEALED COMPARATIVE ADVANTAGE MODEL, WHICH IS ACCEPTED BY INTERNATIONAL ECONOMIC AUTHORITIES, TURKEY WORKS THROUGH TO FURTHER STRENGTHEN ITS GLOBAL POSITION IN THE PRODUCTS THAT IT'S STRONG.

WISHING TO INCREASE ITS SHARE IN EXISTING MARKETS AND FIND NEW MARKETS, TURKEY HAS 47 FEATURED PRODUCTS AMONG THE 200 MOST TRADED PRODUCTS AROUND THE WORLD. AMONG THESE 47 PRODUCTS, THERE ARE MANY PRODUCTS RANGING FROM AUTOMOBILE SPARE PARTS TO BUSES, FROM REBAR TO TELEVISION AND REFRIGERATOR, FROM SPARE PARTS FOR CONSTRUCTION EQUIPMENT TO SWEATERS, JUMPER AND T-SHIRTS. FOR THESE 47 PRODUCTS, THE TOTAL IMPORTS OF THE WORLD IS 1.8 TRILLION DOLLARS.

BY TAMER İŞİTİR

\$ 3.116.784,00

BEING THE STAR OF GLOBAL TRADE

Turkey, which sees the current process as an opportunity period, process that uncertainty increases, protectionism shakes deeply the present system and Europe and

China's slowdown began, has intention to become the star of the global trade by benefitting the country's featured characteristics. Considered as the heart of global trade routes, as the geopolitical center in the intersection of the Middle East, Africa, Europe, Asia, Turkey also supports its advantage by production in many areas, industry in particular. The production portfolio of Turkey, which aims to further boost its share of the global trade as the world's supply base, grows each passing day. The innovative and sustainable supply ecosystem is combined with the talented and practical solutions of the private sector and provides fast and secure service to almost all countries of the world.

Aiming to increase its global market share, Turkey is the hub of Europe, Balkans, Black Sea, Caucasus, Central Asia, North Africa and the Middle East, in the center of Eurasian trade with highways, railways, seas surrounding the three sides, airports and distribution centers, as well as it's at the crossing point of the movement of trillions of dollars between the east and west,

Among the leading countries of the world economy with its increasing foreign trade volume, GNP and population, Turkey gives extra productivity and satisfaction to the countries and companies in which it establishes bilateral relations with its solid commercial practice.

TOTAL EXPORT
VALUE OF TURKEY
\$168.1
BILLION



TURKEY IS DETERMINED TO FURTHER EXPAND ITS DOMAIN AND TO ENHANCE AN EXPORT ECOSYSTEM WITH EFFECTIVE STRATEGIES BASED ON ACADEMIC STUDIES AND THE ANALYSIS OF THE REALITIES OF GLOBAL ECONOMY.

TOP 5 MOST EXPORTED COUNTRIES IN 2018

COUNTRY	2017 (billion)	2018 (billion)	Change rate (%)
Germany	\$15,1	\$16,2	7,0
United Kingdom	\$9,6	\$11,1	15,8
Italy	\$8,5	\$9,6	12,9
Iraq	\$9,1	\$8,4	-7,7
United States	\$8,7	\$8,3	-3,9

Digitalization, Blockchain and e-commerce will pave the way for Turkey

The Turkish business world, which is adapting to the economic habits in every region of the world in foreign trade, started to show this feature in the changing commercial order of the digital age. The components of the Turkish economy are continuing to fulfill the production requirements of the era with manufacturing facilities in accordance with the Industry 4.0 model and robotic technologies. Especially, the first steps were taken in the fast transition to blockchain technology in import and export.

Besides digitalization moves in trade, e-commerce channels will also create large opportunities for Turkey. Current export volume of Turkey, which exports to more than 200 countries in the world, will grow exponentially as it becomes competent in e-commerce.

To realize the advantages of Turkey's ...

Worth to note that in addition to its rising momentum of external trade in the world, many of the companies around the world operating in different sectors perform their global operations based in Turkey. Businesses investing in Turkey, are not only benefiting from procurement and logistics opportunities in Turkey but in a much larger hinterland.

Young, dynamic, educated and skilled workforce, competitive private sector, sustainable infrastructure, large investment climate, low taxes and incentives are some of the advantages that Turkey offers to the international companies.

Behind this assessment, Trade Ministry's works and Turkey Exporters Assembly President Ismail Güllü's "2019 among our highest priorities, is located our exporters realize the digital transformation. Several studies mainly e-export mobilization in this context are going to implement" phrases locates.

TURKEY INVITES THE COUNTRIES AND COMPANIES TO IMPORT TURKISH GOODS, WHICH THE ONES HAVE TRADE ETHICS BASED ON QUALITY AND COMPETITION, ACTING ON THE PRINCIPLE OF PROFITABILITY IN GLOBAL TRADE.

TOP 5 MOST EXPORTED SECTORS IN 2018

SECTOR	2017 (billion)	2018 (billion)	Change rate (%)
Automotive	\$28,5	\$31,6	10,7%
Apparel	\$17	\$17,6	3,6%
Chemicals and chemical products	\$16	\$17,4	8,3%
Steel	\$11,4	\$15,6	36,1%
Electric Electronic and Service	\$10,5	\$11,3	7,9%

Together We Innovate



!NOVATİM

InovaTİM is a family of **2256** students full of spirit of development and change who puts innovation in the center in Turkey's **156** different departments of **150** universities in **72** cities.



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DEFENCE AND
AEROSPACE\$726
MILLION

COUNTRIES WITH THE HIGHEST EXPORT PERFORMED BY SECTORS

PARTICULARLY RESPONSIVE
TO THE NEEDS OF
MANY VERY QUALIFIED
PRODUCTION IN VARIOUS
AREAS,

Turkey performs export to anywhere in the world up from Norway to Singapore, from Egypt to Russia, from Japan to Canada. Producing, processing and distributing the products ably that required by the world for raw materials, intermediate goods and final product classes, Turkey has an intention to further increase of its unique production in many fields for the next period.



LOCOMOTIVE OF EXPORTS

Automotive sector constitutes the most important share in Turkey's exports rising with each passing year, reaching the targeted export figures in 2018. In this process, the share of the automotive industry, which signed exports of \$31.6 billion, reached 19 percent in total exports. Automotive manufacturers, as a production base for export prefers to Turkey increasingly. The exportation about 85 % of automotive production in Turkey is an indication of this condition. In the same period it has been exported to foreign markets from Turkey more than 1.3 million vehicles. This significant growth shown by the automotive industry, today Turkey is the world's 14th largest, and Europe's 5th largest automobile manufacturer has provided his rise to the position. Turkey, especially in the commercial vehicle production, has become a center of excellence. Since the end of 2016, Turkey has become the largest light commercial vehicle manufacturer in Europe.



