



ADFIMI International Development Forum  
**SME Finance & Development**  
in the **Age of Digitalization**

Istanbul, Turkey, 11-12 September 2018

# POST-FORUM REPORT



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# Executive Summary

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**Dear Members,**

**Dear Colleagues,**

ADFIMI International Development Forum was held in Istanbul, Turkey, on 11-12 September, 2018, with the theme "SME Finance & Development in the Age of Digitalization".

In the context of the international development agenda, promoting SME development globally considered an important priority. However, access to finance remains a key constraint to SME development. The phenomenon of digitalization has recently opened new venues and opportunities to SMEs and SME finance institutions. The forum attempted to examine the impact of digitalisation on SME development and finance.

The event was organised with the kind sponsorships of Vakıfbank, Halkbank, Ziraat Participation Bank and Islamic Development Bank (IsDB). The two-day event hosted around 150 participants with 28 speakers and 8 moderators from over 20 countries and 8 international organisations.

This post-forum report intends to provide summaries of the presentations. Mr. Mathew Gamser's Keynote Speech has been given a wider coverage.

Some of the pertinent messages were:

- Annual SME finance gap is over 5 billion USD per year for the formal sector.
- SME finance by banks is difficult because SMEs are cash businesses and require excessive workforce which makes it unprofitable for NDFIs.
- With digitalization, SMEs could provide digital assets instead of mortgage or land as collateral.
- Digitalization in that respect, offers new opportunities for Islamic finance to be active in SME financing.
- Creation of a digital environment or ecosystem like the one in China, exemplified by Ant Financial of Alibaba Group, seems imminent for the future.
- We are now into an era which is payment led and not credit led, due to the developments in digital environment.
- Fintech disrupts SME lending status quo.
- Fintech companies tend to partner whereas, Techfin companies become competitors.
- Platforms may be the future of financing.
- Blockchain is destined to replace the swift system for cross border money transfers.
- Ability to handle big data offers huge potential for financing but privacy protection also becomes an issue.
- SME's in the Middle East and North Africa has the highest credit gap followed by Sub Saharan Africa.
- Financial system should be built to be conducive to meeting the needs of SMEs.
- ICD has planned to provide USD 2 Billion to Islamically finance 10,000 SMEs in the period 2018-2020.
- In East Africa, digitalization started in 2007 when mobile financial service M-pesa was introduced, for sending money and paying bills. With 30 million subscribers and 45% of all money transactions, Kenya has the highest percentage of mobile transactions in the world.
- OECD ministers in early 2018, adopted a new policy action for priority areas to enable SMEs to participate better in the Global Economy.
- SME digitalization could be promoted by state owned banks through understanding challenges, enhancing digital skills, focussing on customer experience, opening digital platforms, optimising e-commerce applications and analysing data created by e-commerce.
- STB Bank of Tunisia uses a five pillar approach to digital transformation, through "SME digital transformation enablers". They show a special route to digitalization for each SME.
- Customers demand better technologies to be used in digital banking, and failing to follow up innovations carries futile risks for enterprises, banks or SMEs to disappear. VakıfBank of Turkey presently carries 93% of its transactions through non-branch channels.
- SMEs are crucial in achieving the SDGs especially SDG8 and SDG9 are related to SMEs and 5 out of 12 targets of SDG8 are directly related to SMEs. SDG2, 3, 4, 6 and 7 also have some targets related to SMEs.
- IsDB proposes a shift of paradigm from "financing for development" to "empowerment for development" and introduced "Inclusive Economic Finance Facility (IEFF)" to promote partnership and to foster development.
- Credit Guarantee Corporation (CGC) and Credit Guarantee Fund (KGF) substantially enhanced SME's access to finance and to digitalisation in Malaysia and Turkey.

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- International cooperation on regulatory frameworks for Fintech is necessary.

- Islamic finance for SMEs in Jordan has caused financial inclusion to reach 32% of population, registering an increase of 10 % in two years.

- Non-profit online Islamic crowdfunding like Narwi Waqf was an exemplary Islamic Fintech application providing funding to entrepreneurs, harnessing USD 8 Million investment from 175,000 persons to create jobs for 15,000.

- Islamic Banks like Al-Baraka and Ziraat Katilim had already taken important steps to utilize Fintech products.

- Blockchain by consensus is an imminent technology with plenty of applications in financing in general and in SME finance in particular. All major players in the field are aware of this phenomenon.

- Cryptocurrencies using blockchain technology can be issued privately or by central banks. There are risks involved and Indonesia's policy is on the balance between nurturing innovation and preserving security and stability.

- As crypto-currencies are not determined by Central banks, some consider them as commodities. While volatility is the main argument against crypto currencies, optimists see it to become a large and powerful market. IMF and Goldman Sachs have positive attitude while several countries have outlawed them.

- Crypto currencies are at the early stages of blockchain utilisation. Although blockchain is highly secure, it could be very slow. Consensus cycle in Blockchain is called mining.

- KOSGEB focuses on technology development, technological entrepreneurship, globalisation of SMEs, increase in value added and competitiveness for SME development in Turkey.

- In the newly designed system in KSA, SMEs can apply online for either equity or debt financing and the application will be accessible by public authorities, lenders and investors.

- An SME association, Independent Industrialists and Businessmen Association (MUSIAD) serves 14,500 members in Turkey and has 207 contact points in 77 countries and owns an online e-platform.

- Halkbank reported on an e-commerce project whereby SMEs will have an online store on Alibaba.com to sell their products to 190 countries.

- Global Entrepreneurship and Ease of Doing Business indices provide a measuring tool to evaluate SMEs. Indices for female Entrepreneurs in OIC Countries need to be improved, although there were success stories in Uganda, Nigeria, Bangladesh, Egypt and Malaysia.

- Bank of Industry & Mine (BIM) supports start-ups in Iran. TOSAN is Iran's first banking solution provider and develops core banking systems.

This post-forum report is anticipated to add to the knowledge of the SME Finance and Development. Presentations will be availed upon a request from "adfimi@adfimi.org". ADFIMI secretariat is grateful for the contributions of sponsors, speakers, moderators and participants in making the Forum a success.

I am boundlessly grateful to Allah Almighty for this successful event.

**Nuri Birtek**

**Secretary General**

**ADFIMI**

# ***ADFIMI; A Forum for Development!***



# Agenda

TUESDAY, SEPTEMBER 11	
08.30 - 09.00	<b>Reception and Registration</b>
09.00 - 09.30	<b>Opening Addresses:</b> <ul style="list-style-type: none"> <li>• Mr. Metin Özdemir, ADFIMI Chairman</li> <li>• Mr. Hammad Zafar Hundal, Country Manager, IsDB</li> <li>• Mr. Mehmet Emin Özcan, CEO of Vakıflar Bankası, Turkey</li> </ul>
09.30 - 10.15	<b>Keynote Address:</b> Mr. Matthew Gamser, CEO, G20 SME Finance Forum, IFC/ World Bank <i>Digitalization of Business: Radical Transformation of SME Finance</i>
10.15 - 10.45	Photo Session & Coffee Break
10.45 - 12.00	<b>Session 1 – Global SME Landscape and Future Outlook</b> <b>Moderator:</b> Mr. Musa A. Shihadeh, CEO & General Manager, Jordan Islamic Bank, Member of ADFIMI Management Committee <b>Speakers:</b> <ul style="list-style-type: none"> <li>• SME Development and Finance in D-8: The Past 20 years and the Road Ahead by Ambassador Dato' Ku Jaafar Ku Shaari, Secretary General, D-8 Organization for Economic Cooperation</li> <li>• Towards an Integrative Digitalization for SME Development in the Arab Region by Mr. H. Charafeddine, Vice Governor, Central Bank of Lebanon, Lebanon</li> <li>• SME Landscape in the wake of Digitalization in IsDB Member Countries by Mr. Najmul Hassan, Director, Financial Institutions Development Department, ICD, IsDB</li> </ul>
12.00 - 13.30	Lunch Break
13.30 - 14.45	<b>Session 2 - Digital Transformation for NDFIs and SMEs – Is it Necessary?</b> <b>Moderator:</b> Datuk Radzif Mohd. bin Mohd. Yunus, Chairman, EthisCrowd, Malaysia <b>Speakers:</b> <ul style="list-style-type: none"> <li>• Digitization Of Financial Services In East Africa by Ms. Vivien Yeda, Director General, East African Development Bank, Kampala</li> <li>• Strengthening SME performance in the digital age by Ms. Lucia Cusmano, Senior Economist, Head of SME Policies and Business Environment Unit, OECD, Paris</li> <li>• SME digitalisation, transforming a threatening challenge into true opportunity by Mr. Samir Saied, Director General, STB Bank, Tunisia</li> <li>• As Vakıfbank, what do we do to enable SMEs to access banking products and services through digital channels? by Mr. İlker Yeşil, Deputy CEO, Vakıfbank Turkey</li> </ul>
14.45 - 15.00	Coffee Break

## TUESDAY, SEPTEMBER 11

15.00 - 16.15

### **Session 3 – NDFIs and SME Financing Practices – Traditional and Alternative Finance Models: Innovation and Meeting Future Needs & Challenges**

**Moderator:** Ms. Patricia Ojangole, CEO, Uganda Development Bank, Member of ADFIMI Audit Board

**Speakers:**

- Role of SMEs Finance and Development in Achieving the SDGs  
*by Dr. Rami M. S. Ahmad, Special Envoy on Sustainable Development Goals (SDGs), Senior Advisor to the President, Islamic Development Bank*
- CGC Malaysia: Driving Financial Inclusion via FinTech  
*by Datuk Mohd Zamree Mohd Ishak, President/CEO, Credit Guarantee Corporation, Malaysia*
- Digitalisation of SME Finance  
*by Mr. Caner Teberoğlu, Deputy General Manager, Credit Guarantee Fund*

16.15 - 17.30

### **Session 4 - Islamic Finance, Fintech and SMEs**

**Moderator:** Mr. Ashraf Khan, Senior Financial Sector Expert, IMF

- Fintech from the IMF perspective

**Speakers:**

- Specialization in the Islamic financing tools for small and medium enterprises (SMEs)  
*by Mr. Musa A. Shihadeh, Chief Executive Officer & General Manager, Jordan Islamic Bank*
- Islamic Finance as a catalyst for access to finance  
*by Mr. Fatih Kazan, World Bank Global Islamic Finance Development Center*
- Islamic Finance, Fintech and SMEs  
*by Mr. Hasan Altundağ, Deputy General Manager, Albaraka Turk, Turkey*
- Mobility of SMEs with Fintech and bank-supported mobile applications  
*by Mr. M. Said Gül, Deputy CEO, Ziraat Participation Bank, Turkey*

## WEDNESDAY, SEPTEMBER 12

09.00 – 10.30	<p><b>Session 5 – Future of Blockchain and Equity Crowdfunding for SMEs</b></p> <p><b>Moderator:</b> Dr. Mehmet Sabir Kiraz, Director of Blockchain Research Labs, The Scientific and Technological Research Council of Turkey (TUBITAK), Turkey</p> <p><b>Speakers:</b></p> <ul style="list-style-type: none"> <li>Blockchain – Disrupting The Status Quo <i>by Mr. Abdul Fattah Bin Mohamed Yatim, Chairman of Malaysia's National Standards Committee on Blockchain and Distributed Ledger Technologies</i></li> <li>Colendi: Credit scoring evaluation method <i>by Mr. Bülent Tekmen, CEO, Colendi</i></li> <li>SME financing with blockchain technologies: Crowdfunding and invoice factoring opportunities <i>by Mr. Matthew Van Niekerk, Co-Founder &amp; CEO, SettleMint N.V.</i></li> </ul>
10.30 – 11.00	Coffee Break
11.00 – 12.30	<p><b>Session 6 - Future of Cryptocurrencies</b></p> <p><b>Moderator:</b> Prof. Dr. Ahmet Faruk Aysan, Dean Faculty of Business and Management Sciences, Istanbul Şehir University, Turkey</p> <p><b>Speakers:</b></p> <ul style="list-style-type: none"> <li>The future of cryptocurrency and the role of central bank <i>by Mr. Solikin M. Juhro, Executive Director, Head of Bank Indonesia Institute, Bank of Indonesia, Jakarta, Indonesia</i></li> <li>The future of cryptocurrencies <i>by Mr. Osman Tanaçan, CEO, Ziraat Technology, Turkey</i></li> <li>Blockchain technology use in cryptocurrency portals <i>by Mr. Reza Ismail, Founder/CEO, SysCode Sdn Bhd, Malaysia</i></li> </ul>
12.30 - 13.30	Lunch Break
13.30 -15.00	<p><b>Session 7 - Creating an Enabling Environment and Global Approach to Legislative and Facilitative Aspects of SME Development</b></p> <p><b>Moderator:</b> Mr. Quazi Shairul Hassan, Managing Director, Saudi-Bangladesh Industrial &amp; Agricultural Investment Co. Ltd. , Bangladesh</p> <p><b>Speakers:</b></p> <ul style="list-style-type: none"> <li>Mr. Salih Tuna Şahin, Deputy President, T. C. Small and Medium Enterprises Development and Support Administration (KOSGEB), Turkey</li> <li>SME funding in the digital age <i>by Mr. Mohammed Al-Malki, Vice Governor, Funding, Small and Medium Enterprises General Authority (SMEA), Saudi Arabia</i></li> <li>Future of SMEs in Turkey <i>by Mr. Ayhan Etyemez, Member of Executive Board, Independent Industrialists' and Businessmen's Association (MÜSIAD), Turkey</i></li> <li>Customized solutions for digitalizing SMEs <i>by Mr. Mehmet Volkan Sayim, Head of SME Product and Process Management Department, Halkbank, Turkey</i></li> </ul>
15.00 – 15.30	Coffee Break
15.30 – 17.00	<p><b>Session 8 – NDFIs and SME Financing Practices – Traditional and Alternative Finance Models: Innovation and Meeting Future Needs &amp; Challenges</b></p> <p><b>Moderator:</b> Dr. Abdulhameed Jameel, CEO, Omdurman National Bank, Sudan,</p> <ul style="list-style-type: none"> <li>Member of ADFIMI Management Committee</li> </ul> <p><b>Speakers:</b></p> <ul style="list-style-type: none"> <li>SME and women entrepreneurship in OIC Countries <i>Dr. Cem Tintin, Researcher, The Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRTC),</i></li> <li>Apex banking <i>by Mr. Bahadır Koçaker, Manager, Industrial Development Bank of Turkey</i></li> <li>SME-Startups in Iran: potentials and financial challenges <i>by Mr. Ali Mohammad Zahedi, Head of Credit Evaluation Division, Bank of Industry and Mine (BIM), Iran</i></li> </ul>

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# Opening Remarks

## Mr. Metin Özdemir

ADFIMI Chairman;

CEO, Ziraat Participation Bank, Turkey



Mr. Metin Özdemir

I am infinitely grateful to Allah Almighty for organising this International Development Forum in this beautiful, historic and vibrant city of İstanbul and in my capacity as the Chairman of ADFIMI, I would like to welcome you all to the Forum and to İstanbul of which we consider ourselves fortunate to be one of its residents.

I would like to thank Halkbank, Vakıfbank, the IsDB Group as well as Ziraat Participation Bank for their contributions as sponsors to the forum. I am equally grateful to speakers and moderators for accepting to contribute to the success of this meeting. My gratitude also goes to distinguished participants for their interest in the forum without whom we could not have materialised this forum.

For the benefit of those who have not been acquainted with ADFIMI, it stands for, Association of National Development Finance Institutions in Member Countries of Islamic Development Bank. Established in 1986, it is an autonomous, international non-profit association, serving around 42 members in 18 countries with headquarters in İstanbul. The main objective of ADFIMI is to establish networking and solidarity among its members and capacity building of its member institutions. In this context, ADFIMI organizes seminars / workshops / conferences for its members in various cities in its region. Annual forums like this one, are ADFIMI's flagship events.

### Ladies and Gentlemen,

The forum is dedicated to three items as the theme would suggest.

The first is the development of SMEs. It is a universally accepted fact that SMEs constitute the backbone of nearly all economies. A G20 study indicated that formal SMEs contribute up to 45 percent of employment and up to 33 percent of GDP in developing economies; these numbers are significantly higher when taking into account of the SMEs operating in the informal sector.

Secondly, the forum attempts to deal with the financing of the SMEs. A study by the IFC and McKinsey and Company estimated that there were close to 400 million micro, small, and medium enterprises in emerging markets about 70 percent corresponding to some 280 million lacked access to credit. In other words access to finance remains a key constraint to SME development in emerging economies.

The third item of the forum is the state of play of the phenomenon of digitalization which opened new venues and opportunities to SMEs and SME finance institutions. Spectacular developments in fintech since 2008 global crises have already changed our lives and will certainly continue to change even more. Blockchain is the wonderproduct of this era and recently the World Bank issued world's first blockchain bond called 'Bond-1' in August. In July, Spanish Banking Group BBVA has arranged 117 Million Euro blockchain based bank loan. Blockchain is also revolutionizing many sectors especially the transportation and logistics sector, and cross border transactions. We all know that the famous (and infamous!) cryptocurrencies also operate on blockchain. Blockchain is however only part of a large spectrum of wonderproducts of digitalisation such as artificial intelligence, and cloud technology. In short, digitalisation reduces costs, increases efficiency and provides better customer services, but requires fundamental changes in the internal operations, interactions with the customers, suppliers and partners. The forum will try to examine the impact of digitilisation on SME development and finance.

We have around 40 distinguished speakers from 8 international organisations and 15 countries. Together with the participants more than 25 countries are expected to be represented in the Forum.

May this event benefit and nurture networking and fraternity among its participants.

I pray Allah Almighty for the success of this event.

**Thank You.**

Metin Özdemir graduated from Faculty of Management from İstanbul University in 1990. He started his career at Kuveyt-Türk Finans Kurumu A.Ş. in 1992. He continued his career as manager in retail sector from 1996 onwards and has been a member of Greater İstanbul Municipality Parliament between 2004 and 2014. He was appointed as the member of Board of Directors of Ziraat Bank in April 2012, where he was also a member of the Wage Determination Committee and alternate member of Credit Committee. Mr. Özdemir has been appointed as the General Manager of Ziraat Participation Bank on 12 June 2017, where he has been a member of the Board of Directors and Audit and Wage Committee since 18 February 2016.



## Mr. Hammad Zafar Hundal

### Country Manager for Albania, Azerbaijan & Turkey, IsDB

I welcome you for participating in the ADFIMI International Forum, in which Islamic Development Bank (IsDB) takes pride in being financial and technical contributor. On behalf of IsDB group, I would like to seize this opportunity to express my gratitude to the Secretary General Mr. Nuri Birtok and his team from ADFIMI for this great organization.

As IsDB we are honoured to be involved in this event as a sponsor. This event is important for us for achieving the goals of economic and social development in our member countries through harnessing the whole potential of SMEs, including enabling their greater access to finance and enabling their participation in digital economy. We reorganized our business model to support the initiatives of digitalization, which support SMEs' participation in global value chains.

SMEs are the real engine of economic growth. They contribute to the creation of more efficient markets and they contribute to employment and reduce poverty in IsDB countries. Through enhanced digitalization, SMEs can use digital technologies for new value creation. Creating business environment conducive to SMEs growth is essential for dealing with the challenges of our economies, which are low growth, high unemployment (particularly youth unemployment) and widespread inequality. The promise of Fintech, the efficiency brought by blockchain technologies must be harnessed. Big data allows SMEs to know their customers better and by properly analyzing this, they can create more opportunities for employment, value creation and productivity increase.

In this context, we believe that this organization would assist IsDB member countries in achieving their goals and identifying the opportunities and challenges that SMEs face in global digital economy.

According to the recent restructuring of IsDB, the organization decided to be closer to its public and private sector clients, to open regional hubs in its key member countries. The IsDB Group office in Turkey, which contributed to building up a portfolio of more than 11 billion USD, in both public and private sector financing, covering 452 projects in various sectors, has now been upgraded to a regional hub, covering IsDB operations in Turkey, Azerbaijan, Albania and Muslim communities in non-Muslim countries, which are mostly in Europe. We have a new business model that focuses on making markets more competitive for development and empowering people for a sustainable future, hence, sustainable development.

Turkey's growth strategy lies on developing the export oriented private sector-led competitive production structure. In line with this, IsDB has recently developed a framework program with Turk Ex-Im Bank, to extend medium-to-long term financing to Turkish contractors including SMEs, for supporting export-related activities, enabling them to expand capacity, to access new markets etc. The 3-year and 7 million USD program started in 2016 and the facility was fully utilized by October 2017. This reflects the strong demand and the developing impact of the program. It has already enabled more than 50 companies to expand their capacity. A replenishment facility is under consideration. Such a success story for leveraging the power of SMEs to access global markets may be implemented in other member countries.

I would like to reiterate the strong commitment of IsDB group to work closely with partners, including ADFIMI, in the future for supporting SMEs in IsDB member countries. We will continue to support innovative means of finance for SMEs, while supporting them to participate in digital economy.



Mr. Hammad Zafar Hundal

Hammad Hundal is an economist and financial sector specialist by training. He possesses an MPhil in Development Economics from the University of Cambridge, United Kingdom (1996). Mr. Hundal is currently the Country Manager for Member Countries (Albania, Azerbaijan & Turkey) the IsDB Group Regional Hub, Turkey. His responsibilities include managing and enhancing IsDB Group's support to MCs, managing IsDB's portfolio, developing and implementing country strategy, managing relationships within the IsDB Group, with the country and other development partners and stakeholders. Mr. Hundal has worked with several international organizations over a period of 21 years including the Food and Agriculture Organization of the United Nations, the World Bank and the Asian Development Bank contributing to high level development initiatives/ assignments. Prior to his current assignment, Mr. Hundal was the Country Manager for Indonesia and Malaysia in IsDB.

## Mr. Mehmet Emin Özcan

CEO, VakıfBank, Turkey;

Member of ADFIMI Audit Board

I am very pleased to welcome you to our country. I also want to thank the ADFIMI management.

The conference program contains many essential topics in SME finance and development in the area of digitalization. Contribution of panellists from all over the world, representing different institutions including World Bank, IFC, IsDB, OECD, IMF, East African Development Bank, and CEOs from 15 countries will cover very extensive areas ranging from blockchain to digital transformations.

The topic of this conference also points to the trend concept of Turkish banking sector, which is SMEs. SMEs are the backbone of our national economy and very crucial for the strength and sustainable growth of Turkish economy. Turkish banks support SMEs not only through lending, but also through helping them to be more competitive compared to their global rivals. Despite the difference in the definition of SMEs among Turkish banks, the share of SME lending in total lending is about 25%.

For digitalization part, Turkish banks carry on investments in that area. Turkish banks are very keen to provide all banking transactions through internet and mobile banking, in a user-friendly, accessible and safe format. Recent data suggest that the highest growth rate among the banking products belong to mobile banking and internet banking. The share of alternative distribution channels within banking transactions increased, while the share of branches decreased. Both households and companies, including SMEs, have a tendency to use digital platforms rather than traditional channels. Strong commitment to digitalization makes Turkish banking sector a more sophisticated service provider. Hopefully, with the ongoing structural reforms, SMEs will be pushed to become more competitive and digitally-oriented. With this understanding, Turkish banks will be ready to take responsibility to assist more SMEs through transferring the know-how to the business models.

I salute every participant for their interest and their support to the Forum.



Mr. Mehmet Emin Özcan

Mehmet Emin Özcan (born in 1960) graduated from Ankara University, Faculty of Political Sciences and Department of Economics in 1982. He began his career as an assistant auditor at İş Bank in 1983. Following this, he held various managerial positions at Albaraka Türk Participation Bank. Between March 2003 and April 2005, he served as a Managing Board Member at Halkbank. During the same period, Mr. Özcan was a representative of the Bank in the IIF (Institute of International Finance) and a Board member of Demir-Halk Bank/Netherlands, Halk Yatırım Menkul Değerler and Halk Finansal Kiralama. Between 2005 and 2010, he was appointed as the Turkish Republic of Northern Cyprus Central Bank Governor. Mr. Özcan was appointed as the CEO of Vakıf Bank by the Prime Minister on June 9, 2017.



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# Keynote Speech

## Digitalization of Business and Radical Transformation of SME Finance

Mr. Matthew Gamser

CEO, G20 SME Finance Forum, IFC

It's always a pleasure to be in Turkey. Turkey has always been one of the leading countries for IFC's activities in the financial sector in the 14 years that I have been at the IFC. That is because Turkish financial sector is vibrant and competitive sector and gives a lot of opportunity to the SMEs in Turkey. It is a great pleasure to speak about where we're going in SME banking in a leading country and with a group of representatives from Islamic development banking institutions, who have an opportunity and a challenge, because of what is happening in digitalization.

Let's touch upon what is happening and see how SME financing, which I have been involved not only in the last 14 years that I have been at IFC, but 25 years before then, in the last few years, has become completely unlike anything we were doing before. There are some principles that still remain, but many of the practices have been turned on their heads and that's a good thing; but where there is so much change, there is also risk and challenge. How do we balance these? What should we be aware of as bankers, as Islamic bankers?

SME Finance Forum is creation of G20 countries and is managed by IFC, which is private sector arm of World Bank. Unlike IFC, which is a finance institution, SME Finance Forum is a knowledge institution. Our job is to help those working in the SME Finance sector, whether they are banks, or fintech companies, development banks, non-bank financial institutions, to learn, to grow and to improve the practices to helping spread knowledge faster. In 2016, we created a member network of the same financial institutions to sustain our operations. Because the G20 has asked us to do two things; one was to be useful and the second was to be sustainable. And that network is now over 140 members and partners from more than 60 countries. I am proud to say that Islamic Development Bank is one of my members. So is the Turkish Credit Guarantee Fund (KGF) and I hope that many of your institutions will be interested in our membership.

Among members, there are globally known brands and not so known brands, because the Forum tries to combine diverse group of institutions; privately owned, publicly owned new and old, big and small, from east and from west; 65% representing financial institutions, 20% technology companies the rest are associations and other partner institutions. There are more from the South than the North and more from East than from the West representing both the developed countries and emerging markets. The members of the Forum primarily learn from each other. They link to new business and partnership opportunities and they help lead the industry discussions with high-level policy bodies like the G20, APEC, BASEL Institutions,



Mr. Matthew Gamser

Matthew Gamser holds A.B. and A.M. degrees from Harvard University, and M.Sc. and D.Phil degrees from Sussex University (UK). Dr. Gamser has over 35 years' experience in private enterprise and financial sector development. He has worked for IFC, the private sector arm of the World Bank Group, for 13 years in various positions from Washington, DC, and Hong Kong, where he has focused on SME finance and on financial sector development. Prior to that, he spent 25 years in management consulting and in senior leadership in an international NGO. He is currently CEO of the SME Finance Forum, the world's leading center for knowledge exchange, good practice promotion and networking for the finance industry in this field.

