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Digital Economy Outlook

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Financial Inclusion Unit

- A Digital Single Market Strategy for Europe: An opportunity to unleash the potential of ICTs
- Electronic identification for the digital market: New tools for the digital industry
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Summary

A Digital Single Market Strategy for Europe

An opportunity to unleash the potential of ICTs. The Digital Single Market Strategy is an opportunity to unleash the potential of ICTs, which are the enablers that underpin innovation, allow companies to grow in scale and increase efficiency and productivity. However to achieve a comprehensive Digital Single Market, the initiatives should be consistent with subsequent actions and other regulatory framework reviews.

Electronic identification for the digital market

New tools for the digital industry. The eIDAS Regulation (Regulation (EU) nº 910/2014 on electronic identification and trust services for electronic transactions in the internal market), which was adopted on 23 July 2014, provides the instruments to facilitate trustworthy and secure cross-border electronic transactions between businesses, citizens, and public authorities. Yet, those instruments, and particularly electronic identification, will not achieve success until there is widespread adoption by the private sector.

Crowdfunding regulation in Spain

Legal certainty for this new alternative source of financing. Spain has recently introduced a specific legal framework for financial crowdfunding. Providing legal certainty is a positive step to foster this new source of financing, which is a complement to traditional ones. However, harmonisation at the EU level is desirable to avoid market fragmentation.

Technology to extend financial access

The banking correspondent business model. Technological advances and more flexible regulations have allowed banks to extend access to the formal financial system through outsourcing agreements with bricks-and-mortar stores. The spread of this banking correspondent business model in developing countries has the potential to reach millions of unbanked individuals more rapidly.

The digital economy, hares or tortoises

Although the extension of the internet digital channel behaves very robustly, trends for some of the services offered through it seem to follow a pattern that offers more diverse results. The repercussions on the potential economic growth of countries which fail to grasp the opportunities which the new digital economy offers could be very significant.

1 A Digital Single Market Strategy for Europe

An opportunity to unleash the potential of ICTs

The Digital Single Market Strategy is an opportunity to unleash the potential of ICTs, which are the enablers that underpin innovation, allow companies to grow in scale and increase efficiency and productivity. However to achieve a comprehensive Digital Single Market, the initiatives should be consistent with subsequent actions and other regulatory framework reviews.

The Digital Single Market Strategy is built on three pillars and it is, in total, composed of 16 initiatives that will be opened to consultation during the following months. The pillars are: i) better access for consumers and businesses to digital goods and services across Europe; ii) creating the right conditions and a level playing field for digital networks and innovative services to flourish, and iii) maximising the growth potential of the digital economy.

Facilitating new digital services and ensuring trust and competition

The strategy includes measures to enhance the network infrastructure, such as incentivising investment in high speed broadband, ensuring the provision of broadband services in rural areas and defining a new approach to the spectrum policy, among others. It also facilitates the development of new digital services, such as cloud computing through initiatives including cloud services certification, contracts, switching of cloud service providers and an open science research cloud. Moreover, it tackles barriers to the free movement of data within the EU and unjustified restrictions on the location of data for storage or processing purposes.

Regarding the ensuring of a trust environment, the Strategy proposes a revision of the ePrivacy Directive and establishing a Public-Private Partnership on cybersecurity in the area of the technologies and solutions for online network security. Moreover, digital skills and expertise will be incorporated as a key component of the EC's future initiatives on skills and training.

To address concerns over the growing market power of some online platforms, the Commission wants to assess the role of different platforms and intermediaries to ensure competition in the digital world, covering issues such as transparency, the usage of the information they collect and the relationships between platforms and suppliers.

Breaking down barriers to cross-border e-commerce

E-commerce is one of the key areas in which the European Commission is willing to remove the legal and technical barriers that prevent the EU from constituting a single market. In particular, harmonising rules on contracts and consumer protection, as well as making more efficient the cooperation on enforcement, would facilitate cross-border online sales of both digital content and tangible goods. As there are also barriers related to parcel delivery services, the EC wants to improve price transparency and regulatory oversight to make cross-border delivery more efficient and affordable. The strategy also proposes extending the single electronic registration and payment to online sales of tangible goods and introducing a common EU-wide simplification measure, the VAT threshold, to help small start-up e-commerce businesses.

Apart from removing legal and technical barriers, the EC also wants to end unjustified geo-blocking or geographic price discrimination, which fragment the Internal Market. Furthermore, the Commission has launched alongside the strategy a Competition Sector Inquiry focusing on the application of competition law in the area of e-commerce. The first results of this work are expected to be published in mid-2016, with a report for consultation.

