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Electronic Banking: Presence and Trends

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Abstract: Competition and changes in technology and lifestyle have changed the face of banking. With the traditional branch based business on the decline, banks are now seeking for alternative ways to provide and differentiate their services. Customers, both corporate and retail, are no longer willing to queue in banks or wait on phones for the most basic of services. They demand and expect to be able to transact their financial dealings where and when they wish. With the number of computers and smartphones increasing every year, the electronic delivery of bank services is becoming the ideal way for banks to meet their clients' expectations. Yet, besides many advantages the development of ICT brings to customers, there are some issues and challenges the electronic banking is facing.

Keywords: electronic banking, internet banking, EU countries, ICT, trends, issues

1 Introduction

For many people, electronic banking means 24-hour access to cash through an automated teller machine (ATM) or Direct Deposit of paychecks into checking or savings accounts. But electronic banking also involves many different types of transactions, rights, responsibilities — and sometimes fees. Electronic banking services are a range of banking and other services or facilities that use electronic equipment and include online banking, ATM and debit card services, phone banking, SMS banking, electronic alert, mobile banking, fund transfer services, Point of sales banking, Estatements and other e-commerce or value added services.

Online banking has many benefits. Two of the most important are *speed* and *convenience*. People who participate in online banking can access their accounts, view their statements, make transactions, pay bills and more, all from their homes or on the go. It is because of these benefits that roughly 51 percent of EU adults participate in online banking. (Eurostat, 2018)

However, despite the benefits of online banking, there is also a number of distinct issues and challenges in the online banking sector. These are highly significant both for banks that offer online banking, but also for their customers, who depend on the banks to operate effectively.

Online banking marketers need to know these challenges so that they can efficiently navigate them. Here are some of the top issues and challenges in the online banking sector that marketers need to be aware of: (Mitham 2017)

1) Traditional banking habits
2) Security
3) Transaction difficulty
4) Technical issues and
5) Small budget.

In the paper, we firstly discuss the presence of e-banking, mainly in EU countries, as well as how the ICT development and achievements influenced it. Later we discuss trends, changes expected in electronic banking and the kind of new services that the banks will offer to their clients and customers.

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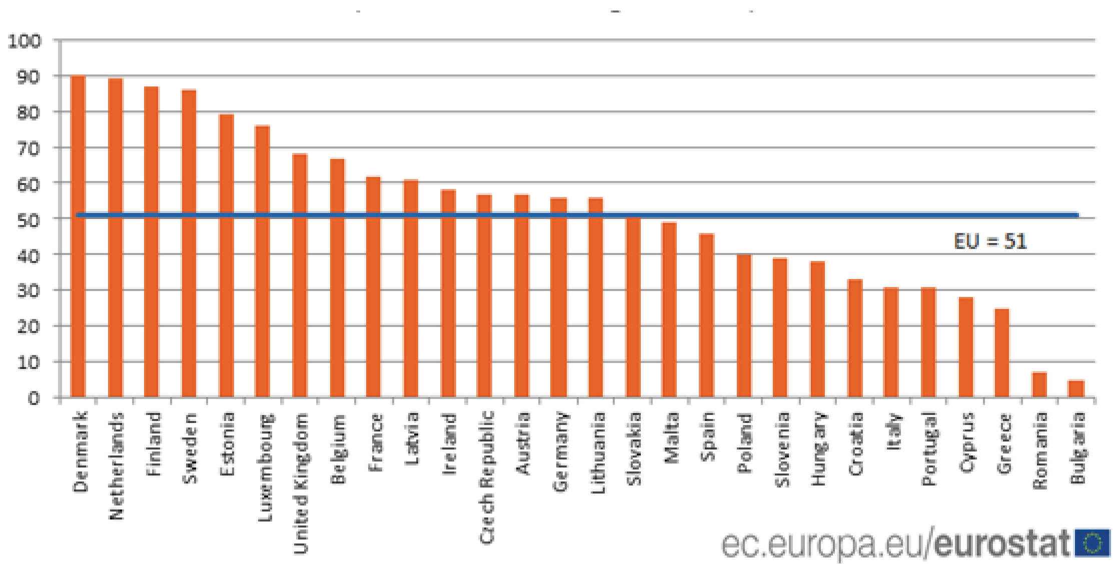
We finish the paper by discussing some issues related to the ICT development and usage in electronic banking and conclude with some challenges to be addressed.

