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NEW INCOME OPPORTUNITIES FOR BANKS AND FOR FINANCIAL INSTITUTIONS UNDER NEW TRENDS

AND LATEST DEVELOPMENTS

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Abstract

Latest technological developments called as "The Fourth Industrial Revolution", the failure of Lehman Brothers, Basel III regulations, digital challenges and mobilization of customers have started a new page in banking industry and in financial services. Sustainable profitability and growth are the top priorities for all professionals and companies' shareholders. Financial services started to face with artificially intelligent learning machines, e.g. robots. Central banks which are responsible of inflation management and supervisory of banking industry in general. boosted money supply and monetary base (expansion) after 2008 but global GDP growth and economic recovery still can not be achieved. Besides, e-money and new payment systems, non-financial intermediaries and non-bank institutions have a huge impact on financial services due to the needs of new financial solutions from individuals and SMEs in the first ranks. In Turkey, and in many countries, new legislations and regulatory measures for the benefits of financial consumers and due to current account deficits, have a huge negative impact on financial services and on banks' balance sheets. This paper aims to discuss the opportunities and the possibilities for/of banking industry to respond for all of these challenges but arguably financial services no longer belong only to financial institutions.

Keywords: Financial services, banking, profitability, innovation, alternative finance



INTRODUCTION

After 2008 Global Financial Crisis, during the digital age the humanity is in, a new age has just started after the bankruptcy of Lehman Brothers which is named "The Fourth Industrial Revolution". New technological developments are due to the value creation needs and the cost effectiveness researches of companies which experienced sharp fall in profit margins and losses in their balance sheets. Central banks in order to recover global economic GDP growth and governments in order to bail-out banks and global companies have started to supply more money and government bonds. Zero policy interest rates implemented by most of the developed central banks since 2008 lead the world towards Keynes' "Liquidity Trap Theory". This "zero level interest rates monetary policy" by the central banks has also aimed to help for the recovery from the recession, to reduce unemployment and to bring balance to financial markets which have suffered by credit crunch and volatility. The injection of money to the banking system by asset purchases of central banks from the banks increased monetary base. The liquidity injection to banking industry would have helped to fund seekers if "Neutrality of Money" had not been existed. Due to deficits and to high jobless ratios, governments could not implement fiscal policies such as issuing new taxes or increasing government expenditures as Keynes suggested. Aiming to minimize their budget and their foreign trade / current account deficits by the help of economic recovery with zero level interest rates and with depreciation / devaluation of their currencies, governments expected more corporate tax returns and export revenues. But, the main economic indicator of this phenomenon which is the inflation rate increase could not have been seen since 2008. So, the first and the strongest argument for this paper is that monetary policies of 2008's are failed and old fashion economic schools and theories could not help for today's professionals and decision makers, they are all outdated.

Besides of macroeconomic issues, new payment systems, non-financial and non-bank institutions are replacing the classical banking system. New technological developments like artificial intelligence, semantic studies, robotics and mechatronics, big data and mining, the internet of things, virtual reality, cloud computing, neural networks, hologram, 3D/4D printing, drones and machine learning has already crowded out social media, mobile payments, internet banking.

These new trends and technologies that called "The Fourth Industrial Revolution" will surely shape the future of banking and of financial services and they are now becoming inevitable. The convergence of telecom and banking has changed card based payment systems and mobile financial services substitute banking in many countries where branches are scarce. (Kuzu, 2003) Started with electronic banking in the late of 80's and named as alternative delivery channels after 90's, internet and mobile improvements nowadays are called as digital banking with the combination of social media and e-money schemes e.g. bitcoin. (Ersoy, 2012) "Chief Information Officers" or "Chief Technology Officers" are now transforming to "Chief Digital Officers" after 2015.