However, the Strategy lacks any specific initiatives related to the development of e-payments, e-contracts and e-invoicing, which are essential drivers to cross-border e-commerce. Standardisation in these areas is a key priority to achieve interoperability within Member States, and therefore it should be included in the extension of the European Interoperability Framework.

In any case, the achievement of a proper Digital Single Market requires the consistency of the previous initiatives with the Capital Markets Union´s strategy and the coming Green Paper on Digital Retail Banking.

2 Electronic identification for the digital market

New tools for the digital industry

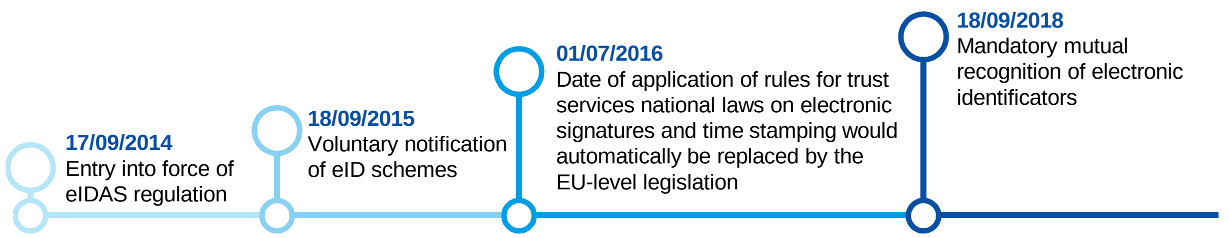
The eIDAS Regulation (Regulation (EU) nº 910/2014 on electronic identification and trust services for electronic transactions in the internal market), which was adopted on 23 July 2014, provides the instruments to facilitate trustworthy and secure cross-border electronic transactions between businesses, citizens, and public authorities. Yet, those instruments, and particularly electronic identification, will not achieve success until there is widespread adoption by the private sector.

European electronic identification is a must to create a Digital Single Market

Electronic identification systems (eID systems) are mechanisms that allow citizens to show their identity in an online environment. Such identity must also be confirmed through the authentication process to ensure that the person is who they say they are. eID means have been broadly developed by European Union Member States to enhance local e-government and financial sector online services. However, there is no global eID solution, which is a prerequisite for achieving a Digital Single Market. After some approaches to create a unique pan-European eID, the Commission has instead decided to develop a mutual recognition of electronic identification schemes that has resulted in the eIDAs regulation.

With eIDAS regulation, Member States will officially recognise the electronic identification of natural and legal persons of a fellow Member State, and thus cross-border electronic identification will be possible. eIDAs regulations have also created a legal pan-European framework for electronic signatures, electronic seals, electronic time stamps, electronic documents, electronic registered delivery services and certification services for website authentication. Those are important tools to secure online transactions and economic relationships.

Figure 2.1
Next steps



Source: European Commission

Secondary legislation is also on-going to provide both technical and organisational details to meet the requirements of the regulation. At the same time, Commission is seeking to create a widespread adoption of eIDs. That includes the leveraging of pilots and the involvement of private sector and other stakeholders for the uptake of the new legislative framework.

eID adoption in the retail banking sector

The private sector is not subject to the eIDAS regulation, but it has the possibility to benefit from it. In fact, the private sector, and especially the retail banking sector, plays a key role in the adoption of eIDs to the extent that the number of online transactions is growing exponentially, where identification and authentication processes are essential to create a trustworthy environment.

eIDAS regulation places new tools at industry´s disposal, but those should be integrated into business models to unleash the potential for growth in a cross-border context. Digital enrolment to online banking, for example, required not only a verification of the identity of the new client but to add further information to that identity to comply with the Anti-Money Laundering rules. In that respect, the banking sector will welcome more regulatory alignment with the previously released or incoming Directives, such as AML4, NIST, Payment accounts, PSD2 and the Data Protection Directive.

On the other hand, second legislation level should seek to create a truly interoperable and standardised environment in which the use of cross-border national eIDs could be easily adopted, offering the private sector the facilities to integrate them and therefore developing secure services for the digital society.

3 Crowdfunding regulation in Spain

Legal certainty for this new alternative source of financing

Spain has recently introduced a specific legal framework for financial crowdfunding. Providing legal certainty is a positive step to foster this new source of financing, which is a complement to traditional ones. However, harmonisation at the EU level is desirable to avoid market fragmentation.

