Towards a
New Vision on
Cash
in the Netherlands

Final Report of the NFPS Task Force for the revision of the NFPS's position on cash

May 2020

Contents

Introduction and summary

This is the Final Report of the NFPS Task Force for the revision of the NFPS's position on cash from 2015. The NFPS's May 2019 mandate for the Task Force was:

- take stock of recent developments in cash; and
- consider whether, and if so, in what way an adjustment of the NFPS's position on cash from 2015 would be desirable.

The Task Force had almost completed its analysis and proposals (see Section 5.3) by mid-March 2020, when the coronavirus (COVID-19) crisis in the Netherlands broke out. The impact of this on the acceptance and use of cash, in conjunction with other recent developments, in the Task Force's opinion justifies a proposal to DNB to engage in further investigation. This is discussed in Section 5.4 of this Final Report. The results of this further research and the proposals in this Final Report for the intervening period are the prelude to a new vision on cash in the Netherlands.

The NFPS's 2015 position was that "in an environment of increasing debit card payments, it is important to ensure that cash continues to function as a means of payment for retail purchases" (see Section 1.2). The NFPS reaffirmed this position as early as November 2019 on the basis of the Task Force's Interim Report. The reason for this is that, as described in Section 2.2, cash has social functions that go beyond the efficiency of POS payments (inclusion, a form of public money, independence from banks, means of storing value, anonymity and fall back option in the event of digital disruption). At the same time, the Task Force (see Section 2.3) expects that the use of cash for POS payments will decrease due to the ongoing digitisation. The COVID-19 crisis may give an additional impetus to this downward trend (see Section 2.3, Box 3). It is not clear how quickly the use of cash will decrease and to what level. A cashless society, however, is a bridge too far right now. That is why it is important to ensure the proper functioning of cash for the coming years, while at the same time examining the socially efficient cash infrastructure for the medium long term given the structurally lower use of cash. This Final Report contains proposals for this purpose (see Sections 5.3 and 5.4).

The proper functioning of cash means that consumers can easily withdraw cash, and that shops continue to accept it and can deposit (or have deposited) their cash receipts easily and at reasonable cost (see Section 2.4). The Task Force endorses this view of the NGFS, which provides for freedom of choice for consumers. This means that, in principle, consumers always have the opportunity to choose how to pay, either by cash or electronically, unless the receiving party demonstrably has specific reasons (such as security) for not accepting cash payments. One element that the Task Force wishes to emphasise is that the proper functioning of the cash payment system requires an adequate cash infrastructure.

The cash infrastructure is the total of facilities that enable cash to be used. These are offered by banks, Geldmaat, independent ATM providers and security transport companies. Retailers also play a role in this. Although retailers use the cash facilities of banks and security transport companies, they themselves also offer facilities (cash register systems and corresponding administrative and logistical procedures) to enable their customers to pay in cash.

An *adequate* cash infrastructure comprises, first of all, **good availability and accessibility, a broad acceptance of cash and reasonable costs for the processing of cash receipts.** An adequate cash infrastructure can, secondly, act as a fall back option in the event of a longer lasting disruption of electronic POS payment systems (i.e. debit card payments). This is all the more important as long as equally common and reliable, digital alternatives are still lacking. A third perspective is that of a dynamic approach. Over time, an adequate cash infrastructure can change. Given a declining use of cash, private companies, such as banks and retailers, will adapt their cash facilities. However, it is not desirable that the reduction in infrastructure should outpace the decline in use, which would spur on said decline, or harm the fall back option. In addition, the availability standards laid down in the NFPS's framework must be met. The Report continues by addressing the recent developments regarding cash.

A clearly noticeable development in POS payment traffic since 2015 has been a marked decline in the use of cash (see Section 3.2). In 2019, consumers paid 32% of their purchases – almost 2.3 billion transactions – at the cash register in cash, and 68% electronically. In 2015 the relative shares were still equal (i.e. cash and electronic payments each accounted for 50%). The acceptance and availability of cash (via ATMs) remained high, but in certain sectors acceptance is no longer a given (see Section 3.3). In a significant part of public transport, cash is no longer accepted for security reasons, which the Task Force considers to be fair, although other options (such as ticket machines) might have been conceivable. However, the security argument should not be used improperly – for instance, if the real reason is efficiency - to refuse cash in shops or at points of sale. In the course of the COVID-19 crisis, from mid-March 2020, the acceptance and use of cash suddenly fell sharply.

Also noteworthy is the Geldmaat initiative – the 2017 decision of the three largest banks to jointly manage and reduce in number their ATMs (see Section 3.4). The NFPS continues to consider this initiative to be positive in several respects, as long as Geldmaat manages to realise the number of machines presented to the NFPS and agreed with both the NFPS and DNB. In addition, the accessibility of ATMs is maintained, also in rural areas, which is to say that at least the current five-kilometre radius is still being respected.

It is less obvious that, with the reduction in the number of ATMs, overcapacity – which gradually developed over the past decade and which actually functioned as spare capacity (redundancy) – is disappearing. This limits the role of cash as a fall back option in the event of malfunctions in the electronic payment system. To this end, the downward flexibility in the ATM network should be controlled.

Explosive attacks on ATMs and, more recently, seal bag machines are a concern (see Section 3.4, Box 4). Criminals are using increasingly heavy explosives to rob machines and thus endanger the safety of local residents, entrepreneurs and bystanders. That is why banks and Geldmaat were forced to take temporary emergency measures at the end of 2019 and in April 2020. These measures limit the availability of the machines and put pressure on the robustness of the cash chain. At the same time, these operators are taking measures against explosive attacks; for example, in the second half of 2020 a system for making stolen money unusable should be introduced. The Task Force stresses the importance of structural measures against explosive attacks to improve the safety and acceptance of ATMs and to ensure the availability and continuity of services.

The robustness of the cash chain has decreased structurally (see Section 3.5). This is partially because banks – through Geldmaat – have placed their cash services at arm's length, so that their branches provide these services only to a limited extent. In addition, the chain has become largely dependent on one sizeable security transport company: Brink's (formerly G4S); should this fail, this would quickly give rise to security risks for retailers.

As a result of the various developments with respect to cash since 2015, the efficiency of POS payments has improved (see Section 3.7). This is hardly remarkable. After all, private providers, such as banks and retailers, are striving for a more efficient payment system. Most users benefit from increased efficiency, provided that the availability and accessibility of cash are maintained.

If the use of cash decreases, at some point tension will arise between the social interest (controlled flexibility of the cash infrastructure) and that of private providers (banks, retailers), who want to save costs. For this reason, Chapter 4 will deal in greater detail with the cost of the cash infrastructure, the opportunity cost of maintaining it and the question of who should bear these costs in the future.

Cash payments are gradually becoming more expensive for retailers compared to debit card transactions (see Section 4.2). The average cost of a payment method is strongly determined by the number of transactions and therefore its use. For example, the cost disadvantage of cash is reinforced by retailers' promoting debit card payments – which are relatively cheaper – which reduces the number of cash transactions. The fixed or opportunity cost of cash for retailers, i.e. the additional costs of maintaining their cash facilities – which presumably would not be used or would be used only to a limited extent – amounts to approximately EUR 230 million per year.

The cost of cash operations for banks is not known. These are likely to be significantly lower (net) than McKinsey calculated in 2006, due to the shift from cash to debit card payments and efficiency-enhancing measures (fewer branches, staff and machines; scale benefits thanks to cooperation within Geldmaat) which have yielded additional revenues and cost savings for banks. As a result of these and other fundamental changes in the cash infrastructure since 2006, there is no up-to-date view of the related opportunity costs for banks.

The question is whether society should bear all or part of the cash infrastructure costs (see Section 4.3). An argument might be that cash is a public good, but that is not entirely correct. The characteristics of a public good (such as law, safety or water management) do not apply to banknotes and coins; moreover, the banks offer an alternative, namely debit card payments. Cash can be regarded as a merit good, however, i.e. a good that the authorities find so valuable that they wish to promote its use or ensure its availability. If market operators do not offer or use such a good to a sufficient extent, the authorities can encourage it (by subsidisation) or enforce it (by regulation). Subsidisation or regulation requires the willingness of the authorities to provide them. It is not up to the Task Force to decide on this.

At the time of the COVID-19 outbreak, the Task Force was close to a consensus on NFPS agreements for the next five years on intervening in cash-related developments in order to ensure the proper functioning of the cash payment system. These are largely based on earlier agreements made in 2015. Box 1 summarises the substance of the proposed agreements. A detailed explanation is provided in Section 5.3.

The Task Force regards the most recent developments since the end of 2019 as sufficient reason to amend its proposal. For example, as a result of the COVID-19 crisis, the acceptance and use of cash suddenly fell sharply, while due to explosive attacks the accessibility and availability of ATMs and deposit machines was reduced. The long-standing vulnerability of the security transport system identified by the Task Force also plays a role in this.

The Task Force proposes that DNB has research conducted on the socially efficient cash infrastructure in the medium term given a structurally reduced use of cash. This proposal is discussed in Section 5.4 of this Final Report. This research can start next autumn and be completed in the course of 2021. The results may lead to a revision of the agreements described in Box 1 in the course of 2021. **DNB is prepared to engage in this research provided that, until this revision is completed, the agreements described in Box 1 apply and are complied with.**

Box 1 Overview of proposed agreements

1. Accessibility and availability

General
Maintenance of two NFPS agreements dating from 2015:
- the common standard (5-kilometre radius) aimed at accessibility;
- "reasonable fees" for cash transactions (withdrawals and deposits) by business account holders.

With banks (or their representatives)
- maintenance of minimum number of machines (ATMs, seal bag machines, machines that accept banknotes and coins) at the level of around the end of 2020 (end state of the Geldmaat's Cash 2020 Project);
- compliance with availability standards for these machines (to be specified);
- periodic reporting of numbers and availability to DNB for the purposes of the NFPS.

2. Acceptance

General
Maintenance of three of the 2015 NFPS agreements:
- consumer's freedom of choice, unless there are specific reasons (such as security) for not accepting cash payments;
- refusal in the context of a local monopoly is considered unreasonably onerous;
- the point of departure is that points of sale have the freedom to determine which payment methods they accept.

An explicit expectation that government and cultural institutions, as well as institutions and companies within and around health care, will continue to accept cash if they require direct payment, unless otherwise provided by law.

With points of sale (or their representatives)
- to advise their members not to maintain a debit-card-only policy unless there are demonstrable and specific reasons to do so (such as security);
- to advise their members to maintain their cash facilities;
- not to impose fees on cash payments.

3. Security transport

DNB
- engage in discussions with the largest security transport company (Brink's) on agreements to ensure continuity of service;
- engage in discussions with the security transport companies and retailers in order to reach agreements on the quality of service.

One member of the Task Force, Detailhandel Nederland (the Dutch Retail Platform), adds a proviso to the agreements referred to in Box 1. Detailhandel Nederland's members are willing to commit to these, provided that the cash infrastructure is in order. In the opinion of Detailhandel Nederland this is not the case at present. Retailers experience problems with, among other things, security transport and depositing cash, partly due to the temporary closure of most seal bag machines in connection with explosive attacks (see Box 4). Detailhandel Nederland emphasises that both issues call for urgent attention and should be addressed in the research into the present and desired cash infrastructure. The organisation would be happy to participate in this. It is also prepared to comply with the agreements until the above-mentioned revision takes place.

In addition to the proposals for NFPS agreements and research, the Task Force makes a number of recommendations to various parties, which are referred to in different places in this Report. Box 8, at the end of this Report, provides an overview of these recommendations.

The NFPS has adopted and approved this report in its meeting on 26 May 2020. The developments and data referred to in the report have been updated up to mid-May 2020.

1. The NFPS's position and mandate for the Task Force

1.1 Mandate for the Task Force

In May 2019, the NFPS decided to set up a Task Force to:

- **take stock of recent developments in cash; and**
- **to consider whether – and if so, in what manner – a revision of the NFPS's position on cash from 2015 would be desirable.** [1], [2]

1.2 2015 NFPS position

This position was that "while the number of debit card payments is steadily increasing, it is important in our society that cash remains a well-functioning means of payment at points of sale. This means that:

- generally retailers should accept cash,
- consumers should have ample opportunity to withdraw cash from their bank account,
- retailers should be able to deposit the cash they receive to their accounts with ease and at reasonable charges."

The NFPS also established a number of agreements on acceptance by retailers, its members committing themselves to promote these in their own circle:

- The NFPS considers it desirable that people have a choice between using cash and using a debit card, unless payees have specific reasons for not accepting cash, such as security concerns.
- Taking this into account, the NFPS supports the joint initiatives of banks and retailers to promote debit card payments without coercion.
- In principle, the NFPS considers it unreasonably onerous for the public if cash payments were refused in situations in which no other provider of a similar product or service is available (local monopolies).