TURKISH MACHINERY BECOMES POPULAR

The Turkish machinery industry is experiencing a higher demand with both internal and external investments. The sector which provides the main machinery and equipment of automotive industry, metal goods industry, textile industry and metal main industry investments determines the development speed and production compositions according to the new needs and demands. Machine industry, growing faster than other sectors, exports increase constantly, keeping a certain level of capacity utilization and value added indicators of a structure raised significantly. Having 145 R&D centers out of 1026, machinery sector ranks the top among sectors. This indicates a determination of sector, which shows us that it's ready for technological competition.

Machinery exports, holds an important place in Turkey's total exports, which increased by over 10 percent in 2018. From Germany to India, from Vietnam to Italy, from USA to China, at all over the world, Turkish machinery sector becomes popular, continues to develop its collaborations.



THE HEART OF TEXTILE AND CLOTHING

The manufacture of textiles is one of Turkey's largest industry, very competitive in international markets, and the most important foreign-exchange earner. Domestic cotton and wool provide much of the raw material for the industry, but synthetics production has also expanded. The fabric industry as a sub-sector of the huge Turkish textile industry has improved significantly in recent years, since the Turkish clothing and home textile industries have had a significant role in the world's clothing and home textile markets in the last two decades.

The ready-to-wear and apparel sector, one of the leading industries of the Turkish economy, is the 8th supplier in the world and the third in the EU countries after China and Bangladesh. With its new investments and modern facilities, the sector wants to turn Istanbul into a fashion center and to turn Anatolia to produce its production base.

CARPET
\$563 MILLION
CEMENT, GLASS
AND CERAMIC
PRODUCTS
\$261 MILLION
TOBACCO
\$172 MILLION
OLIVE AND
OLIVE OIL
\$105 MILLION



STEEL
\$1.17
BILLION



JEWELLRY
\$935
MILLION



ELECTRIC,
ELECTRONIC
AND SERVICES
\$1.66
BILLION



SHIP AND YACHT
\$185
MILLION



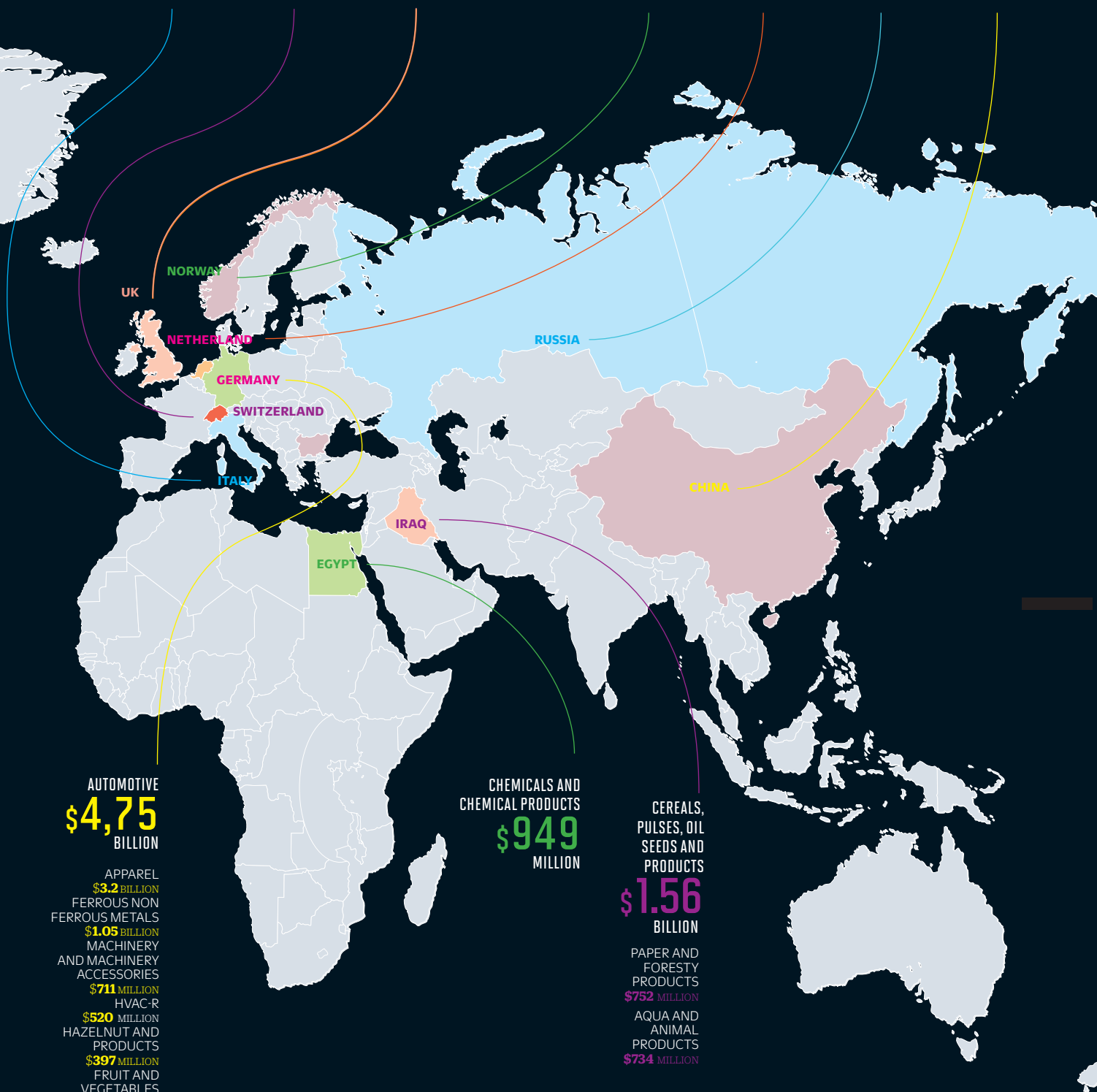
ORNAMENTAL
PLANTS AND
PRODUCTS
\$24
MILLION



FRESH FRUIT
AND VEGETABLE
\$660
MILLION



MINING
PRODUCTS
\$1,51
BILLION



AUTOMOTIVE
\$4,75
BILLION

APPAREL
\$3.2 BILLION
FERROUS NON
FERROUS METALS
\$1.05 BILLION
MACHINERY
AND MACHINERY
ACCESSORIES
\$711 MILLION
HVAC-R
\$520 MILLION
HAZELNUT AND
PRODUCTS
\$397 MILLION
FRUIT AND
VEGETABLES
PRODUCTS
\$228 MILLION
DRIED FRUIT
\$178 MILLION