The early stage of financial-return crowdfunding in Spain

Financial crowdfunding platforms are online marketplaces where investors and fund seekers meet. The former provide financing to the latter in exchange for some kind of financial return. Depending on the instruments employed, financial crowdfunding can be classified into different models: debt-based, equity crowdfunding or invoice discounting.[1] Financial crowdfunding platforms emerged and took their first steps in Spain in the absence of specific regulation. According to a report by the University of Cambridge and Ernst & Young, the funds provided through these platforms grew from EUR1.8mn in 2012 to EUR25.6mn in 2014. Despite this growth, Spain lags well behind other European countries where financial crowdfunding has developed further, particularly the UK (EUR2.215bn in 2014), but also Germany (EUR117mn) and France (EUR113mn).[2] In this regard, providing legal certainty is essential to foster the development of this new source of financing, which is a complement to traditional sources, above all for companies in their early development phases and for higher-risk projects.

A specific legal framework for financial crowdfunding platforms

The Law on Promoting Business Finance, which came into force on 29 April, created a specific legal framework for crowdfunding platforms involved in the intermediation of financing through loans, bonds or equity participations. These platforms are now under the authorisation, supervision, inspection and sanction of the CNMV, the Spanish securities market regulator, with the participation of the Bank of Spain in the case of lending-based crowdfunding. They have to fulfil certain administrative and financial requirements to be allowed to operate as crowdfunding platforms. Moreover, the Law restricts the range of services that these platforms may provide. In particular, they are not allowed to offer investment advice or process payments (unless they apply for a license as hybrid payment institutions).

Protecting non-professional investors

Investing through crowdfunding brings potentially high risks of solvency and liquidity, as greater informality exacerbates the information asymmetry between investors and fund seekers. Platforms are obliged to publish certain information on the applicants and their projects, but no checks on that information are required. Given the risks involved, the Spanish regulation classifies investors into two categories: accredited and non-accredited. The former face no investment limits whilst the latter (the non-professional investors) are allowed to invest a maximum of EUR3,000 per project and a total of EUR10,000 per year. The Law also imposes a limit on the amount of funding that can be raised through crowdfunding: EUR2mn for projects opened to any investor and EUR5mn when projects are targeted only to accredited investors.

Harmonisation at EU level is needed to avoid market fragmentation

Given the lack of European harmonisation, financial-return crowdfunding is being regulated at the national level with different approaches. Indeed, Spain has introduced a unique legal framework for the different types of financial-return crowdfunding, in contrast to other European countries such as the United Kingdom, France or Italy, where lending-based and equity crowdfunding are under different regulations. Requirements for platforms, investment limits and the categorisation of investors, among other issues, also vary significantly across countries. Therefore, harmonisation at the European level is needed to avoid the development of a fragmented market. A harmonised regulatory framework would facilitate getting the most from the cross-border potential of crowdfunding and ensuring that all European firms, irrespective of their location, have the same opportunities to access finance through alternative sources.

1: For further details, see our Digital Economy Watch "Crowdfunding in 360º: alternative financing for the digital era". Available at: https://www.bbvaresearch.com/wp-content/uploads/2015/02/Crowdfunding_Watch.pdf
2: University of Cambridge & EY (2015). "Moving Mainstream: The European Alternative Finance Benchmarking Report". Available at: http://www.ey.com/Publication/vwLUAssets/EY-and-university-of-cambridge/$FILE/EY-cambridge-alternative-finance-report.pdf

4 Technology to extend financial access

The banking correspondent business model

Technological advances and more flexible regulations have allowed banks to extend access to the formal financial system through outsourcing agreements with bricks-and-mortar stores. The spread of this banking correspondent business model in developing countries has the potential to reach millions of unbanked individuals more rapidly.

The need to extend access to the formal financial system

Financial inclusion is the situation in which all working age adults have effective access to financial products such as payments, savings, credit and insurance from formal service providers. This improves social well-being and alleviates poverty. When defining financial inclusion, access is the most important dimension and represents a necessary but insufficient condition for using formal financial services.[3] Therefore, extending access to the formal financial system is essential to foster financial inclusion. Yet traditional access channels seem to be limited in guaranteeing universal financial access. From the supply side, bank branches and ATMs are not cost-efficient for financial institutions to serve certain segments of the markets. Moreover, from the demand side, there are physical, cultural and social barriers that make access difficult through traditional channels. Given these limitations, technology and regulation have facilitated the emergence of a new branchless channel, i.e. banking correspondents, with the potential to reach millions of unbanked individuals more rapidly.