OECD and others. The Forum seeds capital from G20 and also there is a board of our members. So, for the moment we have a dual governance structure eventually when we jump off to our own, we will have a single governance structure.

The SME Finance Forum has a website, a LinkedIn Group and Tweeter feed; these are the public spaces where anybody who is interested in the field can share in the public good, materials we make available. Our members get advantage of additional services. We do most of our work online, because it is much cheaper and more effective way to reach more people. We do have an annual meeting which we hold physically, the Global SME Finance Forum, it will be in Madrid this year on 5-7th November and you can find more about it on the website and it is open to non-members for a small fee.

Now let me talk about what is going on with the SMEs. I will illustrate some fundamental points. Whether we are talking about any of the member countries of your network, no matter how rich or how poor, a lot of your SMEs look alike and this is basically the problem the SMEs presented to the financial institutions for a long time. And it is also the reason why productivity of SMEs, typically lags behind that



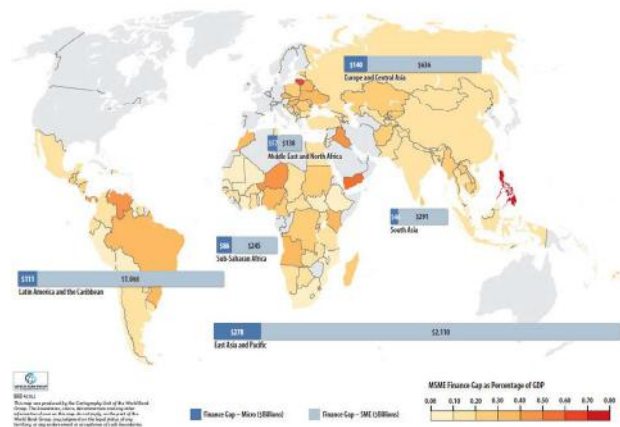
## Keynote Speech Contd.

of large scale companies. That's simply because the SMEs historically have been cash businesses. Phrases like "Cash is King"; very attractive but from a banker's point of view "cash is a pain"; and this is what SMEs look like to a financial institution, because with so much going on in cash, it becomes very difficult, not only for the entrepreneur to know what is going on, but for the bankers to understand what is going on. And that makes the cost to acquire these businesses expensive and the cost to continuously serve these businesses very expensive and that's why every banker has always said, as they must, that "SMEs are important and we want to do more for SMEs." It's only the exceptional ones that are making any money on the SME business. Most others are treating it as a necessary duty, as opposed to what it should be; a profitable venture. And the key problem is "How do we move these SMEs out of cash into more digital businesses". And the good news is that this is more and more possible. But until we had moved the SMEs out of this business, the essential tool that bankers had to overcome the information asymmetries, were the footware of their staff. Because quite frankly the only way to keep in touch with what was going on was to be out in the businesses, kicking their ties, finding more money out what's going on. And the exceptional institutions, the ones that in general were making more money of this market? You look at it how they do it; and they have a lot of staff with very worn-out shoes. Because they're never in the branches, they're never at the headquarters, they're out in the markets with clients, keeping in touch.

The trouble is, that it is very expensive and time consuming and the stronger the bank becomes, the more it has to pay in salaries, the harder it is to sustain this approach. And so, while we have been successful in many institutions in driving into a profitable relationship with our SME market in this manner, we have left a lot of business on the table and I was very pleased that we have already had mention of the work that IFC had done with McKinsey in 2011 on the gap in financing of SMEs. When we published that paper "2 trillion and counting", a lot of people over the last few years have come forward and said "this can't be right; It's too large, and your methodology is very opaque". This was all very true that our methodology was rather opaque as with many things, I don't want to be too critical of McKinsey. But McKinsey has a lot of models, they don't tell you how they work, but then they give you some numbers, and you

can add to them, that's what were basically doing in 2011. So over the past year with some of the best minds in the IMF and World Bank group, we tried to find new and better ways to run these calculations and what happened? Yes, we were wrong; we had greatly underestimated the gap in financing. So, when we took the 2011 calculations and

### MSME FINANCE GAP AROUND THE GLOBE

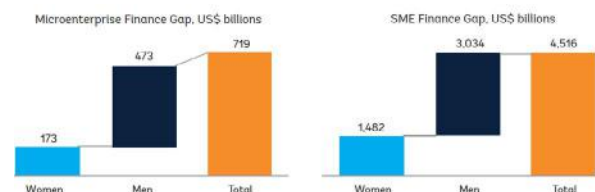


we were trying to estimate both the formal and informal, small and medium and micro enterprises, we came up with a figure of 2 trillion. Today we estimate that the gap is more like 5 trillion plus. And that's just for the formal SMEs that we now have a much better data on, so that we can model much more accurately, country by country.

This gap is true in every emerging market, region of the world and it is a particularly profound gap for women run enterprises which represent a growing share of enterprises, thus a problem, but also a market opportunity. And one that, just like all SMEs, the key to women run enterprises also probably lies in the push into digitalization.

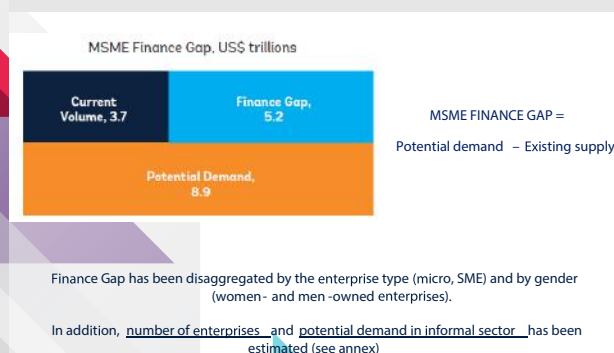
### GENDER FINANCE GAP

- Women-owned businesses comprise 28 percent of business establishments and account for 32 percent of the MSME finance gap
- The total MSME finance gap for women is estimated to be valued at \$1.7 trillion, which is over 6 percent of total GDP



So how do we move from wearing out the shoes of our staff, of our financial institutions, to letting them do more with their brain and their computers, their tablets, their smart phones; because this is the sort of a banker that's going to be successful at scale in the SME world.

### TOTAL MSME FINANCE GAP





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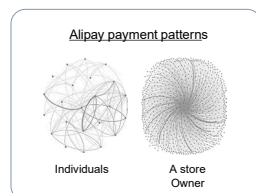
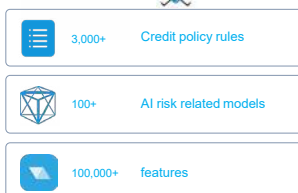
This SME happens to be “a mom and pop shop” in China. If you look much more closely at this picture, you’ll see that this is not a cash business, because, you have a customer and that customer is pointing a smart phone at a QR Code, on the business and that’s how the payment is being made. And this is a typical example of a business that is served by “Ant Financial” which is the financial arm of Alibaba Group. It has grown over the past few years, from a small start-up into a fully licenced commercial bank; I think more than 750 million customers.

### Risk management with big data technology

Big data intelligent risk management



Example:  
Separating business transactions from personal transactions



And its customers are assessed continually based on their electronics payments behaviour and they are running some of the most sophisticated risk management that we’ve ever seen from the IFC side. They’re using 3000 credit rules, they’re using artificial intelligence, and they’re doing things like using network analysis to identify patterns of spending and receipt that can tell without visiting whether the customer is a consumer client only, or, is running a business. And this enables the Ant Financial people to adopt what they call 3-1-0 approach to financing consumers and small firms. What does 3-1-0 mean? It means that it should take you three minutes to complete your assessment of the client and make a credit decision; the one is that it should take one minute or less to get the funding to the customer and the zero is the amount of facetime that is necessary to deal with the customer to do this transaction. So, we are going from the worn-out shoes to, if we can create the right digital ecosystem, which is the sort of system that exists in China today, in a few other

markets so far, then we can turn the whole way that the SME business happening on its head.

And we can use our digital intelligence throughout the customer cycle; from identification and acquisition to portfolio management, to rears management, and even through our marketing promotion and cross selling. But this all depends on our finding ways to create the right

### Payments led, not credit led Apply digital approach across the credit cycle

- Pricing models
- Prospect selection
- Product features



- Scorecards & credit approval
- Profit models & cut-off strategy
- Security / legal

- Provision models
- Default definitions
- Collateral
- Collections

- Behavioural scoring
- Exposure management
- MIS
- Provisions and capital
- Portfolio strategy and optimisation

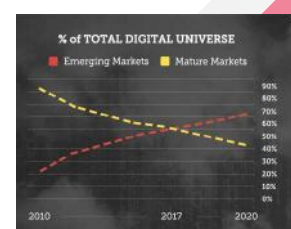
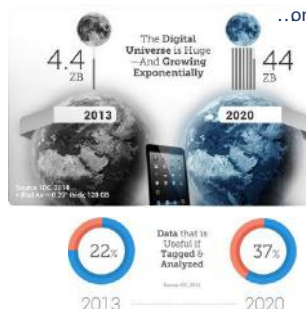
digital environment and to use that digital environment to the most intelligent and continuous way. And we move from a time at which we were starting with credit and finding our customers, getting them into credit, getting them into the bank that way and then trying to build on that. Well, now we’re more on a payments driven strategy where our key is to offer the payment platforms, offer the digital eco-systems and then build on those, not only to find the right financial products to serve our clients, but increasingly, how to help our clients use that digital knowledge themselves to better manage the business. So, it’s giving rise to a whole new era of non-financial services not provided by people outside the financial institution but coming from the financial institutions themselves. And Turkey is the place where you are seeing this practice by many of your commercial financial institutions and this is great. And it is an example to the rest of the world.

Many people used to say, even a few years ago, “This is not for emerging markets; yes, we can talk about it in the US, Canada, Western Europe, Japan”. Well the data is showing

### How much data and where?

The digital universe is more than doubling every two years; emerging markets will surpass mature markets by 2017....

...only 1% of this data has been analyzed



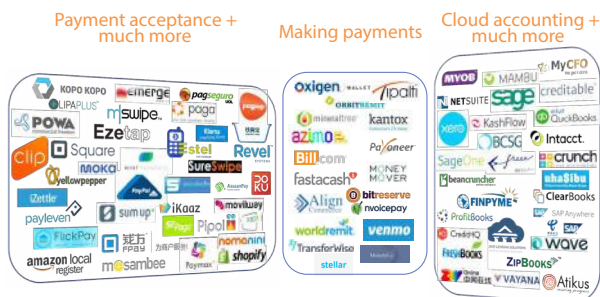
## Keynote Speech Contd.

us that this is no longer the case. We have passed the era at which in the emerging markets digital data is small to where it is growing and it is growing faster than the developed market digital data and it will continue to grow.

This is because more and more SMEs are doing their business, they are accepting payments in digital form. They are making payments in digital forms and, perhaps newest of all, they are finding cloud based software and other services that they use in managing their business,

### Global SME 'operating systems' moving online

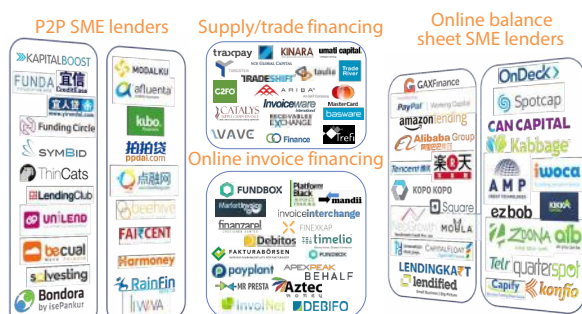
Every time SMEs use cloud-based services, make digital payments, browse the internet, use their mobile phones, engage in social media, buy or sell electronically, ship packages, and manage their receivables, payables, and recordkeeping online, they create and deepen the digital footprints they leave behind.



that also gives them a whole additional data stream and even not just accounting services, but SMEs that are using social media to do their marketing, to do their customer interaction; all this creates data reservoirs that if they can be properly harnessed, can lead to a whole new project.

### Fintech disrupting the SME lending status quo

A rapidly growing crop of technology-focused SME lenders are putting customer needs, big data, and advanced analytics at the center of their business models.



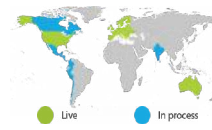
With all these opportunities, there is also a danger. It is up to you and your institutions to seize on these opportunities, because if you don't, there is a whole range of new institutions that are coming up, especially on the credit side and they are saying "Ok, if the banks aren't going to serve this market, we will." Whether they are doing straight lending, supply chain finance, merchant advances, there is an increasing number of these players in the market, whether it is in Europe, whether it is in Asia, in Africa, Latin America.

And this becomes slightly complicated by the fact that some of these firms that have grown up in certain markets, especially in Europe and North America, as they are moving into emerging markets, rather than seeking a competitor model, they are trying a more partnership

### Licensing the platform to scale globally

#### Licensing technology to lenders globally

- Turnkey platform, fully configurable
- Rapid global deployment



- Cash in 7 minutes or less (95% of decisions fully automated)
- Works across all channels



- Short online applications; automatically, painlessly link data sources
- Uses power of SME's own real-time, verified business data to get working capital



model. So you have a firm like Kabbage, as it's going into Asia & Latin America and other regions, even in Europe, rather than go to head to head with banks, it's offering to partner; they provide the analytics, they raise the capital and they do the financing as a competitor; the bank uses its capital to enter some form of joint venture agreement. This is increasingly popular, if you look at the partnership between say Kabbage has with Royal Bank of Scotland in the UK or the BBVA or the partnerships like funding circle with Santander; this is going to be increasingly common. And even broader digital financial competitors to banks like Feedor Bank, which arose in Germany and is now a competitive digital bank in Europe, has formed Feedor Solutions. In the emerging markets; rather than being a competitor, they're trying to be a broad solutions provider to help banks that are already in existences to go digital. So the market is changing quite radically and it's a great opportunity.

Before I get to the biggest threat, let me also talk about what is a particular opportunity for Islamic Banks. Now, one of the challenges of SME Banking has always been that bankers, if they were thinking too narrowly about SMEs, would say that SMEs don't have assets. And actually what most bankers meant in conventional banking circles, was that they didn't have mortgages or land. Because that was the only type of asset that the bankers were used to using to collateralize lending and to reduce risk. There are two fundamental problems with that: first of all SMEs tend not to have a lot of land or mortgages and if they do, they tend to be personal assets rather than business assets. So that leads to the second problem from an Islamic finance point of view, that means that it is not a good practice to base financing on assets that are not related to what the financing is about. So that was a big problem.

Now, may be it is even a bigger opportunity, SMEs are going digital, their assets too are going digital. And not only the internet, but internet of things is enabling us to

## Keynote Speech Contd.

have better viewing, day by day, minute by minute, second by second of assets, so it's opening up for bankers that are willing to look more widely at what assets SMEs really do have. Whether it's their accounts receivable, whether it's their inventory, whether it's their equipment, whether it's their intangibles. These things are all much more trackable than they ever were, if the financial institution is willing to change the mind-set of what financing is based on. And that provides a fantastic opportunity for Sharia compliant financing that I have not yet seen exploited. We still see, with all due respect, I know you are here to talk about SMEs and you are all interested in it, that's great, but in general we see with Islamic Banking, it is focussed on property and infrastructure and we don't see as much SME financing as I think we should be seeing, based on what's possible.

I was talking about fintech companies that are becoming partners. But there are other companies who are increasingly, not being called fintech, but techfin, and they are coming into this market and they're not partners, they're coming in as competitors, in whatever country they're working in. They're called techfin because they didn't start, with an exception, in financing space; they

**The big threat = "TechFin" or "Big Tech" Millions of captive merchants – don't "need" banks**

**amazonlending**

2 million third party sellers globally. Makes short term working capital loans to sellers on invite only basis (US, Japan, India, China, Canada, France, Germany, UK, Italy, Spain; consumer installment loans at checkout in the UK)

**Alibaba Group**  
阿里巴巴集团

8 million Chinese sellers, aims to connect with more than 10 million sellers abroad. \$62 billion in loans to 1.6 million SMEs since 2010. Partnered with Lending Club in US, Capital One in Australia, iwooca and EZBOB in the UK, and ICICI Bank, Kotak Mahindra Bank, and Capital Float in India to finance domestic SME buyers (and in India sellers) on its platform. Launched MYBank in 2015.

**PayPal**  
Working Capital

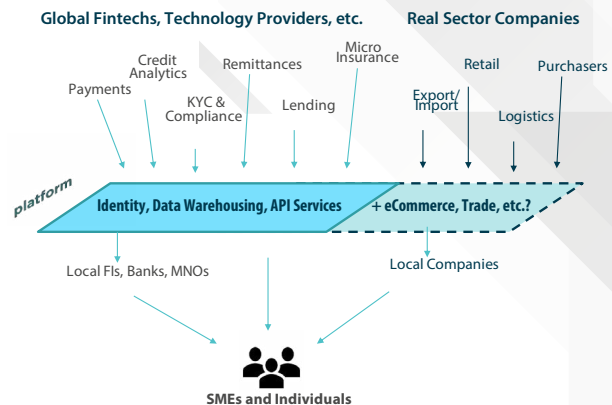
10 million merchants. As of November 2015, it had provided more than \$1 billion in funding to more than 60,000 SMEs in the US, UK, and Australia. PayPal Credit, a reusable credit line available on purchases at thousands of stores (online and offline) that accept PayPal and on eBay surpassed \$2 billion in volume in Q4TR 2015.

started in other areas: Ali Baba started in marketing and e-commerce; We Chat started in messaging; Amazon started in e-commerce; Facebook started in social media. The only one that started in finance is Paypal. But all of them are spreading farther and wider and they're all doing payments and they're using payments as a gateway into broader activities in finance. And they tend to not partner but rather buy up critical data resources in different countries and use those as foundation for expanding their operations. Look at the work how Ali Baba is doing; buying into Mint in the Philippines, PayTM in India, Lousara, the e-commerce platform for SE Asia, just as one example of how they're acquiring data reserves as they're seeking to expand the financial operations of the Ali Baba group into new markets.

And when you think about it, as a banker, Wells Fargo, one of the larger banks in the world, if you look at the products that Wells Fargo advertises on its home page, even a sophisticated bank like Wells Fargo can't be a specialist in all these products. Yet for every single one of the products,

there are many fintech companies that are arising and they are focussing on just that products or service. So the challenge today for a bank is "We can't possibly keep up in every one of these areas.

### Platforms as the future of financing?



So how do we move to a more of an open architecture, open approach so, we can be a platform; we will specialize in what we are really good at, but we can also partner with technology companies to do the others". And that may be not just in finance but also in those non-financial areas like marketing support, e-commerce support.

Now when you have so much data and it is being generated every minute, every second, it is very important to understand how to harness the latest in artificial intelligence and machine learning. But that doesn't mean that we are going to be replacing bankers with robots. We may see some closing of the branches but branch banking will always be here. But what will change is that, if, for the smart banks is that the repetitive processes done by humans will move to machines. What sort of processes am I talking about? There are so many instances, just talk to any of the SME customers, where they need to have some discussion about some new relationship and they and the banker had to sit down and they have to fill out forms with information that is already in the bank, needs to be put in the new form.

Now, this is completely unnecessary and where artificial intelligence and machine learning is advanced it is unnecessary; it doesn't need to happen because the machine goes in and looks at the existing data and automatically populates all the data that's already established in the form and that free both the entrepreneur and the banker to spent time on new discussions, and higher value added work for both of them. And that will make your staff and your customers more productive. It is not going to replace people with machines but we actually take away the dumb work away from our smart people work, where they can be more productive. And we do the same for our entrepreneurs.

Like some of the speakers, I think that blockchain distributed ledger technology is going to be very important



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in this equation. The reason is that there are two banking processes that have existed for quite a while, they are very important to type of SMEs that are most likely to grow and create jobs. And those are the SMEs that are doing business across borders. Unfortunately, when these SMEs want to move money across borders they're using a system that's still in the 21st Century based on 1920s telex technology which is the Swift System. It's not only slow and inefficient, it's prone to error, unfortunately, vulnerable to hacking as we saw it on the case of Bangladesh Central Bank. And the only thing that is unusual about the Bangladesh Central Bank is that they went public about what happened. Because I am sure they are not the only case where this happened.

Now, the other technology which any SMEs that are doing import and export are having to use, is trade finance technology. I wished that technology was as modern as the swift machine. Unfortunately it has changed little since the Venetians developed these basic processes in the 14th Century (give or take). It's paper intensive, it's intermediary intensive and it is also slow, prone to error. What this means, because these systems are so inefficient, is that SMEs that are doing smaller ticket transactions are particularly penalized. If you're a very large company, you can find ways to work around these inefficient processes. But for SMEs, it really hits hard.

The blockchain enables a disruption of both of these systems and replacement with a decentralized system that is much more able to be size and scale agnostic, so that it's not going to discriminate for small companies, it's going to mean that small transactions and big transactions can be handled with the same speed in the same way. And there will be much fewer intermediaries and so you have fewer fees necessary and yet you will have more certainty. And I hope that as we going to meet more people, we will discuss more about how this can work. This is going to be where we can really make great progress.

The Economist last week was pessimistic about all these technologies in general, but they had to admit that, particularly in the area trade supply chain finance, there is huge room for improvement and these alternative

systems, they are starting to scale. And if you do come to our meeting in Spain you can see a company Adhara, which was spun out of Santander Group, which is taking a project they developed in house in their multinational Santander Network and how they are going to make it available to world of banking; how you can use an etherium based blockchain system to do interbank transfer in a much more efficient and cost effective manner that's going to reduce the number of nostro accounts intermediation and massively decrease the time and increase the certainty in cross border payments.

There is great promise in the digital revolution that's taking place. There are also some larger risks and social challenges that are being presented.

With data there is so much we can do. But anyone who is watching the news this morning about the ongoing dispute between the google and the European Commission about whether (EU) General Data Protection Regulations (GDPR) will apply not only within the EU but to all transactions that companies like Google might do for citizens of the EU, no matter where they happen to be. The reason for this sort of debate is precisely the this sort of concern. That if there are these massive data reserves, they had the power to do an enormous amount of good and to overcome the barriers that have made SMEs for so long such a difficult challenge for the financial sector. But at the same time, the same data resources, if we don't get the right balance between the potential of knowledge and the protection of individual privacy, we could easily tip over into something that none of us would be very comfortable with.

Quite frankly, in emerging markets, with such huge gaps in financial inclusion there may even be a different standard that most people have about, where the balance should be between the data potential and privacy protection in the relatively affluent countries of the EU or North America. That's a very tricky subject, but I think on balance, we will see that the potential of data, the potential of digitalization is going to far outweigh the risks and the financial sector could be a real driver of this, because of how much there is to gain.

ADFIMI is an Industrial Partner of



**SME FINANCE**  
FORUM

## Session 1

# Global SME Landscape and Future Outlook

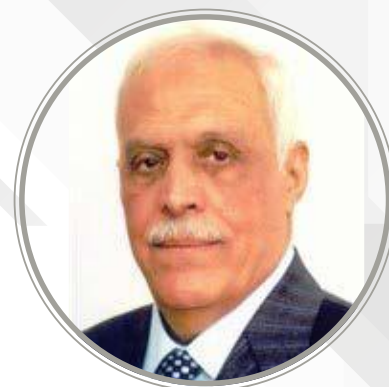
### Moderator:

#### Mr. Musa A. Shihadeh

CEO & General Manager, Jordan Islamic Bank;

Member of ADFIMI Management Committee

Musa Shihadeh holds a Master degree in Business Administration (MBA) from USA. He has worked in conventional banks between 1961 and 1980. He then joined Jordan Islamic Bank in 1980. He is currently the General Manager of Jordan Islamic Bank. Mr. Shihadeh is currently a member of the Board of Directors of the General Council for Islamic Banks, a Board Member of the Jordanian Businessmen Association and Chairman and Board Member of several public and private companies in various sectors. He is also a board member of the Association of Banks in Jordan since 1983 and has been the association's Vice-President for the period from 1997 to 2005 and was elected as Vice Chairman of the Association of Banks in Jordan for a new term since February 2015, then a Chairman of the Board Directors of the Association of Banks in Jordan as of October 2015 until the end of Association term on 26 March 2018.



Mr. Musa A. Shihadeh

## SME Development and Finance in D-8: The Past 20 years and the Road Ahead

D-8 was established in 1997. It has 8 member countries, which are Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan and Turkey. Purpose of the organization was to bolster the economic cooperation. 20 years after its establishment, the organization focuses on 6 areas, which are agriculture and food security, trade, industry, tourism, transportation and energy. The 9th summit of the cooperation was held in 2017 in Istanbul. The new map of action was decided at this meeting and it included initiatives in new areas, which are banking and finance, health, education, SME finance, research and development. The cooperation is working on some additional areas of interest, also.

The organization worked on building new strategies to improve the living standards of people through economic growth and sustainable development. For this aim, countries within D-8 signed some agreements, with each other and with international institutions, including Islamic Development Bank (IsDB). Members of D-8 achieved an important economic success in these 21 years.



Ambassador Dato' Ku Jaafar Ku Shaari  
Secretary General,  
D-8 Organization for Economic  
Cooperation

### 20 Years of Economic Success



D-8 Member States have been recording an impressive economic growth and development trajectory.

By 2017 the D-8 has become an economic club of

- \* 1.1 Billion People
- \* USD 4 Trillion of Total GDP
- \* USD 109 Billion of Intra -Trade
- \* USD 730 Billion of Merchandise Exports
- \* USD 790 Billion of Goods & Service Exports
- \* USD 45 Billion of Foreign Direct Investment Receipt

Following its 20 years of economic success, D-8 is geared towards becoming an ECONOMIC POWERHOUSE

Ambassador Dato' Ku Jaafar Ku Shaari joined the Malaysian Public Service in 1981. He served as Malaysia's highest envoy in Qatar, Brunei, Egypt and Palestine. He was Charge d'Affaires of the Embassy of Malaysia in Vientiane, Laos; Zagreb, Croatia and in Amman, Jordan. At the Foreign Office of Malaysia, Ambassador Ku Jaafar worked in bilateral, multilateral and academic wings. He overhauled and undertook major works on the restructuring of the Organization of Islamic Cooperation during his office as Undersecretary (OIC). He also developed and guided the professional aptitude programme of the Malaysian Diplomats during his office at the Institute of Diplomacy and Foreign Relations as its Director-General. He holds B.A. (Hons) from the University of Malaysia and a Diploma in Public Administration. Ambassador Ku Jaafar has assumed duty as the new Secretary-General of the D-8 Organization for economic cooperation on the 1st of January 2018.