2 The presence of e-banking

Around half (51%) of adult Europeans use internet banking. This share is constantly increasing and has doubled since 2007, when it stood at 25%. Internet banking is particularly popular among 25 to 34 year olds, with 68% using this facility. The use of internet banking tends to increase in line with the education level of the user. While only 24% of those with low education use e-banking, 77% of those with high education use this service. Among EU Member States, internet banking is most common in Denmark (where 90% of people aged 16 to 74 said they were using it) and the Netherlands (89%), followed by the other Nordic countries - Finland (87%) and Sweden (86%). The lowest shares were registered in Bulgaria (5%) and Romania (7%). Less than 30% of those between the ages of 16 and 74 use internet banking in Greece (25%) and Cyprus (28%). (Eurostat, 2018)

Concerning the channels through which payments are made, it must be noted that around half (51%) of adult EU citizens used internet banking in 2017. This percentage is constantly increasing and has doubled since 2007, when it stood at 25%. This trend shows that consumers are gradually becoming more familiar with new and innovative ways of making payments, in particular the use of internet banking. Internet banking is particularly popular among 25- to 34-year-olds, with 68% using this facility, confirming that the new generations of consumers are those most willing to interact with their banks and payment institutions through new technologies. (EBA, 2019)

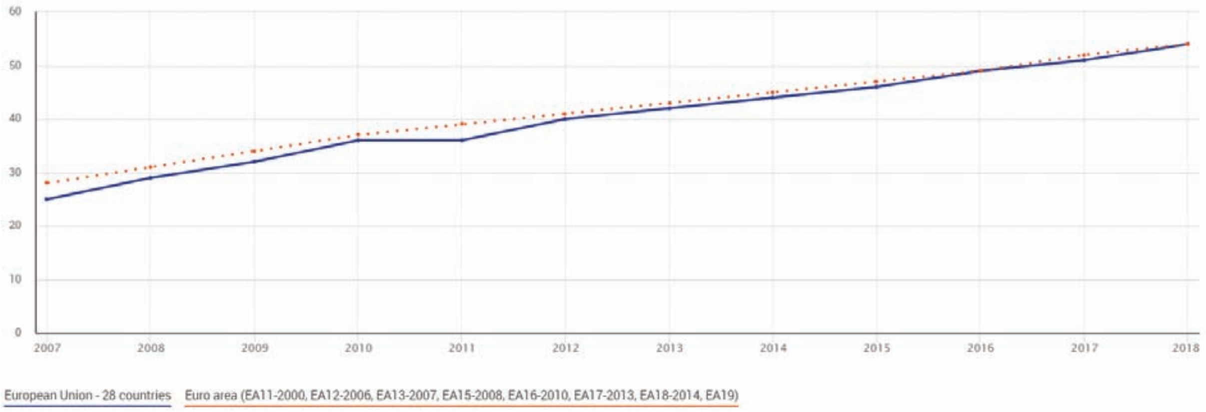
Figure 1: People, who used internet banking in EU, 2017 (% of individuals, age 16-74)



Source: Eurostat, 2018

As evident from Figure 1, within the last 3 months before the survey in EU 28 and in Euro-area, an average of 54% of individuals aged 16 to 74 in Norway, 93% in Bulgaria and 7% in Romania used the internet for banking, including electronic bank transactions for payment etc. or for looking up account information.