[1] For this position, see https://www.dnb.nl/en/news/news-and-archive/nieuws-2015/dnb333953.jsp

[2] Annex 2 describes the mandate, and Annex 3 the composition of the Task Force.

- The NFPS further assumes that, from a legal perspective, retailers are free to decide which forms of payment they accept.

1.3 Additional questions for the Task Force

The NFPS reaffirmed its 2015 position in November 2019.
This was based on the Task Force's Interim Report, which described the developments in cash since 2015.

Additional questions were raised, which the Task Force has since examined:

- what is to be understood by the proper functioning of cash?
- what criteria can be used when assessing recent and future market developments?
- if adjusting developments were appropriate, what methods would be desirable and achievable?

In addition, in accordance with its mandate and at the request of the NFPS, the Task Force has addressed cost developments. This concerns in particular the question of

- who should bear the cash infrastructure opportunity costs if the use of cash decreases, but society demands that banks and retailers continue to facilitate cash transactions?

All these questions are addressed in this Final Report.

The report is structured as follows. Chapter 2 explains what is meant by the proper functioning of cash and the payment system. Chapter 3 describes the developments in cash since 2015, as did the Intermediate Report, and also assesses them. Chapter 4 pays special attention to the cost of cash and its development. Chapter 5 explains that the Task Force considers it necessary to adjust developments in cash, and presents a proposal to this end through NFPS agreements and proposes research into the cash infrastructure for the medium term.

With this Final Report, the Task Force also intends to report on its own work. The Chairman and Secretary of the Task Force (DNB) held bilateral talks with the other Task Force members. There have been nine meetings of the entire Task Force, two teleconferences since the outbreak of the COVID-19 crisis and discussions with various market and external operators (Geldmaat, YourCash, another ATM provider, the security transport company G4S, a representative of the OV Betalen public transport payment programme and the Privacy First foundation). [3] In addition, desk research has been carried out, including into recent developments in various other countries.

2. Proper functioning of cash

2.1 Proper functioning of cash

The NFPS is committed to the social efficiency of the Dutch retail payment system.[4] Cash payments have traditionally been an integral part of this. This chapter describes the social functions of cash. It outlines a prospect for the future and discusses what can be understood by the proper functioning of cash.

2.2 The functions of cash in society

Cash has a number of social functions:

- For a substantial number of people in society, cash is a prerequisite for being able to independently control their own finances (inclusion). The members of the Task Force estimate this to apply to around 2 to 2.5 million people (almost 15% of the population). This concerns people with disabilities,

[3] In early March 2020, it was announced that G4S's international parent company would be selling its cash operations in 14 countries, including the Netherlands, to The Brink's Company. On 7 April 2020, G4S Nederland became part of Brink's.
[4] Letter from the Minister of Finance concerning the task assigned to DNB for the establishment of a National Forum on the Payment System, 4 September 2002, Parliamentary Paper 27863, No 8.

people with no or insufficient digital skills, people of low literacy and people who have to actively manage their budget due to financial difficulties. [5], [6]

- Cash is public money. It is a claim on the central bank and thus a reliable alternative to non-cash (digital) money, which involves a claim on a private bank. It allows people to keep some of their financial resources outside the banking sector if they so wish. This turns out to be particularly desirable in periods of great uncertainty. Thus, in the first weeks of the COVID-19 crisis, demand for cash in the euro area increased sharply. [7]
- Cash offers people – both private individuals and entrepreneurs/retailers – control over their own money, independent of the decisions (e.g. on credit policies or fees) of their bank and its systems (banknotes and coins themselves do carry value).
- Cash can serve as a means of storing value (hoarding). According to the Bank for International Settlements BIS) this function is increasing in importance worldwide. [8] Given the current low interest rates, hoarding is one of the explanations for the increase in euro banknotes in circulation, even as the use of cash at points of sale is decreasing.
- Cash offers people an alternative to digital payment and thus the freedom to pay as they want. This may be necessary if a citizen wants to make purchases without leaving behind digital traces, thus maintaining their anonymity. [9]

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[5] The National Institute for Family Finance Information (Nibud) advises people with a tight budget to manage this using cash, because non-cash money is insufficiently tangible and visible for this purpose. See the Nibud blog, "Help, ik mis contant betalen" ("Help, I cannot pay cash"), 10 April 2020, https://www.nibud.nl/beroepsmatig/help-ik-mis-contant-betalen/

[6] Nibud research has also shown that 15% of the population pays cash more often than by debit card. For people with lower incomes, this percentage is 24%; for lower-educated people it is 20%. See Nibud, Geldzaken in de praktijk 2018 ("Financial affairs in practice 2018"), 2019. See https://www.nibud.nl/beroepsmatig/rapport-geldzaken-in-de-praktijk-2018-2019/

[7] See the ECB Blog, Beyond monetary policy, protecting the continuity and safety of payments during the COVID-19 crisis, 28 April 2020, https://www.ecb.europa.eu/press/blog/date/2020/html/ecb.blog200428~328d7ca065.en.html

[8] See BIS, Shaping the future of payments, 2020 https://www.bis.org/statistics/payment_stats/commentary1911.htm. In the euro area, the volume of cash in circulation increased by 4.5% per annum since 2014 (see ECB Payment Statistics, https://sdw.ecb.europa.eu/reports.do?node=1000004051).

[9] The downside of the fact that cash payments do not leave digital traces is that it makes cash suitable for use for criminal purposes, money laundering and tax evasion. In addition, cash is associated with physical safety risks and the risk of injury (explosive attacks, mugging), which require security measures and result in additional costs. As the electronic payment system has its own security risks (payment fraud, money laundering, terrorism financing), this also

- Cash can serve as a fall back option in case the entire digital payment system is failing for several days. Both the Netherlands Scientific Council for Government Policy (Wetenschappelijke Raad voor het Regeringsbeleid – WRR) and the National Anti-Terrorism and Security Coordinator (NCTV) warned last year that as digitisation progresses, the vulnerability – especially to cyber attacks – of the payment system and society increases. [10], [11] Box 2 describes the role of cash as a fall back option in the event of a debit card payment system failure. This shows that in such an emergency, the Dutch can make more than half of their payments with cash, which is sufficient for the necessities of life. [12] In addition to the national level, cash can also serve as a fall back option for individual retailers in the event of debit card payment system failures. [13]

The Task Force is of the opinion that the importance of these social functions can hardly be expressed in money, other than on the basis of many assumptions. That is why it has made no attempt at quantification.

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requires intensive checks (at banks), resulting in substantial costs. These are likely to be allocated at least partly to the payment system.

[10] See WRR, Voorbereiden op digitale ontwrichting ("Preparing for Digital Disruption"), 2019 and NCTV, Cybersecuritybeeld Nederland ("Cyber Security Overview for the Netherlands"), 2019.

[11] Cash and electronic POS payment transactions are one of the vital processes for the core financial infrastructure in the Netherlands. That is one of the reasons why legal requirements (under Section 3:17 of the Financial Supervision Act) are imposed on the availability (at least 99.88%) of the non-cash payment systems in the Netherlands (Regulation regarding the oversight on the proper functioning of payment systems). Partly because of this, the NFPS considers the non-cash payment system to be robust, but 100% availability is not feasible. See NFPS, 2018 Report, June 2019.

[12] The NCTV advises people to hold cash as part of an emergency package. See www.crisis.nl

[13] Alternative payment methods in case of debit card payment system failures are one-time (paper) authorisations at the point of sale, so-called Merchant Approved Transactions ("offline debit card payments"), electronic payment requests (such as Tikkie), payment through QR codes and prepaid solutions. As these alternatives lack a generic infrastructure and are not generally accepted, they are not generally usable, especially in acute circumstances, as a fall back.

Box 2 Cash as a fall back option

A robust POS payment system requires at least two payment methods that are independent of each other and generally accepted, both having adequate capacity. In the Netherlands, these currently are cash payments and payments by debit card (often contactless) and increasingly by smartphone. In order to determine whether cash can serve as a fall back option, even after the major banks' ATM network will have been reduced, DNB has performed a scenario analysis.

The points of departure for the scenario analysis are:
- Cash only serves as a fall back option for (electronic) POS payments.
- There is a disruption of at least several days, during which retailers remain open on a large scale, but no electronic payments can be made as a result of digital disruption, for example due to a large-scale malfunction or cyberattack.
- A scenario involving a national power outage is not included, because retailers will not remain open in that event (as electric doors and equipment will not function). The structure of the power grid makes such a scenario seem less plausible in advance.

The capacity of the current cash infrastructure is sufficient to enable every Dutch resident to buy basic necessities. [1] The challenge is, on the one hand, to avoid excessive peak loads (queues) at ATMs and, on the other hand, to avoid shortages as far as possible, by replenishing them in time. For this last reason, a withdrawal limit is required (see below). The assumptions of the calculation model are as follows:
- The number of ATMs is equal to that of the end state of Geldmaat's Cash 2020 project
- A perfect distribution of residents across ATMs
- Total capacity per machine: for the record only
- At the start of the crisis ATMs are filled to 60% capacity
- Average operating hours per ATM: 18 hours
- Transaction time per withdrawal: 60 seconds
- No maintenance downtime
- Refilling an ATM takes half an hour
- Cash balance per resident at start: EUR 0
- Maximum amount per withdrawal: EUR 50.

Given these assumptions, in the event of digital disruption cash can still be used as a fall back option. Per day, around 4 million withdrawals of EUR 50 can be made. In other words, every Dutch household can withdraw cash every two days to buy basic necessities. The value issued amounts to circa 55% of the average total daily cash and debit card payment POS transactions (approximately EUR 380 million per day). DNB examines the exact logistical and technical requirements for being able to fall back on cash.

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1 This is based on a comparison of:
- the total cash withdrawals per month in 2019: EUR 3.2 billion, and
- the cost of basic necessities per month (according to the Nibud, EUR 5.64 per day per person) for the Dutch population of 17.3 million people: EUR 2.9 billion. See: https://www.nibud.nl/consumenten/wat-geeft-u-uit-aan-voeding/

2.3 *Looking ahead*

The Task Force expects that the use of cash in the Netherlands will continue to decline in the coming years, even apart from the impact of the COVID-19 crisis. For example, the digitisation of POS and P2P payments continues, partly driven by increased competition between payment service providers. As a result, new digital payment methods are constantly being offered. Already more than half (2019: 64%) of all debit card transactions are contactless. POS payments and consumer P2P payment requests by smartphone are increasing in popularity. [14] Retail chains are experimenting with cashless shops and automated POS systems, where payment takes place electronically later on. In addition, retail organisations and banks aim to further reduce the relative cash/electronic payment ratio (which was 32%/68% in 2019) to 25%/75% by 2025. [15] Research among consumers into the expected use (by Motivaction) and among retailers into the acceptance of cash in the future (by Panteia) points in the same direction. [16] Of the consumers surveyed, 48% expected to be using cash less than today in five years' time, while 21% did not expect to be using cash at all then.

International developments also indicate that the use of cash in the Netherlands will continue to decline. The Scandinavian countries and the United Kingdom are at the forefront of Europe in this respect, followed by the Netherlands (see Table 1). Cash is still relatively widely used elsewhere, especially in Germany. [17]

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[14] See DNBulletin Dutch consumers increasingly use their smartphones for person-to-person (P2P) payments, May 2018.
[15] Stichting Bevorderen Efficiënt Betalen (SBEB), 13 jaar werken aan efficiënter betalingsverkeer ("Thirteen years of work on a more efficient payment system"), 2018, p. 13.
[16] Klöne, E-J, Vrakking, T, and Zondervan, I, A biennial study about knowledge and appreciation of euro banknotes among the Dutch, 2019. This research was carried out by Motivaction on behalf of DNB. The results have been published as an appendix to DNBulletin Dutch people trust cash, 13 May 2019.
[17] See ECB, The use of cash by households in the euro area, Occasional paper, No 201, November 2017, https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op201.en.pdf?f3670de4c470a5361c8b3e250d656699

Table 1 Use of cash and debit cards in various countries, 2018

	Number of cash withdrawals per capita	Number of debit card payments per capita	Cash withdrawals/debit card payments (%) (1)
Denmark	9.1	364.1	16
Finland (2)	22.3	331.5	24
United Kingdom (3)	39.3	314.9	21
Sweden	8.6	348.7	15
Netherlands	15.1	274.6	35
Belgium	23.4	183.7	48
Germany	25.0	63.9	186
France	21.9	197.5	39
EU	17.7	106.8	64

(1) Total value of cash withdrawals/total value of debit card payments x 100%; data on the number of cash payments and the relative proportion of cash in POS transactions are lacking. (2) 2016, (3) 2017.
Source: ECB Payment Statistics, July 2019

However, it is not clear how quickly the decline will take place in the Netherlands nor to what level. The COVID-19 crisis that broke out in the Netherlands in spring 2020 may give an additional impetus to this decline (see Box 3), although its long-term effects are not yet predictable. Conversely, specific events in the digital domain (such as cyberattacks, digital disruptions or privacy incidents) could interrupt the downward trend, but this is expected by the Task Force to be only temporary. According to this view, ultimately, under the influence of digitisation, the declining trend will resume, possibly trending to a minimum level.