## Session 1 Contd.

An important aspect of D-8 is that, the cooperation totally focuses on the economic area; it is not concerned with political issues. With this aim, the organization makes huge efforts to catch up with the technological developments of the era. Digitalization changed a lot of things in the daily life and in the business life. Accordingly, developing countries and SMEs have to cope up with this challenge to have a place in such a world. The member countries of D-8 have more than 1 million SMEs. According to PwC, by 2050, the D-8 will be the third economic force after China and India.

It is admitted that, since D-8 is an intergovernmental organization, SMEs were not given much attention in the 21 years since its foundation. Another problem admitted by the organization is that, although it designed several projects, it lacked the ability to implement them. As a result, the organization will focus on implementation of the projects in the near future. A third aim of the organization is to include the private sector in the activities of the organization, in a way that they will contribute to the sustainable development of member countries.

Among the members of D-8, Turkey is accepted as an advanced economy. Malaysia is also in the path to be an advanced country. In Malaysia, SMEs constitute an important part of the economy.

They contribute to 36.6% of GDP. They have a great share in employment and exports. Major problem of SMEs in Malaysia is the challenge to achieve sustainable finance. This is tried to be improved by a network of SME finance institutions, which consist of Bank Negara, SME Bank, SME Corp, MITI, MATRADE, MIDA, MPC and many other agencies. SME Bank of Malaysia was established in 2005 as a state-owned institution. The bank offers lots of programs including financial assistance, funding and financial facilities.

In November 2018, in Council of Ministers meeting, final chapter of D-8 Federation Chambers of Commerce and Industry is planned to be signed. The focus will be private sector and the main segment of the private sector that the agreements are interested will be the SMEs. Business Forums will be carried to increase communication between companies. A networking program called D8coop will be open to companies from the Member States. A project called D8P Card is developed by a Malaysian company. This project was desired by the leaders of the Member States, in order to have the chance to use the local currencies in financial transactions. This will be introduced to businesses. Project Support Fund is also debated by the management of the organization.

## Towards an Integrative Digitalization for SME Development in the Arab Region

With the bartering being the first medium of exchange, technological improvements peaked at the introduction of digital currencies. These new stores of value will upsurge to escape the cost, complexity and regulatory rigidity of traditional money. Although SMEs constitute 90% of businesses worldwide, only 38% of businesses all around world have the ability to process international orders. This fact points to the disadvantageous position of SMEs.

Monetary change can exist due to several reasons. The catalysts for monetary change can be listed as disruptive competition, decadence of sovereign boundaries, digitalization schemes and digital transformation, social media and mobile technologies, financial crises, democratization of finance and trade, and financial exclusion.

First, industries are typically affected by a two-sided competitive disruption. One side of this is competition due to low barriers of entry and the other side is a large legacy business model that generates the majority of their revenue. In 2018, financial services, healthcare and industrial companies have been through the most significant change. Second, the consequences of economic, technological and cultural changes, of which virtualization of money is part, are reducing the efficacy of command and control by nation-states within their territories. Third, some of the key technologies and applications that are driving the digital transformation today include smartphones, Internet, big data analytics, artificial intelligence and blockchain. Fourth, the outburst of social media and personalized localization of communication creates opportunities for trade and marketing efficiency.

In addition to these aspects, fifth, financial crises and following credit crunch paved the way for alternative service providers. Digitalization, as a sixth catalyst, promotes financial democratization, through a shift of power from a well-defined financial system, with regulations and conventional intermediary channels, to a system personalized to individual consumer needs with minimal intermediation. In this context, self-service and simplified ordering preferences have caused B2B businesses to dwarf B2C businesses in e-commerce area. In 2015, North America had the top position in non-cash transactions, and it was followed by Central and Eastern Europe, Middle East and Africa. Emerging Asia shifts to e-commerce. Financial inclusion/exclusion is another catalyst of monetary change. According to the World Bank, 19% of



Mr. Raed H. Charafeddine,  
First Vice-Governor,  
Central Bank of Lebanon

Raed H. Charafeddine has been the First Vice-Governor at Banque du Liban, Lebanon's central bank, since April 2009. Prior to his current mission he spent twenty years in the banking sector where he held senior Executive positions at leading commercial banks in Lebanon and in the UAE. Mr. Charafeddine is the Alternate Governor for Lebanon at the International Monetary Fund and the Arab Monetary Fund's Board of Governors. He is also the Alternate Chairman of the Capital Markets Authority in Lebanon. Mr. Charafeddine is a visiting lecturer in world-renowned Universities. He is also a contributor to many national and international forums on the issues of governance, human and organizational development, civil society, and interfaith dialogue. Mr. Charafeddine is a holder of Masters and Bachelor degrees in Business Administration from the University of North Carolina, Charlotte, U.S.A.

## Session 1 Contd.

SMEs consider access to finance as a severe obstacle and 20% of SMEs avoid applying for loans due to complex procedures.

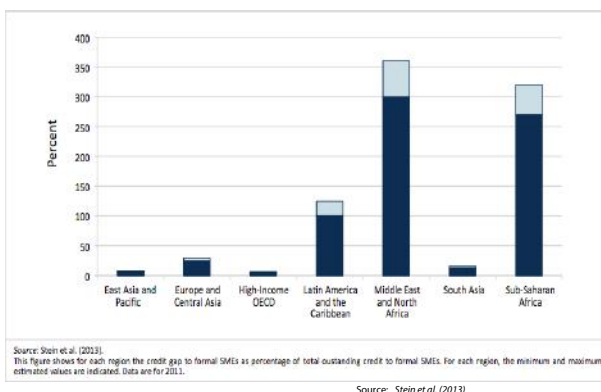
Financial digitalization offers rewards and opportunities on the one hand, and detriments and risks on the other. The rewards of digital economy represent a historical opportunity to developing economies in their quest to upsurge growth, achieve development goals, attain renovation of business models and spur innovation and productivity growth. On the other hand, evidence shows that 44% of SMEs in low-income countries refrain from applying for a credit.

On the supply side, the 2008 financial crisis paved the way for FinTech companies to use their innovation abilities for offering tech-based financial solutions. This resulted in more competition since FinTech facilitates access to financial services for marginalized populations and small businesses at low cost and risk. Advances in data analysis and processing capacities enhance decision making and portfolio management and thus decrease acquisition and service cost for both Fintechs and banks, including Islamic banks. Hence, financial digitalization presents opportunities for collaborative partnerships between banks and FinTechs.

On the demand side, the introduction of FinTech offered solutions to deal with the main barriers that SMEs face in financial markets; such as information asymmetries and collateral shortages. These solutions are further enhanced with the introduction of blockchain technology.

### Credit Gap to Formal SMEs

SMEs are widely hindered by lack of access to credit, knowledge gaps, regulatory imbalances, and limited access to competitive technology



However, there are some detriments and risks enclosed in digitized finance. According to OECD, the availability of and access to alternative sources of finance is limited by some barriers. On the demand side, many entrepreneurs and business knowledge lack financial knowledge, strategic vision, resources and the willingness or awareness needed to attract finance. On the supply side, potential investors are held back by the overall opacity of SME finance markets, a lack of exit options, and regulatory impediments. Other detriments and risks faced by developing countries can be listed as digital exclusion, digital inequality and adverse incorporation, and digital security and privacy breaches.

When the needs of SMEs are considered, it is understood that the support received by SMEs from financial institutions to finance their businesses is not enough, compared to SMEs' contribution to GDP and employment. Therefore, financial system will need to build an environment conducive to meeting the needs of SMEs. The problems of SMEs to be addressed by the financial system include lack of collaterals, poor credit history, information asymmetries, high fixed costs of small-sized loans, unfamiliarity with the lending process, unwillingness to share info and unwillingness to share ownership (equity financing).

Some of the basic monetary-financial stability policy requirements of central banks that potentially impact the digitalization of SME finance are: the anti-money laundering and countering financing of terrorism (AML/CFT) process; international financial stability approaches; corporate governance practices; enhancing financial inclusion and financial capability.

Building a sustainable and progressive digital economy relies heavily on the state of the countries' and the trading partners' digital infrastructure. Developing the digital economy requires infrastructure, including human capital, institutional base and a technical perspective. Since this infrastructure in developing countries often lags behind the developing countries, a need to work for an integrative regional digitalization for SME development emerges.

An integrative regional digitalization in developing countries can be possible with some initiatives and practices. Capacity building and training for digital transformation, a digital Arab common market, regional regulatory collaboration and coordination, electronic financing platforms and schemes, regional private sector and finance institution investment in digital infrastructure, and regional SME policy index are among the initiatives that can be suggested. To highlight some of these initiatives, a digital Arab common market, covering a population of 400 million, can ensure the access to fair and secure online activities and digital goods and services, under fair competition and consumer and data protection, free from copyright issues. Strengthening the governance of digital economy policy can be achieved through regional regulatory collaboration and coordination, including the exchange of experiences. Electronic financing platforms and schemes may offer SMEs new opportunities to access credit. A regional SME policy index can function as a tool to monitor, assess and measure the scope and quality of SME policies and institutions.

Governments and key stakeholders in the SMEs digitalization value-chain can further enhance the digital economy of SMEs by injecting behavioural sciences at various stages: financial inclusion policies, business process simplification, human capital development, and FinTech deployment. Governments and international development organizations can enhance the growth of digital economy for SMEs via a balanced policy approach and practice that involves a valuable inclusive dialogue between public and private sector players, including SMEs, on addressing key challenges and potentials.

### SME Landscape in the wake of Digitalization in IsDB Member Countries

IsDB (Islamic Development Bank) have role in several private sector activities. (Islamic Corporation for the Development of the Private Sector) ICD is the private sector arm of the IsDB; its aim is to support the private sector. The institution is founded in 1999 and its head-office is in Jeddah. It has a capital of 4 billion USD. 54 Islamic countries and 5 public financial institutions are members to this organization and contribute to the capital of ICD. The institution has a good rating; it rated AA by Fitch and as Aa3 by Moody's. The role of ICD in the Islamic world is similar to the role of IFC (International Financial Cooperation) of the World Bank for the world.

Vision of ICD is to be a premier Islamic multilateral financing institution. Its main role is to develop the private sector in member countries. As an objective, ICD analyzes the opportunities of the private sector within the member state to facilitate the activities and to provide a wide range of projects, which include equity investments, financial institutions, etc.

ICD started its operation in June 2000. Along with the financial sector, which is called as the channel strategy, ICD also works with the real sector and creates projects related to agriculture, construction, energy, healthcare, gas, etc. The important activities of ICD more related to SMEs are related to launching new lines of financing to banks and financial institutions in member countries. Providing finance to SMEs is one the core strategies of ICD. This is one of the strategies that ICD can help to generate greater employment in member countries.

When the 10-year strategy of IsDB is analyzed, private sector development is the one most related to SMEs and a target of ICD for 2024 is "to provide access to finance for 10,000 SMEs". With this aim, ICD developed some products and services to help SMEs. One concern about this is that, microfinancing for SMEs is a costly issue. The administrative cost of small transactions is admitted to be higher for banks, compared to corporate finance. Another concern is about understanding the credit risk for each individual SME; especially if the country has economic problems. The last concern is about the ability of the bank and also the SME to understand the usage of Islamic financial instruments.

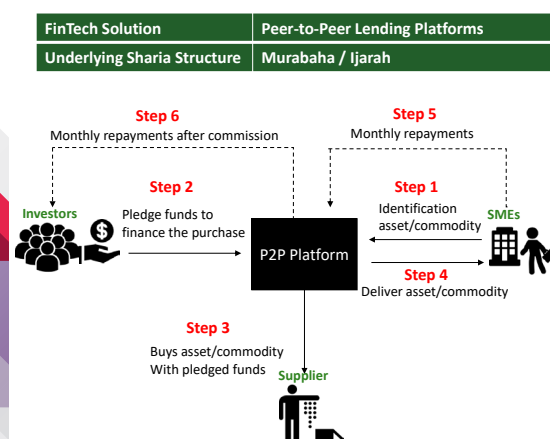
ICD does not assess the credibility of each SME in member countries. Instead, ICD looks at the credible institutions within the member country and assesses their ability to do business with SMEs and then, gives further training on using the Islamic products and Islamic documentation. This means that ICD does not only give finance to the member states, but also give training to them. This serves two purposes: The administrative costs are lowered and the credit risk is controlled.



Mr. Najmul Hassan  
Director, Financial Institutions  
Development Department,  
ICD, IsDB

Mr. Najmul Hassan is the Director of Financial Institution Development Department at the Islamic Corporation for the Development of the Private Sector (ICD), which are parts of Islamic Development Bank (IsDB), Jeddah. In addition, he is the Chairman of Board in Maldives Islamic bank and Tamweel Africa, and representing ICD as Director on the Boards of Zaman bank Kazakhstan and Albarakah bank Pakistan. Prior to joining ICD he was Chief Executive Officer of Gulf African Bank. Gulf African bank set up in early 2008, is the first Islamic bank in Kenya. Before joining Gulf African Bank, Mr. Hassan worked as General Manager Corporate and Business Development in Meezan Bank Limited (MBL). He was one of the founder members of the bank and played an instrumental role in leading the successful conversion of the operations of the Bank into full-fledged Islamic commercial bank, upon the acquisition of Society General in 2002.

### New Business Models



#### Benefit to SMEs



**Greater Access to Funding**  
Platform will allow investors with higher risk appetite to provide SMEs with funding where Banks are unwilling or unable to do so



**Speed & Convenience**  
Applications can be completed in few hours and without visiting a physical branch, funding decision can be taken within a week as opposed to few weeks in Banks



**Lower Financing Cost**  
Platform deploy innovative credit scoring models and enjoys low cost structure that enables it to assess credit risk more accurately and issue credit at lower cost.

## Session 1 Contd.

ICD extends lines of financing to selected banks and financial institutions within its member countries as a means to improve the access of SMEs to medium term financing. Since its inception, ICD has approved credit over 2.7 billion USD. Through its channels strategy, ICD managed to provide finance to over 4,000 SMEs and supported more than 70,000 jobs in the last two decades. Although ICD scaled up very recently, in 2-3 years, it was able to create a great gain. The key targets of the Corporation for the next 3 years (2018-2020) include providing around \$2 Billion financing to SMEs through Islamic financial channels.


ICD provides a wide variety of advisory services to governments and public entities with an aim to create a conducive business environment for SMEs. These services include helping for setting up special economic zones in member countries such as Mauritania and Djibouti, helping SMEs to access to finance in Yemen (BRAVE Project) and developing Halal Meat Park in Kyrgyzstan. Besides these services, ICD provides funds to SMEs. Two funds are already set up: one in Saudi Arabia and one in Tunisia. In these funds, ICD has a share of about 30% and there are other investors; this creates a multiplying effect. During the next 3 years, ICD also envisions to launch 7 new SME Funds including Bahrain, Turkey, Kyrgyz, Kazakhstan, KAUST, Algeria, and West Africa SME Funds.

Digitalization introduces new business models, new delivery channels and new asset classes. In the new business models, there is a P2P process. Investors pledge funds to finance the purchases and get monthly payments, whereas SMEs deliver asset or commodity and pay in monthly payments. The platform can

use the funds from investors for buying assets and commodity of other funds. Murabaha (similar to a sale transaction) and ijarah (similar to a lease agreement) are used, in conformity with Islamic documentation. This new business models allow greater and faster access to funding and lower costs. New delivery channels use e-commerce platforms. E-commerce platforms include Wakala agreements with a specific SME which will have the lending. In new asset classes named crowd-funding platforms, the participants share profits and risks. These platforms are necessary to include small investors.

Challenges of FinTech companies include problems about taxes. Systems in many of the member countries lack transparency and economies are mainly based on cash. The SMEs have to pay high taxes, so ICD have difficulty in cooperating with SMEs and doing equity investment. Another challenge is the low-income. The transactions are small and there is also a need for training of the user about the new Islamic products, which demand specific time and methods of buying and selling. Underdeveloped technological and infrastructural ecosystems of the member countries are another challenge facing ICD in improving SMEs.

In sum, ICD's intervention plan consists of advisory, extending line of finance and equity investment. Advisory services of ICD include capacity building tailored to the needs of FinTech companies and product development and Sharia structuring. Extending line of finance includes introducing P2P and e-commerce platforms. Finally, equity investment means investing in FinTech companies and supporting crowd-funding platforms.



The Association of National  
Development Finance Institutions  
in Member Countries of the Islamic  
Development Bank

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**31st  
Anniversary**

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## Session 2

# Digital Transformation for NDFIs and SMEs – Is it Necessary?

### Moderator:

#### Datuk Mohd Radzif bin Mohd Yunus

Chairman, EthisCrowd, Malaysia

Datuk Mohd Radzif bin Mohd Yunus is the Chairman of Ethis Ventures, an Islamic Fintech venture builder in Malaysia. Mohd Radzif's illustrious career includes entrepreneurship & leadership roles in industries spanning real estate, infrastructure, GLCs and finance, including Group Managing Director of two prominent institutions in Malaysia, SME Development Bank and the National Heart Institute, where he led successful corporate transformations. Datuk Mohd Radzif was recognised with the Malaysian Business Leadership Award for Healthcare in 2009 and CEO of the Year in 2015 by the Association of Development Financial Institution Asia Pacific. Datuk Mohd Radzif was also the Chairman of ADFIM (Association of Development Finance Institutions of Malaysia) and a Vice Chairman of ADFIMI (Association of National Development Finance Institutions in Member Countries of The Islamic Development Bank). He was also a Board member of The Montreal Group, a group of major Development Banks globally involved in SME Financing; as well as a Board member of ADFIAP (Association of Development Financial Institution in Asia Pacific).



Datuk Mohd Radzif bin Mohd Yunus

### Fintech in East Africa

Digitalization in Kenya started in 2007. In March 2007 a relative low-key launch took place and this was Safaricom, which is the largest telecommunication service provider in Africa. The new product was named M-Pesa and it was a mobile financial service. The tool was expected to use by people for sending their money and for paying bills. In about a year, the subscriptions of Safaricom increased 10 times; which was beyond the expectations. Today, 30 million people are subscribed to this mobile financial service. Kenya had more mobile money transactions than any other country in the year ending June 2017, at US\$45.3bn. 45% of all transactions that take place in Kenya includes cards, debit cards etc.

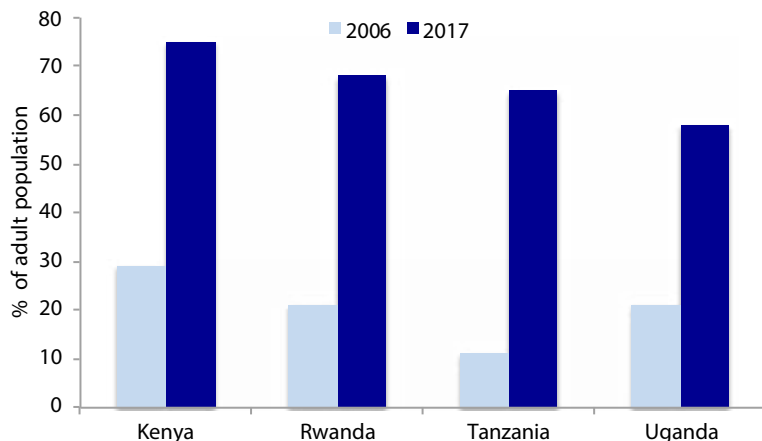
Between 2006 and 2017, financial inclusion in Kenya increased a lot. The situation is similar in Rwanda, Tanzania and Uganda. Commercial bank penetration in the region also increased, but this increase is not as significant as in the increase in financial inclusion. Indeed, commercial bank penetration decreased in Uganda. On the other hand, mobile money penetration emerged and reached to high levels. There has been a transfer from formal banking sector into the mobile banking platform.



Ms. Vivienne Yeda Apopo

Director General, East African Development Bank

#### Financial inclusion across East Africa before and after mobile financial services



Source: FinScope Kenya 2006/2016, FinScope Rwanda 2006/2016, FinScope Tanzania 2006/2017, FinScope Uganda 2006/2018

Vivienne Yeda Apopo is the current Director General of the East African Development Bank (EADB). She assumed the position in January 2009. Ms. Apopo is an experienced professional banker and international business lawyer with over 20 years practical and comprehensive development banking, finance and business experience in Africa. She has worked in the financial sector developing projects in banking and finance in several African countries and has experience in strategic management, business operations and project management.

### Strengthening SME performance in the digital age

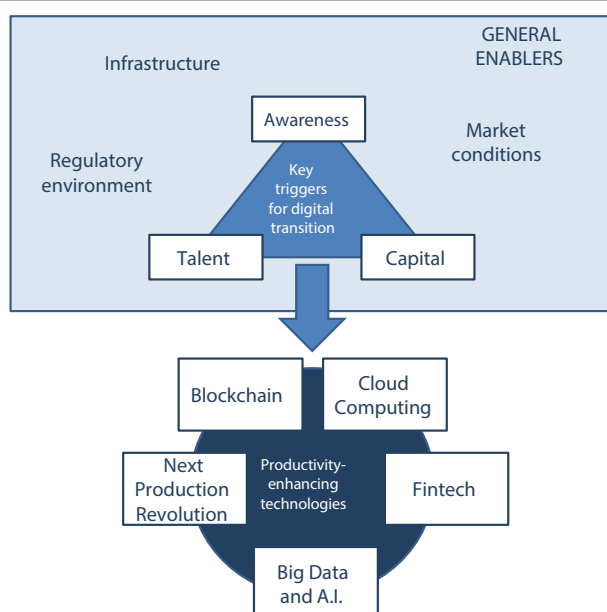
Economies and societies are in a digital transition and this is closely connected with globalization trends. Digital technologies and digitalization have several advantages for growth. But, up to now this has not been beneficial for all; for all people in a society or all societies in the world.

Global economy is overall improving, but this happened after a lengthy period of weak growth, especially in OECD countries. The last decade was also a decade of slow growth for non-OECD countries, if China is excluded. In many countries, the slow growth is related to a slow down of labour productivity and multifactor productivity. The investment levels are also low. Productivity gaps of developing and emerging economies still exist. Income inequality is increasing or remains high in most countries. Advanced economies have a reaction against change, openness and digital transition, due to the aspects of the employment. In OECD countries, people with mid-level skills lose their jobs. The middle class is hit by the changes in technology and changes in the organization of production in the global level.



Ms. Lucia Cusmano  
Senior Economist,  
Head of SME Policies and Business  
Environment Unit, OECD

### Digital for SMEs: a new OECD initiative



SMEs have an important role for an inclusive growth. In OECD, SMEs account for 2/3 of the employment and 1/2 of value added on average. SMEs have a greater role in strengthening productivity and delivering growth for different layers of the society. In the aftermath of the most recent crisis, the productivity gap between large companies and the micro enterprises has increased; this also had implication on wages and income. In this respect, SMEs and their potential growth will have effect on the inclusive growth.

Digitalisation offers new opportunities for SMEs to participate better in the global economy. It allows for improving market intelligence, for reaching new customers for low costs, facilitates emergence of "born global" small businesses and "lean start-ups", enables innovation, eases access to skills in and out of their ecosystem and facilitates access to a range of financial instruments. Although important development has been achieved in this sense, there is a high difference between SMEs in term of their access to technology and use of applications. Also, some new concerns emerge: for example, increasing market concentration, data security issues etc.

These issues were addressed in OECD SME Ministerial Conference, held in February

Lucia Cusmano is Senior Economist and Head of the SME Policies and Business Environment Unit at the OECD Centre for Entrepreneurship, Small and Medium-sized Enterprises, Regions and Cities (CFE), and Executive Secretary to the OECD Working Party on SMEs and Entrepreneurship (WPSMEE). Ms Cusmano has a PhD in Economics from the University of Pavia (Italy) and has completed a Master of Science in Economics at Warwick University (UK). She has authored OECD works on SME financing, SME innovation, SME eco-innovation and green entrepreneurship, and benchmarking of SME and entrepreneurship policy. She has also published extensively in international journals on SMEs, entrepreneurship, innovation, structural change, institutions and economic development in advanced and developing regions.

## Session 2 Contd.

2018. Some priority areas for policy action were agreed by 55 countries. The priority areas included the need to focus in regulatory frameworks, to improve connectivity, cybersecurity and privacy, to address SME financing and skill needs and not to overlook those who are frightened by the transformation, to include more workers.

On this basis, OECD is launching a new initiative named Digital for SMEs. This focuses on productivity-enhancing technologies for SMEs, from blockchain to Fintech, Cloud Computing, Big Data. The key triggers for the digital transition are what countries are doing to raise awareness, to improve access to

new skills and to capital, in addition to enabling conditions, which are infrastructure, regulatory environment, marketing conditions.

The efforts of OECD necessitate an important agenda work. This new initiative will be launched in the coming months. This will be a multi-stakeholder dialog, which will include policy makers, regulators, financial institutions and business sectors. All these participants should understand what policies and what conditions can enable SMEs to seize the benefits of this transition.

## SME Digitalization

There exists high risks and high costs for SMEs. They have low revenue stream and difficulty to reach to several resources and they suffer from informality. If the needs of SMEs are to be summed, it is observed that besides working capital, investment finances, factoring, recovery etc. they want simple, easy, fast product/service and are willing to pay the extra fees for it. SMEs aim to reach to global markets by gaining competitive power, reducing their costs and improving their productivity.

Industry 4.0 is transforming the global economy, introducing ERP, e-commerce, which spread in an integrated mode. Data analytics are used to better understand and optimize customer experience and to empower worker experience. Cloud computing grows rapidly. Mobility and unified communication enable agile and smart transformation. SMEs, on the other hand, are not prepared for the transformative nature of Industry 4.0 due to several hurdles, concern for the security and digital illiteracy.

State-owned banks may promote SME digitalization, because it is a win-win situation. Transparency lowers risk for the bank and reduces the cost. SME digitalization as it increases productivity and creates digital footprints. Priorities of SME digitalization is to understand the challenges, enhance digital skills, focus on customer experience, open digital platforms, optimize e-commerce implementation and analyze data created by e-commerce, mobile use, banking transaction, social media activity etc.

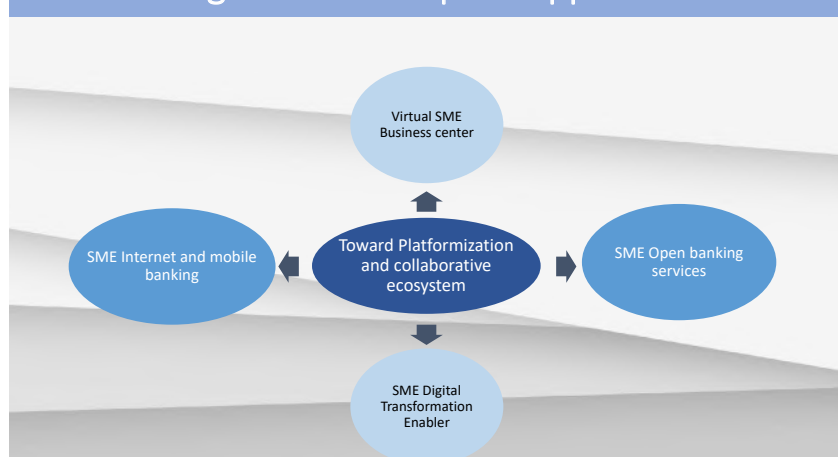
Big banks are following the high cost-low integration model by direct equity investment (VC) and internal incubators. Small banks prefer low cost-high integration: product offer on online market, use of alternative lender technology to power loan application. Many new analytic firms support small banks in leveraging cloud computing in their advanced data analytics.