The banking correspondent business model

Banking correspondents are non-financial commercial establishments that offer basic financial services under the name of a bank, becoming access points to the formal financial system. Those establishments can belong to a broad range of sectors (grocery, gas stations, postal services, pharmacies, etc.), as long as they are bricks-and-mortar stores whose core business involves managing cash. In its most basic version, banking correspondents carry out only transactional operations (cash in, cash out and bill payments) but in many cases they have evolved to serve as a distribution channel for the banks' credit, saving and insurance products. This business model makes it sustainable for banks to focus on low-income clients with cost-efficient access channels.

The role of technology

Together with regulation, technology is the essential element that enables the banking correspondent business model to function. It facilitates the remote interaction between the financial services provider and its customers at the agent's outlet. In the most traditional system, the interaction takes place using bank cards and point-of-sale (POS) devices connected to the bank through a phone line, wireless or satellite technology. In the case of e-money products, the interaction usually takes place using mobile phones. As well as the appropriate technological connection, banking correspondents need to have an active bank or e-money account to automatically offset the cash transactions processed at their till. The interaction in real time between the three parties (bank, agent and customer), together with the automatic clearance process, creates a safe environment for all parties with no additional settlement risk.

Worldwide distribution of banking correspondents

Banking correspondents have significantly contributed to extend access to the formal financial system in many developing countries, particularly in Latin America and the Caribbean, which is the world region with the greatest number of banking correspondents (136 outlets per 100,000 adults). Latin America is followed at a considerable distance by South Asia (83 agents per 100,000 adults) and Middle East and North Africa (72).[4] The prevalence of the banking correspondent business model in Latin America is consistent with the emergence of this business model in Brazil in the year 2000, and with the pioneering specific regulation introduced by many countries in the region. This may be in part promoted by the long-standing banking tradition in this region relative to other emerging markets.

3: For further details, see Cámara & Tuesta (2014). *Measuring Financial Inclusion: A Multidimensional Index*. BBVA Research Working Paper, No. 14/26. Available at: https://www.bbvaresearch.com/wp-content/uploads/2014/09/WP14-26_Financial-Inclusion2.pdf
4: For further details, see Cámara, Tuesta & Urbiola (2015). *Extending access to the formal financial system: the banking correspondent business model*. BBVA Research Working Paper, No. 15/10. Available at: https://www.bbvaresearch.com/wp-content/uploads/2015/04/WP15-10_Banking_correspondents.pdf

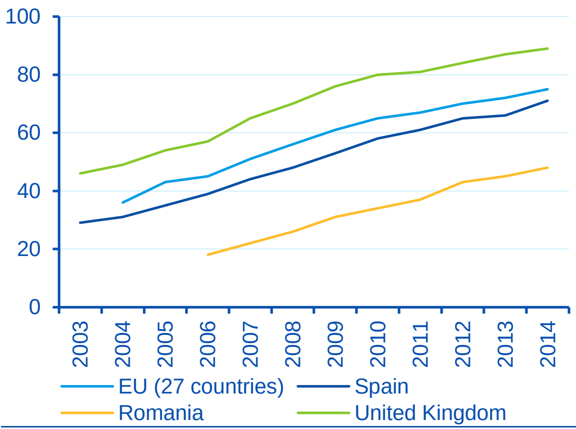
5 The digital economy, hares or tortoises

As Schumpeter said at the beginning of the 20th century, innovation (in all of its diverse forms), is the driver of long-term economic growth. There is no doubt that the digital economy is one of the most important innovations which mankind has experienced since the last third of the 20th century. More precisely, the widening reach of the internet has given rise to deep socio-economic change the world over. Internet-related services have changed social relations among the public (Facebook, Twitter, etc.), and ushered in new channels for communicating and exchanging instant information (e-mail, Skype, Whatsapp).

From the economic standpoint, the Internet has also had major effects on markets for goods and services, on both the supply and demand sides. On the supply side, the development of Web 2.0 has meant that businesses can offer e-commerce. This opens up the possibility of any SME being able to sell its products in any corner of the world, thus expanding its potential market, as well as more competitive prices. On the demand side, consumers can have access to a wide range of products from highly diverse sources, and consult all of the available information on these quickly and cheaply, compare the details with other options, and thus maximise their utility. Internet has therefore become a marketing channel *par excellence* and a key competitive element for companies.