The Task Force recognises that given continued digitisation, some of the functions of cash can be taken over by other means of payment in the longer term, but for the time being this is not the case. For example, there are smartphone apps that can help with budget management, although not all

Box 3 Cash and the COVID-19 crisis

In mid-March 2020, after the outbreak of the coronavirus crisis, many retailers (including chains) decided to ask their customers to pay contactlessly. [1] The rationale for this is that customers' hand contact with cashiers – and therefore transmission of the coronavirus – can be avoided as much as possible. The banks then decided to simplify contactless transactions by increasing the transaction limits and cumulative limits for payment without entering a PIN code from EUR 25 to EUR 50 and from EUR 50 to EUR 100, respectively.

Cash is safe, as several investigations have shown. The National Institute for Public Health and the Environment (RIVM) has stated on behalf of the government that it is safe to pay in cash. The chances are very small that the virus will spread through surfaces, such as money. The ECB and the BIS have also established that the risk of transmission of the virus through banknotes is low compared to hard surfaces of steel or plastic, or other frequently touched objects, such as debit card payment terminals. [2]

However, paying in cash is under pressure – either temporarily or not – due to a shift to online payments and the call to make contactless payments. Online shopping and payments are likely to increase (iDEAL payments have increased by around 35% since the outbreak of the crisis compared to the same period in 2019). On the other hand, the number of POS payment transactions is temporarily decreasing as a result of the required social distancing and the closure of hospitality establishments and various types of retail businesses. [3], [4] Within this last payment segment, the importance of (contactless) debit card payments increases at the expense of cash payments. The question is to what extent this latter, additional stimulus will prove permanent. The Task Force recommends the Dutch Payments Association and DNB to monitor payment behaviour in shops regularly, both during and after this crisis, in order to understand the effects of this.

The effects on the use of cash – both relative and absolute – in the longer term, once the COVID-19 crisis is over, cannot yet be predicted. The BIS believes that the crisis can strengthen the trend towards digital payments. However, this could increase the social division to the detriment of the elderly and those without access to banking services. The pandemic could strengthen the call to defend the role of cash, but also the call for the introduction of digital central bank money. [5]

[1] In mid-March 2020, the Centraal Bureau Levensmiddelenhandel, the organisation of supermarkets and food service companies, requested the cabinet for a legal possibility to no longer accept cash payments in connection with COVID-19 where necessary. See http://www.cbl.nl/pinnen-als-voorzorgsmaatregelen-tegen-coronavirus/
The Minister did not consent to this request because cash is important for some sections of the population and there are no medical reasons for a ban.
[2] See https://www.rijksoverheid.nl/onderwerpen/coronavirus-covid-19/veelgestelde-vragen-per-onderwerp/maatregelen-en-handhaving; BIS, BIS Bulletin, Covid-19, cash and the future of payments, No 3, March 2020 and ECB Blog, Beyond monetary policy, protecting the continuity and safety of payments during the coronavirus crisis, 28 April 2020, https://www.ecb.europa.eu/press/blog/date/2020/html/ecb.blog200428~328d7ca065.en.html.
[3] https://www.ing.nl/zakelijk/kennis-over-de-economie/onze-economie/de-nederlandse-economie/publicaties/coronavirus-en-effecten-op-pintransacties.html
[4] See https://www.nu.nl/economie/6040328/onderzoeksbureau-15000-tot-20000-winkels-hebben-deuren-gesloten.html
[5] See the aforementioned publication of the BIS.

digital innovations are suitable for people in a vulnerable position. [18] The digital central bank money referred to in Box 3 is a claim on a central bank, making it a different form of public money and in this respect a digital alternative to cash. The national and international debates on digital central bank money have recently accelerated. For example, at the beginning of 2019, the WRR suggested considering the introduction of such a currency; it will probably fall to the European System of Central Banks to decide to do so nor not.[19] For the time being, there is no alternative means of payment that can perform all the functions of cash. Both cash and non-cash payment instruments satisfy specific needs; as long as those remain unchanged, both will be required to meet the full spectrum of user needs. [20]

Similarly, the Task Force does not consider a cashless society to be desirable for the time being. Developments in Sweden are telling. The Swedish Parliament and the Swedish central bank, Sveriges Riksbank, are concerned about a situation in which cash would actually disappear. This would lead to strong concentration and potentially large inefficiencies in the digital payment system, vulnerability to digital disruption, exclusion of segments of the population, reduced confidence in the currency – as bank balances can no longer be converted into central bank money – and the dominance of profit over social incentives in the further development of the payment system. [21] As a result, a law entered into force in Sweden on 1 January 2020 which – following Norway's example – requires (large) banks to offer cash services. [22]

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[18] For the time being, the budget management of people in a vulnerable position is better served with cash than with a debit card. See the DNB Bulletin, Budgetbeheer beïnvloedt het gebruik van de pinpas ("Budget management influences debit card use"), July 2014.
[19] See DNB, Digitaal centrale bankgeld. Doelstellingen, randvoorwaarden en ontwerpkeuzes ("Digital central bank money: objectives, framework conditions and design choices"), 2020 (April 2020) and WRR, Geld en schuld, de publieke rol van banken (Money and debt, the public role of banks), 2019.
[20] See G4S, World Cash Report 2018, 2019.
[21] See IMF, Art IV Consultation Sweden, March 2019, Appendix VII, https://www.imf.org/en/Publications/CR/Issues/2019/03/26/Sweden-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-46709
[22] See ECB, Opinion on the requirement for certain credit institutions and branches to provide cash services (CON/2019/41), Sweden, 26 November 2019.

All in all, the Task Force considers it important to Dutch society that cash continues to function properly and advises the NFPS to ensure this for the coming years.

2.4 Proper functioning of cash

What can be understood by the proper functioning of cash or the payment system was already partially specified by the NFPS in 2015. It is noteworthy that the three aspects that the NFPS distinguished at the time (see Section 1.2) relate to the possibility of using cash, but do not say anything about its actual use. Moreover, they relate to both consumers' and retailers' choices as well as the cash infrastructure, in the sense that they refer to the *possibilities* for withdrawing cash, paying in cash, accepting cash, and depositing cash. Both the freedom of choice and the cash infrastructure will be discussed below.

The cash payment system functions smoothly if consumers have the freedom to choose how they pay. Having a choice is important both for individual consumers and society as a whole. Specific groups of people prefer or genuinely need cash for reasons cited in Section 2.2. At the same time, there are an increasing number of people who usually pay digitally and virtually stopped using cash. Cash payment options must remain in place to serve the former group of people, at least as long as digital alternatives are inadequate for that group. The consumers' freedom of choice depends on the retailers continuing to accept cash. Only then will cash remain suitable for use. Freedom of choice and cash acceptance are of even greater relevance in local monopoly situations and for vital goods and services, such as those offered by pharmacies, healthcare institutions and special transportation companies. That being said, freedom of choice is not absolute. In 2015, the NFPS assumed that, from a legal perspective, retailers are free to decide which forms of payment they accept, providing that they make this clear to consumers beforehand. However, this may be at odds with the status of cash as legal tender, especially if it is not accepted in many cases. [23] At the time, the NFPS already stated that retailers may have specific

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[23] Case law on this point is scarce, and ultimately it falls to the European Court of Justice to interpret the provision that cash is "legal tender". The NFPS's position adopted in 2015 urged retailers not to exclude cash payments.

reasons for not accepting cash, such as security concerns. However, the security argument should not be used improperly – for instance if the real reason is efficiency – to refuse cash in shops or at points of sale.[24]

Freedom of choice presupposes the proper functioning of the cash payment system, including an adequate cash infrastructure. In the absence of a solid – or at least adequate – infrastructure, consumers and retailers are less likely to opt for cash. At its autumn meeting of 2018, at the presentation of the Geldmaat initiative (see Section 3.4), the NFPS reaffirmed its desire to maintain an adequate cash payment infrastructure in the Netherlands. [25]

The cash infrastructure is the total of facilities that enable cash to be used. These are offered by banks, Geldmaat, independent ATM providers and security transport companies. Annex 1 contains key data on cash infrastructure in the Netherlands.

POS institutions also play a role in the cash infrastructure. On the one hand, they use the cash facilities of the banks and security transport companies. On the other hand, they also provide facilities themselves, such as cash register systems and the associated administrative and logistics procedures, that enable their customers to make cash payments. Seen in this light, such facilities provided by retailers form an integral part of the cash infrastructure. In order to continue to enable cash payments, shops – including all branches of retail chains – must continue to accept cash at a sufficient number of points of sale, unless there are specific reasons for not doing so. Maintaining their cash facilities is also in their own interest, as these can serve as a fall back option in the event of short or longer-lasting debit card payment system failures (see Section 2.2).

An *adequate* cash infrastructure has various dimensions. According to the NFPS, an adequate cash infrastructure allows consumers to easily withdraw cash

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[24] The NFPS explained this in its Vision in 2015 (page 17).
[25] See NFPS, Outcomes of the NFPS meeting of 15 November 2018, https://www.dnb.nl/en/payments/other-tasks/national-forum-on-the-payment-system/actuele-onderwerpen/index.jsp

and use it to pay almost everywhere, while retailers are able to deposit their cash receipts into their accounts with ease and at reasonable charges (see Section 1.2). This implies good availability and accessibility, broad acceptance and reasonable costs (fees).

A second perspective is that thanks to an adequate cash infrastructure, cash can act as a fall back option in the event of a disruption of the digital POS payment system. It is desirable that people can easily withdraw and use cash, especially if this is necessary and the debit card payment system does not work (see Box 2). The desired availability of emergency facilities – in this case, cash facilities of banks and retailers – is at odds with the ongoing pursuit of efficiency. [26] A properly functioning cash payment system contributes to the resilience of the entire payment system against digital failures and disruption. For similar reasons, it is sensible for people to keep a certain amount of cash on hand, as the NCTV recommends. [27] The Task Force recommends that DNB also publish such a recommendation.

The third perspective is a dynamic approach that considers an adequate cash infrastructure given a declining use of cash. As described above, the use of cash vis-à-vis debit card payments is expected to decrease further. Given a relatively fixed cash infrastructure on the part of providers, at some point this will lead to a greater overcapacity than is required to absorb normal fluctuations in use. This raises the question whether – and if so, to what extent – the cash infrastructure of banks, security transport companies and retailers can adjust to the declining use of cash.

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[26] This is one of the lessons learned from the financial crisis; a second lesson is that major crises are difficult to imagine and require more precautionary capacity than is considered desirable. ‘This [coronavirus] crisis shows that it is particularly important to discuss the costs needed to keep something available, even if we may never use it.’ See De Vries, F. Parallellen tussen coronacrisis en laatste crisis zijn groter dan we denken (“The parallels between the coronavirus crisis and the last crisis are more significant than we think”), Financieel Dagblad, 29 April 2020.

[27] See www.crisis.nl

The decline in the use of cash means that an adequate cash infrastructure is not static. As banks and security transport companies are private institutions, their commercial interests will prevail and they will adjust the size of their cash infrastructure – bank branches, ATMs, cash deposit facilities, banknote sorting centres, vehicles – to the decline in cash use. From a social perspective, however, restrictions could be imposed. For example, in the first place it is not desirable for cash infrastructure downsizing to outpace the decline in cash use, thereby encouraging it. Secondly, the reduction in cash infrastructure must comply with the availability standard (five-kilometre radius) as formulated in 2007 in the NFPS framework. [28] The third condition is that the cash infrastructure must continue to function as a fall back option for digital POS payments, at least as long as alternatives to card payments other than cash are still lacking or are still insufficiently robust.

This also applies to retailers who provide part of the cash infrastructure. If, however, individual shops or retail chains should stop accepting cash, the general usability of cash and the proper functioning of the cash payment system will come under threat. That is why it not desirable for retailers to apply a debit-card-only policy and actively exclude cash payments from a social perspective. This is of even greater relevance in the case of vital goods and services and in local monopoly situations. That said, safety concerns can in specific situations prompt retailers to stop accepting cash payments, either temporarily or permanently.

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[28] See NFPS, Geen generiek bereikbaarheidsprobleem betaaldiensten geconstateerd ("No generic availability issues in payment services detected"), news release, 31 May 2007. This agreement was one of the outcomes of joint research by the NFPS, the association of Dutch municipalities (Vereniging Nederlandse Gemeenten – VNG) and the National Association of Small Villages. This research was performed at the request of the Minister of Finance, following a request of the House of Representatives in the context of the examination of the Crone Bill. See Tweede Kamer, Voorstel van wet van het lid Crone houdende regels inzake de toegankelijkheid, veiligheid, bereikbaarheid en redelijke prijsstelling van basisbetaaldiensten (Wet toegankelijkheid en bereikbaarheid basisbetaaldiensten) ("Proposal for a law by MP Crone laying down rules on the accessibility, safety, availability and reasonable pricing of basic payment services (Accessibility and Availability of Basic Payment Services Act)"), 29688, no 2, 19 July 2004.