Mr. Samir Saied  
Director General,  
STB Bank, Tunisia

Samir Saied is a General Manager in Commercial & Development Banking with expertise in SME lending, Corporate Finance, Risk Management and Venture Capital and a major achievement in rescuing and transforming two MENA banks. He is currently working at Societe Tunisienne de Banque which is First state owned Tunisian commercial bank, founded in 1958 to finance the nascent Tunisian economy. Total Assets 4 \$Billion, 140 Branches, 2000 employees. The bank absorbed two ailing development banks operating in Tourism and Industry which required a massive recapitalization of STB in 2015 to cover the losses and additional provisions. He also worked at Al Hosn Investment Company which is a Venture Capital, Private equity joint partnership between Qatar Holding and the Ministry of Finance of Oman.

### New banking offer : A five pillar approach



## Session 2 Contd.

The bank of STB in Lebanon designed collectively a five-pillar approach of transformation. The needs are a virtual SME business centre for an optimized customer experience, SME open-banking service for an integrated ecosystem via API (Application programming interface), SME Digital Transformation Enabler, SME Internet and mobile banking system for cash management and trade finance. These will create a platform and a creative ecosystem.

For SME internet and mobile banking to facilitate cash management, it is essentially a cash-in - cash-out system, for open banking service for enhancing innovative offer. STB follows of Payment Service Directive of European market to provide account information. An open API catalogue is used for SMEs and it is related to account management, cash operations, treasury operations, trade finance etc. A data analytics API includes scoring, profitability, fraud detection, marketing, treasury etc.

The SME Digital Transformation Enablers are bright young people, who are advanced knowledge about banking activities and digitalization. They help SMEs to plot their own route in digitalization in accordance with the history and capabilities of the particular SME. These people enhance awareness for sustainable integration of SMEs in the digital universe to provide better visibility and transparency, leading to growth and easier access to credit, assist in industry 4.0 transformation, negotiate offers from Cloud partners and B2B platforms, assist SMEs in gathering, organizing and mining data created by digital footprint and enhance security aspects in banking. The platforms based on these facilities are open platforms for stakeholders. The benefits of innovative collaboration is hoped to be exploited by all stakeholders.

The five-pillar approach creates a collaborative ecosystem, openness for an agile and lean Bank and creates a better customer experience.

## Digital Banking

Digital banking is operating in banking channels independent of the time and place. Digital banking makes invisible banking visible to the people. People can control banking transaction easily. The digital banking should address to both the elderly and the young generations and new trends.

Coping up with developing technologies is vital for every actor in the economic system. Various companies diminished and finally disappeared. For this reason, all companies, including banks and SMEs, should design their goods and services in parallel to the demands of their customers, and they should even go further in technological development before the general public become aware of their future needs. Technological innovations are done by those who are a step further their customers. If necessary steps are not taken by the actors, destruction is inevitable.

Vakıfbank of Turkey formed a team to follow the expectations of customers in the digital banking. It is seen that Turkish people are prone to technology use. Rate of use of mobile phones for banking transactions is higher in Turkey, compared to Europe. Vakıfbank improves its digital channels permanently. Carrying almost all transactions on digital banking is possible. Some transactions are not allowed yet, due to legal causes. Currently, 93% of banking transactions of Vakıfbank are carried on non-branch channels. Rate of satisfaction of customers who use digital banking is very high. Digital banking has two more advantages: the impact of informal economy is weakened and small savings by the individuals are made possible and encouraged.



Mr. İlker Yeşil  
Deputy CEO, Vakıfbank

İlker Yeşil was graduated from Ankara University, Political Science Faculty, Public Administration Department. He started his VakıfBank career as an Assistant Audit and he worked at various branches of VakıfBank with "Manager" title. Yeşil was assigned to Manager of Mediterranean Region in 2010 and after that he was assigned to Manager of Çukurova Region in 2017. In 1 August 2017, he was appointed as Executive Vice General Manager. Mr. Yeşil is married and father of two children and he has good command of English.

### We are Social: Digital in 2018





## Session 3

# NDFIs and SME Financing Practices – Traditional and Alternative Finance Models: Innovation and Meeting Future Needs & Challenges

### Moderator:

Ms. Patricia Adongo Ojangole

Managing Director, Uganda Development Bank Ltd;

Member of ADFIMI Audit Board

Patricia is a professional accountant with 16 years international experience in Banking and Finance. Currently the Managing Director of Uganda Development Bank Limited where she has been instrumental in turning around the Bank to become the preferred and trusted partner to the Government of Uganda in achieving Socio-economic development aspirations.

Patricia is completing her Masters of Philosophy in Development Finance at University of Stellenbosch Business School, Cape Town, South Africa and has completed a research assignment on The Impact of Financial Sector Development on Economic Growth in Uganda. This is motivated by the fact that the role of finance is increasingly taking center stage in economic development, making policy makers concerned with how to promote access to financial services by all actors of the economy, while leveraging on the opportunities presented by the changing landscape.

Patricia holds an Executive Master's Degree in Business Administration from Eastern and Southern Africa Management Institute, Arusha, Tanzania; a Bachelor of Commerce (Hons) Degree from Makerere University, Uganda and has completed a number of leadership and management programs.

Patricia is a Fellow of the Association of the Certified Chartered Accountants (UK); the Certified Public Accountants of Uganda (ICPAU), as well as The Institute of Internal Auditors Uganda (IIA).

She is a member of the Board of Uganda Development Bank Ltd, Msingi EA Ltd, Busitema University Holdings Limited, ADFIMI as well as AADFI. She serves as a member of the Presidential Economic Council in Uganda and member of the Private Sector Working Group under the Ministry of Finance in Uganda.



Ms. Patricia Adongo Ojangole



Mr. Rami M.S. Ahmed  
Special Envoy on Sustainable Development Goals (SDGs),  
Senior Advisor to the President, Islamic Development Bank

## Role of SME Finance and Development in Achieving the SDGs

Sustainable Development Goals (SDGs) are global targets, signed by 193 countries, including 57 member countries of IsDB (Islamic Development Bank) in September 2015. This is comprehensive, global framework, which is important for the business world. They are designed to solve some problems about problems.

The problems of global development include extreme poverty, undernourishment, slow economic growth, increasing fragility and conflict, lack of electricity access, lack of basic literacy, high maternal mortality, water scarcity, bad living conditions, environmental issues etc. The problem of poverty, for example, seems to be reduced due to the economic development in China and India; however, the number of people under the poverty line has increased in Sub-Saharan Africa. The poverty issue has not been solved, especially in the member countries of IsDB.

The concept of development used for determining SDGs must be comprehensive, including economic, social, environmental, political issues. The concern of sustainable development should consider all these aspects. In IsDB, 16 member countries are in politically fragile position. All the work has been done for development becomes ineffective. Syria is an example to this. Due to the war, the infrastructure of the country is ruined and reconstructing it necessitates a huge amount of money, in addition to the human suffering.

SMEs are crucial in achieving the SDGs. They are strong sources of employment and youth empowerment. It is understood that the 60%-80% of employment opportunities are generated by the SMEs. It is higher in developing and low-income countries. Contribution of SMEs to GDP is around 40% in emerging market economies. However, informality is a big issue when it comes to SMEs. SMEs have a high contribution to GDP of low-income countries, but 47% of this contribution is from microfinance or informal sector.

STI (Science, Technology and Innovation) is also related to the SMEs. In developed countries, most of the new technologies come from the large corporates, which have

Rami M.S Ahmed started his development career in 1993 in the Young Professional Program and served as a Projects Officer in the operations department until 1999. He was then selected as member of the core team in charge of establishing the Islamic Corporation for the Private Sector (ICD) of the IsDB Group. He served as an Investment Manager in the Business Development Department until returning back to IsDB in 2004, as a Division Chief. He then served as the Director, Country Operations Department and later as the Director of Country Programs Department of IsDB. In 2011, he became a Senior Advisor to the President. Rami M. S Ahmed holds a BS in Electrical & Computer Engineering, a Master in Systems Science, a PhD in Business Administration from Louisiana State University and a Master in Public Administration (MPA) from the Kennedy School of Government at Harvard University.

## Session 3 Contd.

### The 5 Ps of Sustainable Development



budget to sponsor R&D projects. In contrast, a substantial part of the generation and dissemination of scientific and technical innovations in developing countries come from SME entrepreneurs. They have the local knowledge and the ability to understand the needs of the local economy and to solve the problems. An example for innovative SME from Sub-Saharan Africa is AbzeSolar in Burkina Faso, aSME committed to empowering local communities via the provision of high quality solar energy products and solutions installed and maintained by locally trained people.

There are funding gaps for achieving SDGs, varying between 2-3 trillion USD annually until 2030. Official Development Assistance amount is around 143 billion USD and all financing by multilateral development banks is 127 billion USD. These data clearly indicate that there is a huge gap of finance, which can be supplied by SMEs. Interestingly, the World Bank estimates that 10 trillion USD of funds are invested in negative interest rate bonds, 24 trillion USD of bonds are under-invested in low-yield government securities and 5 trillion USD of funds are sitting in cash, waiting for better investment opportunities, clearly, there is no shortage of capital worldwide.

Contribution of SMEs can be useful for solving social problems by creating a win-win situation. Businesses can make money at the same time they solve social problems. SDGs can be a framework for this effort and SMEs can take part. There can be a mutually reinforcing relationship. Many of the SDGs are well-articulated. SDG8 is named as "Decent Work and Economic Growth" and SDG9 is named as "Industry, Innovation and Infrastructure". These SDGs are related to SMEs. SDG8 has 12 targets, 5 of which are directly related to SMEs:

- Sustaining economic growth of at least 7% in least-developed countries,
- Achieving higher levels of economic productivity through diversification, technological upgrading and innovation,
- Promoting development-oriented policies that encourage the formalization and growth of SMEs,
- Reducing the proportion of youth which are not in employment, education or training,
- Strengthening the capacity of domestic financial institutions.

SDG9 has also 2 targets directly related to SMEs:

- Promoting inclusive and sustainable industrialization and

raising industry's share in employment and GDP,

- Increasing the access of small-scale industrial and other enterprises to financial services.

SDG2, 3, 4, 6 and 7 also have targets related to SMEs. An example to the close relation between SMEs and SDGs is that in Kenya, the number of SMEs that provide education service within the context of SDGs has tripled in the past 18 years.

Needless to say, there are some problems about SMEs. First of all, SMEs are typically concentrated in low-skilled and labour intensive sectors. Second, there is less cooperation and collaboration between SMEs. And thirdly, as mentioned before, informality is very common among SMEs which makes it difficult to examine and understand their demands and challenges for business development. According to the data, informal SMEs provide more than 90% of employment in 13 Sub-Sahara African countries.

Incoherent regulatory frameworks are among the reasons behind these challenges. Barriers to entry, including technical regulations, compliance with Environment, Health and Safety (EHS) standards, and labor laws and regulations, increase costs for SMEs. Lack of transparency and overly burdensome regulatory requirements hinder the growth of informal SMEs into formal business entities. Another reason behind the abovementioned challenges is limited access to finance. Short term cash flow constraints and limited access to finance is almost a universal challenge for SMEs. In the short term, the lack of liquidity makes the enterprises unable to pay workers, to make future plans, and to achieve scale in the medium to long run. SMEs also deal with imperfect information and capacity gaps and struggle to find a support to strengthen their business management, marketing, record and bookkeeping, strategic and financial planning, to be able to grow, to formalize their business operations, capture market share and also to cope with shocks. Access to basic infrastructure is also crucial for SMEs because they have limited financial sources. Stable electricity supply, water supply and ICT supply (information and communication technology), broadband internet in particular, are important for fostering private sector development.

A shift of paradigm from financing for development to empowerment for development is needed; because access to finance is necessary for SMEs, but not enough. In this sense, IsDB's Strategy in supporting SMEs is not to create nominal jobs but to pull up great segments of the population through SMEs and increase their productivity. The Inclusive Economic Finance Facility (IEEF) by IsDB is an innovative poverty alleviation and economic insertion program tailored to promote investment partnership, to foster development, to promote wealth for potentially active poor and economically disadvantaged people and Communities.

An example of achievements by IEEF in our member countries is the project of helping microfinance institutions in Sudan. The main beneficiaries of that project were over 80 microfinance institutions and banks branches and 200,000 micro-entrepreneurs in Sudan. IsDB believes that giving money to the poor does not solve their problems, and even makes the problem worse by making the poor the indebted poor. In fact, whilst the number of poor people in the world has reduced, this is because of two countries, China and India. The absolute number of poor has risen in Sub-Sahara Africa. The Islamic world therefore needs to shift from financing to empowerment.

# CGC Malaysia: Driving Financial Inclusion via FinTech

CGC Malaysia was formed 46 years ago in 1972. It was launched by the then Finance Minister (Tun Tan Siew Sin) who said "We should aim to reach a situation in which poverty or lack of capital is no bar to success in business or industry".

That visionary statement is still very much relevant even today. To date, CGC have issued guarantee worth USD16 billion/ EURO 13.5 Bil / RM64.6 bil benefitting over 350,000 SMEs in Malaysia.

### 1. An Overview of CGC's role within Malaysia's Financial Landscape

Credit Supplementation System (CSS) is meant to strengthen Malaysia's financial ecosystem. As a Credit Guarantee Institution, CGC is the core of the Credit Supplementation System (CSS).

CGC operates in areas that are governed by the Central Bank of Malaysia and relevant Government Agencies in which Financial Institutions and Development Financial Institutions conduct their business.

CSS is a channel for the transmission of risks and at the same time a capital management tool for FIs & DFIs. CGC guarantee carries 20% Risk Weighted under the Central Bank Capital Adequacy Framework (BASEL Risk Weighted Assets)

The existence of guarantee institutions such as CGC & KGF will create further access to financing as CGC guarantee will enable FIs & DFIs to increase their financing capacity.

### 2. CGC Catalyst of Growth

To further intensify outreach and accelerate financial inclusion, CGC will cater to both customers under medium and micro segments.

This will be accomplished via:

- i. Review on capping limit for medium sized SMEs; and
- ii. Deepening of existing relationship with micro financing lenders
- iii. Collaborations with Non-Bank partners (AIM, TEKUN and MARA) for micro sized SMEs under Micro Financing product (<RM50k) and/or new PG/WG scheme.

CGC's approach on Medium segment is to explore 1st loss & 2nd loss risk share, and to segmentize the risk based on product structure. As for the Micro segment, in order to minimize the outreach cost, CGC will leverage on existing channels of traditional & non-traditional partners. By partnering with regulated bodies, CGC shall be at a better position to manage risk of micro segment.

### 3. CGC Supports the Financial Inclusion Agenda

CGC is guided by Malaysia's Financial Sector Blueprint (2011-2020) conceived by the Central Bank of Malaysia with regards to enhancing financial inclusion.

The Vision here is to have "an inclusive financial system financial system that best serves all members of society, including the underserved, to have access to and usage of quality, affordable essential financial services to satisfy their needs towards shared prosperity".

CGC is relevant in all the broad strategies to accelerate Financial Inclusion and have made significant progress:

- i. Under Innovative Channel: CGC have launched a technology based channel to reach out to SMEs, for them to source for financings.
- ii. For Innovative Products: CGC are collaborating beyond FIs & DFIs, and have started with Micro Financial Institutions.
- iii. CGC's Developmental Programs are in line with the strategy, which includes capacity building for SMEs.

### 4. CGC anchors its Financial Inclusion Initiatives, leveraging on FinTech



Datuk Mohd Zamree Mohd Ishak  
President/CEO,  
Credit Guarantee Corporation, Malaysia

Datuk Mohd Zamree Mohd Ishak was appointed as CGC's President and Chief Executive Officer on 1st January, 2015. Zamree brings with him vast experience in the areas of banking operations, corporate and consumer banking as well as Islamic finance education. He began his career as a Graduate Trainee Officer with Malaysia's largest banking group Malayan Banking Berhad (Maybank) in 1989. He held several key positions in Maybank which include Executive Assistant to the President and Chief Executive Officer (April 2001 – Dec 2004), Vice President, Consumer Banking (Jan 2005 – Jan 2008) and Executive Vice President, Corporate Banking (Jan 2008 – July 2009). Zamree also served as the Chief Operations Officer of INCEIF – The Global University of Islamic Finance in July 2009 up to his latest appointment in CGC.



# *Family*





# Photo



## Session 3 Contd.

CGC's financial inclusion journey started in 1972 with its guarantee products have since issued guarantee worth USD16 billion benefitting over 350,000 SMEs in Malaysia. CGC is now reaching out beyond FIs & DFIs, namely with non-bank lenders such as credit companies and government agencies.

In 2009, CGC ventured into direct lending, not to compete with FIs & DFIs, rather to focus on the underserved segment. To date CGC have introduced 3 direct financing schemes, TPUB-i in 2009, Biz-Mula in 2014 & Biz-Wanita in 2015.

TPUB-i is a direct financing products funded by the Central Bank of Malaysia to finance small contactors who are awarded government contracts. BizMula and BizWanita are direct lending for start-ups with no track record and zero collaterals. As long as they can come up with a sound business plan and identified take out source.

Both BizMula and BizWanita started out being internally funded by CGC. CGC use risk based pricing and were prepared to absorb NPF of 30%. 2 years have passed and the NPF are below 20% proving that it is viable. Recognising its viability, the Central Bank has agreed to source funding from its SME Funds. CGC finance SMEs as low as USD7,000 and as high as USD75,000 with effective profit rate ranging from 7.8% to 8% p.a.

CGC is proud to highlight that these 3 direct financing products have won awards at Karlsruhe Sustainable Finance Awards in 2015, 2016 and 2017.

In further supporting the Financial Inclusion agenda, CGC use FinTech as an anchor to reach out to more SMEs in the most cost effective manner. CGC launched Malaysia's First Online SME Financing/Loan Referral Platform, imSME on 9 Feb 2018. This is to assist Malaysian SMEs to search information on financing information.

According to Harvard Business School study titled "The State of Small Business Lending: Credit Access during the Recovery and How Technology May Change the Game" published on 22 July 2014, SMEs would on average spend 25 hours to search for financing information from banks. This is both time consuming and challenging to SMEs. While TRIVAGO helps us to find the best hotel rates, imSME assists SMEs to find the best SME financing rates.

### 5. Embark on Digitization – CGC's 5th Strategic Objective

The "House of CGC" outlined its 5 Year Strategic Plan 2016 to 2020. CGC aspire "To be the Household Name for SMEs by 2020" with the theme "Transforming CGC, Powering SMEs".

The other 6 key items are CGC's Vision, Mission, 5 Core Values, 5 Strategic Objectives, 16 Strategies, 25 Initiative and 6 Headline Targets for 2020. Strategic Objective #5 Embark on Digitization was inserted when CGC reviewed this plan in April this year which includes the following initiatives:

- i. Virtual Assistance – Chatbot
- ii. Alternative credit scoring – Psychometric
- iii. Big Data Analytics – Effective and timely decision making
- iv. Innovative Hub / FinTech Lab - Accelerate innovation to address Financial Inclusion

### 6. Overview of Strategic Objective #5: Embark on Digitization

Digitization cuts across CGC's entire operations and has a profound impact on its People, Process and Technology. In this

regard, CGC will continue to invest to transform and upskill its People, enhance the efficiency of its Processes and fully embrace Technology.

Some of CGC's more pertinent developments include the launch of its Chatbot on 12 March 2018, on the imSME platform. The Chatbot interacts with visitors on questions pertaining to imSME. CGC named this chatbot iDA (imSME Digital Assistance).

CGC is also developing an Alternative Credit Scoring – via psychometric. This alternative credit assessment tool is primarily aimed to determine SMEs' propensity to pay. Psychometric will further help CGC to finance those who do not have sufficient banking records.

### 7. Three (3) FinTech Focus Areas

In embracing on digitization, CGC are focusing on three (3) FinTech Areas:

#### i. Leverage on the external programmes and facilities

- Establish and propose solution for problem statement via innovation/accelerator/FinTech hub
- Leverage P2P Financing platform to on-board FIs, DFIs, P2P operators and other capacity building partners to build a holistic SME ecosystem

#### ii. Digitizing processes

- Robotic Process Automation (RPA) for repetitive processes
- eKYC and Digital Signatures for On-boardin
- Digital platform channel for outreach via imSME, a digital (non-physical) SME Financing platform

#### iii. Monetizing CGC Rich Data

Being a CSS, CGC can fit in any FIs digital accelerator environment and can monetize its data. Data Analytics and Open API environment, can help in forming strategic and operational decisions

### 8. Overview of imSME

This is Malaysia's 1st online SME financing referral platform "imSME". The letter mSME stands for micro, small and medium size enterprises. CGC selected imSME because it is simple and easy to remember.

There are 9 processes in imSME but for SMEs, they just need to do 4 easy steps:

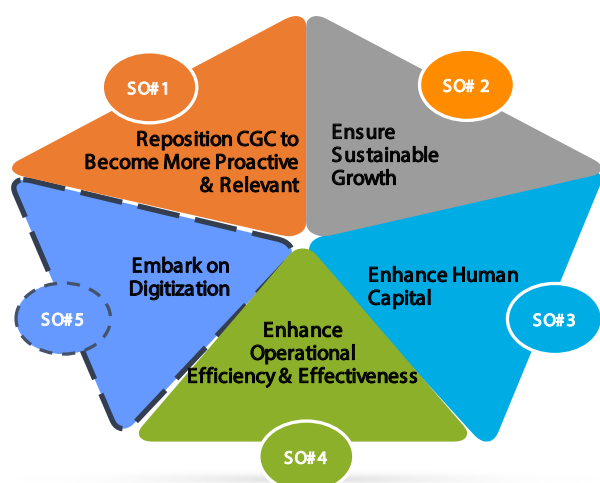
- i. Share their financing requiremen
- ii. Describe their business
- iii. Log-in to imSME
- iv. Select their preferred financing product

There are multiple benefits of using imSME:

- i. It is fast and on real-time. And can be access anytime, anywhere 24/7
- ii. Saves search cost for SMEs
- iii. Provides FIs & DFIs with warm leads which will also result in cost savings

imSME platform will strengthens SMEs' self-service capabilities, enhancing their experience in line with Malaysia's direction for SMEs to embrace FinTech as they are more cost-effective and efficient. imSME enables users to be in control, by searching and

## Session 3 Contd.



discovering the perfect financing option, similar to Trivago and Skyscanner.

### 9. imSME Progress since Inception in February 2018

To date, imSME have 21 FIs/DFIs offering 36 unsecured financing. CGC also have onboard 4 of the 6 licensed Peer-to-Peer (P2P) financing operators offering their services in imSME. They are Funding Societies, Fundaztic, QuickKash and Nusa Kapital.

For SMEs requiring capacity building, imSME have 3 partners providing such assistance namely the Malaysia Institute of Accountants, Malaysia's National Institute of Entrepreneur Development and Centre for Entrepreneur Development and Research (CEDAR) owned by Malaysia's SME Bank.

As at 31 August 2018, imSME received a total of 75,157 visitors or 360 visitors a day! In addition, imSME have 2,505 registered SMEs, 200 financing cases and approval amounting to USD5.0 mil.

The focus in innovation is guided by the need for CGC to stay relevant and continue to have a significant presence in promoting financial inclusions for a better world. To make that happen, CGC are already planning for imSME2.0 –The SME Marketplace where one can find anything about SME.

## Digitalization in SME Financing

In order to solve the problems about security deposits that SMEs come across in financing Credit Guarantee Fund (KGF) was found in Turkey. Between 1994 and 2009, KGF was depending on its equities. After 2009, the Fund has been supported by the Treasury. Although KGF is generally supposed to be a public fund, partners of KGF are Turkish Union of Chambers and Exchange Commodities (TOBB), SME Development Organization (KOSGEB) and several banks. The fund is 500 million TL and the issued capital is 318 million TL (80 million USD).

The fund can guarantee an amount of 800 million USD. Besides that, within the scope of Treasury-supported security deposit system, 40 billion USD of security deposit can be given. 35 billion USD of this security deposit is used currently in the capital market. Total guarantee capacity is 41 billion USD. The fund also gives effort to bring guarantees from foreign markets. Guarantee from EIF (European Investment Fund) and BTC (Baku-Tbilisi-Ceyhan Pipeline) are also obtained for SMEs. Besides providing guarantees, KGF creates a platform which brings the banks together.

When the historical development of KGF is considered, it is seen that KGF was not very efficient in Turkey until 2009, when Treasury began to support the fund. Between 2009 and 2015, KGF was supported by Treasury but the system was not well-founded. As a result, the efficiency was not raised. In these 6 years, a guarantee volume of 1 billion USD was granted to 25,000 SMEs. Starting from 2015 management of the fund was changed and a well-founded system was built. Relationship with banks was changed. The amounts used rose rapidly after 2015.

The guarantee products of KDF vary with respect to the areas of operation. Treasury-backed guarantees, own equity-backed loan guarantees and foreign funds-backed loan guarantees are bank loan guarantees. Sources from public institutions are given as source deposits; these are non-bank guarantees. Aim of these operations is not competing with banks; it is to eliminate the disadvantages of start-up firms in the financing.



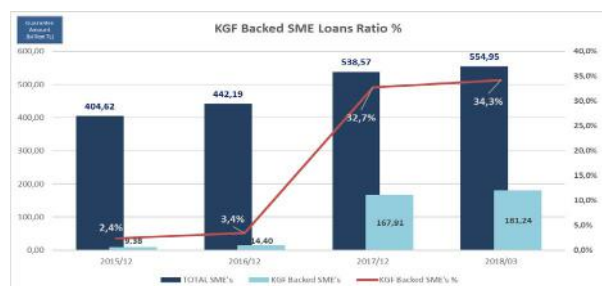
**Mr. Caner Teberoğlu**  
Deputy General Manager,  
Credit Guarantee Fund

He was born in Ankara on 1969. He graduated Mathematics at Middle East Technical University on 1993. During his career starting from 1993, he had taken charge of various positions in corporate, commercial and SME marketing divisions of Demirbank, Pamukbank and Halkbank at corporate branch, head office and regional office levels till 2015. He conducts his duty as Deputy General Manager of Kredi Garanti Fonu since 2015 December.