Figure 2: People, who used internet banking in EU and Euro-area, 2008-2018 (% of individuals, age 16-74)

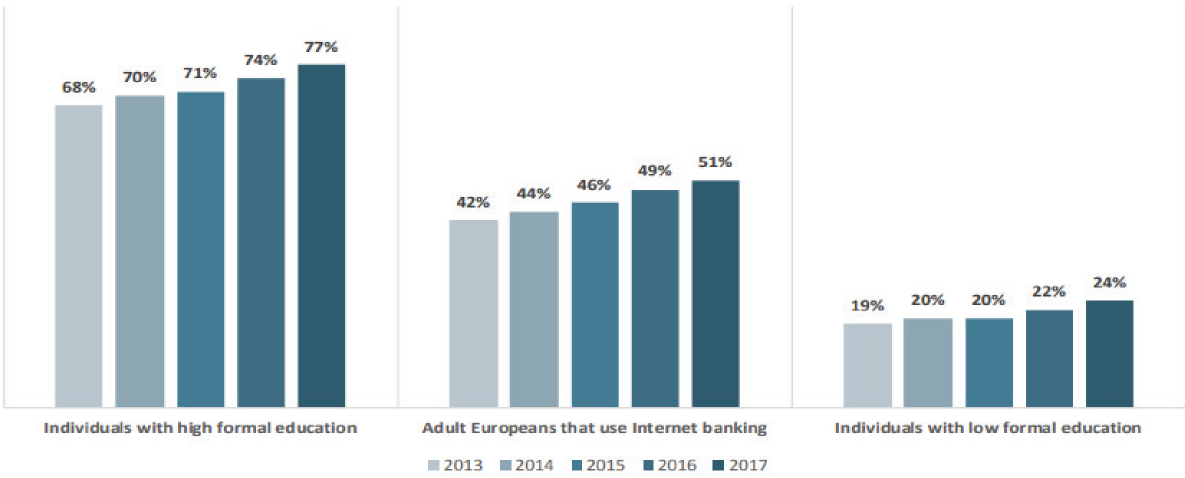


Source: Eurostat, 2019

As we can see from Figure 2, there is no real notable difference between EU-28 and Euro-area, where people are using the electronic banking slightly more than in EU-28, especially in the first couple of years of the observed period. What is impressive is that in 2007, 25% of individuals in EU-25 and 28% in the Euro-area were using e-banking and that percent doubled in only 10 years (54%).

Moreover, the use of internet banking tends to increase in line with the education level of the user. While only 24% of those with no education or less than high school level used internet banking in 2017, 77% of those with high school education used this channel in the same year. (EBA, 2019)

Figure 3: percentage of adult Europeans with higher education degree that use internet banking (2017)



Source: EBA, 2019

The European Banking Authority (EBA) has published its most recent Consumer Trends Report in 2019. Prominent among the conclusions of the report is the fact that mortgages are the retail product that impact consumers' finances the most, whereas more than half of the European population already uses online banking.

In the EBA (2019) the European banking supervisory body analyses consumer trends related to financial retail products in the European banking sector – products such as mortgages, consumer credit, deposits, payment accounts, payment services and electronic money. It also provides a holistic view of questions related to financial products and services that impact consumers the most, as well as the measures taken to address them.

The EBA notes that mortgages continue to have the biggest impact on consumers. They represent more than 77% of all loans to households and in the last five years there has been a relatively steady increase in the volume and value of home purchasing loans. The report warns of mortgage-related issues, such as levels of household indebtedness, the level of fees and charges, and mortgage loan refinancing.

The report points out that the volume of consumer credit remained somewhat stable over the past year, rising just slightly. The main problems arising out of this product include the short-term cost of credit, the misuse of consumer credit and insufficient contractual and pre-contractual information.