2.5 Summary

Even though the use of cash decreases, it is important to society that it continues to function properly. This means (i) that consumers can continue to withdraw cash from their own bank account easily, (ii) that retailers continue to accept cash payments (even though they are legally free to determine which means of payment they accept), and (iii) that retailers can deposit their cash receipts (or have them deposited) into their own account easily and at reasonable cost. It also means (iv) that in principle everyone has the opportunity to choose to pay in cash or to pay digitally (freedom of choice). A properly functioning cash payment system also requires (v) an adequate cash infrastructure provided by banks, security transport companies and a sufficient number of retailers. An adequate cash infrastructure is capable of adjusting to declining cash use without encouraging the decline, and should remain available as a fall back option, with cash continuing to be sufficiently available and usable at retailers.

3. Cash developments since 2015

3.1 Introduction

This chapter describes and assesses the developments in cash over the past five years. The description is often an updated version of the text in the Intermediate Report and is always followed by a brief assessment. At the request of the NFPS, the Task Force has considered which criteria it could best use to do so. These criteria could be derived from what is meant by the proper functioning of cash. A second option was to use the NFPS objectives (safety, reliability, availability, accessibility, and efficiency) as criteria. This last option offered a number of practical advantages, as these criteria are independent of one another, fairly specific and generally accepted among NFPS members. The Task Force therefore decided to assess market developments in light of the objectives of the NFPS.

3.2 Use – actual developments

The use of cash in POS payments has continued to decline since 2015, both in absolute and relative terms. In 2019, Dutch consumers paid in cash for 32% of their purchases in shops, bars, restaurants, hotels and similar establishments, while using their debit cards for 68% of their purchases (see Figure 1). In 2015 both relative shares were still equal (i.e. cash and electronic payments each accounted for 50%). Although retail organisations and banks want to reduce cash payments, almost 2.3 billion cash payments were made at points of sale in 2019. Since the coronavirus (COVID-19) outbreak in the Netherlands in March 2020, the use of cash at points of sale has fallen sharply, both in absolute terms and relative to (contactless) debit card payments (see Box 3). This may be temporary; the longer-term effects of the COVID-19 crisis on cash use are not clear.

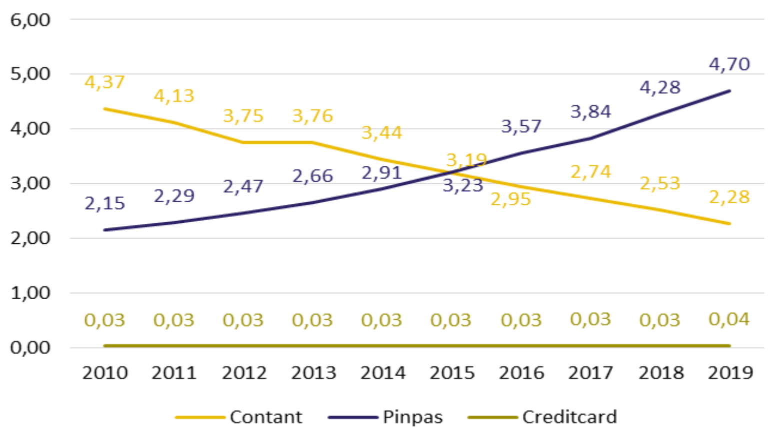
The use of cash is also diminishing in consumer P2P payment transactions. The Dutch made almost 570 million P2P payments in 2019 (EUR 23 billion), of which 54% in cash and 45% electronically. In 2017, consumers carried out 557 million P2P transactions, 67% of which were in cash. [29] No data on the use of cash in business transactions are available. Furthermore, in December 2019 the Minister for Finance and the Minister for Justice and Security published for consultation a proposal for a Law concerning the plan to tackle money laundering which includes a ban on cash transactions starting from EUR 3,000. [30]

Use – assessment

The declining use of cash results from consumers' freedom of choice. If they are increasingly paying electronically, even though cash is generally accepted (see Section 3.3), then that is apparently what they prefer. However, this preference is not entirely independent, because banks and retailers promote debit card payments. Other exogenous factors for cash payments, such as ongoing digitisation, also play a role. The decline in use does not directly affect the proper functioning of the cash payment system. It does have an indirect effect, insofar as the decline in use encourages the reduction of the cash infrastructure (see Section 3.3), thus reducing the availability of and

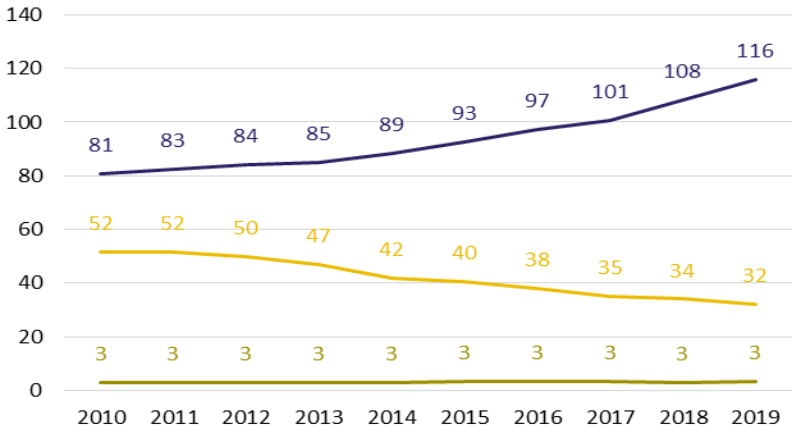
Figure 1 Fewer cash and more debit card payments at the POS

(Billions, EUR billions respectively)



[29] See DNB Bulletin, Verschuiving van contant betalen naar pinnen zet door ("Shift of cash to debit card continues"), April 2020.

[30] See www.internetconsultatie.nl/wetplanvanaanpakwitwassen. The Task Force considers the importance of combating money laundering to be evident. However, this prohibition may have negative effects on legitimate cash transactions above EUR 3,000 and retailers' freedom to accept them.



Source: DNB. Point of Sale payments in 2019 Factsheet, April 2020.

access to cash for potential users. Also, the declining use of cash may increase the physical security of the payment system.

3.3 Acceptance – actual developments

Cash is generally accepted in POS payment transactions, at least until the COVID-19 crisis. According to a recent survey, around 97% of the companies surveyed accept cash. [31] 87% of them accept debit card payments and 43% accept credit card payments. 14% of the participating companies, in particular in the hospitality and entertainment sectors, estimate that it is 50% or more likely that they will no longer accept cash in five years' time; nearly two thirds of the institutions consider that likelihood to be zero.

[31] The research also focused on retailers in Amsterdam, assuming that the payment behaviour there provides indications of future developments in the Netherlands. The acceptance of cash by those retailers turns out to be slightly lower (93%) than the national average. In the hospitality and entertainment industries in particular (89% and 90%, respectively), cash payments are no longer a given.
See the DNB Bulletin, In winkels houdt contant betalen nog stand ("In shops cash still prevails"), March 2020.

In specific sectors, cash acceptance is under pressure:

- Two pharmacy chains refused to accept cash as from 2018; one of them abandoned this intention after the Consumentenbond consumers' organisation – an NFPS member – exerted pressure. [32]
- Several municipalities also decided no longer to accept cash at their public desks. In response, in 2018 the NFPS and the Association of Dutch Municipalities (Vereniging van Nederlandse Gemeenten – VNG) asked them to allow their residents to pay in cash. [33] Despite this, in 2019 26 of the 330 municipalities allowed only debit card payments at their public desks, according to information published on their websites.
- Since 2016, the acceptance of cash in public transport (openbaar vervoer – OV) has been significantly reduced for security reasons. For example, cash is no longer accepted in buses and trams. Tickets can still be purchased using cash at OV ticket machines and windows, as well as one retail chain. At a number of stations OV chipcards can be topped up using cash.

With the outbreak of the coronavirus crisis, the acceptance of cash has fallen sharply – at least for the time being, but possibly structurally. In mid-March 2020, many retailers and retail chains decided to request their customers to pay contactlessly, in order to prevent transmission of the virus as much as possible (see Box 3). Cash is still accepted, provided that hand contact is avoided during the transaction, but in practice no longer in the numerous shops that now require their customers to pay by debit card.

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[32] https://www.consumentenbond.nl/nieuws/2019/consumentenbond-in-gesprek-met-apothekers-over-contant-betalen. The House of Representatives has requested that pharmacists be obligated to enable cash payments. For the motion in question, see https://zoek.officielebekendmakingen.nl/kst-29477-551.html and https://www.tweedekamer.nl/kamerstukken/stemmingsuitslagen/detail?id=2019P03254

[33] An equivalent motion was adopted by the House of Representatives. See https://zoek.officielebekendmakingen.nl/kst-27863-76.html and https://www.tweedekamer.nl/kamerstukken/stemmingsuitslagen/detail?id=2019P00565. See also the subsequent letter from the Minister of the Interior and Kingdom Relations https://www.tweedekamer.nl/kamerstukken/brieven_regering/detail?id=2019Z05955&did=2019D12449

Acceptance – assessment

Cash acceptance was still high in mid-2019, but certain specific developments require attention. Refusal of cash in local monopolies, such as pharmacies and municipalities, was considered unreasonably onerous by the NFPS in 2015. The Task Force advises the NFPS to consider after the COVID-19 crisis whether it will again appeal to pharmacies and municipalities that do not accept cash. According to the Task Force, the NFPS can approve the reduction in the acceptance of cash in public transport, as according to the representative of OV Betalen (public transport payment programme) this was done for security reasons, although other options (such as machines) might have been conceivable. [34], [35] The unfounded perception that cash is medically unsafe that emerged during the COVID-19 crisis (see Box 3) detracts from its acceptance and hence its use. It remains to be seen to what extent this situation will recover once the COVID-19 crisis is extinguished.

3.4 Withdrawal – actual developments

The use of ATMs to withdraw banknotes is steadily decreasing. In 2019, cash was withdrawn 248 million times, with a combined value of EUR 38.2 billion, compared to 379 million withdrawals totalling EUR 46.3 billion in 2014.

In parallel, the number of ATMs is also decreasing (see Table 2), **but availability remains high in normal circumstances.** According to the latest report, in mid-2019, 99.50% of the population lived less than five kilometres from an ATM (spring of 2015: 99.78%). [36] At the end of 2019, a large number of ATMs were temporarily shut down due to explosive attacks (see Box 4).

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[34] For people in a vulnerable position it is important that they can at least buy a public transport ticket or top up their OV chipcard using cash, for example at a service desk.

[35] The Privacy First foundation believes that the generic abolition of cash in public transport is unreasonable given privacy concerns. However, a public transport passenger who objected to the refusal of cash payments on the grounds of structural breaches of privacy was found against by the court. See https://www.privacyfirst.nl/aandachtsvelden/mobiliteit/item/1164-nieuwe-rechtszaken-michiel-jonker-tegen-privacyschendingen-in-het-openbaar-vervoer.html

[36] NGFS, Tussenrapportage bereikbaarheid geldautomaten en afstortfaciliteiten 2019 (“2019 Interim Report on availability of ATMs and deposit facilities”).

Table 2 Numbers of ATMs

End of

2010	2015	2016	2017	2018	2019
8,356	8,319	8,066	7,847	7,113	5,990

Note: The figures relate to bank ATMs, non-bank ATMs and other cashpoints. These are usually inside a shop. Some of these are filled and/or refilled by retailers using bank notes from their POS receipts; the others are filled by security transport companies.
Source: DNB

In 2017 the three largest banks decided to position their cash services at arm's length and to merge these into the Geldmaat joint venture. The aim was to keep cash available, accessible, affordable and secure in the long term. [37] This will create a single shared network of ATMs for all account holders instead of three separate ones for each bank's own account holders (albeit with guest usage) – the so-called Cash 2020 project. This way, cash services will disappear from the banks' branches. [38] The rationale behind this initiative is that a shared network will lead to lower operating costs thanks to the removal of machines that are adjacent or close to each other. Adding a number of machines in new locations and investing in security enables the banks to offer an accessible and secure network. Completion of the migration to a shared network is planned around the end of 2020; Table 3 describes the network resulting in the so-called end state of the Cash 2020 project. At the November 2018 NFPS meeting, Geldmaat presented the planned number of ATMs to the NFPS and undertook, on behalf of its shareholders, to maintain the coverage ratio at the 2016 level (99.67%). On that occasion, the NFPS expressed the wish that an adequate cash infrastructure would remain.