All these developments and trends also affect the financial figures of financial institutions. Customer relationship management and financial services marketing have also been changed due to these waves. Data mining, analytical CRM systems, social media, dashboards, sales forces automation are the other fields of financial services marketing that are used in the last decades. Efficient usage of knowledge and information systems require more depth analysis, integrations, intelligence and investments (Liebowitz, 2001). Banks and financial institutions, especially in retail banking environment, invested heavily in these systems for keeping customers and profitability at the same levels. Each previous year(s) profits were above the following year profits since interest rates momentum are towards zero level. Due to sharp declines in "Return on Assets" (ROA) which is the current case in "Turkish Banking Industry" and deriving from that and from other regulatory measures, free fall of "Return on Equity" (ROE) which lead to negative real income for most banks, sustainability is becoming harder every day. Economic and financial agenda have witnessed many challenges since "Bretton Woods" and "Smithsonian" agreements. "Basel Capital Accord", killer products like credit cards, derivatives, electronic and PC banking, "Islamic Banking", "International Financial Reporting System" (IFRS), "Anti-Money Laundering" (AML) & "Combat Terrorism Financing" (CTF), "Single European Payment Area" (SEPA) in EU, Solveny capital requirements, bank stress tests are all major trends that have affected financial services and banking industry.

After 2008, all companies are looking forward to have more profit margins, to reach more customers and markets. By using marketing functions, banks and financial institutions try to make customers loyal with predictive data analysis e.g. churn, propensity to respond to the competition and innovative challenges in technology and to reduce their operating costs, to increase revenues.

The aim of this paper is to emphasize the impacts of new trends, of technological and regulatory developments on financial services, to discuss possible effects on banking. It is also aimed to highlight new income opportunities to banks, especially in Turkey for sustainable growth and profitability. Finally, conclusions and suggestions are made to banking professionals and to management board level decision makers. After the literature examination, in the third section the suggestions are discussed and in the last section an executive summary is made for further steps.

LITERATURE ANALYSIS

The evolution of new technologies, while on the other hand financial crisises and other developments in world economies and in financial services supported with the changing needs and behaviors of customers are still putting a heavy pressure on financial institutions, especially on banking industry. The rapid progresses and innovations in old technologies, such as internet and mobile, CRM systems have made more impacts and changes in the banking industry and in financial services than before. The "Universal Banking" concept is much easier today than yesterday via "Electronic Banking" without having any boundaries and any barriers in the globally connected environment (Javadin and Yazdani, 2005). "Basel Banking Committee" defined "Electronic Banking" as individual and corporate banking operations affected through electronic channels e.g. internet and mobile banking (Basel Committee on Banking Supervision, 2003). The usage of computers, of analytical chip based business models and smart technology solutions in management, in marketing and in finance (in financial services) is not a new agenda for industries and markets (Zopounidis, Doumpos, & Matsatsinis, 1997). Although security, education, access to internet, income are always a big concern when talking internet banking usage (Altan and Karasioğlu, 2004; Bayrakdaroğlu, 2012), web and mobile technologies are also the easiest and the cheapest ways to access unbankable and underbanked population. Microfinance and micro insurance are other types of financial services delivery together with mobile banking, mobile (bill) payments and mobile money transfers for financial inclusion aim which support the economic involvement of women and start-ups to the economic recovery of GDP. (Mas and Kumar, 2008).

The banking industry tried to respond these disruptive challenges with a quantum leap during the last two decades by meeting the customer demand and needs. Banks implemented "Electronic Banking Systems" integrated with "Customer Relationship Management" (CRM) Systems, "Net Promoter Score" (NPS) monitoring systems, "Mystery Shopping" surveys to manage "Customer Experience". To realize these aims banks have heavily invested to more sophisticated systems for dealing with falling customer loyalty. (Amiri Aghdaie, Karimi and Abasaltian, 2015) By these efforts, financial institutions and banks tried to manage the quality of services and customer information driven by the data strategy. On the other hand, central banking is also rolling towards a new horizon with Bitcoin (Nakamoto, 2013) types of electronic and/or mobile money (Dolan, 2009) that may cause a seignorage problem. The monetary policies followed after 2008 may also cause an insolvency problem in central banks. (Howden, 2009)

Most of the banks have lost their capitals during 2008 crisis and many others are still facing profitability and revenues issues. The globalization, the financial and the economic barriers that could be easily broken with new technologies, channels, services and products are changing the banking industry rapidly. Lehman Brothers' case which was an off-balance sheet risk management issue and a toxic derivatives usage concluded with new measures and with new regulations in banking. Central banks, in general are also responsible for supervisory of the banking industry, asked from banks to do more stress tests, especially in US and in Europe, in order to predict and to prevent possible negative effects of different risks levels and types. "Bank for International Settlements" (BIS) on the other hand enforces Basel III rules and regulations to be implemented in the global banking industry which are also another stress for bankers. The credit crunch in the global banking system is accelerated by these new measures and different approaches in finance that are remarkably argued under the name of "Alternative Finance". Retail banking customers, SMEs, underbanked people are looking for new ways of funding, finance due to credit crunch.