CHEMICALS AND
CHEMICAL PRODUCTS
\$949
MILLION

CEREALS,
PULSES, OIL
SEEDS AND
PRODUCTS
\$1.56
BILLION

PAPER AND
FORESTRY
PRODUCTS
\$752 MILLION
AQUA AND
ANIMAL
PRODUCTS
\$734 MILLION

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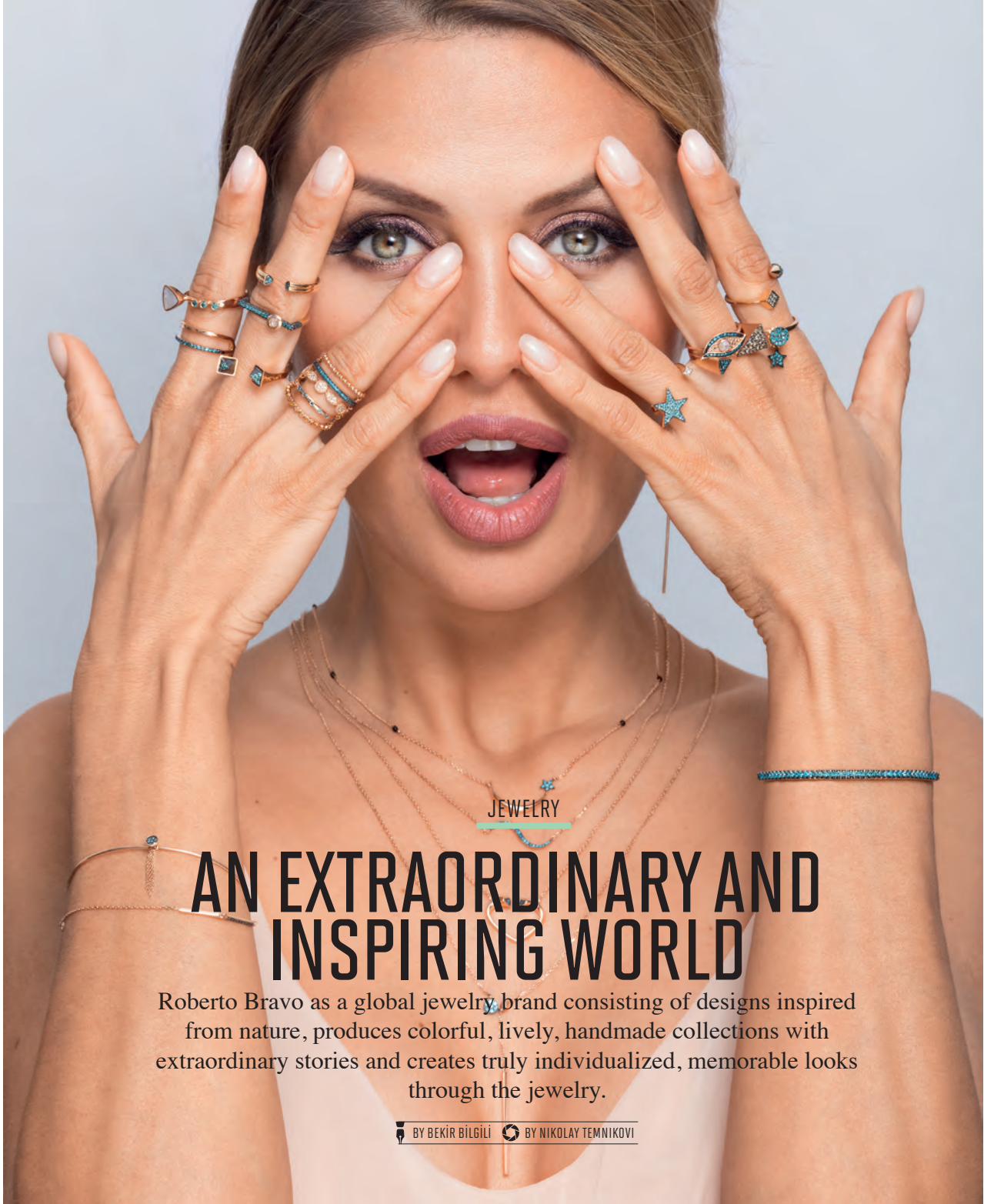
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Brands

JEWELRY, TECHNOLOGY, AUTOMOTIVE, SMART MACHINE, SMART LOCK...



AN EXTRAORDINARY AND INSPIRING WORLD

Roberto Bravo as a global jewelry brand consisting of designs inspired from nature, produces colorful, lively, handmade collections with extraordinary stories and creates truly individualized, memorable looks through the jewelry.



BY BEKİR BİLGİLİ



BY NIKOLAY TEMNIKOVİ

The concept, whose shooting was realized by the worldwide famous Russian photography artist Nikolay Temnikovi has been inspired from the different sides of that supermodel and made her by his shots the perfect expression and the reflection of the brand values.



TURKISH JEWELRY sector is exporting a significant amount of jewelry to various regions of the world. We are pleased to share the brand story of Roberto Bravo, one of the leading companies in the sector with his unique skills in the field of precious metals processing.

Born of Roberto Bravo Name

Kamar brothers coming from 3. generation jewelry sector founded a modest jewelry store in Istanbul in 1998 and then the company that would become one of the leading jewelry brands of the world.

Maintaining and trying to develop the innovative approach, as of the foundation of the company, Kamar brothers were visiting many countries to follow innovations in the world and trying to have an idea about new manufacturing techniques and different processing techniques.

During a journey to Russia, they met with hot glaze technique which is the raw material of many art and

historical pieces based on Moscow Tsarism period.

They tried this technique in a small product group for the first time and exhibited at a fair. The extraordinary attention attracted by the products made the company focus on this field. Within this framework, they added very precious glaze technique seen in our country within them and had the technique down to a fine art by bringing their mastership in workmanship together with the hot glaze technique and became pioneer in the sector.

Rise of Roberto Bravo

Thanks to this technique playing an important role in maintaining the sustaining success of the company, perfect view and bright colors were obtained on each piece.

Aiming at reflecting jewelry's sparkling nature to elegant bodies and extraordinary designs; Kamar brothers took the road with "Roberto" name as response to the question how we can express the sector and its differences in the most successful manner.

Meaning bright, glowing, reputation in Latin origin languages, "roberto" is a name used by persons who are creative and very successful in expressing themselves. In this regard, the word "bravo" defined as daredevil, brave and fearless in all languages and defined as being appreciated with its work and as successful to attract attention

After successful years passed with wholesale, the company started to manufacture its own collections by beginning to develop its retail operations and expansions.

to the success of "roberto" in its business in terms of expressing both its relation with the jewelry sector and creativity and the company took "ROBERTO BRAVO" name along with the branding process as of 1998. The brand reflected the synergy created together by "Roberto" and "Bravo" words to its products.

Branding Process On International Platform

Its first collection Noah's Ark was launched in 2004 in Russian market. Consumers' adopting the concept supported the brand in enriching its collection and exhibiting it in the international markets.

In later years, maintaining to grow its presences in the market, Roberto Bravo provided brand access by using different distribution channel models (Corner, Franchise, Direct Investment). It also increased its competitive power with its manufacturing centers in Italy, Hong Kong and Istanbul.