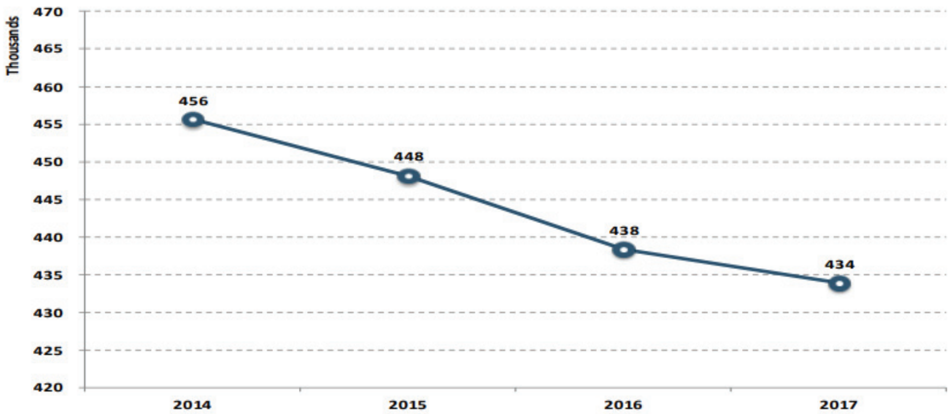
The report points out that 2017 represented an important milestone since more than half of EU inhabitants were already using online banking at that time. A figure that has increased considerably, has doubled in ten years. In 2007, the figure stood at 25 percent. Online payment is particularly popular among 25-34 year olds: 68% of members of this demographic group frequently use this facility. (EBA 2019)

In parallel, the EBA notes that paper-based transactions continue to decrease, whereas the number of payments with electronic money is growing consistently each year. According to the European institution, the main relevant issues related to this trend are security requirements associated with new payment services and solutions, as well as transparency of fees and charges.

The EBA has also observed an increase in the number of people with a payment account in the European Union. The European Banking Authority report points out that payment accounts are “the first step towards accessing a larger variety of financial products and services and a flexible tool for managing personal finances.” However, deposit volumes dropped slightly, in line with a decline in the savings rate.

In 2017, the total number of ATMs in the EU decreased by 1.0% to 433 900. Figure 10 shows the change in the number of ATMs in the EU. From 2014 to 2017, the total number of ATMs decreased by around 21 800 units. This decreasing trend in the number of ATMs may reflect the consolidation of the banking industry in general and the growth of electronic payments that has already been highlighted. Nevertheless, for certain consumers not used to or not familiar with new and innovative ways of making payments (e.g. vulnerable populations or people living in remote or rural areas), the reduction in the number of operative ATMs could be an issue to take into account.

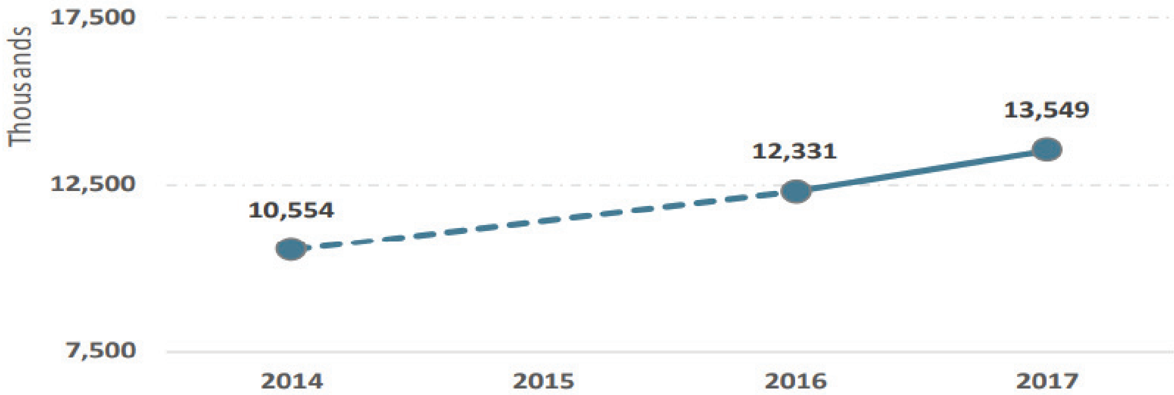
Figure 4: Total number of ATMs provided by resident payment service providers