The new capital adequacy requirements squeeze the banks which is also the case in Turkey. CAR, Growth, ROE and ROA ratios of the banking in Turkey are showed in Table 1 to Table 4.

Table 1. CAR - BRSA - TURKEY



Table 2. GROWTH - BRSA - TURKEY

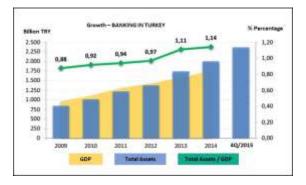


Table 3. ROE – BRSA - TURKEY

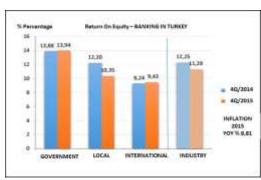
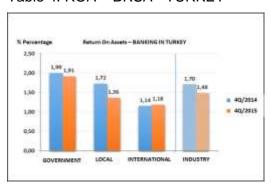


Table 4. ROA - BRSA - TURKEY



Source: Banking Regulatory and Supervisory Agency. (December 2015). Turkish Banking Industry Main Indicators and Figures. Publications, Reports.

http://www.bddk.org.tr/WebSitesi/turkce/Raporlar/TBSGG/14895tbs_temel_gostergeler_aralik_2015.pdf

The main causes of these sharp declines are:

- a. The measures taken by the Turkish government to minimize current account deficit which had been nearby %10 of the GDP in 2013. "Banking Regulatory and Supervisory Agency" (BRSA) has limited installment based card payment programs. The Turkish financial consumers are using credit cards in general for tech based spendings and luxury products e.g. Iphone, LG compared to their income which cause foreign trade deficit. This measure slowed down the spending behaviours of financial consumers and affected banks revenues.
- b. Because credit card programs are widely used and are accepted by Turkish financial consumers and merchants, banks applied high interest rates and fees to their card schemes and overdraft accounts. Due to "Financial Consumer Protection Measures" taken by the government, BRSA has cut again half of the interest rates and has implemented a ceiling rate level to be declared and to be revised by "Central Bank of Republic of Turkey" (CBRT) regarding to the current conditions. BRSA has also limited fees and charges by twenty main items only in retail banking. This measure had a huge impact on many banks in Turkey due to almost 30% of their revenues were coming throught card programs and overdraft accounts. Certainly, interest and non-interest income of the banks were also limited due to these regulations and they cut their marketing budgets.
- c. Basel III requirements, slowdown of the economy, negative interest rates, global financial turmoil, volatility in foreign exchanges, political arena and national elections are the other major impacts on the banking industry and on financial institutions.
- d. New incumbent rivals, new payment systems law, the problems of multinational banks abroad also affected their counterparts and their affiliates in Turkey.
- e. Interest free banking which is called "Participation Banking" in Turkey also gain momentum by the "Istanbul Financial Center" project's aims and by the government support for attracting "Gulf Region" capital flows.
- f. Efficiency problems, high tech investments' maintenance costs, penalties occured by the competition and work laws, unbanked population, entrance of telco companies to mobile payments and so on have also important effects on banks' revenues and profitabilities.

Globally, declines in ROA and in ROE against sky rocketed "Cost of Capital" create a credit crunch and economic growth could not be achieved due to these issues in lending facilities. And, a different type of paradox occured during the "Quantitative Easing" period after 2008. Most of the governments, indirectly most of the taxpayers became the shareholders of the

banks with bail-outs programs. Instead of receiving share of profit from the banks, taxpayers paid more fees and commissions to these banks for their profit generation while the taxes that they paid have been injected again to these banks. This paradox has been seen in many US and in EU banks during the bail-outs period. In that case, taxpayers were the shareholders which were also the customers.

