

NON-CASH PAYMENTS - TRENDS AND PROSPECTS

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ABSTRACT: *For some time, cash is no longer the only method of payment for retail customers, alternative payment instruments like cards, direct debits or other means of making transactions being increasingly preferred by customers. Thus, the substitution of cash with non-cash instruments and the role of paper-based and electronic payments have grown significantly lately. The purpose of this paper is to provide an overview on the latest developments in the use of non-cash instruments and issues related to recent innovations in retail payments.*

KEY WORDS: *non-cash transactions, retail payments, card payments, direct debits, credit transfers.*

JEL CLASSIFICATIONS: *G20, G21.*

1. THEORETICAL FRAMEWORK

The economic development and emergence of banks led to the expansion of the monetary mass and the introduction of a new payment method, known as non-cash payments (a method of paying that does not involve the exchange of cash), which represents a very high quality leap in the financial completion of transactions between participants.

If cash payment instruments are represented by metal or paper currency, being the oldest form of money circulation, the cashless payment instruments are standardized documents containing payment instructions given by the payer to his bank in order to transfer funds to the payee's bank. As non-cash payments have a number of advantages over using cash (efficiency, convenience, rapidity, safety, time saving, attractive discounts) and the world faces fast changes in technology, consumers start to move more and more towards a cashless environment and the share of payments using cash has declined lately in retail transactions. Retail payments describe payments that are made between individuals, between businesses, or between individuals and

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businesses (Cronin & McGuinness, 2010). The European Central Bank defines retail payments as typically payments between consumers, businesses and public authorities and are mainly consumer payments of relatively low value and urgency.

Non-cash payments are performed by a payment system (a set of instruments, banking procedures and rules) involving funds transfer from the payer to the payee by payment service providers, such as credit institutions, payment institutions and e-money institutions. At the end of the 1980s, the substitution of cash with non-cash instruments and the role of paper-based and electronic payments have grown significantly. But the implementation of the electronic instruments in the payment system was not instantaneous. The emergence and development of the electronic payment system was a consequence of the emergence of banking information systems.

Electronic funds transfer from one bank account to another are made either within a single financial institution or across multiple institutions, via computer-based systems. In order to perform interbank electronic payments, involving the connection of different credit institutions in electronic environment, a banking system with global connectivity was required. This global connectivity was made possible by implementing an international interbank communication network on electronic support, swift application.

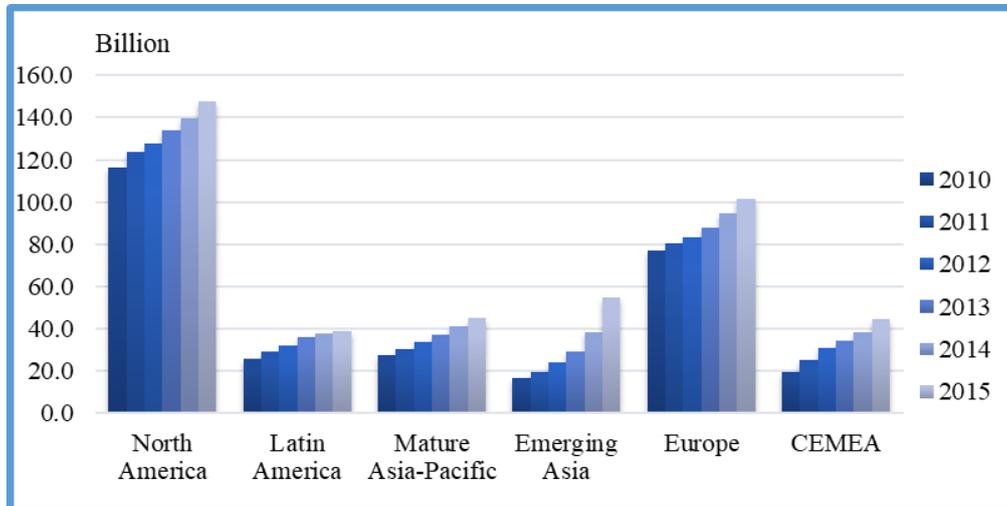
The electronic payment system represents a set of banking practices and techniques, based on common rules and on standardized payment instruments. The system ensures accounting transactions entirely in electronic form based on instructions transposed in electronic messages and payments are made in real time without supporting paper documentation. The transfer of funds can be made by payment service providers based on orders through payment instruments. There are a number of different cashless payment instruments available for customer which are used for a wide variety of purposes, such as payment orders (credit transfers), automatic payment methods (direct debits and standing orders), payment cards, cheques, bills of exchange, promissory notes.