## Session 3 Contd.

Market Share  
Share of KGF Guaranteed SME Loans



189 people are employed in KGF. There are 40 branches of the fund. KGF has a system called KOBIT. 27 banks, which are partners of KGF can enter to the system. KGF has a secondary system to evaluate the information from these 27 banks, in order to prevent information asymmetries. These 27 banks can send different rating information for the same firm, because they have different rating models.

The market share of KGF in guaranteed bank loans is 11.5%. Share of KGF guaranteed SME loans raised to 34.3%. This success can be attributed to two systems, launched after 2016. These are Portfolio Guarantee System and Portfolio Limit System. Portfolio Guarantee System totally relies on the banking system. This system has 7 displays. Banks enter the information about

the firms which they demand guarantee for to these displays and this process takes 10 minutes. The demand is evaluated within the same day, even in 1-hour period. If accepted, KGF participates to the guarantee. This relies on the strong structure of credit supply system of banking sector in Turkey. The limit for SMEs is 12 million TL (2 billion USD) at maximum. The limit for non-SME firms is 200 million TL (30 million USD) at maximum.

In last one and a half years, KGF supported 255 billion TL (40 million USD) of credit by banks. 525,000 firms benefited from these credits. 75% of these credits were used by SMEs. Key of this success was the mutual trust between banks and KGF. KGF is not obliged to pay all the risks. KGF creates a portfolio for banks and gives a guarantee of payment for maximum 7% of the credit. This encourages banks to be more careful in creating their portfolios and selecting the firms. Starting from August 2018, a negative currency change affected the economy of Turkey. The rate of non-paying loans by KGF is around 1%.

Portfolio Limit System uses branches and a rating modelling based on information from these branches. This system supports SME by accepting security deposits that are not accepted by banks. The grants from public institutions are used directly by KGF for supporting SMEs. Recently, meetings are carried with foreign financial institutions about their funding in Turkey. KGF intermediates between foreign financial institutions and Turkish banking sector.

### MAIN OBJECTIVES OF ADFIMI

- Promotion of co-operation and networking among members in all aspects of development financing
- Conducting training programmes for the improvement of human resources as well as institutional capacities of its members
- Conducting research on development financing, promotion of innovation and dissemination of best practices
- Promotion of SME finance and micro finance
- Recognition and appreciation of contributions made by the nationals of IDB member countries to development finance



## Session 4

# Islamic Finance, Fintech and SMEs

### Moderator:

Mr. Ashraf Khan

Senior Financial Sector Expert, IMF

## Fintech from the IMF Perspective

Fintech refers to the technological innovations in the financial sector that use big data and other varying technologies, giving rise to new applications which may emerge as competitive alternatives to existing financial market participants and structures. The IMF has been involved with both Fintech and Islamic finance for quite some time already.

Fintech has a growth potential for supporting economic growth in emerging markets. Fintech investments are increasing globally, in particular in North America, Europe, and Asia. In the MENA region, the number of Fintech start-up has been increasing rapidly. They are concentrated in Egypt, Jordan, Lebanon, and UAE and they are mostly focused on payments (mobile wallets, p2p transactions, crypto / digital currencies). Fintech start-ups are not only involved in developing technologies but also applying them. They vary from local standalone initiatives to cross-border cooperation.

Fintech development is especially important for emerging markets. Financial inclusion, cross-border trade and worker remittances are among the most notable benefits. Sierra Leone is a good example of this development. The country has a low rate of financial inclusion, but the cell phone penetration rate is high. The Bank of Sierra Leone (the central bank) set up a Fintech challenge in 2017 with the help of the UN. The goal was to identify and stimulate Fintech and to increase access to financial services. The involved fintech companies predominantly used cell phone-based technologies. The central bank organised discussions with the fintech entrepreneurs, and set up a regulatory sandbox. This allowed the fintech companies to share insights on their business models and added value to Sierra Leonean society, interact with each other, and further increase the understanding of the central bank.

Existing and new challenges of fintech have to be identified. Fintech is still a largely uncharted territory for governments and financial institutions. Six main areas of attention can be described: overall business environment, investment sources, regulatory environment, technological advancements, institutional support and financial literacy and trust. General risks and opportunities of Fintech include risks for financial and payment system stability, monetary policy risks and innovation opportunities.

International cooperation on regulatory frameworks for Fintech is necessary to ensure level playing fields, and early and adequate identification of risks. Financial stability, cooperation across borders, cyber security and algorithmic governance are key issues flagged by central banks and financial supervisors.

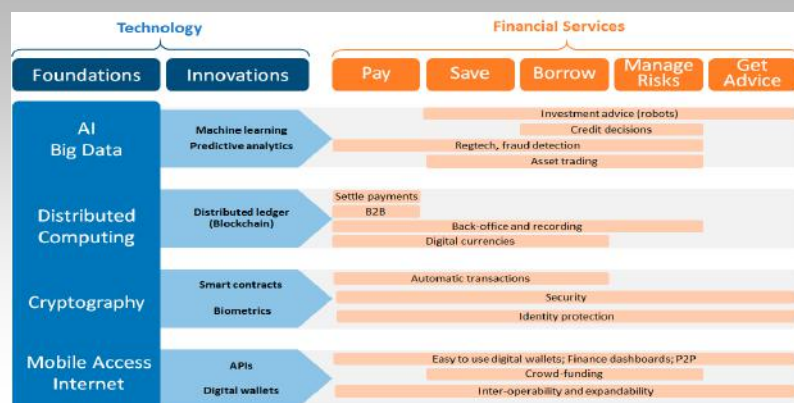


Mr. Ashraf Khan

Ashraf Khan is a Senior Financial Sector Expert at the Monetary and Capital Markets Department of the IMF. He leads MCM's work on central bank governance, risk management, and currency management. He also contributes to the Fund's work on fintech, and Islamic Finance, and coordinates the IMF's Central Bank Legislation Database. Before joining the IMF, Ashraf worked as Head of the Governance and Accounting Department at the Central Bank of the Netherlands, as WTO Trade Policy Advisor at the Dutch Ministry of Economic Affairs, and as a corporate lawyer with CMS Derks Star Busmann. He holds a Master of Dutch Private Law, and a Master of International Law from the Vrije Universiteit of Amsterdam, as well as a Master of Philosophy from Jawaharhal Nehru University, New Delhi. Ashraf was a founding Board Member of the Duisenberg School of Finance, Amsterdam, and has published numerous articles on governance and risk management.

### Fintech: a Definition

#### What is new / why now?



### Financing Micro, Small and Medium Enterprises (MSMEs)

Micro, Small and Medium-sized Enterprises (SMEs) are one of the economic sectors that attract considerable attention from world countries, international and regional organizations and bodies and researchers due to their central role in production, employment and income generation as well as their role in achieving economic and social goals. Today, micro, small and medium enterprises are the focus of economic policy aimed at reducing unemployment rates in developing and developed countries and accordingly, generating income, increasing demand and accelerating the wheel of the national economy. Following the global financial crisis, the voices calling for salvation and the exit from the crisis have risen and the most important was the need to activate the role of small and medium enterprises.

The Central Bank of Jordan (CBJ) defines the micro, small and medium enterprises based on the number of employees, the volume of assets and the volume of sales, as follows:

Micro: The number of employees shall not exceed five workers.

Small- sized: They are not a public shareholding company, insurance company or brokerage company. Total annual assets or sales shall be less than one million Dinars. The number of employees must be between 5 and 20.

Medium- sized: Their annual assets or sales range between 1 and 3 million dinars. The number of employees between must be between 21 and 100.

MSMEs in the Jordanian economy account for 95% of the business sector, 70% of job opportunities and 40% of GDP. MSMEs have difficulty in obtaining funding for inability to meet the requirements of banks, both conventional and Islamic. MSMEs also have inability to provide the required guarantees for the required facilities, in addition to the lack of experience in cooperation with banks, suffer from high cost of funding in case of obtaining it, and difficulty of preparing financial statements because the owner of the institution lacks financial and accounting expertise.

Financing sources of SMEs in Jordan are the Central Bank, Specialized lending institutions, commercial banks, Islamic banks, financing institutions and funds. In direct methods, funds and institutions finance MSMEs directly, without a third part party. In indirect method of financing, specialized financial institutions take part. Reasons for limited funding to MSMEs can be listed as lack of guarantees, high risk, high costs compared to



Mr. Musa Shihadeh  
Chief Executive Officer & General Manager,  
Jordan Islamic Bank

Musa Shihadeh holds a Master degree in Business Administration (MBA) from USA. He has worked in conventional banks between 1961 and 1980. He then joined Jordan Islamic Bank in 1980. He is currently the General Manager of Jordan Islamic Bank. Mr. Shihadeh is currently a member of the Board of Directors of the General Council for Islamic Banks, a Board Member of the Jordanian Businessmen Association and Chairman and Board Member of several public and private companies in various sectors. He is also a board member of the Association of Banks in Jordan since 1983 and has been the association's Vice-President for the period from 1997 to 2005 and was elected as Vice Chairman of the Association of Banks in Jordan for a new term since February 2015, then a Chairman of the Board Directors of the Association of Banks in Jordan as of October 2015 until the end of Association term on 26 March 2018.

#### The developmental and social benefits of Islamic finance for micro, small and medium enterprises

**By the commitment of Islamic banks to the sharia purposes( Maqasid Al Sharia) and Islamic vision of financial transactions, these banks become developmental, through :**

- \* Providing the opportunity for Halal banking for those who refrain from dealing with conventional banks.
- \* Give a living example and a good model in the embodiment of spiritual and moral values in society and to strengthen bonds of interdependence and spread compassion among its citizens.
- \* To strive to meet the needs of people and to pay attention to what benefits them and to avoid what harms them directly or indirectly.
- \* To balance the interests and benefits of all parties involved.

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return, the fact that stakeholders do not tend to request funding from banks (lack of banking culture), the inability to liquidate the project when needed, lack of sufficient and documented financial data and difficulty of censorship.

Jordan Islamic Bank funds MSMEs for lower rates of return because the role of the Bank as an Islamic bank is to help people to have their own business. Central Bank of Jordan raises funds from different sources for MSMEs. The Central Bank of Jordan creates some standards for all Islamic banks in the world.

Jordan of Islamic Bank gives training to SMEs within the scope of the bank, about access to finance and guarantees. Three years ago, a World Bank study was carried in Jordan and it was found that 22% of the population was financially included. In two years, the rate is 32% of the population. People outside cities are not included in the system. This requires a special focus on this population.

## Islamic Finance as a Catalyst for Access to Finance

World Bank has objectives of reducing extreme poverty, promoting shared prosperity, improving financial services and access to finance and increasing financial stability in member countries. World Bank's involvement with Islamic finance is aligned with these objectives. Islamic finance is observed to have positive impacts on the economy and on the society. The World Bank Global Islamic Finance Development Center, established in 2013 in Istanbul, is a global hub to give technical assistance on Islamic finance, not only to Muslim countries but also to non-Muslim countries. In order to improve awareness on Islamic finance the Center provides seminar, trainings and conferences on this issue. Fintech is also considered as an important topic for creating social impact and serving the humanity.

There are 162 million micro enterprises and SMEs in the world. It is widely accepted that micro enterprises are companies with less than 10 employees and SMEs have less than 250 employees. These two groups can be named as MSMEs together. The largest number of SMEs is in East Asia and Pacific region. 8.9 trillion USD is the potential demand for formal MSME finance in developing countries. There is a finance gap of 5.2 trillion USD for formal SMEs. There is also potential finance demand from informal SMEs, which means that the finance gap is bigger. 65 million SMEs are expected to have credit constraints.

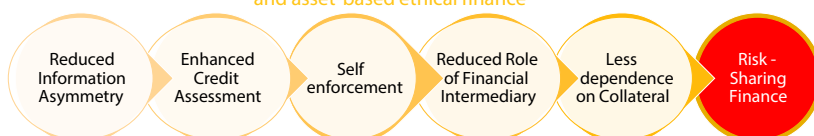
Other than Turkey, in Pakistan, Indonesia, Egypt and Morocco, number of micro enterprises are extremely high, with respect to SMEs. Finance gap is huge in Muslim countries, except Malaysia, Turkey and Tunisia.

Islamic finance is equity-based, sustainable, asset-backed, ethical, environmentally and socially responsible finance. It promotes risk sharing, connects the financial sector with the real economy and emphasizes financial inclusion. Financing must be linked to real assets. Arm manufacturing and alcohol production are banned. Contracts with high uncertainties are prohibited by the Islamic finance.

### Islamic Finance and Fintech

Fintech's Disruption
✓ Enabling <b>risk -sharing</b> finance through reduced information asymmetries
✓ Enable <b>asset-based</b> finance
✓ Reduce <b>collateral</b> requirements
✓ Enable use of <b>moveable</b> collateral through digital tracking
✓ Promote <b>peer-to-peer</b> finance such as peer-to-peer finance
✓ Enables <b>trust</b> and <b>transparency</b>
✓ Promote <b>ethical</b> finance

Provide much needed ecosystem for Islamic finance based on risk -sharing and asset-based ethical finance



Mr. Fatih Kazan  
Acting Supervisor,  
World Bank  
Global Islamic Finance Development  
Centre

Mr. Fatih Kazan is heading the World Bank Global Islamic Finance Development Center in Istanbul as the acting supervisor. He provides expertise and technical assistance in the areas of financial sector development, banking, stress testing and risk management, capital markets, corporate governance and financial inclusion. He participates in domestic and global advisory programs and projects relating to the development of Islamic financial sectors. He provides training in seminars and workshops to banking and securities regulators and other stakeholders.

Prior to joining the World Bank, he was serving as the Deputy Head of Enforcement Department III in the Banking Regulation and Supervision Agency (BRSA) and was responsible for the activities of state-owned banks, branches of foreign deposit banks and Islamic banks in Turkey. He has over twelve years of experience in banking and led several projects in the BRSA on Basel banking principles, risk management, corporate governance, accounting and auditing, and resolution regimes.

He holds a bachelor's degree from Ankara University and an MBA from Darden Graduate School of Business at the University of Virginia.

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Islamic finance has been rapidly developing in the past decade, growing 10-12% annually. Islamic finance has the potential to develop financial industries inclusively, to cover all segments that are not covered by the conventional financial system. So, Islamic finance can make a difference. Islamic finance also enhances the stability of financial system and banking sector. We have observed that Islamic financial institutions were not affected too much after the financial crisis of 2008 thanks to their focus on real assets and the real economy. On the other hand, Islamic finance is at its initial stages and there are lots of issues to be concerned with. Some Islamic countries have underdeveloped financial systems. So, their financial capacity should be increased, governance framework should be enhanced.

In 11 countries, Islamic finance is becoming systematically important. These countries are Iran, Sudan, Brunei, Saudi Arabia, Kuwait, Qatar, Malaysia, United Arab Emirates, Bangladesh, Djibouti and Jordan. In these countries, Islamic finance institutions should be considered more for stability purposes and standardization of applications is required. World Bank and IMF, together, perform financial sector assessment programs (FSAP) in member countries. We prepared technical notes on Islamic finance when we were preparing FSAP reports for Pakistan and Turkey. The results of the recommendations from the program were mostly accepted by those countries. These efforts would ensure standardization in Islamic finance institutions.

World Bank sees Fintech as an instrument to create social good. Fintech can be used as a model for Islamic finance to use its real objectives, which means that it has to be a risk sharing model, not a risk transferring model.

Financial inclusion allows people to save for family needs, for business aims or for emergency needs. Access to financial services is of critical importance for reducing poverty and inequality. Globally, 1.7 billion adults remain unbanked, which means they have no account in any financial institutions. 2/3 of this unbanked population has mobile phones, which indicates that they are actually accessible.

Needless to say, digital technology alone is not enough to ensure financial inclusion. This requires a well-developed payment system, good physical infrastructure, appropriate regulations and consumer protection safeguards. Financial services also need to be tailored to the needs of disadvantaged groups such as women, poor people, MSMEs. When financial inclusion is considered, it is seen that the average rate of financial inclusion in developing countries is close to the developed countries, but some Muslim developing countries are well below this average.

Internet usage for banking transactions, paying bills, making shopping is low in Muslim countries, other than United Arab Emirates and Turkey. The average is below 30%. Debit card ownership is at a high level in Muslim countries. On the other hand, credit card ownership and mobile account ownership is extremely low. Usage of mobile phone or internet in access to financial accounts in Muslim countries is close to the rate in developed countries, around 50%.

Some people do not have any account in any financial institutions only because of religious concerns. This fact underlines the importance of the Islamic finance. World average of people who do not have any financial account is 6%. In some countries, including Turkey, Jordan, Tunisia, the rate is high. In Turkey, it is 19%. This also can be seen an opportunity for those countries. It means that there is a demand for Islamic financial products.

Technology has a constant impact on financial services. Fintech leverages exploration of big data, advances in artificial intelligence, distributed computing, cryptography and mobile access to internet. All these technological developments create similar opportunities for Islamic finance. Several initiatives are launched by both Muslim and non-Muslim countries, including UK, US, Singapore, Hong-Kong and Luxemburg, which are becoming focal points of Islamic finance activities.

There are some online platforms to ensure the easy access to financing. Borrowers can lend from different parts of the world. It is based on peer-to-peer model, where Islamic financial principles like murabaha, musharakah and mudarabah are used. Peer-to-peer lending platforms are based on risk-sharing concept. Islamic banks have profit and loss sharing accounts and the customer and bank share the profit together. In peer-to-peer platforms, banks have the responsibility of conducting the suitability analysis of the investors to Islamic principles and monitoring the performance. Islamic Fintech is developing and there are more than 100 Fintech companies in 24 member countries. Malaysia is becoming the largest Islamic Fintech community of the world.

"Narwi" is an example of non-profit innovative online growth funding platform. It allows investors to support very small enterprises and creates jobs in the MENA region, where the youth unemployment rate is the highest in the world. Narwi harnesses 8 million USD of "awqaf" investment and creates 15,000 jobs. There are other Islamic Fintech examples, including ALAMI, Investment Account Platform, Islamic Fintech Alliance and Islamic Fintech Hub.

***“ADFLMI: 31 years in the service of development finance ...”***



### Financing and Developing SMEs in Digital Era

Digitalization is at the centre of all works in all sectors. In Turkey, banking sector is the leader of all sectors in coping up with technological developments and driving force of digitalization in economy, in cooperation with big firms and SMEs. Participation banks do not see digitalization as an end to reach, but as a long-term innovative process. The banking sector should benefit from the advantages brought by digitalization. The access to products and services of banking sector is made easier by the technological developments. This improves financial inclusion in developing countries.

In order for SMEs to grow and develop in a sustainable way, it is of utmost importance that the financial participation should be spread out and that digitalization and financial technologies should be used effectively. Today, it is seen that relationship of SMEs with financial sector is still limited. The more the finance sector cares about SMEs and provides them services and mentorship in terms of their needs, the more SMEs and national economy will grow and develop.

Albaraka Türk has increased its activities for SMEs with the innovations it made in the field of digitalization as well as in its organizational structure as of 2017. With this aim, it develops special products and services in order to meet the needs of SMEs. While it has been expanding the range of its products and services for SMEs, it continues to work on the basic level as well within the scope of digitization.

By financing the letters of credit available for exports, Albaraka Turk offers the needed amount to exporting SMEs to be used. Consultancy service is provided with "Alo Foreign Trade Line" where SMEs can obtain information about foreign trade transactions and access to financing needs. It is seen that an urgent need of SMEs is consultancy. "SME Days" are organized in 7 cities outside Istanbul; to directly answer the questions of SMEs.

### New Generation SMEs : Start-ups

**As Albaraka Türk, we continue to carry out many innovative projects for entrepreneurs on digital platforms. For example; In 2017, we established Albaraka Garage, which is our start-up development and acceleration center, to support entrepreneurs.**



SMEs are allowed to carry out long-term foreign exchange transactions with the product named "VADI" (Forward Exchange Transactions) in order to protect them against currency risk. In order to help the customers to easily reach to international markets, a website is run. In this site, information about international markets is provided. Cash management and self-service systems are built. Albaraka has also serious efforts towards the financing needs of SMEs. With cooperation with other sectors, the products and services needed by SMEs are supplied for lower prices. The Bank also plans to meet the financial needs in the near future with ready credit limits and credit application via mobile phones.

Albaraka Türk continues to carry out many innovative projects for entrepreneurs on digital platforms. Cooperation with start-ups is an essential activity. The synergy between active structure of start-ups and experience of the banking sector would be efficient. For example, in 2017, Albaraka Garage, which is our start-up development and acceleration center, to support entrepreneurs, was established. Entrepreneurs from all over the country were very interested in this program. Around 400 start-ups got in connection with Garage and

9 were selected among them in the first stage and supported in their activities in the market. The second stage of Garage is recently launched. 550 start-ups applied, 11 of them are selected for support. The program in Albaraka Garage lasts for 12 months in total. During this period, 12-week small MBA education, mentoring, financial support, office support and consultancy for specific needs are provided. This is in accordance with the nature of participation banks. In addition to this, a program called "Keşfet" (Invent) is launched inside the institution to support the innovative ideas of employees. Innovation is designed as an internal characteristic of the institution.

All activities and processes within the bank are carried to the digital environment. The 'Insha' project, which has been put into service in order to provide digital banking services in Europe, is a banking application that totally serves on a digital platform without a branch. This project is the first step digitalization of Albaraka in foreign markets; and also, it is the first experience of this kind for Turkish banking sector. Insha is launched in Germany and it is planned to be used in 8 other countries in Europe. It is used for basic banking transactions, for now. The scope of the application will be expanded.



Mr. Hasan Altundağ  
Deputy General Manager,  
Albaraka Turk, Turkey

Hasan Altundağ graduated from Ankara University Department of Economics. He started his banking career in 1986 at Yapı ve Kredi Bank as an internal auditor at the Board of Auditors. Until 1999, he served as Auditor, Assistant Manager responsible for Operations and Assistant Field Manager respectively. Altundağ, who served as the Branch Manager at a participation bank between 1999 and 2004, joined Albaraka Türk Participation Bank family in March 2004. He served as a branch Manager at Albaraka Türk between 2004 and 2005, as Marketing Regional Manager between 2005 and 2011, as the Manager of the Transformation Administration Office between 2011 and 2013 and as the Manager of Strategy and Corporate Performance Department between 2013 and 2016. Mr. Altundağ is appointed as the Vice President in January 2017. He also serves as a member of board in Albaraka Kültür Sanat ve Yayıncılık A.Ş. and Financial Literacy and Inclusion Association (FODER).

### Mobility of SMEs with Fintech and Bank-supported Mobile Applications

SMEs have valuable place in markets; however they cannot get value-added financial services because of their small volumes. Fintech and bank-supported mobile applications can be used to improve the mobility of SMEs. Using technological developments banks will support SMEs under more transparent and safer conditions. Cost of subsequent transactions will be reduced.

Developing new products and delivering existing products to SMEs through mobile platforms is compatible with Islamic finance principles. SMEs should be able to access banking transactions via mobile technologies. With new technologies, expectations can be met rapidly. Microfinance and mobile financing can contribute to the development of SMEs. SMEs should be directed to alternative financing processes and supported for the financial inclusion.

In Islamic banking history, Islamic finance has served the retail and corporate segments. Support of new Fintech formations will make SMEs stronger. Mobility gives great features for SMEs: it improves the speed, security, compliance, customer satisfaction, transparency, accessibility and design.

Fintech provide many advantages to SMEs, which include the ability to create differences from rivals, rapid transition to technology, ability to offer simple and focused services/products, ability to give more importance to customer experience and cost advantage using technology. It is assumed that the client channels for SMEs will change in the near future and the majority of clients will use internet and mobile channels to reach to SMEs.

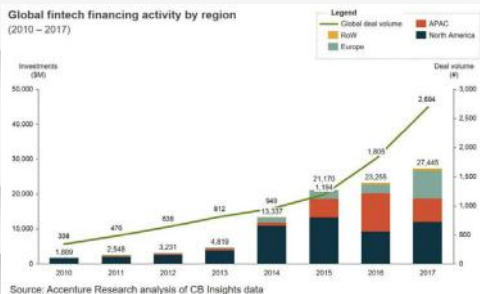
SME banking will be in the top 5 financial sector disrupted by Fintech over the next 3 years. SMEs can be mentored by adopting SMEs to mobility, determining mobility strategies to evaluate mobility steps, determining mobile applications and Fintech solutions compatible to Islamic Finance principles and making SMEs aware of security issues.



Mr. Mehmet Said GÜL  
Deputy General Manager  
Information Technology and  
Operation  
(Presented by Mr. Sinan Kadioğlu)

Mehmet Said Gül was born in Kahramanmaraş in 1973. He graduated from Hacettepe University Department of Computer Engineering in 1995. He started his banking career as software developer in Anadolu Finance in 1997. After serving as system analyst and software development leader, he continued as Software Development Manager in Türkiye Finans Participation Bank Inc. in 2006. He worked as IT Coordination Department Manager since 2009. After he took duty the charge of the foundation phase of the Ziraat Participation Bank in 2014, respectively worked as Consultant in Ziraat Bank and as Head of IT in Ziraat Participation Bank. He was appointed as the Group Head of the Information Technologies and Operational Processes in 2015. He has been serving as the Deputy General Manager of Information Technology and Operation at Ziraat Participation Bank since August 23, 2017.