Facing the "Liquidity Trap" of Keynes because of central banks interest rates policies, simultaneously another dilemma with "Neutrality of Money Theory" (Polleit, 2009), the financial markets have also witnessed the failure of "Too Big To Fail" (Kaufman, 2013) with Lehman Brothers. The theory of "Big Run or Run For the Money" (Skeie, 2006, 2008) with Northern Rock in UK or in European Union EU was tested many times during this period. Most of the banks still try to find solutions for regaining their capital and financial losses but instead of investing in customers and in new technologies for adopting new revenues generation opportunities or minimizing operating costs, they still invest in capital markets by the help of central banks. Governments led "Keynesian Fiscal Policies" and budget financing of treasuries (Aydın, 2013) e.g. "Initial Public Offerings" of treasuries in the primary markets have been followed by the assets repurchase agreements of central banks in the secondary markets. So, the second strongest argument in this paper is that issuing money or increasing monetary base, mainly depending on these (to be defaulted) assets, are deja-vu and never ending stories for further crisis. As an example, only FED balance sheet is five times bigger than before Lehman Brothers failure.

In the next global financial crisis, the financial markets will be witnessing big central banks failures or their bankruptcies for the first time in history. This will be mainly due to the reason that they would not be able to manage liquidity risks of treasuries' bonds in their balance sheets (Ballabriga, 2011). "Too Big to Fail" theory would not also work for a central bank. (Buiter, 2008). Led by this hypothesis, the role of the "Bank for International Settlements" (BIS) would be the most probably questioned issue and would be discussed due to its responses to central banks broke if it occurs as being the "Last Resort of the Central Banks". The failure of many treasuries and default of countries after 2008 had also made the same impact on "International Monetary Fund" (IMF) and the role of the IMF was questioned at that time.

Another threat for (central) banking system is the digital form of money, in general electronic or mobile money. The impacts on the banking industry would be, first of all, on the payment systems and deposits. The definition of the electronic money is (BIS, 1996):

"E-money products are defined here as "stored-value" or "prepaid" products in which a record of the funds or "value" available to a consumer is stored on an electronic device in the consumer's possession."

Based on the definition, any stored (excess) value in credit cards or mobile phones or loyalty schemes would have been accepted as demand deposit which is not easy for a bank to have control on it. The possible impact on payment systems would be on the competition side. Besides non-banks financial institutions or non-bank companies became a rival of the banks, just like the battle of credit unions against banks in US, which will have a direct effect on the loyal customers of the banks due to their expensive fees and charges. The acceleration of money issuing and monetary base by the velocity of money would definitely have a strong effect on the balance sheets of the central banks (BIS, 1996). Possibility of decreasing the seignorage income could be balanced by increasing reserve requirements which will also put a pressure on the banking system.

For the conventional (retail) banking system, there are many opportunities to respond to these technological threats, to non-bank financial institutions, to non-loyal customers as well as to other financial and economics issues and to new financial exposures (Frei et al, 1998). These opportunities may not be valid for all countries due to the local legislations and to different conditions but could be considered in time by the bankers and decision makers. The opportunities and suggestions are discussed in the remaining sections.

METHOD

As Lehman Brothers caused the global financial crisis in 2008. Operating costs, hedging of risks, sustainable cash flow and income became the biggest issues of today's companies besides the governments' GDP growth and budget problems. Therefore, managers and decision makers in the financial institutions should consider Porter's "Value Creation and Competitive Advantage Theory" more to keep the same profitability level. (Porter, 1985) This theory facilitates profitability and sustainability by following two options: Minimizing costs or maximizing value. For financial institutions and banks, implementing this theory is very clear and simple. First, to attract more customers by new, innovative products and channels and by new applications in marketing. Secondly, to drive towards cost efficiency and to minimize their operating costs by increasing efficiency and productivity by new or revised processes, channels and other production factors.

At this point, it could be pretended that apart from digital platforms and online financial services, other scientific improvements such as artificial intelligence, hologram, robotics are going to have huge positive impacts on banks' and financial instutions' growth and sustainability. Obviously, it would be on the funding side first. The banks will open new credit lines to these entrepreuneurs and to companies that invest in new technologies and R&D. In the second rank, the banking industry will use new technologic improvements for cost efficiency.