For banks around the world, payment services are an important source of income and drivers of customer loyalty and satisfaction for both retail and corporate customers. For retail consumers, extensive technological revolution and payment innovations have transformed the payment experience, whereas for corporate customers, payment choices and customer behaviour regarding different payment methods are more about the efficiency and convenience of payments (Accenture, 2016).

2. NON-CASH PAYMENTS WORLDWIDE

Even if globally, adoption of non-cash payments has been slower than expected, competition for cash has come from a variety of cashless instruments, especially from traditional electronic payment instruments, such as debit and credit cards. In the last decade, World Payments Reports find that the transaction volume of non-cash payments is increasing rapidly in certain areas (53.5% from 2010 to 2015 to reach 432.9 billion transactions) with developing markets leading the growth in Asia

and CEMEA, shaping the global payments landscape in terms of innovation and transaction capacity handling (Figure 1).



Source: based on data from the World Payments Report 2016

Figure 1. Number of worldwide non-cash transactions, 2010-2015

The highest growth rate was recorded in Emerging Asia (234.76% from 2010 to 2015 to reach 54.9 billion transactions in 2015 from 16.4 billion transactions in 2010), followed by Central Europe, Middle East and Africa – CEMEA recording a growth rate of 130.4% from 2010 to 2015, with a modest increase on the 2012-2013 growth rate of 10.93% and on the 2013-2014 growth rate of 11.3% (Table 1).

The next-fastest growing region was Mature Asia-Pacific where the non-cash transaction values grew at a slightly lower rate of 9.69% in 2015 compared with 10.72% in 2014 (reaching 45.3 billion transactions in 2015). Decelerated, but still positive growth rates were recorded in Latin America (with a growth rate of 52.73% from 2010 to 2015, rising to 39.1 billion transactions in 2015 from 25.6 billion transactions in 2010) due to decreased volumes in Brazil and Argentina.

During the same period, Europe witnessed accelerated growth of 7.27% in 2014 (compared to 5.39% in the previous year) induced by the largest EU markets, such as Germany, UK and France, and also Denmark and Sweden. North American non-cash transaction growth was lower compared with the other regions (26.63% from 2010 to 2015), the number of non-cash transactions increased at a slightly higher rate of 5.44% in 2015, compared with 4.33% in the previous year.

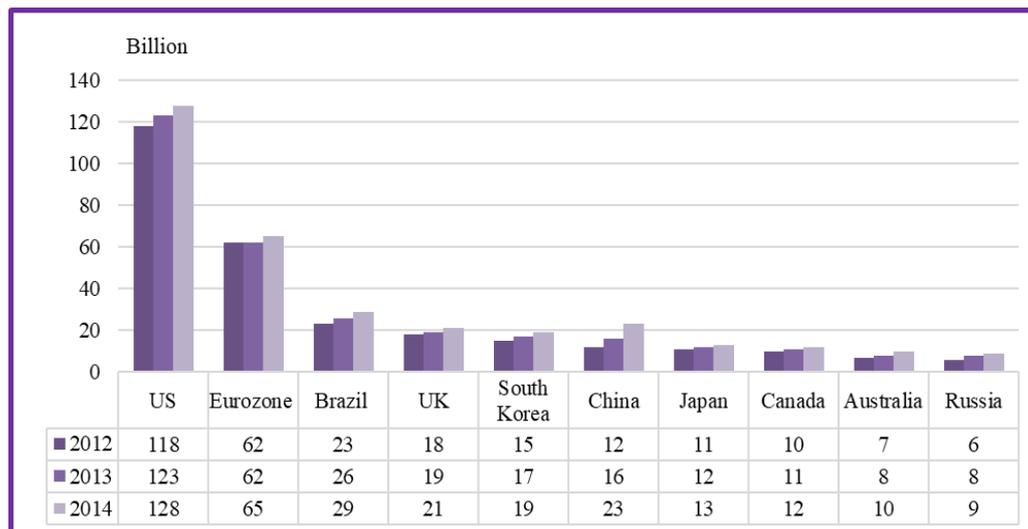
World Payments Reports also indicate that among the top-10 markets for non-cash transactions, the US continued to dominate the list, followed by the Eurozone (Figure 2). In 2014 China became the 4th largest cashless transaction volume market behind the US, Eurozone and Brazil, surpassing for the first time the UK and South Korea (Capgemini, 2016).