Source: Source: ECB 2019

In contrast to the number of ATMs, the number of point of sale (POS) terminals increased by 9.9% between 2016 and 2017, to 13.55 million. Figure 5 shows the upward trend in the number of POS terminals in the EU. This growth may reflect the increasing use of credit and debit cards for payment transactions by consumers that has already been highlighted, as well as the rise in popularity of new and innovative technologies among consumers (e.g. mobile payments, including the ones through smartphones, payment applications) introduced in the EU payments market.

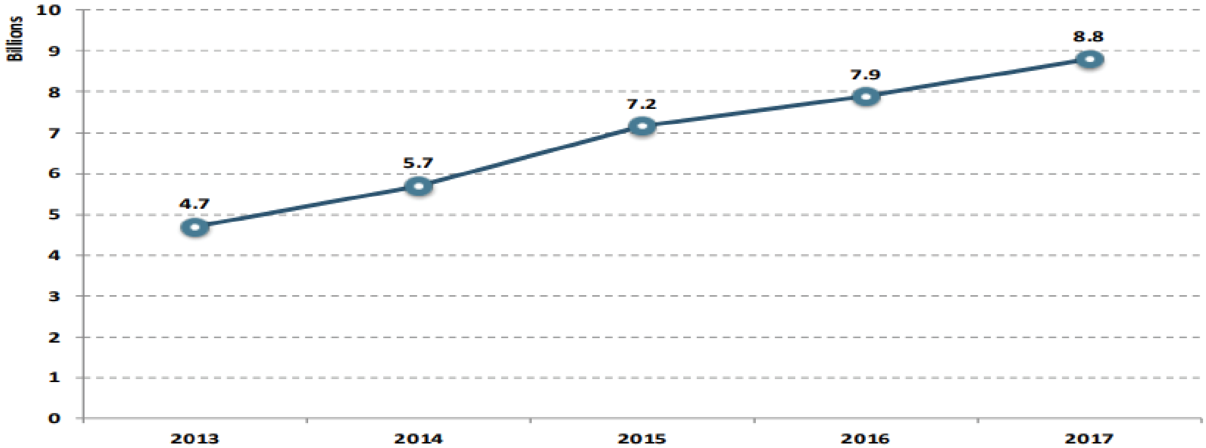
Figure 5: Total number of POS terminals provided by resident PSPs



Source: ECB 2019.
Note: EU aggregated data for 2015 are not available

Electronic money (e-money) is broadly defined as an electronic store of monetary value on a technical device that may be widely used for making payments to entities other than the e-money issuer. The device acts as a prepaid bearer instrument, and the transactions do not necessarily involve accounts. E-money products can be hardware based or software based, depending on the technology used to store the monetary value. Therefore, electronic money is considered a digital equivalent of cash, stored on an electronic device or remotely on a server. Figure 6 shows a steady increase in electronic money issued in the euro area from 2013 to 2017. This upward trend may confirm the growing use of prepaid e-money cards by consumers that has been reported by some competent authorities.

Figure 6: Electronic money issued in the euro area (billion EUR)



Source: ECB 2019.
Note: not seasonally adjusted, outstanding amounts at the end of the period

As evident from the key highlights, data and figures, e-banking has made a major breakthrough over the last 10 years, one way or another, in the lives and work of individuals in almost every money-related area, simplifying their lives and work and reducing the cost of dealing with individuals within the bank sector.

3 Discussion and current issues of e-banking

The EBA report (2019) also identified the most relevant topics for consumers, including commissions and fees; indebtedness; poor creditworthiness assessment; financial education; transparency and the disclosure of pre-contractual information and changes to contractual terms and conditions; cybersecurity; and the cross-border selling of products and services.