#### WHY FINTECH?



www.adfimi.org

- Create **differences**
- **Speed** transition to technology
- Ability to offer **simple and focused** services / products
- Give more importance to **customer experience**
- **Cost** advantage

## Session 5

### Future of Blockchain and Equity Crowdfunding for SMEs

#### Moderator:

#### Mr. Mehmet Sabir Kiraz

Director of Blockchain Research Labs, The Scientific and Technological Research Council of Turkey (TUBITAK)

Mehmet Sabir Kiraz received his bachelor's from Mathematics Department at Middle East Technical University in 2000. He worked at IT departments of Pamukbank and Yapi Kredi Bank as software engineer between June 2000 and September 2002. In October 2002, he started his M.Sc. studies (with full scholarship) at International Max Planck Research Institute for Computer Science, Germany and completed in November 2003. He received his Ph.D. from Computer Science department at Eindhoven Technical University, the Netherlands in March 2008. He then worked at PHILIPS, Eindhoven and TOMTOM, Amsterdam as a test coordinator between 2008 and 2010. Since January 2010 he has been working at TUBITAK BILGEM Informatics and Information Security Research Center. He has been promoted to associate professor (Cryptography-Algebra and Number Theory) by Inter-University Council of Turkey in March 2017. He has been working at TUBITAK BILGEM, Turkey and director of Blockchain Research Lab



Mr. Mehmet Sabir Kiraz



Mr. Abdul Fattah Bin Mohamed Yatim  
Chairman of Malaysia's National  
Standards Committee  
on Blockchain and Distributed Ledger  
Technologies

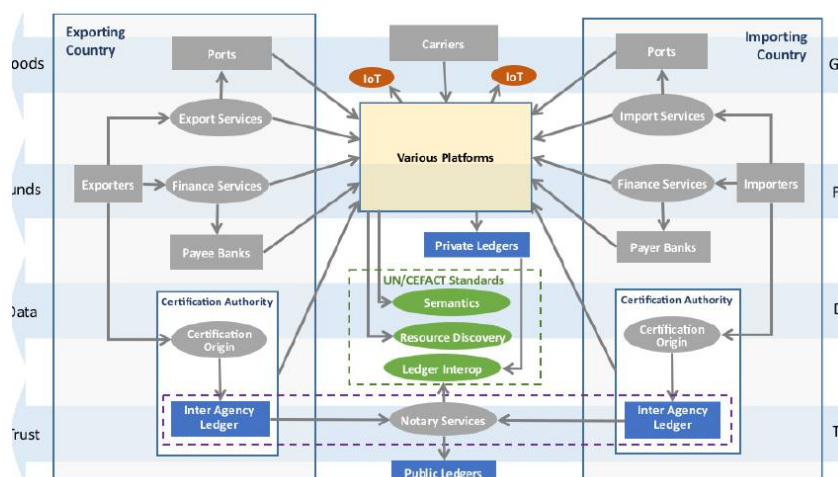
#### Blockchain – Disrupting the Status Quo

Malaysia's Standards Committee on Blockchain and Distributed Ledger Technologies is a committee in the local level, following the efforts of ISO to determine standards in this area. Standards Australia proposed a paper to ISO in 2016 to form a new standards committee on Blockchain and Distributed Ledger Technologies. After consulting within ISO committee, the proposal was shared with other ISO member countries for their feedback. Some member countries participated in the debate process with their comments. Finally, ISO formed a new committee on this issue and given the code ISO/TC 307. In Malaysia, the committee is formed under the same name in February 2017 and given the code TC/G/15.

The committee is aware of the fact that the Blockchain technology is still evolving. The committee also recognised that standards discussions need to commence early as Blockchain technology as a foundational technology will be applied across organisations as well as across borders and interoperability of Blockchains is a fundamental requirement. So, developing standards while the technology is evolving is a challenging issue. Members of the local committee in Malaysia are government departments and agencies, regulators (Central Bank etc.), professionals, industry and academia and R&D. At the international level, as of September 2018, 39 countries are

Abdul Fattah Mohamed Yatim is the Chairman of Malaysia's National Standards Committee on Blockchain and Distributed Ledger Technologies under the Department of Standards Malaysia, a Malaysian Government agency. The Committee is involved in standards development on Blockchain and Distributed Ledger Technologies at the ISO level with participation from over 40 countries. Mr Fattah has 40 years of work experience, starting off as an electrical engineer with the then National Electricity Board, Malaysia from 1978-1983 and then switched to a career in ICT. He worked in Exxon, from 1984-1995 where his last position was the Applications Manager. He also had foreign assignments in Houston, Texas, USA and London, UK in 1987-1989. Since 1996 he has been a consultant to both the public and private sectors on ICT Standards, ICT Security, Project Management, ICT Strategic Plans, Business Process Reengineering, Risk Management, Business Continuity Management and Blockchain.

He is a Professional Member of the Organisation of Islamic Cooperation Computer Emergency Response Team (OIC-CERT). He was also a Council Member of The Institution of Engineers Malaysia.





## Session 5 Contd.

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participating in ISO Standards Committee on the issue, and 11 countries are observing the process. It is noted that currently the number of participating Muslim countries is very low and this is disproportionate to the number of Muslim countries in the world. Muslim countries should express serious interest in Blockchain and join the ISO/TC 307 standards committee.

European Commission, International Federation of Surveyors, Institute of Electrical and Electronics Engineers, International Telecommunication Union, Society for Worldwide Interbank Financial Telecommunication (SWIFT) and United Nations Economic Commission for Europe are external organizations in direct liaison with ISO/TC 307 Standards Committee. Other organizations like these which want to join the committee at the ISO/TC 307 level, will have to apply to ISO. The ISO/TC 307 member countries will examine the application and cast their vote to approve or disapprove the application for membership.

G20 comprises largest 20 economies. They generally cover 75% of world trade, population and GDP. The G20 countries think has proposed in a paper that G20 countries must lead in forging effective technology-regulatory synergies to Blockchain as a matter of priority. The paper mentions that Blockchain empowers individuals around the globe to transact economically on a peer-to-peer basis, enabling them to quickly and cheaply exchange value across borders without the need for a trusted intermediary such as a bank, broker, or exchange. Blockchain also holds the key to integrating other emerging technologies of the Fourth Industrial Revolution. The European Union had already commenced efforts to study the feasibility of developing Blockchain infrastructure in member countries.

In a traditional supply chain, when a problem occurs, it takes time and sometimes weeks to trace through the supply chain to determine the source of the problem, say contaminated vegetables that has caused an epidemic. Time, energy and resources were wasted and all suppliers of the same vegetable incur losses during the time the sale of such vegetables is frozen by regulators while the source of the contaminated vegetables is being investigated. When Blockchain is used in supply chain, the problem is determined in a very short period of time, in fact in seconds in one of the pilots, and costs are reduced and other suppliers will not be affected.

As the Halal Supply Chain in country and worldwide is of utmost importance to Muslims, hence Muslim countries and communities should explore and implement Blockchain technology for the Halal Supply Chain. It is only natural that this should be within the leadership and domain of Muslims and Muslim countries.

The World Economic Forum document titled 'Blockchain Beyond the Hype - A Practical Framework for Business Leaders' provides a decision tree on how to decide on Blockchain. There are 11 steps in that decision tree and the very first question asked is "are you trying to remove intermediaries or brokers?" This is an unusual question but it strikes at the very center of the issue of where Blockchain should be used. If the answer is 'no', the decision tree reaches to the decision that Blockchain

should not be used. This question forces decision makers to look deeply in their current processes, challenge fundamental business assumptions and identify those parts of the work typically identified as intermediaries, whether internal or external that can be eliminated.

A case study carried by IBM and Maersk indicated that a particular item moving from East Africa to Europe required 30 people and organizations, more than 200 different interactions and communications among them and costs associated with these trade documentation processing and administration are estimated to be up to one-fifth of the actual physical transportation costs. Applying a Blockchain reduced costs.

The correct perspective of Trust is important when considering to implement Blockchain. It would be inaccurate to label Blockchain as a tool for a disintermediation of trust. In reality they only enable re-intermediation of trust. The Blockchain challenges the role of existing trust players and reassigns some of their responsibilities, sometimes weakening their authority. The Blockchain does not eliminate trust. It shifts it. It moves it around. Trust is always needed. What changes with the Blockchain is how trust is delivered and how it is earned. Whoever earns the trust earns the relationship and that includes trusting a Blockchain. The Blockchain decentralizes trust and makes way to multiple, singularly harmless, but collectively powerful entities that authenticate it. The Blockchain disrupts existing economics of trust because the costs of delivering that trusts are now distributed. Whereas central trust distanced us, distributed trust brings us together.

Blockchain is more than a technology solution. It certainly has great potential in a wide cross section of government and society. However the successful implementation of Blockchain use requires stakeholders to have the right understanding about what Blockchain enables, the right mindset about trust re-intermediation and consensus, to identify and architect the process changes that are enabled by Blockchain, the well planned change management program to effect and sequence the changes, the synergistic and timely coordination of all parties including the required regulatory amendments and the strong (political) will to push matters through.

United Nations also have entities and projects on Blockchains. UN Centre for Trade Facilitation and Electronic Business (UN/CEFACT) aims trade facilitation to help make trade across borders (imports and exports) faster, and cheaper and more predictable, whilst ensuring its safety and security. This is related not only to the physical movement of goods, but to the information flows. UN/CEFACT has initiated a white paper on Blockchain for world trade facilitation. Countries must actively participate in this planning and get involved early, to be among the leaders moving in this direction. Ignoring this initiative may be a disadvantage to the country in the long run. This brings the question to mind that if IsDB or ADFIMI should look into similar coordinated opportunities of Blockchain implementation, specifically for member nations and between member nations.



### Blockchain: Unlocking Peer-to-Peer Finance

Banking sector is a constantly changing environment. Banks have to cope up with several developments, including blockchain, augmented reality, virtual reality, IoT, big data etc. This can create a panic in banks, to find where to start to cope up with these changes. SettleMint is a company which produced 20 applications about the interaction of banking with blockchain technologies, for helping banks with these difficulties.

Challenges of financing of SMEs are not sourcing from the banks, but from the SMEs. Bank loans are just one source of finance; SMEs have a number of other sources: friends, family, venture capitalists, angel investors etc. It is important for banks to look at the SME. There are a number of pro's con's of different sources of finance: debt, equity, crowdfunding and grants. Crowdfunding has been growing rapidly since 2012. It doubles in volume globally every year. The most common of form is peer-to-peer lending.

Popularity of crowdfunding for SMEs comes from the marketing value it brings about. This is found as a result of a survey among 500 SMEs. According to the answers given in the survey, 82% of participants, who are representatives of SMEs, indicated that SMEs managed to build a stronger profile with crowdfunding. Bank lending does not create such a benefit. Banks should learn from this and think about how they can help SMEs to build a profile. Banks' offering can be re-designed, considering this need of SMEs.

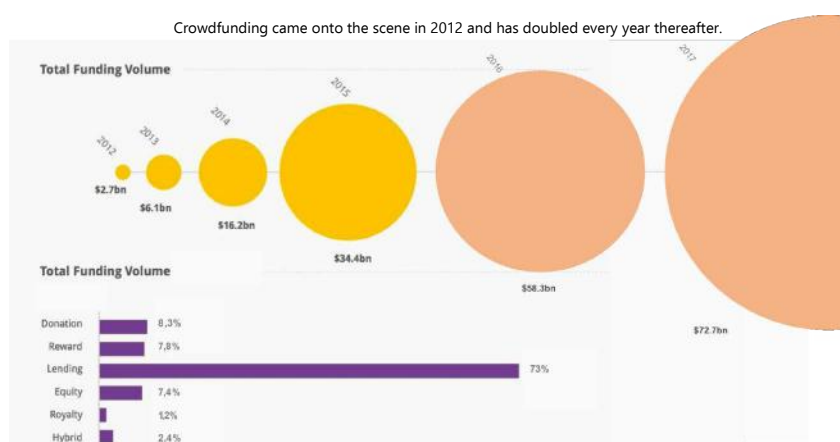
In 2017, a new form of crowdfunding emerged: Initial Coin Offering (ICO). The number and volume of ICO expanded rapidly in a very short period of time and this is expected to continue. Tokens seem to replace virtual capital (VC). In the last quarter of 2017, the financing raised through ICO was near six times of the financing raised by traditional VC financing. Benefits of technology are expressed as reducing the cost of traditional capital markets, through removing intermediaries and brokerage firms and as increasing trust. Bolero Crowdfunding was the first publicly available blockchain platform application by a European Bank served for crowdlending.

Invoice factoring is also growing globally. It has doubled over the past 5 years. Making this available on blockchain system had several benefits and increased efficiency. Factoring as an industry will be an even large industry globally. China, Hong Kong, Singapore and Korea had double-digit growth in 2017. The systems works as follows: Sellers issue invoices, and invoice is tokenized and transferred between different markets, investors make purchases. What blockchain technology fit into that story is identifying the sellers of invoices. This detailed information of the sellers is reachable by other parties, which increases trust. Additionally, the investors and sellers can communicate in peer-to-peer platforms, where sellers put their invoices and investors search for invoices to buy.



Mr. Matthew Van Niekerk,  
Co-Founder & CEO, SettleMint N.V.

Matthew Van Niekerk, an Economist and MBA by education, has had an international career with 7 years in Tokyo in the FX business and also launched several online retailing companies. In 2006, Matthew made Belgium his home and worked at KBC as an internal consultant to senior management, as COO for the Belgian Consumer Finance business and finally as the Head of Platform Innovation at KBC Securities Bolero where he was responsible for the online retail brokerage platform 'Bolero' and the equity crowdfunding platform 'Bolero Crowdfunding'. Under his guidance, Bolero Crowdfunding was the first bank/broker in Europe to launch a publicly available blockchain application in Europe. In August 2016, Matthew set up his own company, SettleMint, offering a set of modular middleware solutions that take the complexity out of the blockchain journey for clients



### Decentralized Credit Scoring and Microcredit Protocol

Bülent Tekmen is a Serial Entrepreneur. His latest endeavor is Colendi.com which he founded and serves as CEO. His prior Banking Regulation and Supervision Agency Licensed e-money company ininal.com has reached more than 2 Million accounts, and 1 Million active digital wallet users monthly, and still growing fast. Cheque-Dejeuner Group acquired in May 2016 a majority stake at ininal and signed for one of the biggest deals in the Turkish Startup ecosystem. He is also an active Business Angel and invests in early stage start-ups. He has been elected as the "Internet Entrepreneur of the Year" in Turkey and EY Entrepreneur Of The Year - Accelerating Entrepreneurs program in Monte Carlo. Ininal won several awards: "Best FinTech Start-up". The Wired UK magazine selected ininal in 2013 and 2014 as the hottest 100 companies in Europe. He holds B.S. Industrial Engineering degree and joined Harvard Business School later.

Colendi is a team, which works in the Fintech area for the last 10 years. It built several applications and some successful start-ups. The latest project that Colendi funded was a prepared card-based payment solution for unbanked and under-banked people. Financial inclusion is a big problem and there is not enough tools for lending space to reach unbanked and under-banked people who do not have any financial data. Colendi is a credit scoring system built on blockchain to make computation on digital users to provide them digital financial score on blockchain and to let them access to finance.

In 2014, 53% of the adult population was unbanked or under-banked, which means that they did not have access to financial services provided by financial institutions and banks. The half of the population is unbanked, and the other half is not creditworthy. Almost 75% of entire world population is not credible in the eyes of financial population. Although those people do not have any access to finance through financial institutions, they still accessing to excess finance via traditional and unrecorded lending methods, like peer-to-peer lending, through friends etc.

The problems with current credit scoring methods are as follows:

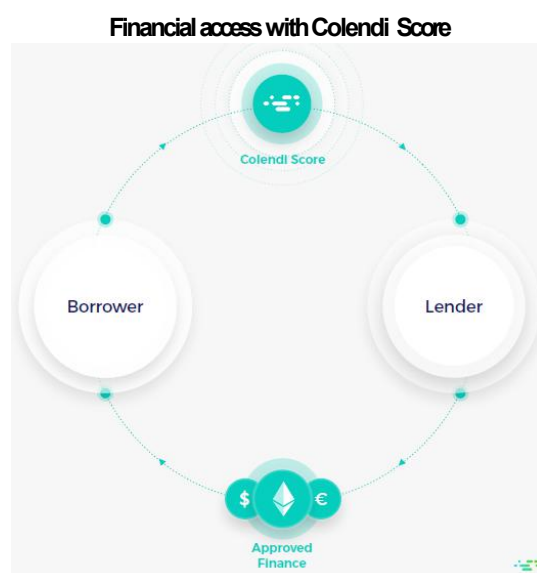
- limited access: results in limited financial inclusion,
- the assessment is based on financial data: if you do not have a bank account or not taken loan before, you are invisible
- no transparency: you do not know how your score is computed
- central and immobile

The 2014 data shows that financial inclusion problem is heavy in Southern Eastern Asia, Africa, Latin America and Eastern Europe. The problem can be solved through blockchain technologies. With this aim, Colendi analyzes digital data: smart phone data, social media data etc. which is collected and stored. Creating the data requires cooperation of several partners: Data partners, mass data owning companies, integrators, merchants and applications. Using this data, Colendi provide a digital credit score to the user, which can be used by any applications and third parties with user's consent. The user gets an identity and decides on the applications. Via this score, the user can access to financing, which was not available before.

Tremendous data, other than financial history, can be used to evaluate creditworthiness of people. Banks are only looking for the financial history, but people have spending habits, social media,



Mr. Bülent Tekmen  
CEO, Colendi  
(Presented by Mr. Zahid Sağıroğlu)



smart phone data that tell their characteristics. People can use their data via all third party applications provided. These include making installment shopping with integrated merchants, accessing to microfinance, getting peer-to-peer finance. If the borrower applied for financing with this financial score and the lender accepts, the transfer of money is realized via crypto-currencies.

Colendi is providing payment applications, integrations and other services to boost the level of penetration. The firm already partnered a lot of companies, including retailers, payment providers, in multiple countries from Philippines to Columbia. The expansion in Turkey will start in 2019. The project is at the end of the production phase. There are multiple segments of this. Colendi works with different organizations and other applications from all over the world, from Germany to US, to create a combined ecosystem.

Trust building is a challenge in a trustless computation environment. A credit-scoring algorithm is being built to provide a trusty mechanism. In the next couple of years, a global expansion will be on agenda. The team is composed of skillful entrepreneurs and a huge data science team. The number will increase in the near future.

## Session 6

# Future of Cryptocurrencies

### Moderator:

#### Prof. Dr. Ahmet Faruk Aysan

Dean Faculty of Business and Management Sciences, Istanbul Şehir University, Turkey

Ahmet Faruk Aysan received his B.A. in economics from the Bogaziçi University in 1999 and both his M.A. (2001) and his Ph.D. (2005) in economics from the University of Maryland College Park. He became an Associate Professor in 2008. Dr. Aysan, who served as a consultant at various institutions such as the World Bank, the Central Bank of the Republic of Turkey and Oxford Analytica, has been lecturing at the Department of Economics at Bogaziçi University since 2005. Before joining the Istanbul Şehir University as a professor, Dr. Aysan has been the Board Member and Monetary Policy Committee Member of the Central Bank of Republic of Turkey. He has also served as the Deputy Director of the Center for Economics and Econometrics at Bogaziçi University, a member of the G-20 Financial Safety Net Experts Group, a member of the Advisory Board of Social Sciences and Humanities Research Group of TÜBİTAK, and a National Expert in 'Socio-Economic Sciences and Humanities' under the Seventh Framework Programme of the European Union. Dr. Aysan's fields of specialization are international finance, macroeconomics, political economy, banking and finance, econometrics, governance and development and he is a member of editorial and advisory boards of several international journals. Dr. Aysan, who has many articles published in academic journals, was awarded with the Bogaziçi University Foundation Publication Awards; Bogaziçi University Foundation Academic Promotion Awards and the Ibn Khaldun Prize for the best paper on the North African and Middle Eastern Country Studies granted by Middle East Economic Association. Dr. Aysan has also served at the advisory board of the Contemporary Turkish Studies at London School of Economics and Political Sciences (LSE) European Institute. Dr. Aysan is currently the Dean of the School of Management And Administrative Sciences at the Istanbul Şehir University.



Prof. Dr. Ahmet Faruk Aysan



Dr. Solikin M. Juhro,  
Executive Director,  
Head of Bank Indonesia Institute,  
Bank of Indonesia, Jakarta, Indonesia

## The Future of Cryptocurrency: Central Bank Policy Perspectives

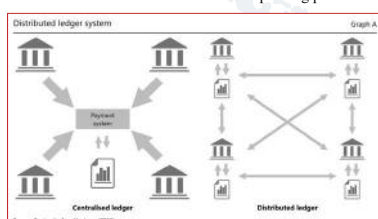
A credible currency has to carry the function of money. Cryptocurrencies should also have this function. Additionally, cryptocurrencies have the advantage of being a technological advancement. They reduce cost and increase the efficiency. On the other hand, there is potential volatility of cryptocurrencies, because there is no credible institutional back-up for them. The source of that risk should be concerned by the policy authorities.

### DLT Marks the Future of Money & Economy

*The future of money and economy will be marked by innovation, new technologies and increased competition across borders ...*

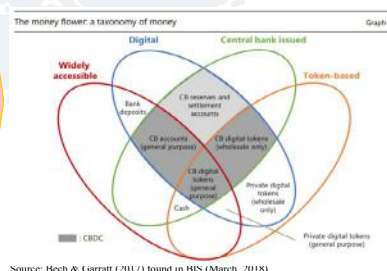
#### Distributed ledger technology (DLT) potential leap

- DLT refers to the protocols and supporting infrastructure that allow computers in different locations to propose & validate transactions and update records in a synchronized way across a network.
- DLT offered a solution for the "double spending problem".



#### Cryptocurrencies: A new form of 'currency' using DLT

What constitutes good money, and where do cryptocurrencies fit in?



Dr. Solikin M. Juhro is the Executive Director and Head of Bank Indonesia Institute of Bank Indonesia. Previously he served as Director of the Economic and Monetary Policy Department, where he is also a member of the SEACEN Advisory Group for Macroeconomic and Monetary Policy Management (MMPM) representing Bank Indonesia and was active in several Pacific Economic Outlook (PEO) Structural Specialist research projects in Osaka, Japan. He is also an active postgraduate lecturer at the University of Indonesia. His current research focuses on macroeconomic transformation, central bank policy, and frontier issues in economic development, some of which have been published in international outlets. He completed his Bachelor in Economics from the University of Airlangga, the Master's program in Applied Economics from the University of Michigan, Ann Arbor-USA, the Master's program in Economics from the University of Maryland, College Park-USA, as well as the Doctoral program in Economics (cum Laude) from the University of Indonesia.

## Session 6 Contd.

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How Central Banks will respond to this advancement is an essential subject. Currently, cryptocurrencies do not have significant implications for central bank operations because they are still not used widely. But in the future, when they are widely used, they will have impact on the financial system and on central bank operations. For this reason, central banks should pay attention on this subject pre-emptively. They should make a balance between benefiting from the technology on the one hand, and preserving stability, on the other. The task of preserving stability includes managing the risk and managing the security arising from exponential development of technology.

Distributed ledger technology (DLT) marks the future of money and economy. DLT refers to the protocols and supporting infrastructure that allow computers in different locations to propose and validate transactions and update records in synchronized way across a network. This is the difference between centralized (conventional) ledger and distributed ledger. In centralized ledger system, the money has to be collected and distributed again. In distributed system, one can directly reach to it. So, DLT offers a solution for the “double spending problem” and reduces costs.

Cryptocurrencies are currencies using DLT. The work cryptocurrency means both the money, and the technology that is used for it. In the future, both privately-issued cryptocurrencies and central-bank issues cryptocurrencies may co-exist. If so, privately-issued cryptocurrencies can circulate concurrently with legal tender in the form of a central bank-issued cryptocurrency. A central bank-issued cryptocurrency will most likely have to compete with private-sector alternatives. How to deal with credible money and how to deal with opportunity that will rise with technology will be a concern for central banks.

There are various risks associated with cryptocurrencies. There is no regulator of cryptocurrencies; they are not issued by authorities. However, this may can in the near future. They are not subject to any regulations regarding their implementation, including regulations of cryptocurrency algorithm management. Additionally, they do not follow best practice or international standard to ensure the implementation security and efficiency. Lastly, there is no legal certainty.

They are bought and sold in peer-to-peer environment. Transactions are done without formal intermediaries. There is no legal guarantee of settlement certainty and there is no legal ownership status of currencies. The identity and transactions are hidden, so the user does not know who issued the asset and who will be held responsible. There is no central authority. Issuance and price are determined by the market through supply-demand mechanism. There is no consumer protection. All these facts raise concern about cryptocurrencies.

Despite its risks, cryptocurrency market develops rapidly. The Bitcoin accelerated this development; and it constitutes more than 50% of market capitalisation. There are hundreds of cryptocurrencies, but some of them are popularly traded. The market capitalization of cryptocurrencies illustrates both the opportunity and the risks. Volatility is seen to be high. Market capitalization and trading volume have dipped substantially since its peak, and seems to be on a downtrend toward levels one year ago.

Implicit enforcement due to the emergence of regulatory concerns and increasing literacy of these technologies is one reason that encourages investors to invest in cryptocurrencies. According to a survey carried on US universities, 18% of student own cryptocurrency and 9% of student have taken a cryptocurrency course. 42% of the top 50 universities around the world offer at least one class on blockchain or cryptocurrency, and 22% offer more than one (Survey by Coinbase). People want to understand the mechanism.

Regulations about cryptocurrencies differ among countries and depend on the Developments of financial technology within a specific country. The idea about cryptocurrencies differs from country to country but no government has yet backed any cryptocurrencies. Japan, China and Korea are among the countries which are against cryptocurrencies. But they spend effort to have control and to set rules of the game. Japan is trying to create a regulation template for the other countries. However, increase in regulations would probably increase the popularity of cryptocurrencies.

Bank Indonesia policy focuses on the balance between nurturing innovation and preserving stability and security. The Bank's policy perspective includes encouraging innovation in financial sector and boosting economic growth including digital economy on one hand, and ensuring monetary stability and financial system stability, preserving the safety, smooth and efficient payment system, monitoring shadow banking/underground economy and guaranteeing risk mitigation and customer protection.

Regulations of Bank Indonesia states that currency shall be money issued by Indonesia and fulfilled with Rupiah. It is written in regulations that payment system service providers and Fintech providers are prohibited to conduct payment transaction process with virtual/cryptocurrency. These regulations are necessary, but not sufficient, to cope up with the new era of digital challenges. At a broader perspective, to reap the maximum benefits of digital economy, Bank Indonesia is strengthening payment infrastructure and developing a framework of payment system for digital economy and finance to support financial inclusion, particularly for SMEs, and national economy. Goals of Bank Indonesia include developing national payment gateway (NPG), accelerating electrification in the economy, and developing Fintech in the area of payment system.



### The Future of Cryptocurrency

The total amount of cryptocurrencies is below 1% of total assets in the world economy. This amount seems very low, but the Blockchain technology behind the cryptocurrencies will shape the future; including money and other technological advancement. This technology is also a threat to the existing system.

Blockchain technology started at the end of 2008 and the beginning of 2009. The nickname Satoshi Nakamoto issued a manifest, including some couple of papers. The person or persons, or institutions behind this nickname is not revealed yet. The manifest had a technical and non-technical content, claiming that money payment can be done in a peer-to-peer basis via internet, encrypting, and blockchain that will end any need of a bank, central bank or a notary. No regulatory authorities would be needed in such a transaction.

In centralized system, used by banks, all registrations are collected in one centre. This seems as an easy way; but it has deficiencies about security and safety. If this one centre is captured, the whole system is affected. Decentralized system has one branch in every units; a fault in one centre should not affect all the other centres, so the damage would be limited. Distributed system used by blockchain technology, on the other hand, contains no centre. In this system, everyone is a centre and everyone is equal. Everyone is an authority in the ledger.