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[37] See Geldmaat, Press Release of 5 November 2018, https://www.geldmaat.nl/berichten/persbericht/

[38] One commentator believes that the disappearance of cash services from bank branches is the logical consequence of its outsourcing to Geldmaat. In this view, bank branches are no longer part of the cash infrastructure.

Table 3 Cash 2020 project end state

Numbers of machines

For banknotes	
Withdrawals	2,700
Withdrawals and deposits	1,150
Seal bag (wrapped deposits)	620
For coins (1)	
Withdrawals	170
Deposits	608

(1) These numbers have yet to be finalised. Geldmaat is looking for an alternative solution for parties that deposit large numbers of coins, such as collecting organisations.
Note: The figures concern the numbers of machines of the three largest banks, which are Geldmaat shareholders, as foreseen on completion of the migration to a shared machine network around the end of 2020 (Cash 2020 project).
Source: Geldmaat.

Withdrawals – assessment

The decline in the number of ATMs since 2015 has had beneficial effects:

- The efficiency of the cash chain has increased, allowing banks to save costs (scale and synergy benefits). One point of attention is that with the creation of Geldmaat, the cash operations of the large banks are concentrated in this specialised company. As a result, the pressure to adapt to falling use of ATMs (withdrawals, deposits) and therefore increasing costs per transaction lies on Geldmaat.
- The availability of ATMs – a socially important prerequisite – has been maintained, apart from the effect of the temporary closure in connection with explosive attacks. The accessibility of Geldmaat ATMs is improving, partially at the insistence of representatives of specific user groups.

The assessment of the reduction and modernisation of the ATM network from a security point of view is more nuanced. Safety may increase if the number of potential locations for explosive attacks decreases. In addition, Geldmaat wished to apply the security best practices of the banks. However, these were not sufficient. The parties mentioned were forced to take additional measures in connection with the explosive attacks and the resulting political pressure (see Box 4).

With respect to the reliability of cash payments, there are negative effects:

- with the decrease in the number of ATMs, part of the capacity in the ATM network disappears. This could be detrimental to the function of cash as a fall back option in case of longer lasting debit card payment system failures. Therefore, DNB has requested Geldmaat not to reduce the number of ATMs below that foreseen in the end state of the Cash 2020 project (see Table 3; see also Section 5.4). Moreover, a single network is more vulnerable to digital disruption than three separate networks.
- with the termination of cash services in their branches, the three major banks will no longer accept bulk cash deposits, and two of them will soon stop accepting banknote orders. As a result, shops will become dependent on either deposit machines or security transport companies for converting their receipts (see Section 3.5).

Deposits – actual developments

The Geldmaat initiative also covers cash deposit facilities. Until recently, these were offered by each of the three largest banks at 500 to 700 locations; account holders of other banks are dependent on alternatives, such as the branches of GWK Travelex or the services of one of the security transport companies. Geldmaat aims to ensure that most retailers can deposit their receipts at a machine less than 5 km away, or that virtually all retailers have access to a seal bag machine within 20 driving minutes. At the beginning of April 2020, however, the banks and Geldmaat were forced to reduce the availability (numbers and opening hours) of seal bag machines temporarily in connection with explosive attacks (see Box 4).

Box 4 Explosive attacks

In the course of 2019, social unrest over explosive attacks increased sharply. In response, the Minister of Justice and Security and the Minister of Finance consulted the sector on an effective approach. [1] The reason for this is that criminals use heavy explosives to rob ATMs and thus endanger the safety of local residents, entrepreneurs and bystanders. A dilemma for the banks is that the security measures that have been adopted so far provoke ever more and increasing violence (the spiral of violence).

The explosive attacks and resulting social unrest are undermining the acceptance of the ATM infrastructure. The municipality of Amsterdam, for example, first decided to keep ATMs out of living environments as much as possible. At the beginning of December, ABN AMRO was forced to temporarily close more than 470 machines. In mid-December 2019, the banks and Geldmaat shut down their ATMs at night; this is expected to last until the first quarter of 2021. Meanwhile, the shutdown window of ATMs with a relatively high number of transactions at night has been shortened. In early April 2020 the banks and Geldmaat decided to temporarily restrict the availability of the seal bag machines. Some 800 of these machines were shut down; the more than 400 machines that remain in use will be closed at night.

Table 4 Number of explosive attacks per year

2013	2014	2105	2016	2017	2018	2019
129	44	56	79	65	42	71

Source: Dutch Banking Association (NVB).

In the meantime, banks, Geldmaat, the police and DNB are joining forces to take new measures against explosive attacks on ATMs. They aim to reduce the potential spoils and increase the chances of catching the perpetrators. These are:

- development and implementation of a system to render money effectively unusable
- removal, from April 2020, of machines with an increased risk to local residents to safer locations
- continued detection and intensification of public-private partnerships.

The Task Force welcomes this. Seal bag machines also require better security, so that the available number is at least reduced to the number foreseen in the end state of the Cash 2020 project (see Table 3). In addition, it is important to the NFPS that the accessibility and availability of cash are maintained.

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[1] See https://www.nvb.nl/nieuws/banken-geldmaat-overheden-en-politie-strijden-samen-tegen-plofkraakcriminelen/en
https://www.tweedekamer.nl/kamerstukken/brieven_regering/detail?id=2019Z25359&did=2019D52192

Banks' fees for depositing cash by business customers have increased since 2015, although each bank uses a different pricing methodology. Between 2015 and 2019, the fees increased by 10% to 35% for small deposits (see Table 5). For each bank, this may be different for varying denomination combinations in a deposit. In 2017, the total cost of retailers for depositing cash – which they paid to banks – amounted to EUR 86 million. That is 10% more than in 2014, despite decreasing volumes. [39] In real terms, this is 7.5%, i.e. 2.5% more than inflation annually. Given the possible effects of these fees on the cost and acceptance of cash by retailers, the Task Force recommends that DNB monitor the bank charges for depositing and withdrawing cash annually.

Table 5 Bank fees for deposits at seal bag machines

(EUR, respectively average changes per year in %)

Deposit	2010	2015	2019	% change 2015/2010 per year	% change 2019/2015 per year
1,000	3.50	3.66	4.93	0.9	7.7
5,000	7.50	7.75	9.00	0.7	3.8
10,000	12.50	12.75	14.00	0.4	2.4
CPI				2.0	1.4

Note: The fees were measured on the basis of three standardised numbers of banknotes (1,000: 14 x €50, 10 x €10, 10 x €20; 5,000: 70, 50 and 50; 10,000: 140, 100 and 100). For each package, the fee of the cheapest bank is indicated. CPI = consumer price index.
Sources: DNB calculations, websites of banks with their own network of seal bag machines.

Deposits – assessment

As in the case of ATMs, the reduction in the number of cash deposit machines represents an increase in efficiency, saving banks costs. While the reliability of the payment system does not change as a result, security for retailers using the machines seems to be diminishing. Although the numbers of machines are decreasing, their availability is increasing, according to Geldmaat, as retailers can now use any machine, not just those of their own bank. The temporary closure of seal bag machines from April 2020 due to explosive attacks limits that accessibility.

In addition to the increase in efficiency, the fees for making deposits are increasing at the same time. To the extent that this discourages retailers from

[39] Panteia, Kosten van het toonbankbetalingsverkeer in 2017 ("Retail payments costs in 2017"), 2018 and Panteia, Kosten van het toonbankbetalingsverkeer in 2014 ("Retail payments costs in 2014"), 2015.

depositing their receipts, this may hinder accessibility. In 2015, the NFPS referred to the need for retailers to be able to continue depositing cash receipts at reasonable costs. The Task Force is unable to assess whether the fees mentioned are reasonable. Large fee increases for making deposits in future would not be explainable a priori in the light of increasing efficiency, unless the volumes decrease to such an extent that the costs would otherwise not be covered.

3.5 Security transport – actual developments

Security transport in the Netherlands is largely carried out by one operator. Since the bankruptcy of SecurCash Nederland (January 2019) Brink's (formerly G4S) has been the only transport company filling and emptying ATMs and dominates the market for retailer deposits. In addition to Brink's, RCCS and some small providers are active on the retail side. Between 50% and 60% of all deposits by retailers (based on value, according to a DNB estimation) at banks take place via security transport companies. Large retail chains and petrol stations in particular – numbering less than a quarter of all retailers – use this method to convert cash receipts. A total of EUR 43 million in security transport costs were incurred by retailers in 2017, over 6% (real: 11%) less than in 2014. [40] This is due to a decrease in the volumes transported and a decreasing number of journeys.

As of April 2020, a clearing bank no longer accepts deposits by security transport companies from retail customers of other banks (so-called direct money processing). [41] The reason for this is that this clearing bank has insufficient insight into the identity of the retail customers of other banks and the origin of their cash. This is at odds with customer knowledge and transaction

[40] Panteia, Kosten van het toonbankbetalingsverkeer in 2017 ("Retail payments costs in 2017"), 2018 and Panteia, Kosten van het toonbankbetalingsverkeer in 2014 ("Retail payments costs in 2014"), 2015.

[41] Direct money processing means that a security transport company collects cash from its customer (retailer), processes it and – through a clearing bank – ensures that the equivalent of the cash money is credited to the customer's account with his bank. The clearing bank should include the funds deposited by the security transport company in its transaction monitoring. See https://www.dnb.nl/nieuws/dnb-nieuwsbrieven/nieuwsbrief-banken/Nieuwsbriefbankenjanuari2019/dnb381801.jsp

monitoring requirements. For operational reasons, the security transport company concerned, Brink's, can represent eight banks and serve only those retailers that have a payment account with these banks. Although the bulk of the cash receipts of retailers can be converted into non-cash (digital) money , a number of retailers can no longer deposit cash to a smaller Dutch or foreign bank using this transport company, but only via GWK Travelex. These shops will have to find other ways, possibly another transport company, to convert their cash receipts.

Security transport – assessment

Developments in security transport since 2015, with the reduction in its infrastructure, threaten the proper functioning of the cash payment system. Although the concentration in this sector has increased the efficiency of security transport, the downside is that the reliability of the chain, in terms of robustness, has decreased. In the event of Brink's failure, no alternatives are available in the short term and security risks for retailers may arise quickly. The changes in direct money processing policies lead to fewer banks handling cash deposits from retailers. This forces a small group of retailers (2% of the total, in terms of transaction numbers) to switch to one of the other banks which still process deposits from their own customers, or to a transport company with another clearing arrangement. The effort required for this could lead these retailers to stop accepting cash, which is detrimental to the functioning of the cash chain.

3.6 Coins – actual developments

Retailers should be enabled to have an adequate amount of small change. Some 30% of them withdraw coins from their own account directly from the bank or through a security transport company. The others receive enough coins or can obtain them informally (local recirculation). In total, the cost of obtaining change in 2017 was EUR 72 million, 19% less than in 2014 (real: 13%). [42]

[42] Panteia, Kosten van het toonbankbetalingsverkeer in 2017 ("Retail payments costs in 2017"), 2018.

Coins – assessment

Coin needs in the Netherlands are gradually decreasing, presumably due to the emergence of contactless payment for low-value transactions. Coins are needed for many transactions as change, but the value concerned is relatively small. As far as we know, the security, reliability and efficiency of the coin chain are not at stake. This is not the case with regard to availability. It is true that Geldmaat is striving to maintain the number of coin machines and their coverage. However, the placement of new coin machines in separate locations, apart from those of banknote machines, can be perceived as impractical by users (commercial parties, collecting organisations). There are also complaints about the long lead time of coin orders with one large bank. Despite the declining need for coins, the proper functioning of coin distribution remains important, as a complement to banknote distribution.

3.7 Summary and conclusions

Considering all these cash developments, our conclusions are as follows.

- The use of cash in the POS payment system has decreased, although its acceptance and accessibility have remained high. In this respect, the cash payment system has functioned well. However, developments in specific retail sectors, but also at pharmacies, municipalities and public transport require attention, as cash payments are no longer a given there.
- Most of the developments since 2015 have been gradual and their effects on the functioning of the cash payment system are moderate. In addition to the COVID-19 crisis (Box 3), three developments stand out:
  - in important parts of the public transport system, cash is no longer accepted for security reasons. According to the Task Force, the NFPS can approve of this, given the explanation by OV Betalen, but other options might have been conceivable, such as the placement of ticket machines on trams or buses.
  - the Geldmaat initiative. This is positive, as the NFPS concluded earlier, provided that the availability of cash is maintained. The downside of the increased efficiency is that the spare capacity in the number of ATMs disappears, at the expense of the robustness of the cash chain.
  - security transport has become vulnerable as only one major provider is left.

In the event of this provider's failure, security risks would quickly arise among retailers. The problems concerning direct money processing is also worrying, if they lead retailers to stop accepting cash.