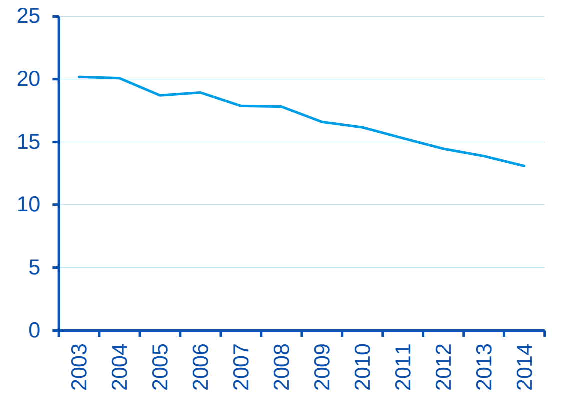
A general feature of the digital economy is the enormous ease with which it can extend among people and countries. More specifically, Internet development has seen very substantial growth rates in Europe in the last decade. The country with the highest internet usage is the United Kingdom, where about 90% of the population use it and growth in the last 10 years has been 40 percentage points (see Figure 1). The average for Internet users in the European Union has risen from 35% in 2004, to 75% in 2014. The figure for Spain has steadily grown at around this average level to over 70% today. In the case of Romania (the country with the lowest internet use), it has climbed from 18% in 2006 to 48% in 2014. As can be observed, there is still a significant gap between the most advanced country in this sense (the United Kingdom) and the least developed (Romania), which is as much as 40 percentage points. Despite this enormous gap today, the divide as regards internet use has been steadily closing. If we view this using a traditional mean of measuring convergence such as sigma convergence[5], we can see that the standard deviation for the percentage of internet users in Europe is tendentially reduced over time. In other words, countries which currently have a usage level below the mean are growing at a faster rate than those above it (see Figure 1 and 2).

Figure 5.1
Internet use over time: % of regular internet-users



Source: Eurostat and BBVA Research

Figure 5.2
Internet use over time: Sigma convergence



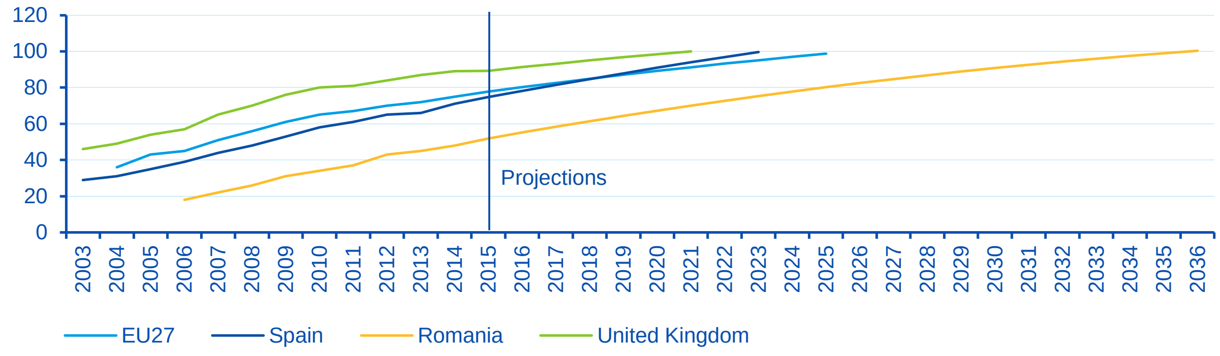
Source: Eurostat and BBVA Research

If we were to make a simple projection of these time series, we would be able to see that, in the case of the United Kingdom, 100% of the population might be using the internet by 2021. Spain would reach this level in

5 Barro, R. & X. Sala (1990). "Economic Growth and Convergence Across the United States." NBER Working Paper no. 3419.Barro, R. & X. Sala (1992). "Convergence." *Journal of Political Economy,* 100(2), pp. 223-51.

2023, and the average for the European Union would arrive there in 2026. The country which is lagging the most (Romania) should achieve 100% in 2036. This means that from that point 100% of the European population should be using the internet in one of its available forms.