For example, the usage of drones for its branch operations or hologram technology as a contact center for customers' interaction and internal meetings or corporate trainings. Third, there will be more disruptive changes in organizational charts. "Chief Digital Officer" (CDO) and "Chief Information or Technology Officer" will become "Chief Executive Officer" in banking. It would also have been the case that a "Chief Artificial Intelligence" (CAI) had also been the head of a financial company. The usage of robotic solutions and artificial intelligence in companies' business environments and human resources planning have already started e.g. in the case of Volkswagen for replacing retired workers with more robots.

In today's volatile financial markets, risks and financial exposures could be analysed interactively and simultaneously by using all of the new smart technologies. For example, special software and algorithms are used for risk and portfolio management. The theories of RAROC (Risk-adjusted capital), MACD Markowitz, return on (Moving convergence/divergence) or VAR (Value at risk) are used by the computers for calculating the portfolio risks. Based on the commands and the instructions implemented into the systems, the computers could respond to market conditions. These chip based solutions could also follow up stop loss and stop gain price levels for any financial investment product or for any commodity contract and could realize buy and sell transactions anytime automatically. The developments in artificial intelligence technology will also help for "Financial Forecasting. Cash flow forecasting, predictive econometrics and financial modelling are the heart of the risk management. Artificial intelligence could help invesment bankers and economists to forecast more precisely the market moves as earlier academic works suggested. (Binner, Chen & Kendall, 2004; Selvi & Wonga, 1998) Toronto based company DDIQ (Due Diligence Intelligence Quotient) launched in 2014 an artificial intelligence "The Brain" which is the first solution for fraud investigations, anti-money laundering, anti-bribery and anti-corruption compliance. (McLaughlin, 2015). Artificial intelligence systems could also be used for bank creditworthiness and performance assessment (Fethi & Pasiouras, 2010) and for bankcrupty predictions.

Cloud computing is a network based or web based data storage hub or environment that enables and facilitates sharing of knowledge, information, files. It is much more than an intranet system that companies widely used in the first decade of 2000's. With cloud computing solution banks have two options to generate new revenues and to minimize costs. First, offering tailored, segment based value added services, i.e. CRM systems to SMEs or personal finance tools to individuals and second minimizing the communication and archiving costs within the bank or minimizing back-up or end-of-day transaction costs. (Rani and Gangal, 2012) Hologram technology could also be a new delivery and sales channels for banks and financial institutions

for reaching to new customers, for staff and board meetings. (Murray and Keevil, 2014). It could also be used as a distance learning tool for corporate learning.

Alternative financing methods i.e. property sales and lease back, crowdfunding, fundraising, direct lending, nonbank financial institutions i.e. microfinance companies, peer to peer lending and money transfers are gaining importance due to credit crunch and the proportion of bank loans in investments of fund seekers. Finally, banks and financial institutions could cooperate or could merge and/or could acquire non-banks financial institutions, (Morcroft, 2014) tech companies for alternative financing. They can also demerge or split in separate companies or in affiliates as a part of their organic or inorganic growth strategies (Oncer, 2012) in order to respond the competition and to implement "Value Creation and Competitive Advantage Theory" outputs within the company more quickly.

RESULTS

The global financial crisis questioned the reliability of the financial services industry and customer trust became the most important issue especially for banks during and after 2008. Financial institutions are still evaluating their strategies to gain more portfolios and to keep existing ones. (Jayamaha, 2002) For realizing this aim, one of the question that should be questioned by the banks is that what kind of product development and innovation initatives could generate new income opportunities for today and for tomorrow? The banks should ask themselves how to shift to the second generation of loyalty program management or product development.

For all initiatives, the solution lays in the answer of this critical question: What are the main components of a balance sheet? Deposits, loans or on and off balance sheet, letter of credits, transactional banking? The main answer for these questions is that the bank should not think and not act like a banker but like a customer which means they should put in the first place customer centricity and their trust. Hence, the customers and its value chains that are constituted by them are the main components of a balance sheet. If customers don't deposit to the bank or if they don't need more financing, then there will not be the need for a bank or for a lending corporation. The same logic is valid for other financial institutions. Investing to customer is the first priority for all companies that are looking after new income opportunities. The other initiatives for new revenues, fees generation are listed below:

Drucker mentioned in 1993 that information is the most important dimension among the production factors. Volume, variety and velocity are the three dimensions of data as defined by Laney in 2001 and IT company Gartner, Inc. defined big data in their IT Glossary (Gandomi & Haider, 2015) as:

"Big data is high-volume, high-velocity and high-variety information assets that demand costeffective, innovative forms of information processing for enhanced insight and decision making."