- A point of concern is the explosive attacks on ATMs and more recently seal bag machines (Box 4). The temporary emergency measures taken by banks and Geldmaat are necessary, but limit the availability of machines and put pressure on the robustness of the cash chain. In the second half of 2020, a system that effectively renders the money unusable must have been installed in the ATMs.
- Many developments have caused an improvement of the efficiency of POS payments and the payment system as a whole. This is hardly remarkable. After all, private providers, such as banks and retailers, are striving for a more efficient payment system. Most users benefit from this, provided that availability and accessibility are maintained. However, large fee hikes (for deposits) would not be explainable a priori in this light, unless the volumes decrease to such an extent that otherwise costs would not be covered.
- The availability of the ATMs has so far been maintained, even in rural areas, which is to say that the current standard (five-kilometre radius)d is still being respected.
- It is less obvious that the reduction in the number of ATMs, reinforced by the Geldmaat initiative, removes the overcapacity that had been gradually created and functioned as spare capacity. This undermines the robustness of the cash chain, as shown by the closure of ATMs and seal bag machines due to explosive attacks. In view of this robustness and the role of cash as a fall back option, the downward flexibility in the ATM network should be controlled. Therefore, DNB has requested Geldmaat not to reduce the number of machines further than foreseen in the end state of the Cash 2020 project, so that cash can continue to act as a fall back option in the event of debit card payment system failures. This is a condition of DNB for the proposed research (see Section 5.4), the outcomes of which may lead to a revision of the relevant agreement.

4. Cost developments

4.1 Introduction

The Task Force has paid particular attention to the cost of cash. For example, Section 4.2 deals with the private costs of cash for retailers and banks and the recent relevant developments. This does not include the social costs of cash. [43] Section 4.3 examines the costs (including opportunity costs) of the cash infrastructure, if the providers maintain this for social reasons, while its use decreases. [44] Section 4.4 discusses the arguments for distributing these costs differently.

4.2 Recent cost developments and estimates

The decline in the relative use of cash at points of sale also manifests itself in the development of payment costs. Cost studies performed repeatedly by Panteia since 2009 indicate the following (see Table 6). [45]

- The number of transactions and thus the total cost of cash payments have decreased. [46]
- The number of debit card transactions and their costs have increased.
- The average cost of a cash transaction for retailers has gradually increased while that of a debit card transaction has decreased. [47]

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[43] Social costs are the cost of resources for the production and execution of payment services. Private costs are the costs incurred by each operator in the payment chain for the production, delivery or use of such a payment service, including any transfers to another party. When all private costs are netted off and the transfers between them are deducted, the social costs remain.

[44] The cash opportunity costs are the costs for these operators in the form of unrealised savings if they do not reduce their cash facilities, which would be optimal from a cost perspective, but maintain them for social reasons. See Section 4.3.

[45] See Panteia, Kosten van het toonbankbetalingsverkeer in 2017 ("Retail payments costs in 2017"), 2018.

[46] Panteia counts both the internal costs (such as the time for labour involved in payment at a point of sale) and the external costs (such as banks' fees for depositing cash). This includes the costs of security measures (cash box, security transport, insurance), but not the direct and indirect costs of crime.

[47] This difference in cost per transaction between cash and debit card payments may be overestimated. It is determined for almost ninety percent by back office costs. These are the costs of administrative operations before and after retail closing time for processing the (cash) receipts. These are based on estimates made by retailers in a telephone survey conducted only with small and medium-sized enterprises. This excludes economies of scale in the back offices of large retailers, which can be realised, for example, by using smart safes or counting machines. The Task Force advises Panteia to analyse the back office cost of cash in greater detail in the next cost study (2020).

Table 6 Cost of cash and debit card payments for retailers

	2009	2012	2014	2017	% change compared to 2009	ditto real
Costs per transaction (EUR)						
Cash	0.22	0.24	0.25	0.29	31.8	17.5
Debit card	0.21	0.21	0.19	0.17	-19.0	-27.8
Total, cash and debit card	0.21	0.22	0.22	0.22	4.8	-6.6
Total cost (EUR millions)						
Cash	823	780	711	697	-15.3	-24.7
Debit card	324	428	472	561	73.1	54.3
Total	1,147	1,208	1,183	1,258	9.7	-2.5
Number of transactions (billions)						
Cash	3,881	3,311	2,907	2,426	-37.5	
Debit card	1,564	2,112	2,558	3,214	107.2	
Total	5,445	5,423	5,465	5,640	3.6	

Note: In this table, credit card and fuel card payments are not included under "debit card". The numbers of cash and debit card transactions differ from those shown in Figure 1 because Panteia's research concerns a smaller group of retailers.
Source: Panteia, Kosten van het toonbankbetalingsverkeer in 2017 ("Retail payments costs in 2017"), 2018.

The relative cost disadvantage of cash payments is partly due to the promotion of debit card payments and the associated decrease in the number of cash transactions. The average cost price is strongly determined by the number of payment transactions. Panteia notes that "The increase in the cost of cash payments is mainly due to the decrease in the number of cash payments, because of which the fixed costs weigh more heavily on the remaining number of payments. Debit card payment costs decrease, however, as the fixed costs now weight on a larger number of payments." [48] On balance, the shift from cash to debit card payments has led to savings for the relevant retailers to more than EUR 300 million between 2009 and 2017. [49] Looking at the retail payment system more broadly, it can be said that by promoting debit card payments and reducing cash payments, the total cost of payment at a point of sale has fallen in real terms during that period (-2.5%). [50]

For banks, cash payments are both a cost item and a source of income. No recent data on the cost of their cash operations are available. The most elaborate analysis was research performed by McKinsey in 2006, commissioned by the NVB and DNB, into bank's proceeds and costs for all their payment services (see Box 5). McKinsey at the time expected that the substitution of cash by electronic payments would lead to cost savings for the banks.

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[48] See Panteia, Kosten van het toonbankbetalingsverkeer in 2017 ("Retail payments costs in 2017"), 2018, page 45.

[49] The decrease in the total cost of cash since 2009 of EUR 126 million can be broken down roughly (because of rounding) into a volume effect of EUR -320 million (savings), a price effect of EUR +272 million (cost increase) and a product of price and volume changes of EUR -98 million.

Box 5 Summary of McKinsey research, July 2006

Payment services were loss-making for banks in 2005. That year, they caused a gross loss of EUR 2.661 million on the execution of payment transactions and the provision of payment accounts. Payment accounts (EUR 1.2 billion) and cash (EUR 779 million) in particular contributed to the negative result. On the other hand, there were proceeds of EUR 2.641 million on the balances that private individuals and companies were holding in current accounts. Including the cost of capital that banks must keep on hand for carrying out the payment activities (EUR 105 million) the result was a net loss of EUR 128 million. However, there are large differences in results between different segments and products. Foreign payments generated a positive result of EUR 707 million, while domestic private payments generated a loss of EUR 642 million.

Regarding cash, the report noted: 'The main proceeds of cash are (1) the deposit fees paid by business users, and (2) an allocation of part of the debit card fee to the use of ATMs. The main cost items are the maintenance of the payment facilities at bank branches, the ATM network and the facilities for sorting and distributing cash, and part of the debit card fees."

See: McKinsey & Company, Betalingsverkeer in Nederland: een onderzoek naar de opbrengsten en kosten voor het bankwezen ("Payments in the Netherlands: an investigation into the proceeds and costs for the banking sector"), July 2006. See https://www.dnb.nl/binaries/Betalingsverkeer%20in%20Nederland_tcm46-145628.pdf

However, McKinsey's cost estimates are outdated due to fundamental changes in the cash chain, such as:

- the absolute and relative decrease in cash payments [51]
- the decrease in the number of machines (see Table 2) and bank branches (more than half in ten years, to 1.260 at the end of 2019), usually with a cash function
- the creation of Geldservice Nederland (GSN, September 2011) for most of the large banks' cash operations (counting, sorting, distribution), followed by
- the transformation into Geldmaat (beginning in 2019), which also manages their joint ATMs; and
- the reduction in the cash departments of the banks (fewer staff).

[51] In 2015, a survey predicted that the aimed-for substitution of cash payments by debit card payments, from 60% and 40% respectively to 40% and 60% respectively in 2018, would reduce the cost to banks of their cash services by 10% to 20%. The proceeds would also decrease slightly. On balance, the negative result of the banks' cash services, as calculated in 2006, would decrease. Of this result, the report did not give a quantitative estimate. See DNB and Selen Consultancy, Betalen met contant geld van 60% naar 40%. ("Cash payments from 60% to 40%"). Possible impacts on the size and cost of the ATM and deposit facilities network. Final Report, April 2015.

With the advent of GSN/Geldmaat, the number of cash centres (from 20 in 2010 to 7 in 2019) and the number of ATMs (down by almost 30% in ten years, to 5.990 at the end of 2019) fell significantly.

Banks' cash revenues derive mainly from the recurring fees for their payment services and the fees for deposits by retailers (see Table 5). Incidentally, so far consumers consider the withdrawal and use of cash – as well as of debit card payments – as free of charge, because the banks offset these, in whole or in part, with the periodic charges for a payment package and not with the cost of individual transactions. [52], [53]

It is likely that the banks have achieved cost savings in their cash operation through the substitution of cash by debit card payments and continuous efficiency improvements. This involves both favourable volume effects (fewer cash transactions) and efficiency benefits (fewer offices, staff and machines; scale benefits thanks to cooperation). In doing so, the banks have succeeded in reducing the main cost items that McKinsey mentioned. It is therefore likely that the costs of banks' cash operations have fallen significantly since 2006. [54]

Given the changes in their cash business, the major banks have largely outsourced the operational part to Geldmaat. Of course, the cost of this has not disappeared, but has shifted to Geldmaat and, in the first instance for the major banks, has become variable, by means of a transaction fee. Because Geldmaat is a joint venture of the major banks, the costs will eventually be borne by them. However, the pressure to reduce the cost of cash operations, should

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[52] ING has been offering its customers a discount on the cost of a payment account since 1 October 2019, if in principle the customer no longer withdraws cash from ATMs. If the customer still withdraws money, that withdrawal will cost EUR 0.80. See https://www.ing.nl/particulier/betalen/bankrekeningen/oranjepakket-met-korting/index.html

[53] Note that the provision by a bank of a payment account and its cash and non-cash payment services can serve as a basis for offering other profitable services, such as the extension of credit (cross-selling).

[54] In a recent publication, DNB estimated that banks' total payment operations are currently loss-making (negative result of EUR 0.5 to 0.75 billion). See DNB, Veranderen voor vertrouwen. Lenen, sparen en betalen in het datatijdperk ("Transformation for trust. Lending, saving and paying in the data age"), January 2020.

cash payments continue to decline, is now on Geldmaat. In addition to the costs of the major banks, there are the costs of the other banks with independent cash operations, but little can be said about this given the absence of data.

4.3 Cash infrastructure cost amidst declining cash use

The decline in the use of cash will create tension at some point between social interests versus private business interests. The social functions of cash have been described in Section 2.2. Banks and retailers have other, private interests. They will want to save costs by promoting debit card payments, reducing cash payments and reducing the cash infrastructure. However, the latter must remain sufficient for social reasons. Put differently: banks and retailers may want to downsize their cash infrastructure more broadly and more rapidly than is desirable from a social perspective. The question is how to distribute the costs (including opportunity costs) of maintaining the cash infrastructure (or part thereof) insofar as it is not being used, or at least being used less frequently, as a result of a decrease in the use of cash in the future.

The opportunity cost of cash in case of declining use of cash is the fixed cost for the cash infrastructure. If society demands from banks and retailers that cash payments remain possible, they must maintain the infrastructure for this purpose, without it being used continuously. This means that providers will no longer be able to recover these costs (through prices and fees) or set them off by reducing the infrastructure and thus saving costs. In other words, opportunity costs are unrealised cost savings. This does not apply to the variable costs: if the use of cash declines, correspondingly lower variable costs will be incurred. On the basis of the Panteia research these can be estimated at EUR 181 million (see Box 6).

The opportunity costs for retailers amount to around EUR 230 million per year (see Box 6). [55] It should be borne in mind that this amount is a maximum estimate. It is based on a rough calculation and in practice retailers may be able to reduce the fixed costs of their cash facilities by means of efficiency

[55] This represents almost 0.17% of the total turnover of the institutions concerned, or an average of EUR 1.332 per company, but is significantly lower per business establishment.

improvements, without limiting the ability to accept and process cash. In addition, there may be commercial reasons other than cost savings to maintain cash facilities longer. This could include cash facilities as a fall back option or in response to the needs of specific customer groups, such as the elderly or foreign tourists. This touches on the above-mentioned social functions of cash (see Section 2.2).

For banks, a calculation of their opportunity costs is not possible due to a lack of understanding of the costs and their breakdown into fixed and variable costs. For a clear analysis, it is desirable for banks to be transparent about the costs (and revenues) of their cash operations. To this end, the Task Force invites them to do so not only in a discussion of their opportunity costs, but also with a view to the proposed research into a socially efficient cash infrastructure (see Section 5.4).