Mustafa Kamar, the co-founder of the company; says that with its contemporary line, advanced technology, extraordinary designs, master craftsmanship, impressive collections and wide product range, they have created a powerful extraordinary jewel flow worldwide and their effort will continue unabated over the coming years to render this brand a little bit more perfect with each passing day.

From The Art to the Science of Emotional Branding

Roberto Bravo uncovers women's romantic moods, fun and everyday styles with collections of stories that touch women's feelings.

Every people deserves to be told "BRAVO". Roberto Bravo wants to inspire women, to praise them, to charge them with the energy, and to let them remember and remind always their special moments in their life.

The art and the designs Roberto Bravo create from nature's inspiration becomes part of its corporate and cultural identity. By mentioning nature's beauty and magic, Roberto Bravo ensures that future generations will continue to find inspiration in the natural world around it, they will treat the nature well and become much more sensitive.

With nature domain, Roberto Bravo reveals romantic moods, amusing and daily styles of women with its collections that have a story slightly mentioning about the women's emotions.

It defines a life style inspiring

women and an emotion that will be an inspiration for them. Making special moments and experiences of people special and encouraging them to share those special moments and experiences with their beloved ones are among its principles.

In this regard, clothing has a very big meaning in the lives of today's modern women. It tells us that women should wear a pieces that pleases them greatly and is suitable for them; that make them feel each moment



The brand gives importance to emotional connection with their women, so that emotion, it is a powerful tool for associativity and brand engagement.

best, enjoy the life, immortalize them and wear as they wish and which they think it makes this moment special as they wish and also they should remember that moment always.

Lively Portraits of Nature Review with Victoria Bonya

Roberto Bravo describes her women as feminine, fashionable, successful, energetic, who exude and project self-assurance and happiness.

Victoria Bonya represent this modern, lively, multifaceted women and has been chosen as the ambassador of Roberto Bravo 'Bravo Bonya campaign' during 2018-2019.

"Bravo Bonya" campaign tells us how jewels are included in our daily lives and how each piece touches every moment of our lives. Roberto Bravo emphasizes that every moment is worth living and need to celebrate these moments. 'BRAVO' through Victoria Bonya, to the people who knows and appreciates the value of these moments.

With this campaign, Roberto Bravo describes a lifestyle that inspires women, She encourages people to make special moments & experiences in their lives and celebrate / share / enjoy them...

Bravo campaign tells us how to make women feel good all the time, to enjoy life, to immortalize these moments, dress up the way they want, and when they want a special piece that will make this moment special, they should carry it and remember all time.

"This campaign is about to create a daily life including luxury and celebrating every special moments" says Mustafa Kamar, founder and CEO of the brand. We choose Victoria Bonya because she is iconic, smiley, multifaceted hardworking but enjoys life at the same, celebrate her every special moments and share them – a combination that is the very core of this brand.

Victoria Bonya Campaign shootings where striking and exciting shots take place which constantly surprise the women with the stories in their designs are ready to surprise and taking their breath away. Different hours and friendly sentiments of Bonya's day will show how she adopts the luxury in her everyday life including jewels.

Being a model, mother, businesswomen and celebrity, Victoria Bonya fits exactly and perfectly the image of the women dreamed by Roberto Bravo.

The Operations and Worldwide Success

Roberto Bravo determined its sales policies and goals for the purpose of increasing sustainable growth and expansion and its brand recognition in the markets where it has entered and carry its sales power in Turkish market to target markets. Accordingly, it has built its corporate strategy so as to be a world brand in global jewelry market.

While Roberto Bravo is opening its stores with Corner, Franchise or direct investment model in countries having criteria such as powerful economy, developed corporate infrastructure and bureaucracy, quality labor force, brand sensitivity, high purchase power, political stability (USA, Germany, Belgium, Italy, Netherlands, Austria), it collaborates strategically with



Today the brand continues
to meet with women
through its 250 sales points
throughout Turkey.

local companies and Corner and Franchise distribution channel model in countries having conditions increasing investment difficulty degree and risk such as bureaucracy, unregistered economy, underdeveloped corporate infrastructure, insufficient human resource, exportation legislation, limited distribution channels, etc. (Russia, Kazakhstan, Latvia, Lithuania, Belarus, Ukraine, Azerbaijan, S.Arabia)

Roberto Bravo made branded sales to 31 countries between 2015-16-17 over 17 million dollars. Exportation they performed in Russia

market decreased negatively around 50% levels due to political and economic view in the country, excess value loss of Ruble and pressure on target audience at the end of 2015 and in the beginning of 2016, however, in 2017, our exportation increases 100% with improvement in the market and the brand's Market variation (compared to previous year). Reading economical developments and opportunities in the world well, Roberto Bravo strengthened its position in competitive markets when compared to many of its competitors in the relevant year.

Their this positive development in exportation was reflected to per unit exportation figures and their unit sales price increased from 27.00 USD/Gram to 36.00 USD/Gram. This case shows that branding process of Roberto Bravo also speeded up at target markets.

Roberto Bravo offers its branded products to its target audience through its 13 stores along with 7 franchise stores and 60 sales points opened with direct investment channel model in Russia. All of the stores are concept stores and they are located in Moscow-St. Petersburg considered as fashion scope in Russia and Ekatarinburg-Sochi-Orenburg-Gelendzhik cities which are other big cities.

Exportation of Turkey in 2017 in Russia is 34.152 million USD. Exportation of their brand in Russia in the same year is 1.9 million USD. These data show us that Roberto Bravo performed 5.56% of the exportation alone that Turkey performed in Russia. Not all of the exportation of Turkey is branded. Branded exportation is assumed as 10%. Based on this assumption, Roberto Bravo performs 55.63% of the branded exportation to Russia alone. This case is an important gain on behalf of Turkey and brand.

Roberto Bravo maintains its abroad operations in 31 countries with 13 direct investment stores, 11 franchise stores and 193 corners.

Roberto Bravo determined its sales policies and goals for the purpose of increasing sustainable growth and expansion and its brand recognition in the markets where it has entered and carry its sales power in Turkish market to target markets. Accordingly, it has built its corporate strategy so as to be a world brand in global jewelry market.



LEADS THE WAY TO SAFE CITIES IN THE WORLD

Ekin with its offices in New York, Stuttgart, Istanbul, Ankara, Baku and Dubai is the leader in safe city technologies with its state of art solutions crafting the future of safe and smart cities.