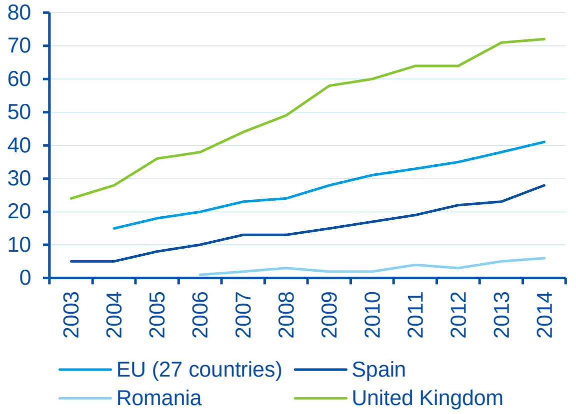
Figure 5.3
Projected internet coverage



Source: Eurostat and the European Union

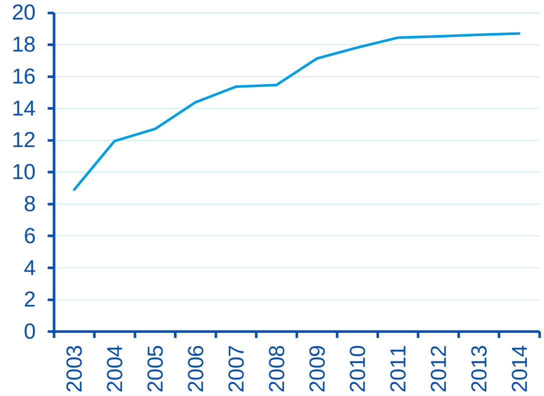
Although the extension of the internet digital channel behaves very robustly, trends for some of the services offered through it seem to follow a pattern that offers more diverse results. To give a specific example, if we observe the increase in the use of e-commerce by European citizens, once again it is the United Kingdom which has experienced the fastest growth in the last decade, moving from 24% in 2003 to 72% in 2014 (See Figure 4 and 5).

Figure 5.4
Growth of e-commerce: individuals having ordered/bought goods or services for private use over the internet in the last three months



Source: Eurostat and BBVA Research

Figure 5.5
Growth of e-commerce: Sigma convergence



Source: Eurostat and BBVA Research

In Spain's case, the use of e-commerce has also grown at breakneck speed (though at a slower pace than in the UK), rising from 5% in 2003 to 28% in 2014, 13 percentage points below the European mean. In other countries, such as Romania, the increase has been from 1% to 6% in 2014. The gap between the country with the highest percentage of users (the UK) and that with the lowest (Romania) currently stands at 66 percentage points.

If in the case of internet use, we observe a converging process among the European countries, in e-commerce we nonetheless see the opposite pattern (see Figure 3). The reasons behind this are very diverse and complex. This could be due to supply or demand problems, issues relating to regulation in each country, or socio-economic idiosyncrasy itself. The fact is that the repercussions on the potential economic growth of countries which fail to grasp the opportunities which the new digital economy offers could be very significant (where Spain could be one such country). In future studies we will examine the causes that give rise to these trends (as well as others) and describe the implications which they could have in the short to long term both for the welfare of the public and for economic development.

Digital news

Risks and vulnerabilities in the EU Financial System

The joint committee of the European Supervisory Authorities reports on the risks and vulnerabilities in the EU financial system. Apart from macro and business conduct risks, the report covers IT related operational risk and cyber risk. According to the supervisory authorities, IT risk rose since the last report in August 2014 due to costs pressures, outsourcing, the need for additional capacities and a mounting number of cyber-attacks. In this regard, the report highlights that systematic integration of IT risk in overall risk management still needs to progress.

Unleashing the Potential of Blockchain Technology

The Institute of International Finance analysis how the blockchain technology –the power behind Bitcoin– could alter the financial industry. This new technology removes the need for a clearing house or financial establishment to act as an intermediary during a transaction, facilitating quick, secure and inexpensive value exchanges. This report explains the implications of this new technology in the payments space, the barriers to widespread its adoption and the need of a better regulation and advances in technology.

Compliance with the Guidelines on the security of internet payments

The European Banking Authority publishes a summary table of the notifications received from the national competent authorities regarding their compliance or intention to comply with the EBA Guidelines EBA/GL/2014/12 on the security of internet payments. As the table shows, 24 national authorities in the EU stated that they will comply with the Guidelines, while two indicated partial compliance and three reported that they will not comply. In addition, two of the three EEA/EFTA authorities reported compliance. The Guidelines represent the first output of the cooperation between the EBA and ECB on retail payments; have taken two years to develop; are applicable as of 1 August 2015; and will apply until the PSD2 requirements come into force in 2018/9.

DISCLAIMER

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