Box 6 Cost advantage and opportunity costs for retailers

The fixed or opportunity costs for the total Dutch retail sector amount to almost EUR 230 million. On the basis of the Panteia figures, if, in the long term, retailers were to replace cash payments entirely by debit card payments, they would save an additional EUR 360 million (in addition to the above-mentioned cost reduction of more than EUR 300 million in the 2009-2017 period). Of this, EUR 201 million is fixed costs. As the Panteia research included fewer retailers than the CBS distinguishes, all amounts will be increased by 14%.[1]

The calculation assumes that all cash payments are replaced by debit card transactions (i.e. not partly by credit card payments) and that the banks' fees for debit card payments remain the same. The substitution of cash payments by debit card payments eliminates the fixed and variable costs for cash payments; instead, there are additional (variable) costs for debit card payments.

Table 7 Cost advantage and opportunity costs

(EUR millions)

			Adjustment
Cash payment fixed costs, to be saved		201	230
Cost effect of debit card instead of cash payments			
- saved variable costs, cash payments	-/- 496		
- additional variable costs, debit card payments	+337		
(Variable) cost advantage		159	181
Total cost advantage		360	410

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1 At the end of 2017, Statistics Netherlands (CBS) counted more than 117,000 shops and more than 55,000 hospitality companies. See CBS Statline, Bedrijfsleven, arbeids- en financiële gegevens, per branche ("Business, labour and financial data, by industry"), and CBS Statline, Bedrijven, bedrijfsgrootte en rechtsvorm ("Companies, company size and legal form").
Source: Panteia 2018, Table 21 and own calculations

Redistribution of cash opportunity costs would mean that the providers of the cash infrastructure would be eligible for compensation. This actually means a public fee, from the government to banks or retailers. In principle, three arguments are conceivable, but these can be qualified to some extent, as will be explained below.

The first, implicit argument is that cash or the cash infrastructure is a public good, so that the operators, such as the banks, that enable cash payments and cannot recoup or set off the costs, deserve compensation for it. However, this argument does not seem to be completely valid, as Box 7 explains.

Box 7 Cash – a public good, yes or no?

In an abstract sense, cash is a public good. Abstractly put, cash is, among other things, a means that makes it possible to make secure, reliable and efficient payments and thus facilitates economic exchange transactions. In this sense cash is a public good. A public good is:
- non-rivalrous: its use by one person does not impede the use of it by another
- non-excludable: the provider of the good cannot exclude any parties from it and therefore cannot charge a price for it.

Examples of public goods are: justice, security, defence and water management, all of which are provided by the public sector. Because money is also a public good, public authorities have in the past taken care of the money supply for reasons of stability (including price stability) and network effects (a single currency in a country).

In its tangible appearance, i.e. as banknotes and coins, cash is not a public good. Notes and coins are both rivalrous (which allows for an exchange of scarce goods and provokes theft) and excludable (by means of security). A banknote or coin is rather a private asset, although it is issued by the public authorities.

In the past, the authorities took over the care for the cash supply, in particular the issuing of money from the private banks. The banks continued to be involved in its distribution and thus provide part of the financial infrastructure, in this case the cash infrastructure, in a market economy. However, this infrastructure does not seem to be a public good. Moreover, banks charge fees for the use of their cash infrastructure.

A second, related argument would be that banks are providers of a social infrastructure, namely the cash infrastructure. That is correct in itself, but banks have a position protected by prudential licensing requirements. Only they are allowed to raise cash funds from the public and then, at higher interest rates, lend them (extension of credit). Partly because the entry of new providers is limited, intermediation is, in principle, sufficiently profitable to finance the cash operations from it.

Similar concerns arise with regard to the possible reimbursement of fees for retailers. Shops that accept cash do this for their own purposes, because their customers apparently want to pay in cash. Their cash facilities are not a public good, but they are part of the cash infrastructure. The relevant costs are regular costs for the retailer, who will usually pass them on to his customers. Sometimes this is not possible due to strong price competition. In that case, it is likely that other costs cannot be passed on in part or in full either. This is not a reason to reimburse the cash costs.

A third argument is that cash can be regarded as a merit good. A merit good is a good (or service) that the authorities find so valuable that they promote its supply or demand, usually through subsidies or regulation. In this case, the aim would be to maintain the cash infrastructure and thus the ability to use cash. The rationale for this is that the social benefits of cash are considered to be greater than the sum of private benefits, on the basis of the arguments given in Section 2.2. Cash could be considered a merit good, but it requires the willingness of the authorities for it to be subsidised or regulated. It is not up to the Task Force to decide on this.

In this context, at least in the first instance, the costs of the cash infrastructure are borne by the banks or the retailers. Banks set off those costs in their fees and then pass them on partly to their private customers, but mainly to their business customers. The fees play two roles in this: they cover the costs (or part thereof) and yield revenues for the banks, but are a cost item for retailers. Retailers, if possible, pass these costs on to their customers – consumers – via the prices of their goods and services. As long as the distribution of the private costs of banks and retailers remains unchanged, the private, business incentives that slow down the acceptance of cash payments and promote that of debit card payments will remain in place. Insofar as the COVID-19 crisis leads to a structurally reduced use of cash, the tension between private and social interests, and thus the discussion about the opportunity costs of cash, becomes more manifest. With regard to the question of whether adjustment will still be sufficient, or whether a more fundamental revision of the cash infrastructure will be needed, see Chapter 5.

5. Adjustment and additional research

5.1 Introduction

This chapter first deals with the NFPS's question – if adjustment would be opportune, what forms of adjustment would be desirable and possible? –

and then advocates additional research. Section 5.2 explains what adjustment is and how other countries are making or have made adjustments. Section 5.3 proposes to adjust the cash developments in the Netherlands by means of NFPS agreements. Section 5.4 describes the Task Force's proposal for additional research to be commissioned by DNB.

5.2 Desirability of adjustment

By adjustment the Task Force means any measure, in any form whatsoever, to influence developments in the cash payment market and prevent the cash payment system from not functioning properly. Four kinds of adjustment can be distinguished: legal obligations, subsidisation, cooperation laid down in bilateral or multilateral agreements, and unilateral policies.

In countries where the use of cash has already declined significantly, legal arrangements have been or are being introduced. In Norway, for example, this concerns banks' obligation to maintain access to cash services and to ensure the continuity of payments. Norwegian banks should be able to provide cash services if the electronic payment system fails. A similar legal obligation has recently entered into force in Sweden (see Section 2.3). In the United Kingdom, in the spring of 2020, the government stated its intention to regulate the accessibility of cash by law. In Denmark, there has been a general obligation for retailers to accept cash since 1984, which was taken over by Norway in 1999. [56]. In some countries, the status of cash as legal tender in combination with the legal system results in a de facto acceptance obligation. [57]

The Netherlands has several multilateral agreements on payments, such as the Debit Card (PIN) Agreements I and II (2014), the NFPS Vision on cash from 2015 and the public/private partnership against explosive attacks from early 2020 (see Box 4). [58] The Consumentenbond's appeal to a pharmacy chain to

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[56] See https://www.nationalbanken.dk/en/publications/Documents/2017/12/Analysis_Danish%20households%20opt%20out%20of%20cash%20payments.pdf
[57] See Siekmann, Legal tender in the euro area, 2018, page 25. https://www.econstor.eu/handle/10419/178212
[58] The Debit Card (PIN) Agreements I and II are successive agreements between banks and retailers (shops, the hospitality industry and petrol stations) aimed at jointly creating a more secure and efficient payment system and to that end promoting debit card payments.

continue to accept cash (see Section 3.3) entails a bilateral approach, while the publication of principles for the use of cash by the central bank of Finland (2018) is an example of a one-sided policy. [59] As far as is known, in no country in the world is the offering or acceptance of cash subsidised; subsidisation will not be discussed below.

Any form of adjustment has advantages and disadvantages:

- legal obligations are generally effective because they are enforceable and generally applicable, at least to those parties that address laws and regulations. Laws require an effort by legislators and are less flexible (adjustable), although this last aspect does not apply to delegated regulations.
- voluntary, bilateral and multilateral agreements are relatively easy to adjust, subject to the agreement of all involved parties. On the other hand, they are not enforceable and only apply to the parties involved.
- with regard to policies (including voluntary policies), the same applies *mutatis mutandis* as to agreements, bearing in mind that they apply only to one party or one type of party.

The Task Force considers that agreements between the most interested parties should be preferred, provided that they can be effected. Unilateral policies are always possible, if necessary in addition to multilateral agreements. Legislation to maintain e.g. cash services or cash acceptance is the preferred option if effective agreements are not possible.

Moreover, initiatives can also be taken at the European level with a view to regulatory action (e.g. the call from the ECB to Member States to arrange for banks to provide adequate access to cash services, or clarification by the European Commission concerning legal tender status) or otherwise. European

[59] See https://www.suomenpankki.fi/en/media-and-publications/speeches-and-interviews/2018/tuomas-valimaki-maksamisen-murros-helsinki-28.11.2018/

consumer organisations are asking for a right to use cash. [60] Perhaps the Euro Retail Payments Board – the European equivalent of the NFPS – will also comment on cash.

5.3 Agreements in the context of the NFPS

It is reasonable to pursue agreements within the context of the NFPS, provided that these can be made effective. The NFPS is the body where most (not all; see Section 5.3b) parties involved in cash transactions are represented and which possesses the mechanisms to monitor developments periodically and revise agreements if necessary.

Some developments since 2015 provide grounds for adjustment in order to ensure the proper functioning of cash, as described in Chapter 3. These include the vulnerability of security transport, the fact that spare capacity in the ATM network has disappeared and that cash payments are no longer a given in some sectors.

Against this background, the agreements can be relevant to three aspects:

a. accessibility and availability
b. acceptance
c. security transport

With regard to each aspect, consideration will also be given to possible fees.

5.3a Accessibility and availability

ATMs and cash deposit machines are essential to the cash infrastructure and cash availability. As such, it makes sense to agree with the banks that they maintain at least specific numbers of ATMs and cash deposit machines until further notice, partly because of the fall back function of cash. The common standard of a five-kilometre radius aimed at accessibility must be adhered to in all cases. The agreements should cover both withdrawal and deposit machines for both banknotes and coins.

[60] See BEUC, Cash versus Cashless: Consumers need a right to use cash, 2019. See https://www.beuc.eu/publications/cash-versus-cashless-consumers-need-right-use-cash/html. BEUC is the Bureau Européen des Unions de Consommateurs.

Agreements on accessibility and availability will only be made with the banks, although non-bank providers have also installed a substantial number of ATMs (see Annex 1). This is because, unlike these non-bank parties, banks offer their creditors/customers a payment account and related services. Banks are still the main players in the financial infrastructure and are therefore subject to prudential supervision and possibly cash supervision. In practice, the machine networks of the non-bank providers appear to fluctuate for commercial reasons (such as agreements with shop owners).

It is prudent to make agreements on the availability of ATMs, as well as on their accessibility. This is because the accessibility of the machines, based on their numbers and the common standard of a five-kilometre radius, does not say anything about their availability during a certain period (minimum downtime). It is precisely because once efficiency has been increased by removing machines that were adjacent or close to each other that the availability of the remaining machines will become more important. In concrete terms: if the only machine in a neighbourhood or village is not functioning for any reason, the availability of cash will be damaged immediately. The exact availability standards should be specified in greater detail, after consultation with Geldmaat.

The fees for withdrawals and deposits are another significant factor for the accessibility and availability of cash. After all, fees will partly determine the demand for cash.

- For private account holders (consumers) in the Netherlands, the cost of withdrawing cash is almost always non-transaction-related. The banks offset the costs of individual withdrawals via the pricing of a package of cash and non-cash payment services (for deposits fees are charged, but these differ from one bank to another).
- For business account holders things are different: for cash withdrawals and deposits by retailers fees are charged. With regard to this latter issue, the 2015 NFPS Vision contained the expectation that retailers will be able to

convert their cash receipts into non-cash (digital money) at reasonable cost (by depositing them, either via a security transport company or not).

These pricing methods will also be important to the availability of cash in future, especially if the numbers of cash transactions are gradually declining and the costs per transaction are gradually increasing. In particular, the argument of inclusion pleads against a fee for every cash withdrawal by private account holders. As mentioned above, some people in vulnerable positions depend on the use of cash. It is not socially desirable if these people need to pay extra for their participation in the payment system by charging transaction fees for the use of cash. An additional argument against this is that this method of charging fees appears to be contrary to the UN Convention on Disability and can be regarded as discriminatory. [61]

As in 2015, it is desirable to agree with the banks that "reasonable fees" apply to cash transactions (withdrawals and deposits) by business account holders. This is not a precise, cleanly formulated objective and as such allows banks room to manoeuvre ("competitive space") regarding their business fees. However, it is not practicable for the NFPS to formulate more specific proposals for these rates, partly because it should interfere as little as possible with the pricing policy of individual banks. What the NFPS can do, is periodically monitor and publish the development of bank fees for cash transactions, as part of the annual assessment of compliance with the agreements, and publish on them (see Section 5.5 Follow-up). [62]

[61] The United Nations Convention on Disability was ratified by the Netherlands in 2016. Subsequently, the Equal Treatment (Disability and Chronic Illness) Act was extended to include the provision of goods and services. Case law on (non-)compliance with these provisions is still scarce.