The second characteristic of blockchain is encrypting. This is an algorithm that cannot be reversed. Blockchain becomes safety thanks to this algorithm. Blockchain technology is a technology that one signature is linked to the all other signatures before it. A signature ensures that the content of a card we sign is not modifiable. If you want to change one signature, you must change the previous change, which is not possible.

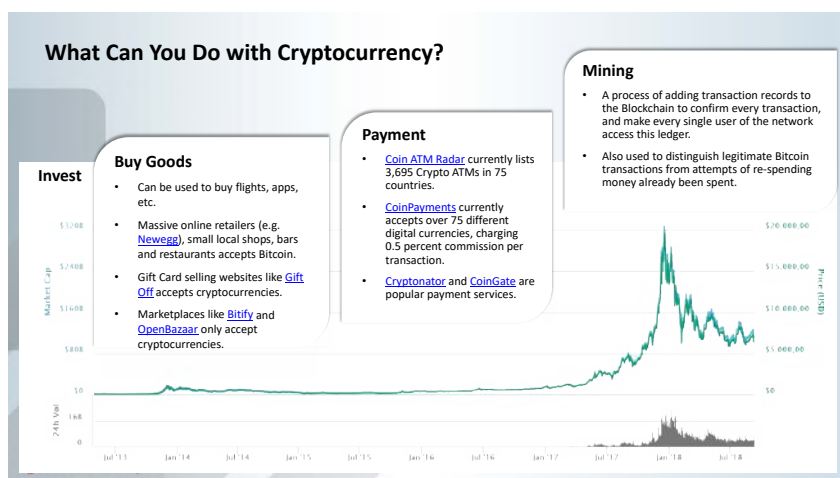
Blockchain works in the following mechanism: a transaction is requested, a block that represents the transaction is created, the block is sent to every node in the network, nodes validate the transaction and receive a reward for the proof of the work, the block is added to the existing blockchain and the transaction is completed.

Cryptocurrencies are produced with this blockchain and other technologies. However, popular cryptocurrencies including Bitcoin are produced by blockchain technologies. Cryptocurrencies use an internet protocol and they are safe. However, a currency must have three characteristics to be money: they must be available for spending, saving and investment purposes. Cryptocurrencies are not determined by a central bank and that is why authorities tend to name them as commodities, not as money.



Mr. Osman Tanaçan,  
CEO, Ziraat Technology, Turkey

Osman Tanaçan graduated from the Department of Statistics of the Middle East Technical University Turkey in 1989. He has completed his master's degree in Marketing Communication from Institute of Social Sciences at Istanbul Bilgi University. After serving as the Service Manager at Retail Banking in Pamukbank, Assistant General Manager at Bileşim A.Ş. and Head of Department at Akbank Payment Systems, he was appointed as the President of Payment Systems Department of Ziraat Bank in January 2012. Since June 2015, he has served as the General Manager of Ziraat Teknoloji A.Ş.



One can purchase goods like flights, applications, goods of some massive online retailers and marketplaces using cryptocurrencies; make payments and do mining, in order to add transaction record, confirm them and produce new cryptocurrencies. Some ATMs accept cryptocurrencies from conventional cards.

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Advantages of cryptocurrencies are the following ones: it is an open and transparent system, easy to set up and use, there is no inflation, the transaction fees are low and irreversible, and there is no authority. The main disadvantage is strong volatility. The system is new, not registered. It lacks a relevant theoretical background and institutional backup. Coping up with these issues is hard for those who are used to conventional system.

The number of cryptocurrencies has increased recently. At first, the origin countries of the cryptocurrencies were not known. After 2016, the number of cryptocurrencies from Europe, Asia and Australia increased. The increase will continue. On the other hand, there are obstacles against these currencies. One of the obstacles is financial institutions. The chains would be ungovernable as they grow too fast. Mining requires more and more energy, which increases costs.

The optimistic view about cryptocurrencies focuses on the expectations that this will be a very large and powerful market, gradually settle down in the financial system and the number of countries accepting them as a valid currency will increase.

Japan, Russia, Sweden have some efforts for controlling them. It is certain that this market will grow in the short-run. In the long-run, financial institutions against cryptocurrencies will change their attitude. IMF, Goldman-Sachs etc. have positive attitude about these currencies. Some mortgage and retirement funds are evaluating the option to invest their money legally to these currencies. If this happens, the attitude towards cryptocurrencies would change drastically.

The pessimistic view about cryptocurrencies stress volatility of cryptocurrencies. The currencies had several harsh declines, which shakes the confidence. Some instances of hack have happened and significant losses are registered. Also, digital currencies are outlawed in China, Bangladesh, Bolivia, Ecuador, Kyrgyzstan and Vietnam as of November 2017. Some experts define this system as a black hole, or a balloon. In short, there are supporters and opponents of cryptocurrencies.

## Blockchain Technology in Cryptocurrency Portals

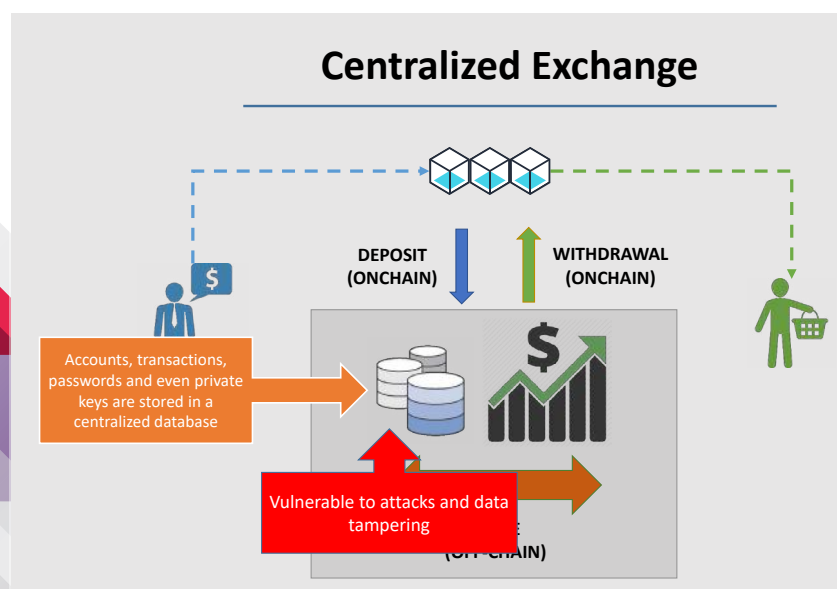
Blockchain is a distributed P2P (Peer to Peer) ledger technology to process transactions in immutable blocks of data using cryptography. It is distributed and decentralized network that processes, verifies and maintains (multiple copies of) its own data; autonomously. It works autonomously. It is actually a very specific architecture used for digital asset storage, ownership and transfer.

For blockchain developers, cryptocurrencies are very early stages of blockchain utilisation. The future of blockchain technology utilizing that specific technology to develop decentralized autonomous organization. This is tokenizing businesses and industries. The final aim is distributed autonomous society.

Cryptocurrency allows anyone to transfer a unique piece of digital property to another internet user and guarantee this to be safe and secure. Everyone knows that the transfer has taken place, and nobody can challenge the legitimacy of the transfer. These are underlying principles of cryptocurrencies. The role of blockchain technology in cryptocurrency portals of exchange is not so much. The portals used to trait the cryptocurrencies do not use



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Founder/CEO,  
SysCode Sdn Bhd, Malaysia



Reza started programming at the age of 12. Since then he has had over 20 years of professional software development experience. He holds a Comp. Sci. Degree from McMaster University, Canada and is a specialist in multi tenanted cloud application development and blockchain technology. He started his career in late 1990 developing web applications for ERP and HR systems. He was then recruited as Regional software Development Manager for MYOB Asia where he worked on the development of numerous financial accounting and payroll product releases. In 2011, he founded SysCode as a Research and development company to develop his proprietary cloud accounting and financial engine. Reza is currently heavily researching into real-world blockchain technology applications via the company's Kryptosys Blockchain Development Framework.

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blockchain technology.

Blockchains are highly secure; but they are not very fast. Security and speed do go in parallel. Blockchain requires a consensus cycle, called as mining. Different blockchain architectures require different periods of time for consensus cycles: Bitcoin, 10 minutes; Ethereum, 15 seconds and NEM, 1 minute. This is the time required for the transaction to be committed to the chain. Currency Exchanges need to be able to process transactions fast because people need to money in real time. Currency exchange is done for profit and as the currency moves up and down, the users demand fast transactions. Transactions are basically centralized, not done on the blockchain with this aim. However, when the aim of fast transactions is achieved, security is weakened.

In a traditional centralized exchange, one has two types of transactions, when depositing and when during withdrawal. The accounts, transactions, passwords and even private keys are stored in a centralized database, which makes users vulnerable to attacks and data tampering. Cryptocurrency exchange hacks are made possible by this centralization of information. Hacking is done on the database architecture, not on blockchain architecture. The idea of blockchain is not secure is faulty, so. The transactions become unsafe when they are done on databases, for the sake of speed.

Decentralized exchange is developed for this aim. These exchanges are fully on chain. Through smart contracts of intermediary tokens. User retains full control of their accounts. One does not have to put the money on a database architecture. This exchange does not require a centralized transaction server. As a result, no tampering or hacking happens. However, high security brings slowness. Trades have to go through a consensus cycle especially for cross blockchain transactions. There is low liquidity and it is more difficult to use the system. The system is not beneficial to make profit on exchange fluctuations, because it takes near 10 minutes to complete this process.

Purpose-built architectures are utilized for exchanges and implementing blockchains in businesses and industries. These architectures meet the needs of speed and security. Future in cryptocurrency exchange lies in utilizing these architectures. In this architecture, an exchange system takes place as a trading platform, purposely built for making profit. Also, a blockchain takes place, which is a digital asset storage built for security. Developers are developing new types of distributed ledger technologies for micro transactions. They essentially use less heavy consensus algorithms, so they are faster.

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## Session 7

# Creating an Enabling Environment and Global Approach to Legislative and Facilitative Aspects of SME Development

### Moderator:

Mr. Quazi Shairul Hassan

Managing Director SABINCO, Bangladesh

A management professional with four decades hands on working experience, with renowned multi-nationals and leading local corporate. (American Express Bank, Eastern Bank Limited, One Bank Limited & SABINCO) Working experience comprises of twenty six years in the Banking and financial services industry, fifteen years in the fast moving consumer goods (FMCG) industry. Demonstrated strengths are in the areas of setting up business with 'world class operations capability', marketing, customer relations, relationship management, strategic planning, human resources management, etc. Additionally, key strengths are in the areas of negotiation, communication, teambuilding, leadership, project management, while operating within budgets and consistently delivering/ surpassing on financial results.

Acquired "world class" management skills and competencies and have successfully established a track record of progressive job responsibilities, covering a wide activity spectrum.

He has an MBA (IBA, Dhaka University) and a Post Graduate Diploma in Management.



Mr. Quazi Shairul Hassan

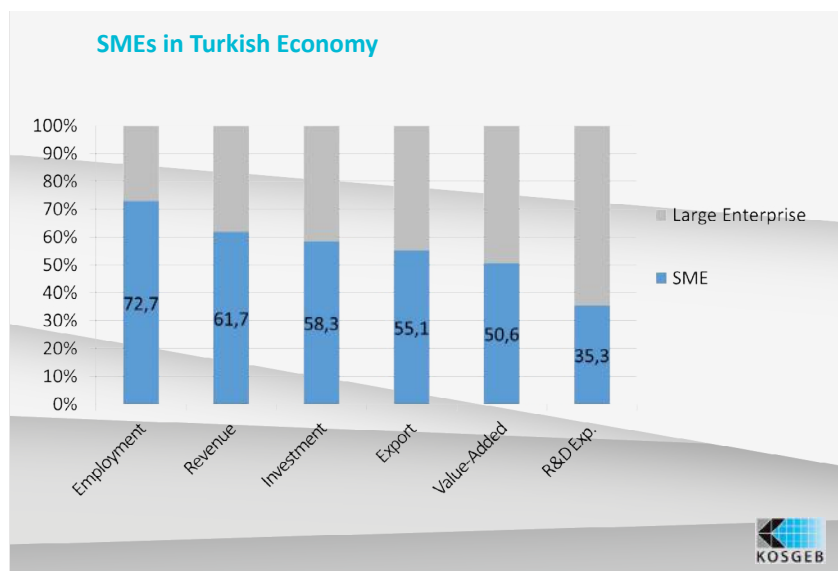
## SME Finance & Development in the Age of Digitalization

KOSGEB (Small and Medium Industry Development Organization) was established in Turkey in 1990. Its objectives are increasing the share and efficiency of SMEs in the economy, increasing the competitiveness of SMEs and increasing the integration in the industry in accordance with economic developments. According to the latest arrangements of the state structure in Turkey, the subjects of support by KOSGEB are determined by the president of Turkey.

The organization of KOSGEB consists of the general assembly, executive committee and presidency. The general assembly is an advisory body, to put the framework of the activities. The activities of the organization are based on three legs: government, academia and NGOs. Head of the executive committee is the Minister of Science and Technology. Members are from government, business world and academia. Executive committee is the main decision body of KOSGEB.



Mr. Salih Tuna Şahin  
Deputy President,  
(KOSGEB), Turkey



Salih Tuna Şahin graduated from TED Ankara College in 1990 and from METU Metallurgical Engineering Department in 1995. After working in TSE between 1995 and 1999, and as adviser to the Minister of Industry and Trade in 1999, he has been worked in KOSGEB since August 2000. Since January 2018, he is vice president of KOSGEB. Between 2007 and 2015 he was vice chairman of "Credit Guarantee Fund". He worked as a board member of "Technology Development Foundation of Turkey" between 2012 and 2016. During the years 2014-2016, he was vice president of the Business Council of "Conference on Cooperation and Confidence Building Measures in Asia, and between 2016 and 2017 he was independent board member of KOBİ Inc. He also worked as a member of MEKSA Foundation and TÜBİTAK-MAM Advisory Board. He was lead reviewer at OECD Eurasia Competitiveness Program. Mr. Şahin currently serves as chairman of the Board of Directors of Istanbul Venture Capital Initiative, board member of Turkey Research and Business World, chairman of Technical Committee of TSE Management Systems.

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There are offices of KOSGEB in all cities of Turkey. There are 92 directories, 78 representative offices and 28 technology development centres. Technology development centres are in cooperation with universities and businesses. There are 19 business development centres and 8 laboratories. The total number of employees is around 2000. Annual budget of the organization for 2017 was near 463 million USD.

Around 99.8% of the enterprises in Turkey consist of SMEs. According to the legislations, SMEs are enterprises with less than 250 employees and net sales/balance less than 125 million TL (almost 20 million USD). SMEs account for 72% of total employment in Turkey. 62% of revenues, 58% of investment, 55% of exports, 51% of total value added and 35% of R&D come from SMEs.

Taking these definitions and the numerical facts about Turkish economy, KOSGEB's priorities are supporting the industrial sector, designing regional support programs, designing support programs from cooperation of SMEs and large enterprises, making a concrete and effective implementation of a consultancy system, making effective evaluation of competitiveness and competencies of SMEs, making enterprise-based analysis for SMEs, developing new markets for SMEs, creating local brands and supporting cooperation and collaboration between SMEs.

Focus points are technology development, innovation and digitalization, technological entrepreneurship, globalization of SMEs, scale growth of SMEs, increasing value-added and competitiveness. The basic principles are citizen-focused work, pioneering and guiding, innovative approach, accessibility and digitalization, impartiality, sustainability, reliability and transparency.

Last year KOSGEB defined a road map for the organization and work on all its steps. First step was supporting products to decrease the current account deficit. Strategic Product Investment Support Program supports the production of imported products, mainly products of the defence sector. SMEs apply KOSGEB together with a large buyer company. KOSGEB works to diversify and coordinate SMEs. Second step is spreading high technology through local and national SMEs via a program called "Techno Yatırım". If a SME has a prototype or patent, which may also be produced in a university, in a technopark, in a R&D project supported by government, KOSGEB support SMEs in their investment to make this product tradable.

Third step is including value added firms in the scope of SME. Recently, the definition of SMEs is changed. KOSGEB changed the maximum amount of net sales/balance that makes an enterprise a SME. This led to an increase in the number of SMEs. As a result some value added and high level companies are included in this definition. Fourth step is establishment of SME consulting and guidance system. KOSGEB plans to put up a new consultancy system that SMEs would be involved. This will not be mandatory one; but will constitute a bridge between KOSGEB and SMEs. The system will be active in a period of one month.

The fifth step is establishment of SME competency system. Competency of a selected group of medium size SMEs will be analyzed and foreign investors will have information about these SMEs. It will not be a rating system, but will be about innovation, export etc. The sixth step is increasing collaboration between small and large businesses. A program will be started up and SMEs in cooperation large enterprises will be supported. Large companies will be encouraged to work with the SMEs.

The seventh step is a new financial system, including a credit interest support program. This program was implemented time to time, on a seasonal basis. It will be permanent and all SMEs will reach to this support under certain limits. KOSGEB will cooperate with national banks for interest deduction and support interest payments. The eighth step is making region sector scale and business specific support model. Meetings are held in each province of Turkey and the sectors to be supported are determined as a result of these meetings.

The ninth step is focus in technology entrepreneurship and high technology area. In the past, KOSGEB had been supporting entrepreneurship. The focus is now technological entrepreneurship. The tenth step is purification of bureaucracy and revising the support programs. Support of KOSGEB is through online programs. Application and decision making are carried online. The last step of road way is SME B2B platform. KOSGEB will continue to collect information of SMEs and make this program work.

Support program of KOSGEB has five main subjects: entrepreneurship supports, R&D and innovation, technological production and domestication supports, enterprise development, growth and internationalisation support, financial support and laboratory services support.

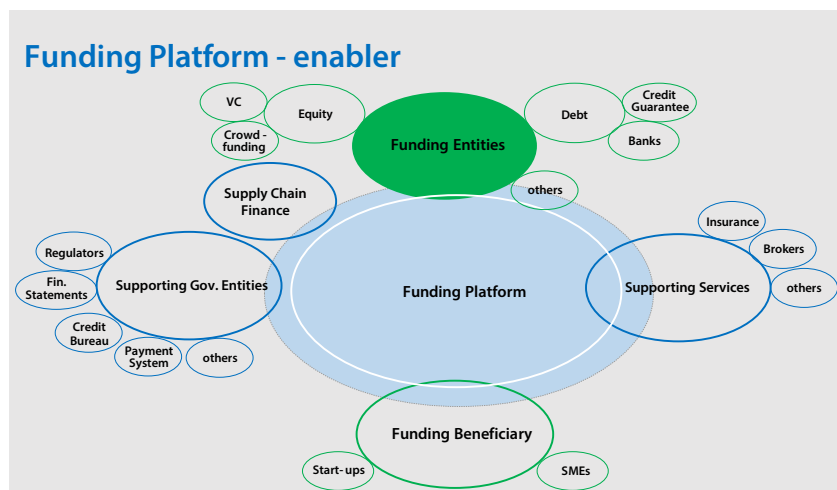
### SME Funding in the Digital Age

Saudi Arabia has an initiative for national transformation of SMEs and cooperation of government and SMEs. An SME strategy at the national level is developed, taking into account the challenges and gaps in the market. The challenges included government bureaucracy, problems of creating demand and access to funding and cultural and educational challenges. Initiatives and strategic plans are constituted to address these challenges.

To overcome the problem of government bureaucracy, comprehensive reviews of legislations and regulations has been conducted to make sure that conditions are made more appropriate to develop the businesses, to attract the foreign investment and to achieve start-ups. Saudi government also works for increasing the demand. A new bank has been established for exports, to encourage the local content of exports to regional and international markets.

Another aim of the initiatives is to improve the access to funding. First of all, a strategy is developed to comprehensively analyze what is happening in the market, which gaps exist and what solutions can be suggested for these gaps. The needs for digitalization of financing instruments are classified under the two broad headings of building a funding platform and regulatory support. The funding platform includes digitalization of debt, equity and additional financing systems.

For the debt side financing, a credit guarantee organization is built to support SMEs. The organization is capitalised with extra capital which exceeds 1.5 billion Saudi riyals. In addition to this, different products are designed, other than the sole conventional product. New products, including tourism and other sectors, portfolio kind of credits are introduced. For opening the market for non-banking financial institutions, a program is launched. Government injected 1.6. billion Saudi riyals to the market and that would be used to encourage non-banking institutions lend to SMEs. Government is now providing training sessions, subsidy and discount services to SMEs to benefit from artificial intelligence, machine learning, business learning and finance process automation.



On the equity side, the government introduced a new product, focusing on early-stage investments facing a major gap. A fund of 2.8 billion Saudi riyals is invested in this area. Deal management system and investor management system are supported by the government. On the alternative financing side, government investment for SMEs aims to refund SMEs for their payments and fees. Government also supports efforts for developing a Fintech ecosystem that can foster a wide range of solutions including blockchain, P2P lending, wallets and personal finance and other areas. Government gives support to development of start-ups and R&D and provides grant support and CSR support.

For the regulatory support, the initiative "Regtech" is designed for implementing technologies that enforce the regulations of the lending process. A dashboard for



Mr. Mohammed Al-Malki  
Vice Governor, Funding,  
Small and Medium Enterprises General  
Authority (SMEA), Saudi Arabia

Mohammed Al-Malki is the Vice Governor, Funding at Small and Medium Enterprises General Authority, Saudi Arabia. His experience spans for more than 25 years of diverse expertise in financial sector in both semi-government and private sectors. Prior to joining the Small and Medium Enterprises General Authority, he held senior positions with leading organizations i.e. KASB Capital, Capital Market Authority, Samba Financial Group and Riyadh Bank. His expertise includes Capital Markets and Banking products & services, regulatory oversight, governance, auditing, compliance, etc. Mohammed holds an MBA from Alfaisal University.

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monitoring and tracking all the lending activities is activated. Government supports artificial intelligence and audit process automation.

The funding platform is expected to be an area, a game changer for SMEs. In the current model in Saudi Arabia, SME goes to Bank A and B, has its applications rejected and thinks that this is the rule and decides to focus on its work, rather than searching for financial resources. In the newly-designed model, the SMEs will not have to go to the branches of several banks, but apply online for either equity or debt financing and become able to see snapshot report and add anything necessary about the company or the business plan. This will be seen by supporter government

authorities, lenders, investors. Financial statements are also be stored in one place and will be sent to lenders when necessary. Insurance companies, brokers, venture capital, crowdfunding and equity options will also be included in the system.

The role of authority on SMEs is to help SMEs to get excess to funding. A scale-up program is introduced, together with London Stock Exchange. It helps SMEs to scale up their businesses to international markets. SME authority in Saudi Arabia also started licensing, co-working spaces and accelerators. Establishing a SMEs bank is on the agenda. It is expected to be a real game changer in the near future.

## Future of SMEs in Turkey

Independent Industrialists' and Businessmen's Association (MUSIAD) has more than 14000 members, most of which are SMEs. It was found in 1990, it has 86 branches in all parts of Turkey and 207 contact points in 77 different countries. The organization has a strong link of communication in every part of the world to help its member SMEs and increase their knowledge and ability.

MUSIAD focuses on increasing communication, improving professional literacy, discussing the positions of SMEs for future and ensuring sustainable profitability of SMEs. To ensure more communication among departments, MUSIAD encourages use of communication technologies by SMEs, including ICT, CRM etc. MUSIAD owns its online platform, e-MUSIAD, where databases of its members are available and open to users. Costs and benefits are calculated constantly and shared with member SMEs.

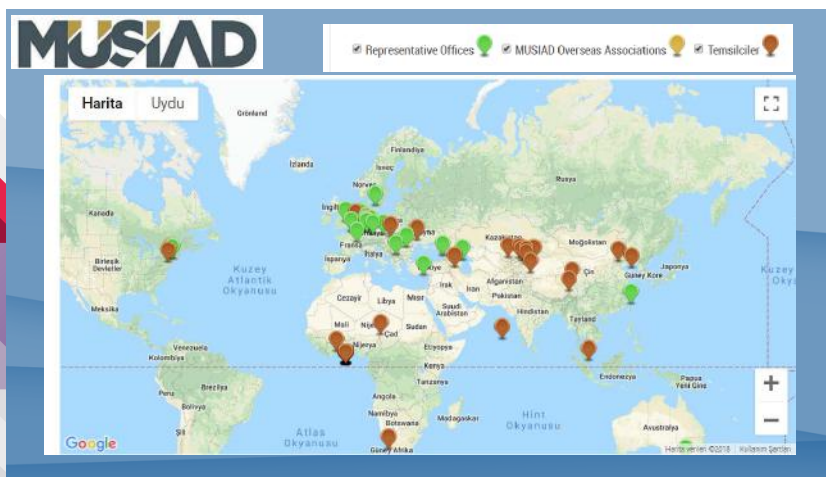
Literacy is important because SMEs have limited financial power and limited human resource. Owner of the company should control everything. A good control of cash flow may prevent bankruptcy. KOSGEB raises the awareness of the owners of the SMEs, to better manage their companies financially, legally technologically etc. The owners are also encouraged to assess the situation of their SMEs via SWOT analysis. This assessment process and SWOT analysis should be carried with an objective perspective. SME owners sometimes neglect the weaknesses of their SMEs. So, professional auditors check the actual situation. Digitalization and computer technology eases these assessment and control processes.

Positions of SMEs for future in a changing world may change rapidly. Although SMEs have different past and experiences, issues about their future are much more important and these can have common points. Ensuring sustainability is possible if SMEs focus on decreasing their costs and increasing their profits, on meeting the demand of global



Mr. Ayhan Etyemez, Member of Executive Board, Independent Industrialists' and Businessmen's Association (MUSIAD), Turkey

Ayhan Etyemez is a Member of Executive Board, Independent Industrialists' and Businessmen's Association (MUSIAD), Turkey. He worked at Tekno2000 A.S. – Istanbul. He served as a General Manager at OCTO ENG.LTD. – Istanbul. He is currently serving at Nikken Turkey A.S.G.





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market and on being aware of risks and current developments. SMEs are given information about what is scale economy and what advantages scale economy can provide to SMEs. Training and meetings are organized in a regular basis.

Profits are important for SMEs to prevent bankruptcy. To ensure profit sustainability, SMEs must be hardworking, but also smart.

Automation and technology are very important for this aim. This approach should include shareholders, stakeholders and others; the owners of SMEs should think of all these parties. The short-term, mid-term and long-term goals must be written and these must be realistic, reachable goals.

## Customized Solutions for Digitalizing SMEs

The digital age shapes all activities of SMEs. Companies using artificial intelligence, online stores, mobile channels, cloud informatics etc. develops, whereas those companies who are not able to use them remain in the back in the competition. SMEs must be interested in the developing technology.

