

# INSIGHT

MARCH 12, 2019

## THE EVOLUTION TO A CASHLESS SOCIETY IN BELGIUM

IS THERE ROOM FOR CASH IN A SOCIETY WHERE ALL TRANSACTIONS TEND TO GO DIGITAL?



In today's terms, a cashless society is described as an economic state, whereby financial transactions are not conducted with money in physical form (banknotes or coins), but rather through the transfer of digital information. To this day, no country is fully cashless. But does it matter in today's *digital world*? What are the benefits of going fully cashless?

## Introduction: Why is a cashless society worthwhile and who advocates it?

**The benefits of a cashless society are numerous.** For society, digital transactions are a more secure, convenient and a faster method of payment. Additionally, the Belgian banks benefit from a cashless society thanks to a yearly cost reduction of €300 million, mostly borne by the ATMs, according to a study conducted by Sia Partners. Lastly, the government also gains from a cashless society by removing the possibilities of the black market (valued at €221 million in Belgium<sup>1</sup>) and thus, enhance the tracking of criminal activities.

Society	Banks	Government
<ul style="list-style-type: none"> <li>Since all your capital is digitized, it's more secure against robbery</li> <li>It's more convenient to monitor your budget, expenses and savings</li> <li>Faster transaction speed especially for international payments</li> <li>It facilitates personal accounting</li> <li>It's easier for exact amounts at stores and no need to worry about the change.</li> </ul>	<ul style="list-style-type: none"> <li>Cost reduction of € 300 million per year for all Belgian banks due to cash. Sia Partners cost of cash study</li> <li>Tracking of spending behavior</li> <li>Bank run becomes physically challenging as there is nothing to retrieve from banks</li> </ul>	<ul style="list-style-type: none"> <li>Enhancing the tracking possibility of criminal activities (money laundering, financing of terrorism, ...)</li> <li>Reduce corruption</li> <li>Increase revenue due to reduction of black economy (valued at € 221 million)</li> <li>Creation of new jobs</li> </ul>

Fig. 1: Advantage of a cashless society

In countries like Sweden, South Korea, India and Israel the cashless revolution is happening at a rapid pace. The Swedish central bank, the Riksbank, predicts that cash transactions will make up less than 0.5% of the value of all payments made in the country by 2020. South Korea is planning to go completely coinless in 2020. And since November 2017, the Indian government has embarked on a demonetization policy against corruption and money laundering. But what about Belgium?

The question that will be tackled in this article is twofold. Firstly, we ask ourselves whether or not Belgium will evolve to a cashless society at all. Secondly, how far is our country in the conversion to a cashless society? This article will quantify the state of “cashlessness” in Belgium based on popular indicators.

## The genealogy of cash/payment methods: convergence to a cashless society

In order to answer the first part of the question, it would be interesting to have a look at the origin of cash and keep the evolution of cash in mind. At the very start, payments happened with the exchange of products. The unit of valuation was based on all possible products available (e.g. the value of 1kg of grain equaled to 0.7kg of apples). This arbitrary system was simple and good enough for tribes, but once civilization expanded and cities emerged, there was a need for a more reliable and standardized system. This led to the first evolution of payments: commodity exchanges. This system valued all products in weight of commodities like silver, bronze, copper, etc. (e.g. 1 kg of grain equals to 1g of gold). But also, perishable commodities or salt and rice, which can get hard to transport or store. Therefore, the second evolution emerged with standardized coins and banknotes based on gold deposits that have the advantage of portability (1kg of grain equals €0.5). As of today, the gold-based currencies are replaced by fiat currencies (“let it be done”) and we are still in the second evolution, contemporaneously with a third evolution, that of a fully digitized monetarization (i.e. cashless society) supported by computers, smartphones, IoT and AI and even blockchain such as cryptocurrencies (technologies of the third and fourth industrial revolution).

If we look at the history of cash, we see that money is constantly evolving. We went from an exchange system to commodities and eventually to standardized coins. These evolutions did not happen overnight but happened slowly over centuries. Consequently, it would seem unreasonable that in the near future all currencies (e.g. EUR, USD, CHF, etc.), and thus the valuation system, would disappear and be replaced by an alternative system. However, the method of payment is evolving to more and more digital formats (this is in trend with the third industrial revolution of home and mobile banking). However, in the near future, cash will always exist but in limited usage. As stated in the BBC; Many who think about cash like to use Mark Twain's quote: “reports of my death have been exaggerated.” In one paper, the authors compare cash to a kind of Cinderella. “It

<sup>1</sup> Source : Havoscope

doesn't have a mom or dad to watch over it – just those horrible stepsisters that try to convince Cinderella that she is ugly. But she isn't,". Sia Partners' reasoning behind the statement lies in the global constraints. If the EU were to go cashless, but other continents (e.g. North America) chose to keep cash as payment method, this would mean there is still cash circulating that could cross borders and enter the EU with a value, making the EU non-cashless. The question raises: Can we call a society non-cashless if only a very small percentage of the transactions are made in cash? In other words, is it reasonable to call a society cashless only and if only it has exactly 0 banknotes and coins? At Sia Partners we believe a society is as good as cashless even though cash is still used in very small amounts (e.g. 0.5% of the transaction value).