FOUNDED BY AKİF EKİN and Suzan Ekin in 1998, Ekin's core mission is enabling law enforcement, and security authorities to more efficiently and effectively protect the public with its power in developing software, hardware and design triple. Ekin has reached six continents around the world with it its pioneering technologies

and now with more than 2 decades of experience. Ekin is the inventor of mobile surveillance systems in safe city technologies in the world with their reserved patent rights. With a focus on mobile, versatile security technology, Ekin's easily implementable security systems are available for cities, airports, shopping centers, universities and arenas

around the world. Known for its sleek design and innovative approach to security, Ekin has received a number of awards for their work in the safe city field, including the coveted Red Dot Design Award, CES Honoree Awards and the "Game Changer" title from the World Technology Award in 2014 and is a member of ICERT – The Industry Council in the U.S.

Setting the Standards Worldwide

Cities can be protected with fixed systems to some extent. However, there is a need for surveillance at points where fixed systems are not available. On that account, developed with the aim of providing complete safety in cities, Ekin integrates mobile and fixed systems' operation and

enable cities to be under 100% control. Unrivalled in its field, Ekin License Plate Recognition System changes the game by challenging world standards with an outstanding 99% accuracy rate. After employing the use of Ekin's Safe Traffic system, a capital city in the middle east saw a 34 percent reduction in deadly traffic accidents.

Game Changing Inventions

Ekin Patrol is the first and only mobile smart patrol in the world and is just one of Ekin's product line that entitles Ekin, the world leader in safe city technologies. Ekin's Patrol G2 combines elegant design with powerful technology, turning it into the go-to high-tech, mobile enforcement product for safe cities around the world. With license plate number detection, face recognition, and speed and parking violation detection on the move, Ekin Patrol G2 is designed to enhance safety in cities around the world. Patrol G2 is designed as a light bar and is suitable for vehicles such as police cars or fire engines.

The first and only smart patrol bike in the world that performs number plate recognition and parking violation detection on the move, Ekin Bike Patrol is a high-tech mobile enforcement product designed for bicycles. Suitable for any patrol bike, Ekin Bike Patrol is aimed to bring order to traffic and prevent the chaos caused by parking violations.

Game Changer Enters New International Markets in 2019

Ekin entered successfully the European, American and Asia Pacific markets with the all new AI based product line. Growing its global network



year by year – Ekin has an essential contribution to Turkey's export rates. As "the 2018 Leader in Information Technologies and Software Export" in Turkey, Ekin's export rate proudly corresponds to $\frac{1}{4}$ of exports in the industry consisting of 47 companies.

The First and Only Entirely Modular Smart City Furniture

Italian A' Design awarded, designed to meet the needs of safe cities with its modern and modular design Ekin Spotter is the first and only modular smart city furniture in the world. A single device capable of providing a wealth of real-time information about a city, Ekin Spotter can

be customized to perform a number of functions. Ekin Spotter can detect automatic license plates from up to 6 lanes, can make speed enforcement and parking management. In addition to traffic management, Ekin Spotter can make environmental analysis.

Facial Recognition with No Need for Existing Photo Archive

With its advanced face analysis feature, Ekin Face does searches based on gender and age. In addition to that, it can identify if the suspect is with a group or alone. Even if there is not an enrolled image in the database, the system reaches the closest results in searching for the wanted

Ekin's easily implementable security systems are available for cities, airports, shopping centers, universities and arenas around the world.

person. For instance; Ekin Face lists all women in red, all men groups of three or all women under thirty according to its set filters. With the advanced face analysis feature, Ekin Face lists possible time zones, images and videos that the wanted or specified person was appeared in.

Ekin Technology, with its game changer team of 150 and 75 engineers developing revolutionizing technologies with artificial intelligence, works to keep its pioneering position as the leader in safe city technologies and to set the standards in its field.

Global References

Mentioning about the points that Ekin stood out to him about Ekin versus other police tech options, Gerhard Schaub, President of the Police Officers Association Municipal Police Zurich, Switzerland indicated; "Ekin is the only supplier in the world who can provide the total package for us policemen in one. The image quality is qualitatively the best and leaves the competition far from it. The other vendors still partly offer outdated technologies. Ekin technologies are mature and the best in the world. The systems with Patrol G2 complete with face recognition, license plate recognition, speed measurement, parking surveillance including all-around video surveillance, the Bike Patrol with license plate recognition, speed measurement, and parking space monitoring as well as the fixed solutions make the operating system a unit a modern police needs, The systems are designed so that they can also be used across borders and used effectively in crime fighting."

AUTOMOTIVE

SOUND OF ROADS

There is only one unique voice which is heard from millions of vehicles on the road...



SEGER, which was established in 1981 in Bursa, manufactures 1 horn in every 4 seconds and exports its 15 million pcs of horn production to domestic market and to 70 countries such as Romania, U.S.A., Spain, Germany primarily and Japan, Russia, S.Africa, Poland and Jordan. Seger supplies its horns to Tesla Motors as well. This is the success story of Seger...

Seger has a story extending from the production of enameled bobbin wires to the production of horns. Seger is a family company with 100% domestic capital and has a presence in both domestic and international horn production. Sinan Baykal and his partners,

the founders of Seger, pondered the idea of horn production. In the 80's, the domestication efforts of automotive industry led the way for the progress of automotive sub industry. With Sinan Baykal's vision, Seger initiated its export operations following the Horn production. Seger improved concurrently with the development of domestic automobile manufacturers.

Co-Operates With Globally Renowned Vehicle Manufacturers

Seger continues its journey that has started in a small workshop 38 years ago, as "Turkey's brand exporting horn to the globe". Seger co-operates

with globally renowned vehicle manufacturers both in our country and in the world as an international brand. Seger supplies its horns to world's giants such as Renault, Isuzu, Audi, Honda, Mercedes-Benz, Volkswagen, Tesla, Nissan, Ford in passenger vehicles, BMC, Karsan, JCB, Iveco, Temsa, Otokar, DAF in heavy commercial and construction vehicles, Hattat, Çukurova, Erkunt, Hidromek, Tümosan, Türk Traktör, Taral, Bozok Traktör, Hars Traktör in tractor and agricultural vehicles, Indian Motorcyle, Bigdog, Victory, Polaris in motorcycle segment.

Seger, which expands its portfolio with the addition of new markets by the contributions of its special productions, makes special production for countries with cultural peculiarities, lifestyle choices and conditions in global market as well as based on special requirements from the vehicle manufacturers. Seger makes a name for itself with the production of horns for different Tesla models. Seger has started to manufacture horns for Ford F-Max and Yağmur Tractor in the heavy commercial segment.

Seger's vision is to become a global horn brand preferred in both aftermarket and OEM markets. In parallel of this vision, Seger cares greatly for brandification both domestically and internationally. Seger attracts significant attention with its 15 million horn production capacity per year in its 2

1 horn
in
every
4 seconds



factories located in Bursa/Turkey and Dongguan / China respectively. Seger allocates 3% of its annual turnover for R&D investments to become a global leader in the sector. The target is to launch at least 1 new product each year as SEGER sees the R&D department as the captain's quarters of a ship. This goal has already been achieved. Seger has also increased its capacity by 50% with the addition of its new 3rd assembly line that became operational in 2017.