A SME can own a virtual market and reach to a firm in any part of the world. These services are provided to SMEs for very low prices. In global competition, sale and marketing of products are not enough. Logistics, customs, VAT return and similar issues have the possibility to slow down the SMEs in competition if necessary arrangements are not done. The Minister of Trade of Turkey launched a project called "One Touch", to overcome these problems. This can be defined as exports from one point. Within this project, SMEs can reach to the information on issues including logistics, customs, VAT etc. This system makes the processes easier for SMEs. With this project the e-commerce rate is expected to rise from 0.5% to 5%.

Minister of Trade in Turkey started another e-commerce project. In this project, SMEs that are members of Turkish Union of Chambers and Commodity Exchanges (TOBB) will have an online store on alibaba.com and sell their products to the customers in more than 190 countries. These SMEs will pay 80% of annual membership fees with support of the Ministry of Trade and the other 20 percent will be paid with support of Halkbank. This will be an important support for SMEs which focus on internationalization. Halkbank supports digitalization of SMEs with a recent e-commerce loan package for SMEs. SMEs which want to digitalize or go deeper in digitalization are supported financially by the bank.

Halkbank also gives non-financial supports to SMEs. Consultancy supports are provided on online platforms. Foreign trade, law, grants and incentives are among the subjects that Halkbank gives consultancy services to SMEs. Campaigns are organized by the bank; including discounts, additional services in the enterprises that SMEs do their purchases heavily.

All these supports are realized in order to reduce the costs for SMEs and to make them more competitive in international markets. If SMEs export to different parts of the world, they can be protected from any regional crises or stagnations.



Mr. Mehmet Volkan Sayim  
Head of SME Product and Process  
Management  
Department, Halkbank, Turkey

Mehmet Volkan Sayim was born in Ankara. After receiving his primary and secondary education in Ankara He attended Gazi University and earned his bachelor's degree in Econometrics. He started his professional career in 1999 as Corporate Banking Management Trainee at Diş Fortis Bank. And then he served as Branch Manager in Dişbank Fortis Bank and Turkish economy Bank. In 2011 he joined Halk Bank as a Branch Manager and in 2015 he started to serve as a Head of Department of Budget and Performance Management. He has been serving as Vice Chairman of the Board of Directors of Halk Portfolio Management AŞ since 2015.



## Session 8

# NDFIs and SME Financing Practices – Traditional and Alternative Finance Models: Innovation and Meeting Future Needs & Challenges

### Moderator:

Dr. Abdulhameed Jameel

CEO, Omdurman National Bank, Sudan;

Member of ADFIMI Management Committee

Abdulhameed Jameel obtained B.sc. in Economics, Post-Graduate Diploma in Eco-Development, M.Sc. in Statistics, M.Sc. in Econometrics and Ph.D in Economics. He worked in Ministry of Finance, as General Manager of Public Co., as General Manager of Workers National Bank (1998-2016) and General Manager of Omdurman National Bank (2016-up to now). He participated in many Conferences, Seminars, and workshops by papers. He has some books, researches and papers in Economics and Banking. He is a board member of General Council of Islam Banks and Financial Institution-Bahrain, International Centre of Reconciliation and Arbitration-Dubai, Vice president of Sudan banks Union, member of University of Dongola, University of Elgezera, Sudan, Academy of Banking and Financial Sciences, Sudan, White Nile Sugar Company, Sudan, Sudanese Free Zones, SUDAN, Electronic Banking Services, Sudan, Liquidity Fund, Sudan and ADFIMI, Turkey.



Dr. Abdulhameed Jameel

## SME and Women Entrepreneurship in OIC Countries

Organization of Islamic Cooperation (OIC) is an international organization based in Saudi Arabia. Women entrepreneurship is important for all countries, including the OIC member countries. Potential of women is very great, but it is known that women face challenges in the labour market and in the business environment due to institutional issues, infrastructural problems or socioeconomic barriers. The question that how digital and ICT technologies can be used to address these challenges faced by women-led SMEs is very important.

Entrepreneurship is very important per se; female entrepreneurship is also critical because it makes countries more resilient against financial and economic crisis because of the nature of businesses run by women. Also, it is known that female entrepreneurship is an important tool for poverty alleviation especially in the context of low and middle income countries. There are some studies which indicate that female entrepreneurs are more likely to pursue social value in their enterprises. Social character of female entrepreneurs helps countries in their developments and improvement of living conditions of vulnerable groups, including poor, youth and children. All these facts indicate that promoting women entrepreneurship is very important. In this regard, the state of women entrepreneurship must be understood.

Global Entrepreneurship Index scores revealed that in 2018 risk acceptance in OIC countries is very low, compared to the other groups of countries. Risk acceptance is low due to the institutional problems, the socioeconomic structure and social security systems. According to the Ease of Doing Business Index, doing business in OIC countries is relatively more difficult when compared with developed countries. This means that developed countries have more advanced business environments, where conducting business is easier. Therefore, OIC countries need to exert more efforts and design policy interventions and reforms in order to have a more conducive environment for doing business. In the OIC group, the overall business environment has been gradually improving between 2015 and 2018. Another improvement in OIC countries is about the time required to start a business. It went down from 42 days in 2009 to 18 days in 2017. This is basically because of the national initiatives and efforts, as well as technological developments such as web-based platforms.

Among the OIC countries, the Ease of Doing Business Index is even worse in Sub-Saharan African Countries as compared to countries in Central Asia and Europe. Therefore Sub-Saharan African countries have to do much to create a conducive environment for businesses.

Gender disparities are open when the number of procedures required for men and women to start a business are compared. Females have to complete 7.4 procedures on average, whereas males need to complete 7 procedures on average in OIC countries. In developed countries,



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Research and  
Training Centre for Islamic Countries  
(SESRIC)

Dr. Cem Tintin is a trained economist with a Master degree in Economics with distinction from Lund University (Sweden) and a PhD degree in Economics from University of Brussels (Belgium). Dr. Tintin has been working with SESRIC (Statistical, Economic and Social Research and Training Centre for Islamic Countries) as a researcher since 2013. Prior to joining SESRIC, he worked for three years at the Institute for European Studies in Brussels as a researcher on economics. He is the author of two books on international macroeconomics and published several scholarly and non-scholarly articles on international finance and development issues with a particular focus on developing countries. His recent research agenda is focusing on the role of women entrepreneurs and SMEs in economic growth and development.

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only 4.8 procedures are required and there is not a difference between males and females. ICT technologies may be a good tool to address this challenge.

Time required to start a business is higher in OIC countries. Males in OIC countries need 18.3 days whereas females need 18.7. This requirement is only 7.7 days in developed countries and there is no difference between males and females.

As a result of gender-specific challenges, the prevalence of female entrepreneurship is very low in OIC countries. Male entrepreneurs outnumber female counterparts in many OIC countries as well as in the world. However, in some OIC member countries, like Kazakhstan, Qatar and Cameroon, the number of female entrepreneurs is very close to the number of male entrepreneurs.

Female entrepreneurship index score for OIC countries shows that in some OIC countries like the UAE, Turkey and Malaysia the

entrepreneurship ecosystem is conducive for women entrepreneurial activities. Not all OIC countries have a similar structure and ecosystem for women entrepreneurs.

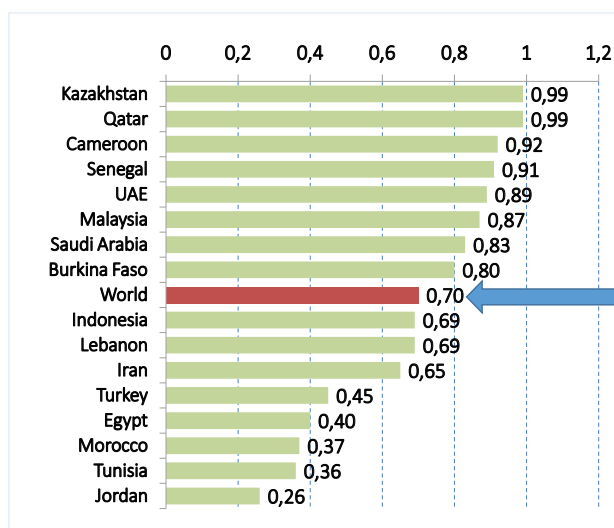
There are some legal barriers in a limited number of OIC countries. In 21 OIC countries, women are not allowed to work in the same industries as men. These legal issues must be addressed in order to benefit from the potential of female entrepreneurs. Discrimination is another issue that needs to be addressed. In majority of OIC countries, women entrepreneurs stay unprotected against gender-based discrimination that reduces their access to finance or credit markets. In 38 countries, there are no legislations against discrimination. In 33 countries, there is no law against discrimination of creditors against women. The lack of such legal protection mechanisms generate new challenges for women in accessing capital and finance.

Challenges against women can be summarized as low human capital development, high sector concentration, limited access to finance, ineffective infrastructure, policy and legal issues, and cultural and structural barriers. Ineffective infrastructure includes ineffectiveness in the domain of ICT and IT technologies. In particular, there are a large number of women who are literate, but not literate of ICT technologies. Specific programs to improve financial literacy may help to create successful enterprises led by women.

There are some success stories in OIC countries, generally as a result of government initiatives. These can be listed as Uganda Women Entrepreneurship Programme (UWEP) (Uganda), Women Entrepreneurship Development Programme (WEDP) (Nigeria), Entrepreneurship Development and Investment Promotion Programme (Bahrain), SME Corporation (Malaysia), Financing Cottage, Micro, Small, and Medium Enterprises through Women Entrepreneurship Development Unit (Bangladesh), The Women Business Development Centre (WBDC) (Egypt). These experiences can be utilized by other OIC countries by taking their local factors and conditions into consideration.

When we look at the policy implication, it is understood that investment in education, not only into traditional education but also into adult learning programs, is important. Training programmes targeting women entrepreneurs such as on ICT technologies, blockchains can enhance women entrepreneurial activities.

Figure 7.6: Female/Male Total Entrepreneurial Activity



Source: Global Entrepreneurship Monitor, 2017-2018

## Acknowledgements:

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### APEX Banking in TSKB

TSKB is the first and only private development and investment bank of the Republic of Turkey, since its establishment in 1950 with the support of the World Bank, the Turkish Government, the Central Bank and commercial banks. From that time TSKB expanded its cooperation to many other Development Finance Institutions (DFIs) such as the EIB, EIF, CEB, KfW, AFD, IFC, JBIC, IsDB, EBRD, OPIC and OeEB. Throughout its 68-year history, TSKB has assumed a key role in supporting many companies from various industries make their investments via the long-term funds it secured from international financial institutions and extended through either direct lending or APEX banking.

In most of its borrowings, TSKB enjoys sovereign guarantee, which is supplied by Republic of Turkey Ministry of Treasury and Finance. In that respect, themes of the loans supplied are in line with the priorities of the country, applicable development plan of the country and related country partnership framework of the financing development banks. With this characteristic TSKB can be considered as privately owned development bank with public mission.

TSKB has mostly thematic lending from DFIs, such as financing renewable energy, energy efficiency, resource efficiency, women employment, sustainable tourism, environmental investments, occupational health and safety, supporting exporter companies and SMEs.

APEX Banking, which is also called wholesale banking, is an effective tool for development banks to reach much wider final beneficiary base through on lending other financial institutions. APEX loans allow TSKB to reach especially SMEs and offer them funds that are secured from international DFIs through commercial financial institutions, having wide branch network. Since 2004, World Bank is the major fund supplier for APEX Banking activities of TSKB formerly through Export Finance Intermediation Loans (EFIL Loans), afterwards through Innovative Access to Finance Project (IA2F) and lately through Inclusive Access to Finance Project (IncA2F). The purpose of the EFIL Loans programme was to support companies in their efforts to increase exports and create new job opportunities, whereas the IA2F programme's purpose is to improve access to longer term Islamic finance and factoring for SMEs and export oriented enterprises. Through this loan, TSKB has started to work with Participations Banks and Factoring Companies for the first time. The USD400 million loan from World Bank (Inclusive Access to Finance Project) signed in July, 2018 also includes USD200 million APEX Portion. Through this loan, TSKB will have women inclusive SMEs in its APEX activities for the first time. This loan will also let TSKB finance



Mr. Bahadır Koçaker  
Manager,  
Industrial Development Bank of Turkey

Bahadır Koçaker graduated from the Department of Mechanical Engineering, Middle East Technical University. Mr. Koçaker began his professional career at Robert Bosch as project manager. After having worked four years in Bursa plant and two years in Stuttgart, Germany, in 2010, he joined Engineering Department of Industrial Development Bank of Turkey (TSKB). Since 2014, he has been working in Development Finance Institutions as Manager. Mr. Koçaker also holds MSc degree in mechanical engineering from Middle East Technical University and executive MBA degree from Koç University.

### Outstanding Project Themes



Themes are determined in coordination with DFIs, Clients and Ministry of Treasury and Finance as to be in line with the priorities of the other regulatory bodies.



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SMEs in less developed sub-regions, impacted by influx of Syrians under Temporary Protection through other commercial banks.

Other important fund supplier for TSKB's APEX activities is CEB (Council of Europe Development Bank). CEB's financing focusses also mainly on SME finance. Since 2009, 3 credit lines were on-lent to final beneficiaries. The ongoing loan, which was provided from CEB in 2016, to TSKB and the Development Bank of Turkey (TKB) aims to reinforce the operating position of Turkish MSMEs as well as their ability to maintain and/or preserve jobs. Final beneficiaries are supported through leasing companies under the cooperation of TSKB and TKB.

As of 30 June 2018, the total outstanding volume of loans supplied by TSKB through APEX Banking accounts for 9 percent of the Bank's total loan portfolio. Since 2004, TSKB has provided approximately USD 2 billion of APEX funding that is channelled to approximately 2,200 companies. Within the scope of APEX

Banking, TSKB has collaborated with 30 participating financial institutions in total, which are comprised of commercial banks, leasing companies, participation banks and factoring companies.

TSKB uses its own Internet Portal dedicated to APEX Banking to receive applications from the relevant Participating Financial Institutions. Through such an interface, PFIs can upload their applications and relevant documentation and also reach some training materials.

APEX Banking is an effective tool for channelling thematic funds to support SMEs, spread all over the country and it will continue to be an essential tool for TSKB in the future by diversifying its themes over various areas like energy efficiency, renewable energy, innovation and many others.

## Start-ups in Iran: Potentials and Financial Challenges

Iran is the second largest country by area in the Middle East after Saudi Arabia and second largest country by population in the Middle East after Egypt, excluding Pakistan from Middle East countries. Iran is among the young countries of the Middle East. A great portion of Iranian population is under the age of 35 (more than 60%). However, population growth slows down recently. It is currently 1.22%. The literacy rate is above 80% and there is not much difference between males and females. Internet use is very common in Iran. Iran is among the top 20 countries in the number of internet users; it ranks 13th. Social media usage is also very common. Some internet sites are filtered in Iran but Iranian people use proxies to reach to those sites.

Crude oil, gas and petroleum are the main driving forces of Iranian economy. Iran is third largest economy of Middle East after Turkey and Saudi Arabia by GDP. However, in GDP per capita, it is below several Middle Eastern countries.

When the history of start-ups in Iran is considered, it can be seen that very first speaks took place in 2012. In that year Iran was under the sanctions. In 2014 startups extended in the whole country and near 150 startups were created. Iran was still under the sanctions. In 2015, JSPOA (Joint Comprehensive Plan of Action) was signed and sanctions on Iran were lifted. A positive environment was created. In 2015 seed capital activities and initial network of VCs started to emerge. Above 400 startup companies are registered. And finally in 2016, Fintech boomed in the country and structure of startups ecosystem is clear now.



Mr. Ali Mohammad Zahedi,  
Head of Credit Evaluation Division,  
Bank of Industry and Mine (BIM), Iran

Ali Mohammad Zahedi holds 8 years of teaching and 10 years of research experience along with 9 years of experience in the banking sector. He earned his Bachelor's in Materials Engineering and Industrial Metallurgy. He did his MBA from Industrial Management Institute Tehran and completed his PhD in Material Science and Engineering. He started his career Project Control Inspector and Professional Consultant in 2009. He is currently associated with Bank Industri and Mine as Head of Credit Evaluation Division.

### Tehran Startup EcoSystem

**TIMCHE HQ**

[TimcheHQ.ir](http://TimcheHQ.ir)



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All elements of start-up environment in Iran were produced and developed locally. This environment included accelerators, venture capital, annual summits, universities, events, media, angel groups, government and NGOs. The ecosystem tries to maintain the expectations and protect the positive atmosphere. The atmosphere is a lively one with different types of start-ups.

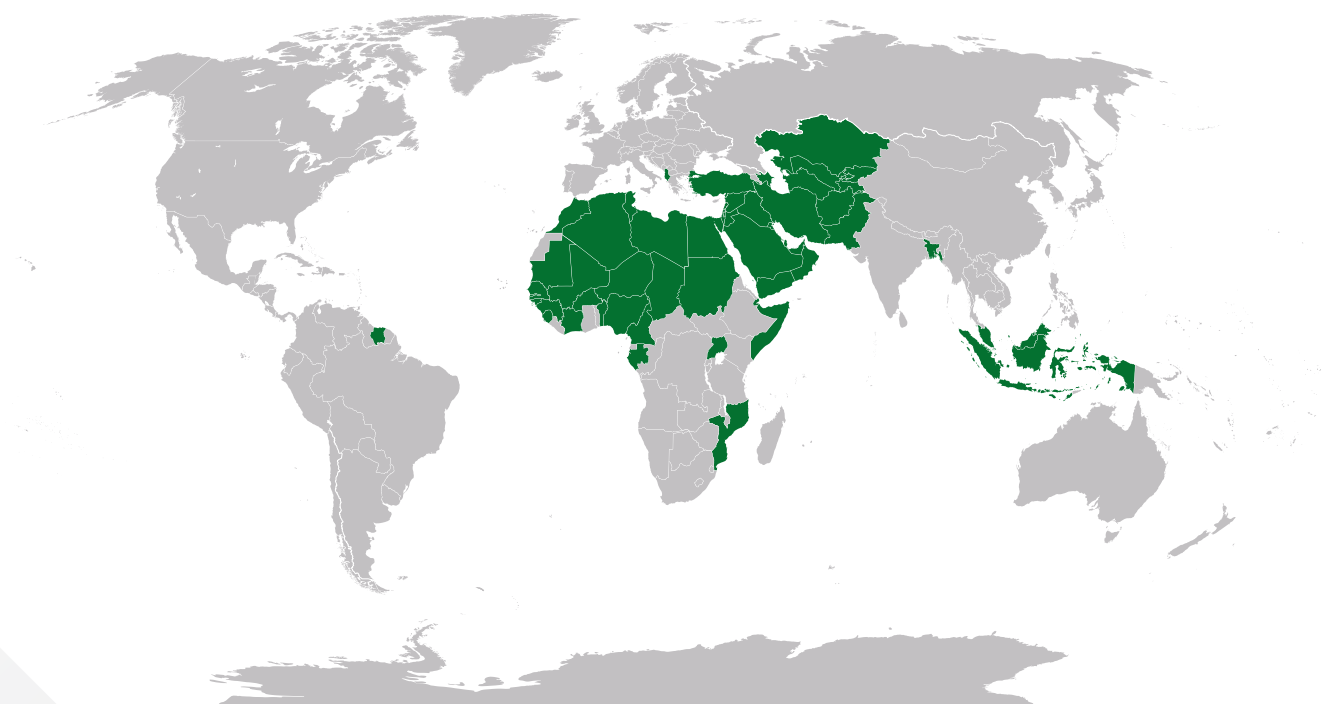
Bank of Industry and Mine in Iran is a development bank with the responsibility of supporting industries and financing infrastructural projects, including petro-chemical and transportation project etc. Knowledge-based firms in the Iranian market are from various technology fields, including software, renewable energies, medical equipment, essential and high-tech machines, IT projects and nano materials.

Main challenges are financial challenges and human resource challenges. Bank of Industry and Mine concentrates on providing

financial support with specific conditions as regulations permit. Relations with universities are being strengthened. The Bank also tries to design a model to ease the jobs of start-ups, which need specific eligibility standards evaluation.

TOSAN is a very important start-up, active in IT banking. TOSAN is a hub of talented individuals who are active in creating core banking systems. It is Iran's first banking solution provider, developing core banking systems for some Iranian banks such as Dey bank. But, it has no experience of developing core banking systems for development banks. The structure in development bank is different than other banks, with different assessments, different infrastructural preferences and different considerations. BIM is the first Iranian development bank that managed to develop and install a core banking system specialized for development banks after more than 2 years cooperation with TOSAN.

## Global distribution of the member countries of Organisation of Islamic Cooperation (OIC) and Islamic Development Bank (IsDB).





# ADFIMI Events



ADFIMI Training Seminar on  
**Strategic Management for CEOs**  
Traders Hotel, Dubai  
12-13 March 2011

ADFIMI - IDCOL JOINT SEMINAR  
**OVERVIEW OF PROJECT FINANCE VIS À VIS CORPORATE FINANCE**  
Sonargaon Pan Pacific Hotel  
Dhaka, Bangladesh  
19-21 November 2012

**Leading Rationales**  
Male, Maldives  
19-21 September 2011

An Overview of  
**Auditing & Internal Control**  
for CEOs

ADFIMI - FORENSIC  
**EARLY DETECTION OF FINANCIAL**

IRTI - ADFIMI EXECUTIVE PROGRAM  
**RISK MANAGEMENT OF ISLAMIC BANKS**

ADFIMI - BIM Joint Seminar on  
**International Project Finance & Cash Flow Modelling**

Parsian Evin Hotel, Tehran, Iran  
17-18 December 2014

ADFIMI - FFSA  
**Joint Sukuk Conference**

04 September 2014  
Holiday Inn Almaty, Kazakhstan

Development Bank Joint Seminar on  
**USE OF ANALYTICAL TOOLS USED IN FINANCE & MICROFINANCE FINANCIAL ANALYSIS**

ADFIMI - Development Bank of North Cyprus Joint Seminar on  
**FINANCIAL ANALYSIS and FORECASTING**

Ment Hotel, Lefkoşa, North Cyprus  
12-14 January 2015

ADFIMI Basic Bank Joint seminar  
**Asset Securitisation**

Ruposhi Bangla Hotel  
Dhaka, Bangladesh  
02-04 December 2011

**TRAINING of TRAINERS**  
Lefkoşa, North Cyprus  
11 January 2015

ADFIMI - UDBL JOINT TRAINING SEMINAR  
**INFRASTRUCTURE FINANCE: THE**

Imperial Royale Hotel,  
Kampala, Uganda

ADFIMI - IRTI Joint Seminar  
**PROJECT APPRAISAL**

Point Hotel Taksim, Istanbul  
06-10 April 2015

TSKB  
ADFIMI TSKB Joint Conference on  
**GREEN FINANCE**

TSKB Garden of Eden Training Facility, Istanbul, Turkey  
14-15 May 2014

ASSOCIATION OF NATIONAL  
DEVELOPMENT FINANCE  
INSTITUTIONS

ADFIMI Special Seminar on  
**"Avoiding Financial Fraud: Cyber-Security be**

SESRIC-ADFIMI-CIBFM  
JOINT TRAINING WORKSHOP ON  
**CORPORATE GOVERNANCE AND INTERNAL AUDIT**

The Empire Hotel, Bandar Seri Begawan - Brunei Darussalam 11 - 13 October 2016

ADFIMI SPECIAL SEMINAR ON:  
**FORENSIC ACCOUNTING:**

**FINANCIAL FRAUD & FRAUD PREVENTION TECHNIQUES**

EliteWorld Hotel, Taksim, Istanbul,  
25-26 April 2013

**Reporting Standards (IFRS)**

25-27 May 2011  
Green Plaza Hotel,  
Malaysia

ADFIMI Workshop on  
**Legal Documentation of Contracts in Islamic**

22-23 February 2014  
Point Hotel Taksim, Istanbul, Turkey

IDB-ADFIMI-Bank Zitouna- Zitouna Tamkeen Joint CEO Seminar on  
**Regtech & Fintech for Development Finance**

Utique Hall, Ramada Hotel, Gammarth, Tunisia  
03 April 2018, 12.00-14.30

# IsDB



## مجموعة البنك الاسلامي للتنمية Islamic Development Bank Group

### The Islamic Development Bank Group

The Islamic Development Bank (IsDB) is one of the world's largest multilateral development banks that has been working for over 40 years to improve the lives of the communities that it serves by delivering impact at scale.

The Bank brings together 57-member countries across four continents touching the lives of 1 in every 5 of the world's population.

Rated AAA by the three major rating agencies of the world, the IsDB maintains an annual volume of operations above US \$10 billion and a subscribed capital of US \$70 billion. With its headquarters in Jeddah, Kingdom of Saudi Arabia, the Bank also runs major regional hubs in Turkey, Morocco, Indonesia, Kazakhstan, Bangladesh, Senegal, and Nigeria.

The mission of the Islamic Development Bank is to equip people to drive their own economic and social progress at scale, putting the infrastructure in place to enable them to fulfil their potential.

The IsDB builds collaborative partnerships among communities and nations, and works towards the UN Sustainable Development Goals (SDGs) by harnessing the power of science, technology and innovation and fostering ethical and sustainable solutions to the world's greatest development challenges.

Over the years, the Islamic Development Bank has evolved from a single entity into a group (IsDB Group) comprising five entities: Islamic Development Bank (IsDB), the Islamic Research and Training Institute (IRTI), the Islamic Corporation for the Development of the Private Sector (ICD), the Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC), and the International Islamic Trade Finance Corporation (ITFC).

Since 1975 to date, the IsDB Group has proudly built a portfolio of 452 development operations in different sectors in Turkey totaling US \$11.3 billion. Currently, the Group maintains a regional hub with two branches in Ankara and Istanbul and also serves to fund and facilitate development projects in Azerbaijan, Bosnia, and Albania.

More information is available via twitter: @IsDBG\_TURKEY



## ADFIMI

Established in 1986, ADFIMI, Association of National Development Finance Institutions in Member Countries of Islamic Development Bank, is an international, autonomous, non-profit association serving around 45 members in 18 countries with headquarters in Istanbul. The main objective of ADFIMI is to establish networking and solidarity among its members and capacity building of its member institutions. In this context, ADFIMI organizes seminars / workshops / conferences for its members in various cities in its region (like Istanbul, Karachi, Kuala Lumpur, Amman, Tehran, Baku, Cairo, Ouagadougou, Ashgabat, Beirut, Dakar, Sarajevo, Lefkosa, Prishtina, Lome, Dushanbe, Jakarta, Damascus, Khartoum, Dhaka, Gironne, Islamabad, Kuwait City, Antalya, Doha, Tirana, Kampala, Dubai, Almaty, Maldives, Muscat, Tunis, Astana, Bander Seri Begawan, Dushanbe, Maputo).

ADFIMI aspires to be "a forum for development".

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