With regard to financial education, the report notes that new solutions, based on innovative technologies, have been introduced to consumers who are unprepared to face them. Therefore, a specific need has been identified for financial education with a digital focus.

New and innovative services

The most common issue raised by the competent authorities relates to new and innovative services and technologies introduced in the EU payments market and their growing use and popularity. These innovations cover the development of: (EBA, 2019)

1) mobile payments executed through applications installed on smartphones,
2) fast/instant payment solutions, which allow the execution of retail payment transactions to be carried out in near-real time, and
3) contactless solutions, which facilitate the use of payment cards, smartphones and other devices in day-to-day payment transactions.

The use of online banking has also increased. The ability to make fast, efficient and easy-to-use payments has been identified by the stakeholders as very interesting and convenient from the perspective of consumers, who can access and purchase a wide range of products and services with great speed, also through e-commerce. As an example of the growing use and popularity of these new and innovative services and technologies introduced in the EU payments market, one competent authority reported that 20% of the online purchases in its jurisdiction are already paid by using a solution that allows consumers to make instant transfers, make online purchases and withdraw money using smartphones.

In order to address the security risks in the payments market in general, revised Payment Service Directive mandated the EBA to develop regulatory technical standards on strong customer authentication and three sets of guidelines, which the EBA delivered in 2018. Throughout 2019, regulatory technical standards were introduced in order to put close attention to how payment service providers comply with the requirements of regulatory technical standards on strong customer authentication in particular, which applies from 14 September 2019 onwards. This will also be the focus of the EBA's supervisory convergence work throughout 2019, as envisaged in the EBA's work programme.

Other issues related to payment services identified by some regulatory technical standards were unjustified levels of fees and charges invoiced to consumers (e.g. fees related to payment incidents or payment account maintenance fees), transparency of information about fees and charges and how they apply to the services offered, issues related to the execution of payment transactions (including ATM transactions or booking of payments) and unauthorised and/or fraudulent payment transactions reported by consumers.

Literacy

Regarding financial literacy and education, the issues identified as most relevant by the various stakeholders are: (EBA, 201)

- a lack or low level of financial and economic knowledge among the general population, with associated negative consequences in some cases (e.g. over-indebtedness);
- a specific need for 'digital financial education' due to the increasing appearance and use of new and complex digital providers, tools and services in the financial market; and
- the existence of specific vulnerable groups that are most affected by the lack of financial education, which may include the elderly, migrants, consumers with low levels of education and/or income, young people and the unemployed.

Data breaches and cyber-security

Following a significant increase in digitalisation in the provision of retail banking products and services as well as rapid developments in the area of so called FinTech, the topic of data breaches and cyber-security has gained substantial attention during the last few years.

Consumer data held by financial institutions mainly encompass consumers' transaction records, financial and personal data: these can be exploited in several ways, either in a standalone/aggregate manner or through matching it with publicly available information about consumers available on social media. In this context, the use of the services provided by third parties requires adoption of appropriate security measures to protect the confidentiality, integrity and availability of customer/consumer data (in transit or at rest) and of the systems and channels that are used to process, transfer or store these data.

In general terms, the majority of competent authorities noted that the increasing digitalisation of financial services may imply that consumers are exposed to 'newer' risks and threats in comparison with traditional financial products, including the risk of misuse of personal financial data and cyber-crime.

In this respect, risks of fraud and theft of consumer data may emerge if stringent security systems are not in place to protect personal records, thus exposing consumers to substantial detriment due to system failures.

Competent authorities also highlighted that cyber-attacks may result in loss of availability of financial services for consumers and loss of consumer data, leading to harmful outcomes, such as fraud. High profile attacks on individual firms clearly demonstrate the potential scale of impact on consumers in terms of data breaches. In this respect, a few competent authorities reported an increased volume of cyber-attacks, although no major incidents with losses of data from supervised entities were reported, due to proper prevention solutions in place.