- Big data has already become a critical factor in IT and CRM environments. Artificial intelligence is the new tech tool that can be used for CRM and for big data mining as well.
- Customer segmentation is always king. As personal income and asset under management as well as banks figures are changing by banks' mergers, governmental take-over, existing customer segmentation models could not answer. Segmentation rules and migration are in general managed periodically, e.g. quarterly. With predetermined rule sets and algorithms, customer segmentation and migrations between segments could be managed simultaneously right after selling the product or after the banking transaction. By doing so, one to one pricing, customer and portfolio risk management and revenue per customer could be calculated simultaneously. Regarding these new segmentation business models, banks should also renew their existing sales and service models.
- By minimizing the communication and staff costs and by maximizing service delivery hours with robotic or cloud based solutions, banks will be able to minimize operating costs.
- By using "Hologram Banking" solution as a new distribution channel, banks will be able to reach to its customers and more markets without limitation and by minimizing their sales and call center costs, they will also be able to increase their cross sell ratio.
- Convergence of social media with financial services, e.g. Facebook Video Banking, Loan Application via Twitter could be integrated with other core banking systems i.e. risk management for early warning mechanisms.
- Artifical systems together with neural network could identify portfolio risks, credit anomalies and fraud attempts.
- Big Data-integration with artificial intelligent system could support lending decisions.
- Face recognition system could be a strong tool together with GPS systems for finding an NPL customer with moral hazard problem just like "Find my Iphone" application. By minimizing NPL ratio, Capital Adequacy Ratio stress on funding cost will be minimized.
- With robotic technology, robo-advisors assisting customers in making financial decisions will be decreasing retail and investment banking costs.
- Wealth management and private banking services could be delivered to lower net worth customer segments by less costs (Power, 2015). By lower commissions and fees more



- customers could be gained and by economics of scale more revenues could be generated as Telco companies are realising with cheap product packages.
- Debit and credit (charge) cards have a lot of product features. In Turkey, payment installments, cash back, air miles or gifts based schemes are widely used but after BRSA regulations they became steady. Without creating new operating and funding costs, banks could still develop new cards and payment solutions to their customers.
- Using credit or debit cards for national lottery drawing or as an airline ticket or as a telco calling card could be a new revenue generation engine for banks. In addition, integrating them with highway tolls and using them as fuel cards in gas stations could also be some new opportunities for existing cards and loyalty programs.
- Integrating card payment and clearing systems with lottery or betting companies or airline companies is very easy with today's technologies. Having special applications / interfaces on both side's will enable the bank customers to have one multifunctional plastic card (even mobile phones) on their pocket for multi-purposes with exceptional use and flexibility. Besides, debiting or crediting the customers would be cost efficient with end-to-end integrated processes. The economics of scale created by integrating cross industries products, services and loyalty programs would help banks to reduce their operational costs and generate more revenues. Such innovative value propositions would also undoubtedly improve customer experience.
- Issuing pre-paid credit cards for specific purposes is another possibility for banks to use their fullest potential in payment systems. Oil cards that are hedged against the risk and exposures of volatile oil prices and foreign exchange parity moves would enable customers to avoid price changes impact on their budgets. Such innovations and new products would help customers as well as the companies in managing their liquidity and cash management efficiently. All these pre-paid cards could be sold through various delivery channels such as post offices, gas stations, supermarkets. Mobile payment and phones could also be integrated to such pre-paid systems.
- Financial supply chain management could bring other opportunities to banks. Commercial customers have complex trade relationships with different parties in its financial supply chains. Their local and international trade payments and financing needs create a total network value for a bank e.g. suppliers, distributors, retail customers, employees, shareholders, government, etc. Each customer network in this financial (value) supply chain is managed by a different business line within a bank. Every relation that different customers play a role either directly or indirectly in these internal value chain (network) within the bank is calculated by different business lines. However; an



accurate and an effective strategy to evaluate the risk and the profitability of the customer segments is crucial. Calculating the network value which can be called as "Financial Supply Chain Management" will reveal the underlying effect of commercial customers to the bank by taking each and every financial relation in into account. Aggregate segment-wise transaction numbers & figures could be integrated with CRM and risk systems. By the help of artificial intelligence, the total hidden value of a customer or a customer network could be calculated and this will enable the banks to see, to forecast and to manage the holistic view of a commercial customer or of a value chain.