Seger has launched its 4 new products in 2018 and introduced them to both domestic and international markets simultaneously. These models are 65V V type snail horn, 65H H type mega snail horn, 8 melody Ottoman Military march horn a.k.a. "Mehter" and 8 melody Nostalgia Horn. The launch of Ottoman Military march horn a.k.a. "Mehter" containing 8 different marching melody and Nostalgia horn containing 8 different famous Turkish Pop/Folk melodies from past to present, has drawn significant attention.

Seger, which has "Public Gender Equality" based policy, allows its female employees equal opportunities with its male employees from production to management since its foundation. 48 out of 205 employees are women in Seger. 35% of white collar employees and 45% of senior management are composed of women.

Seger operates with the goal of institutionalization and finding itself a spot in the world's giants since its founding. Seger aims to co-operate with more vehicles manufacturers in 2019 and is proud to represent our country in international platforms and to advance to the league of international brands.



SMART MACHINE

SMART TAPS FOR PERFECT DRINKS

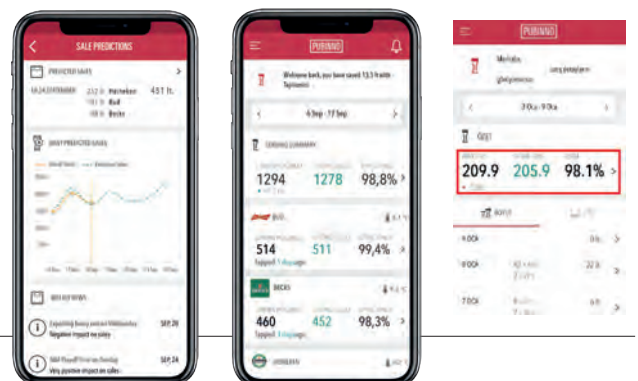
Turkish initiative Pubinno, which changes habits with smart solutions in soft drink consumption areas, is growing on a global scale.

CAN ALGÜL, the CEO of Pubinno, studied civil engineering at İTÜ. He had done a lot of work; from bartending to basketball coaching, but he did not want to be a civil engineer. When he went to Küçük Beyoğlu (it was very famous at those days), he was always waiting for the beer turn. And an idea was born: "How would it be if there were taps on the tables, to which people pressed and took their beers themselves?"

With this idea in mind, Can Algül left the college and devoted himself entirely to this project. While he was getting help from people at that time, he is now writing a global success story with his teammates.

Tap adjusts the pouring speed to prevent excessive foaming, foaming, so that it does not spill or waste any beer.

At first, his goal was to use these devices in the pub they opened. Then he started to talk to beer brands and while it was still just a project, he got approval and support from Efes. However, the project was stopped because of the alcohol prohibition and he returned to basketball coaching.



Of course, Can did not give up, because customer needs and wants were still the same. Together with the current CTO, Necdet Alpmen, they invented the self-service beer machine and received payment from Efes. In the summer of 2015, the first products were put on the beaches of Çeşme and people loved it and queues were formed.

They were aiming to be a global technology company from the beginning and this business model was not suitable-scalable for a startup. They were selling it to the brand, brand was setting up the sales point, sales point was selling it to the consumer, etc. It was a very complex business model. The device was also very big in size and the logistics was difficult. In this process, the biggest problem in the bar industry was discovered thanks to the successful relationship with the bar owners and bartenders. There was a 20% loss in draft beer service. The bar owners could not do anything about it because every day, different types of beer were coming out of each barrel, 80 cups a night, 70 cups a night. Also, there were other factors such as the gas tube, foam and fraud. The third most consumed drink in the world is beer and each draft has 20% casualty.

During this process, they had many difficulties in fundraising for this product development process. They found the solution in going to Silicon Valley and applying to various organizations. In May 2016, Alchemist, one of the most prestigious accelerator, agreed to invest in Pubinno and they moved to San Francisco. When they moved the business to the United States, they took the



initial investment from Fatih İşbecer in Turkey. Then they found another investment from Silicon Valley. Up to date Pubinno raised \$1.4M in total. Smart Taps have been used in many countries such as Germany, Israel, Holland. In Turkey, they currently have an agreement with Efes Pilsen, and Pubinno has started mass-production. In the spring of 2019, almost every pub in Istanbul, Smart Tap2 will meet the customer.

What Were The Problems And How Did They Solve Them?

The flow of beer changes with some parameters like temperature, pressure, humidity and the amount remaining in the beer keg. For example, if the filling process starts with a drop of foam, this can cause the whole cup of beer to be poured in the form of foam. This in turn causes overflow. In addition, the number of cups poured from

a standard draft keg cannot be fully standardized. That's why there is a lot of loss.

With the developed system, data can be analyzed and the desired amount of beer can be offered at the ideal foam rate. While beer is served, quality, coldness and foam ratio are preserved. Smart Tap 2, the product of Pubinno, is a complete technology marvel. Plug & play, smart and connected draft beer device combines robotics, Internet of Things and Artificial Intelligence.

Smart Tap2 pours a predefined amount of beer with a single click on the touch screen interface, using a flow control algorithm that minimizes foaming and hence waste.

Because the tap adjusts the pouring speed to prevent excessive foaming, it does not spill or waste any beer. It warns the bartender when the keg or line is empty or when there is a line problem.

Smart Taps have been used in many countries such as Germany, Israel, Holland.

The flow algorithm utilizing artificial intelligence is changed between flow profiles to compensate for the environmental changes using bartender behavior and sensor readings.

Smart Tap2 warns bartenders when the service temperature or line pressure is too high. It also shows how much beer is left in the keg. Real-time alerts help bartenders immediately take corrective action. With Taptronics, bartenders can plan their operation and spend their time effectively.

Thanks to the mobile application, bar owners can access all the information gathered remotely. In this way, they can increase their sales.

There are 4 important factors in maintaining the quality standard; freshness, maintenance, temperature and pressure. Pubinno's smart taps help bars and breweries track draft beer quality in real time and take immediate action when necessary.

All these above-mentioned features can be provided in a very short time because they are very easy to install. 5 minutes is sufficient for this system to be installed thanks to the Plug&Play feature. The old faucet is replaced with the new smart tap and the sensor box is set where the beer line is cut. When the sensor box is connected to power, the device is ready to use.

Currently working with countries like the United States, the Netherlands, Germany and Israel, Pubinno has an inspiring story. In the very near future, we are sure to drink perfect beer pouring from the Smart Tap2 taps all over the world.



SMART LOCK

A Game-Changing Locker Lock: miniK10

miniK10 offers a locker lock that is eco-friendly, can be managed on a mobile app and used with a time-stamped passcode and employs cloud technology – all for the first time!

EUROPE AND THE USA are home to a number of success stories that start with “in a garage”. Garages are not so common in Turkish culture. But, in the face of their garages, we have success stories starting with “in the attic” just like the one representing Vemus.