In addition to what has been identified by the competent authorities, consumer associations highlighted some concerns: (EBA, 2019)

1) that the innovative financial services may lead to obtaining additional information beyond that needed for the provision of the service in question; and
2) that consumers in general struggle to understand some of the innovative services, which could expose them to fraudulent actions (e.g. consumers lured to 'fake' shops, which could then lead to the theft of consumers' personal data, as well as — in the specific case of payment services — the payment account number and sensitive payment data).

Technological innovations could potentially increase the risks for consumers, including the loss or unlawful exploitation of data. Although in most cases such risks have not materialised, competent authorities s have started paying increased attention to them from different perspectives. Since most of these risks are common across the EU, there may be merit in increasing and facilitating the cooperation among the competent authorities. At the same time, further coordination efforts may be needed to integrate the activities aimed at preventing IT risks from a microprudential perspective with the overarching goals of consumer protection.

Cross-border selling of products and services

Cross-border selling of banking products and services occurs when consumers purchase retail banking products and services provided in their country by financial institutions authorised or registered in another jurisdiction. Cross-border signing of contracts typically resorts to one or more means of long-distance communication, which include, among others, the internet, mobile applications, telephone and videoconference. The advance of technology and the increased familiarity of consumers with digital means provide a case for growing cross-border selling of retail banking products and services.

At present, the internal banking market is not fully exploited, as there seems to be a significant discrepancy between the numbers of domestic and cross-border providers (including financial institutions offering services and products solely on the Internet) and likewise between the number of contracts signed and/or products and services provided where the financial institution and the consumer are located in the same country and the number of those concluded on a cross-border basis.

Thus, the potential for further growth of cross-border provision of products and services is high. Some stakeholders also expect that the increase in cross-border activity will result in complex challenges for all parties involved (financial institutions, consumers, supervisory authorities), which may include: (EBA, 2019)

- difficulties in determining the legal liability of each party involved and/or the applicable legislation, since it may be difficult to identify all contractual parties and their identities, as the contract is concluded without their physical presence;

- difficulties for supervisory authorities in effectively enforcing consumer protection provisions upon financial institutions established in other countries;
- the lack of understanding and knowledge of the existence and functioning of cross-border redress mechanisms.

Cross-border selling of products and services is a growing concern among stakeholders. Nonetheless, it is important to highlight that, overall, stakeholders reported that they had limited evidence of consumers resorting to foreign financial institutions to access the traditional banking products and services falling under the remit of the EBA or experiencing major issues with their use.

Despite the harmonisation of regulation applicable to some retail banking products and services provided within the EU (i.e. mortgages), consumers do not seem to resort to financial institutions authorised in other countries when making use of a specific banking product or service.

However, the increasing use of means of long-distance communication facilitates the growth of cross-border agreements. This may potentially lead to an increase in the challenges for competent authorities in order to ensure a consistent level of regulation and supervision of consumer legislation. Therefore, it is essential to ensure effective cooperation between home and host competent authorities in the supervision of the financial institutions providing cross-border services and the agreements they conclude with consumers, to fully contribute to the internal EU market for financial services.

4 Conclusion

Online banking is one of the most significant developments for the banking industry in its long history. However, despite the many benefits that online banking provides to customers, there is also a number of major concerns and challenges for marketers in the online banking sector.

Traditional banking habits, security, technical issues, transaction difficulties, and small marketing budgets are all major challenges that online banking marketers will have to reconcile if they are to succeed in this field. However, demand for this industry continues to be very strong. So it is likely that online banks will only grow more advanced and successful as they strive to resolve their marketing challenges.

Therefore as Marous (2019) is stressing, to be able to compete and grow where margins are thin, competition is fierce, regulations are changing and technology has an increasing impact, financial institutions must place innovation as a top priority. Organizational cultures must be shifted to support innovations that will impact increasingly outdated business models. Banks and credit unions must also anticipate consumer needs and innovate in ways that will prioritize the most effective mix of capabilities, processes and people.

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