Table 1. Growth rate (%) in non-cash payments worldwide, 2010-2015

	2011/2010	2012/2011	2013/2012	2014/2013	2015/2014
North America	6.27	3.23	4.93	4.33	5.44
Latin America	14.45	9.22	11.88	4.47	4.55
Mature Asia-Pacific	11.03	10.93	11.34	10.72	9.69
Emerging Asia	18.90	22.56	21.76	31.62	43.34
Europe	4.29	3.99	5.39	7.27	7.52
CEMEA	29.90	23.41	10.93	11.30	16.41
Total	9.29	7.62	8.14	8.61	11.11

	2011/2010	2012/2010	2013/2010	2014/2010	2015/2010
North America	6.27	9.71	15.12	20.10	26.63
Latin America	14.45	25.00	39.84	46.09	52.73
Mature Asia-Pacific	11.03	23.16	37.13	51.84	66.54
Emerging Asia	18.90	45.73	77.44	133.54	234.76
Europe	4.29	8.44	14.29	22.60	31.82
CEMEA	29.90	60.31	77.84	97.94	130.41
Total	9.29	17.62	27.20	38.16	53.51

Source: based on data from the World Payments Report 2016

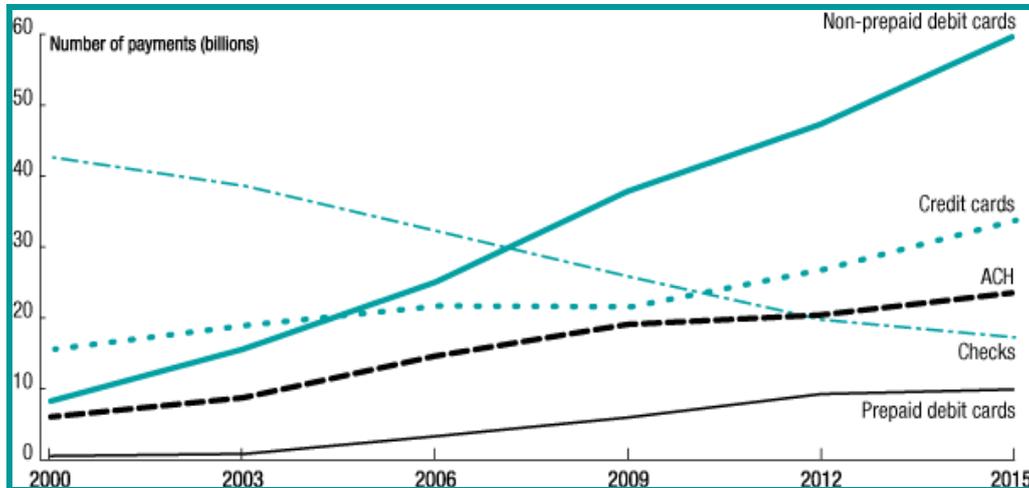


Source: based on data from the World Payments Report 2016

Figure 2. Number of non-cash transactions in top 10 non-cash markets, 2012-2014

In the United States, since 2001 the Federal Reserve System periodically reviews non-cash payments. During 2000-2015, card payments in the US have shown substantial growth while payments by cheque has considerably declined and ACH

payments (credit transfers and direct debits) have increased annually with significant growth potential (Figure 3).



Source: Federal Reserve System (2016) *The Federal Reserve Payments Study 2016*, <https://www.federalreserve.gov/paymentsystems/2016-noncash-payments.htm>

Figure 3. Trends in non-cash payments in the United States from 2000 to 2015

In the US, the current distribution of cashless payments is the outcome of many decades of change, with many transformations over the years of the non-cash payments system, starting in 2007 when debit and credit card, then ACH payments, including debit transfers and credit transfers combined, overtook cheques.