The creator of miniK10, Vemus Industrial Electronics Turkey was established in Bursa, a prominent industrial city in Turkey, in the year 1989. The story of Vehbi and Mustafa Dayanikli brothers, who had taken a close interest in electronics in childhood, started with

their production of amps for marketplace sellers and of electronic lighting features. Even then, they decided to start up their own business on the basis of the pleasure they derived from their initial success. They did not have any capital. Therefore, they set off their journey as a small business. But they kept abreast of the developing world.

Vemus designs and produces unique electronic locks aiming to contribute to the satisfactions of the needs of people for security and comfort under their



Kilitronik brand and with their slogan: “Leading Locker Lock in Turkey”. In this context, its vision aims to offer internationally-patented innovative products as a service to humanity. The most successful product family among Kilitronik products covers miniK10 locker locks. miniK10 products have been exported to 31 countries notably including the USA, Germany, the UK, Italy, Australia and Finland.

miniK10 For Every Locker

Available for use at new-generation offices, personnel/student lockers, security/checkpoint lockers, deposit lockers, post boxes, and lockers at healthcare institutions/ laboratories, SPA centres, and sports facilities, etc., Kilitronik and miniK10



MUSTAFA DAYANIKLI

Co-founder

"Vemus provides all their electronic locks to the humanity as a combination of creative design, innovative spirit and technology. Vemus product has a distinctive features with its unique identity."

products offer keyless access, thereby providing for ease of use and adding value to every such facility.

With its investment in automation, Vemus aims to establish the infrastructure necessary for Industry 4.0, produce miniK10 with an automation rate of 90%, and increase its annual production capacity to 100,000 pieces.

Kilitronik miniK10 product family is among the products further discovered and preferred by architects, interior architects, and furniture designers as a family of user-, business- and eco-friendly products manageable with a mobile app offering "all-around easy" features, as well as support and post-sale services, which stand out as the smallest products in the world equipped with 12-key locks and an economic life approaching 10 years with a single button battery.



An Easy Platform to Manage Electronic Locks: hopinlock

Vemus also appended its signature to an important innovation in electronic locker locks by allowing locks to be managed easily with the innovative "hopinlock" app they developed in the year 2016.

"hopinlock" makes it much easier for managers to manage multiple locks as an app allowing access to all parameters featured by Kilitronik locker locks on mobile devices. Opening locks fast and easily without troublesome and exhausting

keying makes it possible for passcodes and usage parameters in a manner completely independent from locations. This feature, patented with Vemus as a system, resonated extremely well with the world.

The "hopinlock platform" has enabled 12,500 locker locks in a university campus to be used and managed successfully for three year.

Kilitronik products and especially miniK10 is primarily admired by architects, internal architects, and furniture designers at various fairs around the world. One country distributor for Vemus has apparently "fallen in love" with miniK10, which is now in preparations for an expansion in its network of distributors and for the creation of new sales channels in e-trade. Keeping an eye on Vemus is highly recommended for its on-going projects and its pipeline of more "game-changers" in the world.

With its investment in automation, Vemus aims to establish the infrastructure necessary for Industry 4.0, produce miniK10 with an automation rate of 90%, and increase its annual production capacity to 100,000 pieces.

Agenda

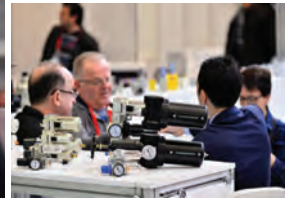
FAIRS, EXHIBITIONS, SUMMITS AND MEETINGS IN THE NEXT MONTH

14-17 MARCH 2019

WIN EURASIA

TUYAP CONGRESS AND FAIR CENTER- ISTANBUL

*Which brings together the leading 6 industry fairs in the world's manufacturing industry under a single roof with the **Industry 4.0 concept**, is leading an important first.*



"Be Part of the Future" will be held at the fair for the first time in Turkey with the slogan, "**Industrial production 4.0 smart factory**" will be established. In the Smart Production

Plant to be established in the "Industry 4.0 Festival Area", the unmanned production process will be exhibited in the dark factories of the future. Eurasia, the leading industry fair "WIN

EURASIA" in 2019, TÜSIAD, TIM and ENOSAD cooperation will shed light on the future of the industry, panels, conferences and forums will be held.



05-06 MARCH 2019

6th INTERNATIONAL NUCLEAR POWER PLANTS SUMMIT AND FAIR

PULLMAN ISTANBUL CONVENTION

Countries with experience in nuclear technology will participate in the 6th International Nuclear Power Plant Summit and Fair in Istanbul with 16 companies to take part in nuclear power plant projects in Africa and the Middle East. South Korea, Germany, Spain and Slovenia, especially in



many countries of the world, important companies and close to a thousand visitors will be hosted on 5-6 March 2019 in Istanbul.

28-30 MARCH 2019

IFAT EURASIA 2019, INTERNATIONAL ENVIRONMENTAL TECHNOLOGIES FAIR

IFM - ISTANBUL EXPO CENTER, HOL 9-10-11



The fair, held for the second time in February 2017 at the IFM Istanbul Exhibition Center, strengthened its claim to be the industry's leading environmental technology platform. At IFAT Eurasia, which brings together 412 participants from 18 countries on the same platform in a total

of 17,000 m² exhibition area; New products and technologies were exhibited in the categories of solid waste, water and wastewater technologies, bioenergy, waste collection and transportation vehicles, recycling systems, recycling plants and products, renewable energy.