- Islamic Banking or in general interest free banking is another opportunity for all banks to enter directly to trade finance transactions and to generate more profits and fee incomes.
- In Turkey, BRSA should consider to give sub-licences to banks to open interest free banking departments instead of establishing stand alone banks which requires many items including (the cost of) capital in the first rank.
- BRSA should work directly with Ministry of Finance for tax issues including Value Added Tax and Banking & Insurance Transaction Tax for interest free banking.
- On the other hand, banks without having more regulatory help could develop new interest free products to their customers if they put it in their agenda and in their priorities.
- Agency agreements with their financial holding's affiliates are also another opportunities for banks. Selling other financial products more to their customers such as leasing, factoring, investment banking, insurance would enhance banks' commissions income.
- Cross border banking, entering to new markets & countries would also grow their market potential and customer base which are the case of multinational banks.
- Efficiency projects, business process re-engineering would also help financial institutions to minimize their operating costs and enhance sales efforts.

CONCLUSION

Digital age, innovative advances in smart technologies have accelerated and have facilitated financial services delivery and sales. During the 2008 global crisis, international and global banks as well as local banking industries have witnessed many issues and troubles. They are still trying to find ways of regaining their revenues, profits or of minimizing their operating costs. Due to the same financial turmoil, central banks exponentially boosted their balance sheets by buying government assets instead of gold and other precious metals. The imbalance and the



gaps in the composition of their balance sheets could probably be ended by the first bankruptcy of a central bank during the next global financial crisis. On the other hand, digital money will have a direct effect on their seignorage incomes and on their insolvencies since there is not any global concensus of how to track digital money and to put in money supply definitions.

The developments in such areas put disruptive changes and financial results on banking and financial services. Minimizing transaction costs by differentiation of products and services would also help banks to compete with non-bank financial institutions. Time value is the first ranked issue due to scarce IT resources and bank funding and capital costs. Fusion of customer behaviors and neuromarketing with the developments in robotics, cloud computing, artificial intelligence will help banks to manage their sales and operations more efficiently than today if they don't repeat old mistakes in such areas. Banks should be ready for and be open to implement such innovation and processes as quickly as possible to their strategies. The shift from alternative delivery channels to "Fourth Industrial Revolution" will also have a direct effect on the organizational charts. New CEOs with IT background have to tackle with these new challenges and to respond the sustainability expectations of shareholders and of the regulators.

The priority of these initiatives explained in high level above can be differentiated depending on the situation and on the current state of the financial institutions. It can be pretented and be argued that new economic and financial rules are being written nowadays. The banking system will stand in the middle of the economic activities but they will not be the only one in lending facilities since new alternative financing methods are rising. Banks and other financial institutions have two options: Whether to be against these changes or to shake hands and to cooperate with these new challenges. Considering examples from previous applications in Turkey could be taken as a best practices by other financial institutions. "Bill Payment Centers" (BPC) could not be stopped by the banks in Turkey and by fulfilling the necessary conditions, non-bank companies could open BPCs by having the approval, the licence from BRSA.

Customer trust, risk management, CRM are critical success factors for a financial institution. Adam Smith's free market rules or John Maynard Keynes' government expenditures were questioned during the 2008 crisis. It is obvious that new trends and latest developments, especially on the technology side, will change banking. New bail-out packages in the future could not be available due to central banks abilities. Every financial institution should find new tactics and solutions to survive and to sustain. As new market rules are being set in the world, especially commercial banks' executives need to be more creative, be ready for adopting faster to changes and to respond to customer expectations swiftly. This paper will be a baseline for such readings, headlines and researches. This study will lead following researches and studies

for detailing important topics in financial services and will be a source for detailed analysis and survey based academic works.

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