3. NON-CASH PAYMENTS ACROSS EUROPE

In the EU countries, the popularity of payment cards continues to grow based on peoples' trust in the security of the system. As ECB figures show, among different non-cash payment instruments, the highest values were recorded, in general, for card payments, followed by credit transfers. In Denmark, Portugal, Estonia, Finland, Ireland and Sweden, known for some time as the most cashless society in the world, over 60% of non-cash transactions were carried out using bank cards.

Table 2 shows important differences between EU countries on the share of payments made using different types of non-cash payment instruments.

In the Czech Republic (68.9%), Greece (57.8%), Croatia (53.7%), Bulgaria (53.4%) and Hungary (51.1%) a significant number of non-cash payments were carried out using credit transfers.

The 2015 ECB values also indicates that direct debits continue to have a notable degree of concentration in certain EU retail payment systems, such as Germany, Spain, Austria and Netherlands, while cheque payments have a relatively low usage in the majority of EU member states, except for Malta, France and Cyprus where they are used quite frequently.

Table 2. Main non-cash payment instruments in EU countries in 2015

		Credit transfers	Direct debits	Cards	Cheques	Other¹
1	Austria	33.3	27.7	37.7	0.1	1.2
2	Belgium	38.5	12.6	47.6	0.3	1.0
3	Bulgaria	53.4	1.2	19.4	0.0	26.0
4	Croatia	53.7	3.7	41.9	0.0	0.7
5	Cyprus	21.4	8.6	58.8	8.1	3.1
6	Czech Republic	68.9	3.6	27.4	0.0	0.1
7	Denmark	18.6	0.0	81.4	0.0	0.0
8	Estonia	33.9	0.0	65.7	0.0	0.4
9	Finland	38.2	0.0	61.7	0.0	0.1
10	France	17.0	19.5	51.7	11.3	0.5
11	Germany	30.5	50.6	18.6	0.1	0.2
12	Greece	57.8	4.1	34.1	1.8	2.2
13	Hungary	51.1	6.3	40.1	0.0	2.5
14	Ireland	22.8	11.9	62.3	2.8	0.2
15	Italy	27.8	12.9	42.9	3.9	12.5
16	Latvia	40.4	0	59.6	0	0.0
17	Lithuania	34.5	4	49	0	12.5
18	Luxembourg ²	2.9	0.8	5.4	0	90.9
19	Malta	22.9	5.4	48.2	21.6	1.9
20	Netherlands	29.3	19.3	51.3	0.0	0.1
21	Poland	45.7	0.5	50.7	0.0	3.1
22	Portugal	13.8	11.9	68.4	3.4	2.5
23	Romania	43.4	2.1	54.1	0.4	0.0
24	Slovak Republic	48.1	4.1	45.5	0.0	2.3
25	Slovenia	44.1	10.9	39.6	0.0	5.4
26	Spain	15.3	31.2	45.9	1.0	6.6
27	Sweden	25.5	6.7	67.7	0.0	0.1
28	UK	17.5	16.9	63.2	2.4	0.0

Note: ¹ e-money transactions and other payment instruments; ² in the special case of Luxembourg, a very high number of e-money payments are executed.

Source: European Central Bank (2016) Payments statistics for 2015

In the European context, the emerge of non-cash transactions have been supported by the establishment of the Single Euro Payments Area (SEPA) which aims at creating an integrated payments market and harmonies the way cashless euro payments across Europe are made thereby fostering competition and driving innovation (Hasan, et al., 2013).

4. CONCLUSIONS

The importance of payments in banks' service portfolios is widely recognised as there is no doubt that a well-functioning payment infrastructure is crucial to enhance the efficiency of the financial system and to increase consumer confidence.

New technology and new business models are changing the way retail and corporate customers pay for their purchases, increasing the potential for major changes in the payment landscape worldwide and stimulating economic interaction and trade both in goods and services. The past decade has been characterized by rapid financial innovation, which induced the extended use of various payment instruments other than cash and cheques (credit and debit cards, credit transfer, direct debits) and the emergence of new means of payment that offer a range of innovative functions alongside traditional cashless payment instruments (contactless payments, digital wallets etc.).

The substitution of cash with non-cash instruments has an important economic dimension. Existing studies show that there is a strong relationship between the development of cashless transactions and economic growth given that an adequate payment market infrastructure allows reducing costs with money emission and circulation. In the near future, cashless transactions are expected to be more attractive and efficient so as to accelerate the move to digital payments, however, based on current usage pattern, cash still remains a significant payment instrument worldwide.

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