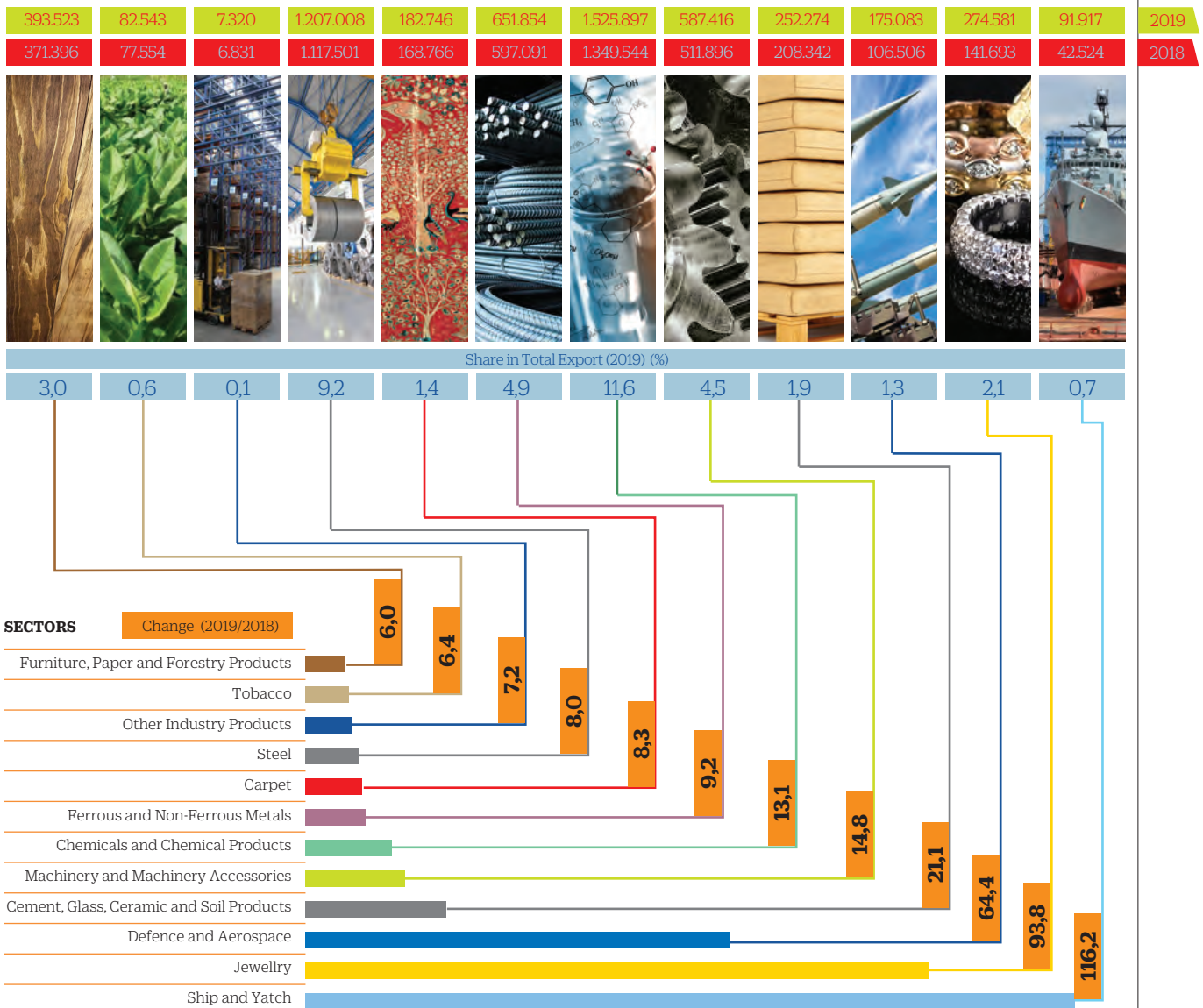
Figures

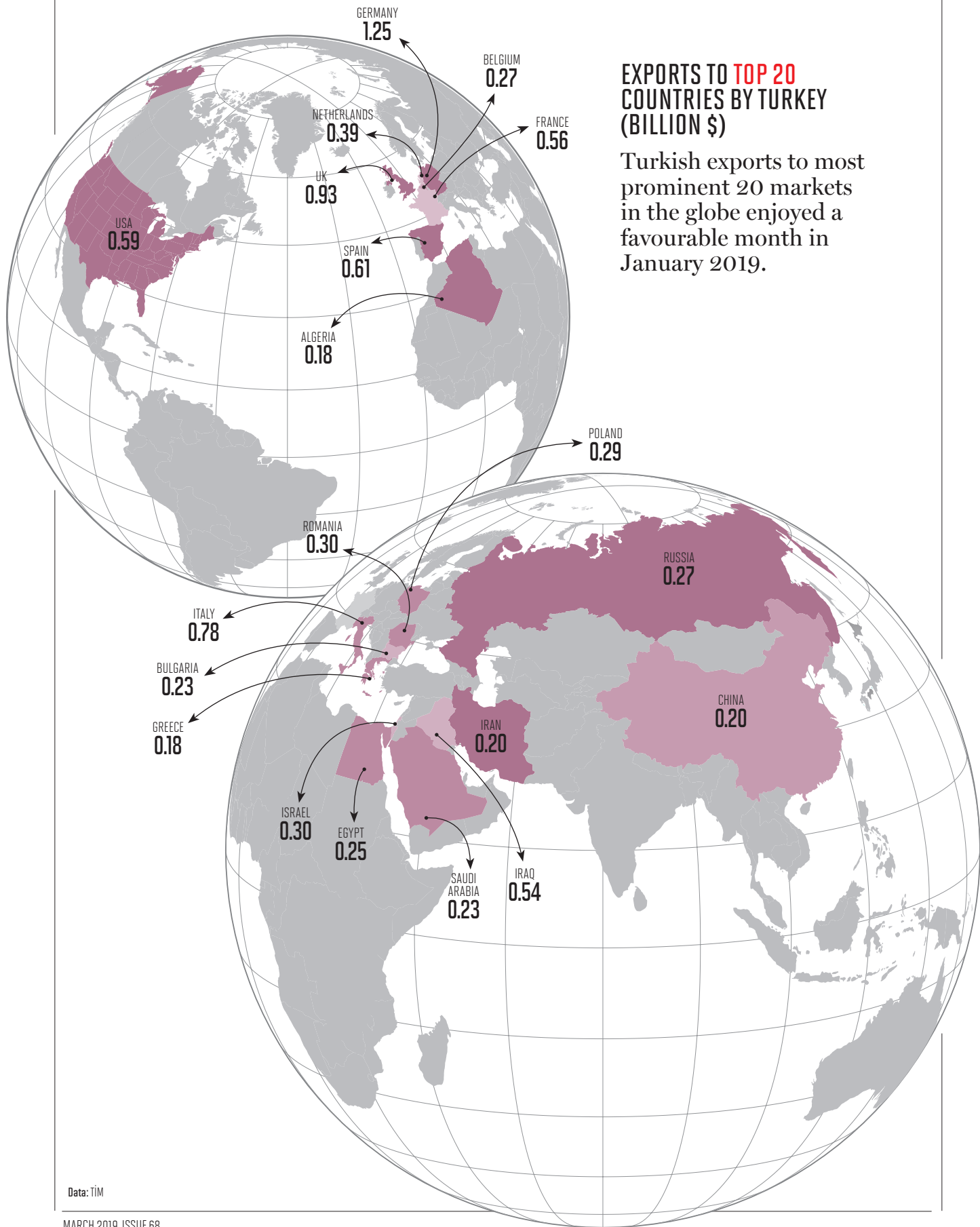
2019 WILL BE BETTER THAN 2018

Breaking the all-time exports record in 2018, Turkey seems determined to continue with this successful performance in 2019.

Export data for the first month of this year supports this view. In the first month of 2019, Turkish exporters surpassed the January performance of 2018. Exports increased by 5.9 percent to \$ 13.2 billion compared to the same month of 2018.

Exports of 19 sectors increased.





Data: TIM



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A STAR ALLIANCE MEMBER 

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