## How cashless is Belgium?

But how far is Belgium in the process of convergence? Sia Partners measures the state of convergence based on 3 popular indicators<sup>2</sup>: Facility of digital payments, alternatives for cash and reduction in volume of cash transactions.

### 1. Facility of digital payments

In the beginning of the year 2018, the Belgian government ended overcharges for card payments in shops. The goal was to enhance the use of cards as they provide higher safety and to reduce the circulation of cash as Kris Peeters<sup>3</sup> stated. Also, cash has the advantage of being transferred instantaneously. A digital transaction on the other hand, can take several days before the beneficiary receives the payment. The European Payment Council (EPC) took this seriously and introduced the instant payment scheme on November 21 2014 for all its members. This entails that for every transaction under €15,000 (national or international), the beneficiary's money will be on his/her account within 5 seconds, every day of the week, 24/7. The Belgian banks agreed to participate in the scheme before the end of January 2019<sup>4</sup>.

<sup>2</sup> Source: Worldline

<sup>3</sup> Federal Minister for Economy

<sup>4</sup> Source: Sia Partners Decryption: [Instant Payments: How long till European standard](#)

## 2. Alternatives for cash

### Cards

The number of cards in Belgium has been decreasing for 3 years straight. As of 2017, there were approximately 22.2 million debit and credit cards (reduction of 300,000 from the previous year), which is an average of 2 cards per habitant. Moreover, younger consumers aged between 18 and 39 carried out fewer cash payments, namely 1.0 daily payments compared to 1.2 for the elderly. This could be the result of alternatives which are popular with younger people and need less cash. Figure 2 confirms this statement for the EU. The Netherlands is the only country in the EU where they use their card more often than cash. On an international scale, Belgium is below average on number of cash payments and above average on number of card payments. Payment cards are still the number one payment method for online transactions. This could be explained by Belgians having their habits or a false feeling of security and/or control (e.g. introducing a pin code when authorizing payments).

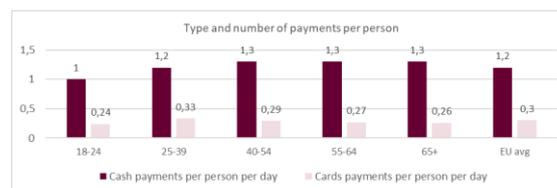


Fig.2 Cash vs Card Payments Demographic comparison (Source: ECB)

### Mobile apps

Multiple mobile payments methods are available in Belgium such as Bancontact & Payconiq<sup>5</sup> and almost all Belgian banks have their own mobile banking app. Additionally with PSD2<sup>6</sup> we have noticed a rise fintechs like Revolut and TransferWise offering consumers even more ways to conduct payments through their phone. The most used mobile payment app in Belgium is the Bancontact app which had 53.5 million online transactions in 2017, a 40% increase compared the previous year. On a European level, Belgium places 4th in terms of mobile payments users. On an international scale, Belgium is positioned 10th<sup>7</sup>.

<sup>5</sup> Bancontact and Payconiq have recently merged their mobile applications into one

<sup>6</sup> Source: Sia Partners

<sup>7</sup> Source: Visa

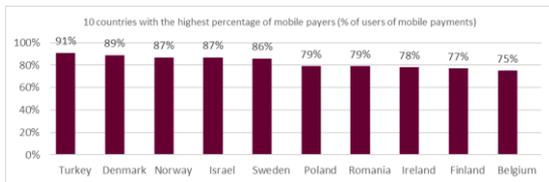


Fig.3 Percentage of Mobile Payment users (Source: Digital Payments Study by Visa – Conducted by Populus)

Nowadays, payments tend to be contactless, requiring no pin (e.g. Paypal, Samsung pay, Google Pay and Apple Pay who recently joined the Belgian market and the meal voucher provider Edenred). These are new payment methods that support contactless payment using Near Field Communication (NFC) and are not quite established yet in Belgium. In 2018, only 4% (coming from 2% in 2016) of the payments were contactless in Belgium (approximately the same figures for France) compared to 49% in the Netherlands (9% in 2016). To conclude, Belgium is advanced on the mobile apps, but despite performing above average on the European landscape of contactless payment, there is a lot of growing potential on the former. The recent merger of Bancontact with Payconic could enhance the usage of mobiles and contactless payments at the same time.

### Chatbots

In the field of chatbots, Belgium is far behind, especially if we compare to China. A pioneer in this field is the chatbot SendWyre which technology is based on blockchain and AI and used for transfers between the US and China. The app “Pengo” (created by Studio which is a start-up from Belfius) is a chatbot that offers money transfer via a message platform in Belgium. It is linked to multiple platforms such as Messenger, WhatsApp etc. Also, the Belgian newspaper “Het Laatste Nieuws” allows to pay for subscriptions fees via Messenger. Overall, Belgium is far behind on the use of chatbots for mobile transfers.

### 3. Cash transactions make up less

As shown in Figure 2, most transactions are still made in cash. (1.3 in cash vs 0.3 in cards), and it is still a very popular payment method in Belgium. More specifically, 63% of total number of transactions in Belgium are made in cash, which is below the European average of 78.8%. This can be explained by the preference of cash for payments of small value since only 32% of the value of all transactions is paid in cash (compared to 53.8% in Europe) according to the ECB.

The maps in Figure 4 show the share of cash transactions at points of sale. The left map shows the number of transactions while the right map the transaction value.

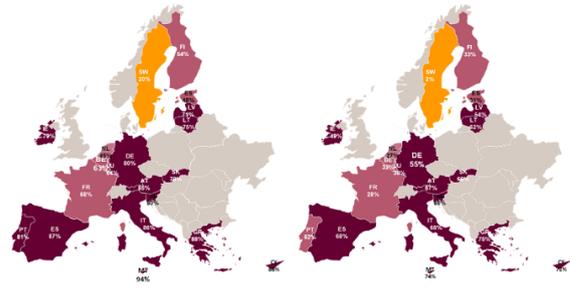


Fig.4 Share of Cash transactions at P.O.S. with number of transactions (left) and transaction value (right) (Source: ECB)

## EU Benchmark on cashlessness

Sia Partners performed a benchmark on the level of cashlessness for all countries in the European area with ‘facility of digital payments’, ‘use of alternatives for cash’ and ‘volume of cash transaction’ as indicators. By normalizing the data between 0 and 1 and afterwards using weighted averages, the benchmark resulted in figure 5.

To summarize, Belgium is positioned fourth on the most cashless country in the Euro Area based on the previously mentioned indicators. Sweden, a pioneer cashless society, has been added to indicate the growth opportunities.

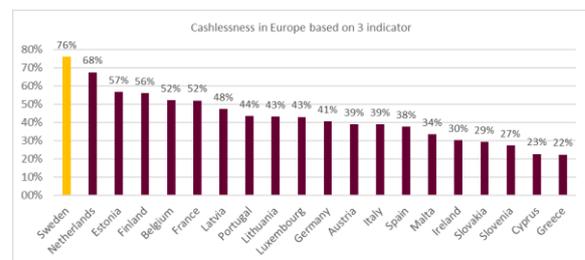


Fig.5 Cashlessness in Europe based on 3 indicators

## What are the challenges of a Cashless Belgium?

Earlier, the benefits of a cashless society were mentioned, unfortunately a cashless society in Belgium comes with multiple challenges. This table lists the most important challenges.

Challenges
Cash gives a sense of freedom. Banks and governments can't follow your purchases through cash; Anonymity that cash gives will be lost since all transactions can be followed (solution: Prepaid cards are good to make payments anonymous. Neosurf and MINT);
IT illiterate will have a hard time adapting to technology (solutions: courses and increase user friendliness);
Security and privacy measures need more attention due to a significant increase in cyber-attacks and identity theft) → Need of more reliable and resilient system in case of a system crash
Horeca in Belgium highly depends on cash (mainly fraudulent reasons). Also, each transaction has a fixed cost which is beneficial for merchants with high volumes but not for merchants with smaller volumes and many transactions.
Unbanked people like the homeless will have to change their way of income (solution: print a QR code such that people can transfer to your bank account);
Loss of seigniorage for the national bank;

Fig. 6 Challenges of achieving a cashless society

Additionally, we cannot forget that cash brings benefits that digital payments cannot offer:

1. If you're a shopaholic who wants to become more frugal, cash is the way to go. Studies of consumer psychology suggest that people who use cash are less likely to spend it frivolously or impulsively. This is due to the "pain of paying," based on the transparency cash provides [source: APA]. When you pay for an item using cash, you literally watch your money part from you. With credit or debit cards, the transaction is less transparent and the pain of paying is put off until a later date, generally when the credit card bill arrives or the bank account is balanced. By then, however, the purchase has long since been made. Less likely to overspend.
2. Instant money in hand, except taxes of course. (Hey, nothing is entirely free!)
3. There are no transaction fees with cash like there are with credit cards. This is why all businesses accept cash, which is not the case for cards.
4. Minimizes bookkeeping, which means less stress & less hassle

## Conclusion: What is the next step towards a CS according to Sia Partners?

Rome wasn't built in one day. Taking into account the technical opportunities and the challenges, the transition towards a cashless society in Belgium could happen in steps. Sia Partners advocates for an alternative definition of a cashless society, a less radical way of thinking (a first step). An economic state where everybody (buyers as well as sellers) has a digital payment system available and where all financial transaction can be conducted with digital payments. This means that everything can be done using digital information but that cash does not

necessarily have to disappear and still plays a role in society.

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