[62] On behalf of the Task Force, the Secretariat discussed a first draft version of this Report containing fee agreements at the technical level with the Authority for Consumers and Markets (ACM). The representatives of the ACM recognise the societal importance of cash and the usefulness of the proposals. They pointed out that any fee agreements should comply with the conditions of the Competition Act, including necessity. For an agreement on business fees this seems possible, also because such an appointment was made in 2015.

Part of these agreements is that the banks, or Geldmaat, periodically report on the number of machines and their availability to DNB for the purposes of the NFPS. These aspects could be formalised in a separate arrangement between DNB and the banks and Geldmaat. The latter can be achieved in the context of the supplementary proposal, which is discussed in Section 5.4.

5.3b Acceptance

Where acceptance is concerned, the new agreements can build on the 2015 recommendations of the NFPS (see Section 1.2), except for the second, which supports initiatives to promote debit card payments. This is no longer necessary, given the continued rapid growth of electronic payments that is to be expected. Rather, it is now necessary for the NFPS and the retailers' organisations to advise their members not to apply a debit-card-only policy unless there are demonstrable and specific reasons (such as security). In doing so, a retailer would in fact put pressure on paying customers, whereas – given the first recommendation – he should instead enable them to choose how to pay. However, individual retailers are free to promote debit card payments.

The foregoing implies that retailers' organisations advise their members to continue to accept cash in the coming years, unless there are demonstrable and specific reasons (such as security) for not doing so. In line with this, retail organisations could call on their members to maintain the cash infrastructure, i.e. the physical facilities (cash registers, safes) as well as related administrative and logistical procedures. Insofar as retailers have not yet done so, there are still means for optimising this infrastructure (smart safes, cash guards). [63]

With regard to other types of institutions, too, it may be explicitly expected that they will continue to accept cash if they require immediate payment, unless otherwise provided by law:

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[63] Smart safes are electronically secured safes. Cash guards are closed, electronically secured cash register systems. Various functionalities, such as counterfeit detection, settlement, deposit or cash management, can be added to both.

- public institutions, such as municipalities, and cultural institutions, as these are local monopolies, in accordance with the third recommendation of the NFPS (2015)
- health care institutions and businesses, such as pharmacies or special transport companies, because they provide necessary goods and services, often as local monopolies and to people in a vulnerable position.

It should be noted that these parties are not or not directly represented in the NFPS. If such institutions no longer wish to accept cash, DNB and/or other NFPS members will discuss this with them.

In this context, too, the question of possible fees for cash transactions is raised. Section 4.2 explained that for a retailer a cash transaction is relatively expensive compared to a digital payment. Retailers could see this as a reason to charge fees for cash payments in the future. This is not the case as yet – cash is in fact still the most widely accepted means of payment – but that could change.

However, charging for cash payments is not permitted, at least according to the European Commission. [64] The Commission considers that this is contrary to the principle that legal tender must be accepted at its nominal value. [65], [66] Moreover, the social functions of cash would be compromised by charging, while there is no means of payment that can replace cash in all respects. Also, charging for cash transactions can be discriminatory against those who can only pay in cash. For these reasons, charging for cash payments in shops is not socially desirable. Therefore, the agreement with the retailers' representatives would also imply that their members will not charge for cash payments.

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[64] European Commission Recommendation 2010/191/EU. Note that a Recommendation is not legally binding.
[65] As mentioned above, it falls to the European Court of Justice to explain what the status of cash as legal tender implies.
[66] In the Netherlands, the thinking on this was different for a long time. In the Dutch view, a creditor was allowed to include in his general terms and conditions that cash payment would be charged for, provided that this was not contrary to reasonableness and fairness. See Scholten, A.A., Juridische aspecten van contant geld ("Legal aspects of cash"), 2017 (Sections 7.12 and 7.13). However, it should be noted that this view was adopted before the introduction of the euro and the publication of the Recommendation by the Commission. For these reasons, it is conceivable that the Dutch view will no longer prevail.

5.3c Security transport

An equally essential part of the cash infrastructure is security transport. The Dutch market for this type of service is highly concentrated, with only one large provider – Brink's – and some smaller operators. Failure by this provider would almost immediately cause problems for retailers who wish to convert cash receipts into non-cash (digital) money, partly because bulk deposits at banks are no longer possible. In order to avoid such issues, DNB wishes to engage with Brink's in order to reach bilateral agreements aimed at ensuring continuity of service. Brink's has indicated that it is willing to do this. DNB will also examine whether more formal requirements pertaining to the business continuity of security transport companies are needed, possibly in cooperation with the Ministry of Finance.

Another point for attention is the capacity of security transport in the Netherlands. According to the representatives of the retail sector in the Task Force, transport capacity, at least during busy shopping periods, is not sufficient, leaving excessive amounts of cash at retailers. The largest security transport company, Brink's, does not recognise this picture. Its representative points out that preventing congestion at all times by adapting capacity to peak load is exceptionally expensive. In normal circumstances, he told the Task Force, his company is sufficiently flexible to scale up if necessary, partly thanks to agreements with Geldmaat, DNB and its Belgian sister company. Moreover, regular capacity and service provision in security transport also depend on the fees agreed between the carriers and retailers (see Section 3.5). [67] DNB and the NFPS cannot intervene in this either. DNB will engage in discussions with the security transport companies and retailers on this issue with the aim of reaching agreements on the quality of service.

In summary, Box 1 in the Introduction provides an overview of the proposed NFPS agreements.

[67] In addition to the loss of some large customers, disappointing turnover resulting from pricing may also have played a role in the bankruptcy of SecurCashNederland in early 2019.

5.4 Infrastructure research

Recent cash developments since the end of 2019 have given rise to an updated proposal. For example, the acceptance and use of cash has fallen very sharply in a short period of time as a result of the COVID-19 crisis, at least temporarily. The longer-term effects of this crisis cannot be predicted yet. Then there is the problem of explosive attacks leading to the shutting down of substantial numbers of ATMs and cash deposit machines, also temporarily (Section 3.4, Box 4). The long-standing vulnerability of the security transport system identified by the Task Force also plays a role.

Therefore, the Task Force proposes that DNB has research carried out. The aim would be to define a socially efficient and secure cash infrastructure in the medium term (2026), based on structurally reduced cash use. The whole chain is to be taken into account, including the use and acceptance of cash in the retail sector. This research could start next autumn and yield conclusions in the course of 2021. The outcomes may lead to a revision of the agreements (see Box 1) that were intended to apply over the next five years. **DNB is prepared to have this research carried out, provided that the agreements referred to above (Box 1) continue to apply and are complied with until this revision is completed.**

Detailhandel Nederland adds a proviso to the agreements referred to in Box 1. Detailhandel Nederland's members are willing to commit to these, provided that the cash infrastructure is in order. In the opinion of Detailhandel Nederland this is not the case at present. Retailers experience problems with, among other things, security transport and depositing cash, partly due to the temporary closure of most seal bag machines in connection with explosive attacks (see Box 4). Detailhandel Nederland emphasises that both issues call for urgent attention and should be addressed in the research into the present and desired cash infrastructure. The organisation would be happy to participate in this. It is also prepared to comply with the agreements until the above-mentioned revision takes place.

5.5 Follow-up

In order to strengthen the agreements, including any interim agreements, publicity is needed. DNB can draw attention to them through its regular channels (bulletins, speeches, interviews). As it does every year, the NFPS will report on compliance to the Minister through its Annual Report, which will be published around April. All NFPS members are expected to draw attention to the agreements and the importance of compliance in their newsletters.

DNB is committed to monitoring cash developments, including fees, and compliance with the agreements. In this context, according to the Task Force, a reporting desk at DNB, where cash payment users can report specific issues, may be useful. DNB can report to the NFPS on the monitoring through the Task Force, which in principle meets once a year. To this end, the Task Force advises the NFPS to maintain the Task Force. If the annual monitoring shows that the agreements are not being complied with, other measures must be taken, as in other countries (see Section 5.2).

In this report, the Task Force has made a number of recommendations to different parties. Box 8 offers an overview.

Box 8 Task Force Recommendations

- to the NFPS:
  - to stop speaking in favour of joint initiatives to promote debit card payments
  - to appeal to pharmacies and municipalities that do not accept cash at some point
  - to maintain the Task Force for the monitoring and assessment of cash developments.
- to DNB:
  - to advocate private holdings of cash as a fall back option in the event of short or longer-lasting debit card payment system failures
  - to monitor bank fees for depositing and withdrawing cash annually
  - to set up a reporting desk as part of the monitoring of cash developments
- To the Dutch Payments Association and DNB: to frequently monitor payment behaviour in shops during and after the coronavirus (COVID-19) crisis in order to properly understand its effects
- To Panteia: to analyse the back office cost of cash in greater detail in the next cost study (2020).

Annexes

Annex 1 Cash infrastructure in the Netherlands

End-2019

Banks, numbers	
Banks based in the Netherlands	41
Bank branches	1260
Banks with cash operations: • Three major banks: all services, including seal bag machines • Volksbank (SNS, Regiobank): withdrawal through own ATMs • RegioBank has approximately 250 branches with cash operations • Other banks: cash withdrawal by means of guest use at machines of other institutions • Private account holders of SNS and Van Lanschot can deposit cash at Travelex.	
Machines, numbers	
Total (banknotes, withdrawal and deposit) *, **	5990
including those of banks and Geldmaat **	5282
of which cash deposit machines	1685
Seal bag machines ***	1200
Coin withdrawal machines (end-2018)	425
Coin deposit machines (end-2018)	1298
[for the record] offices for coin orders	493
* Of banks, Geldmaat and non-bank institutions required to report to DNB. In addition to the ATMs listed in this table, there is an unknown number of machines belonging to non-bank providers that do not report to DNB. ** Not including more than 470 ATMs that were shut down in mid-December 2019 because of explosive attacks. *** Of these, almost 800 were shut down in April 2020.	
Numbers of transactions, 2019	
Cash withdrawals with a Dutch card at ATMs	247.9 million
Same at own bank	133.2 million
Same with a foreign card at Dutch bank ATMs	9.9 million
Over-the-counter cash withdrawals	267,000
Deposits	18.8 million
Cash withdrawals with a Dutch card abroad	31.5 million
Security transport companies	
Institutions licensed by the Ministry of Justice and Security	13
of which residing in the Netherlands	9
There are in actuality four institutions that transport cash, one of which is by far the largest. Two of them offer direct money processing and smart safes. Two security transport companies deliver and collect coins.	
Cash sorting centres	7

Annex 2 NFPS Task Force for the revision of the position on cash – mandate

Task

The Task Force is requested to take stock of the developments in cash payments since 2015, distinguishing between developments in the acceptance of cash in point-of-sale payments (with special attention paid to payments for essential services and products, such as in the public sector, in public transport and at pharmacies), the options for withdrawing cash from one's own payment account and the options for depositing cash in one's payment account (with and without the use of security transport). In doing so, the Task Force should also consider cost developments. In addition, the Task Force is requested to examine, in the light of the developments observed, if adjustment of the NFPS's position on cash of 17 November 2015 is appropriate, and if so, in what sense.

The Task Force is requested to report to the NFPS at the autumn meeting of 2019 (by means of an Interim Report if necessary).

Method

The Task Force is advised by parties that play an important role in the cash payment system, such as Geldmaat and G4S, but also, for example, the National Public Transport Council. Where appropriate, the Task Force will also acquaint itself with relevant developments abroad.

The Task Force will submit its report for discussion and assessment to the Working Group on Accessibility and Availability and the Working Group on Efficiency and Europe, and present these workings groups' comments to the NFPS.

Annex 3 Composition of the Task Force – list of participants

ANBO (Dutch Senior Citizens' Association)	Alex van Scherpenzeel
Betaalvereniging Nederland (Dutch Payments Association)	Marc van der Maarel (until November 2019) Gijs Boudewijn (from November 2019)
BOVAG (Association of Dutch Automobile Traders and Garages)	Francien van der Wal (until December 2019)
Consumentenbond (Dutch Consumers' Association)	Ben Schellekens
Detailhandel Nederland (Dutch Retail Trade Platform)	Michel van Bommel (until December 2019) Hester Duursema (from December 2019)
De Nederlandsche Bank	Pim Claassen (Chairman) Nicole Jonker (from February 2020) Jaap Rotte (Secretary) Bram Scholten (until November 2019)
KBO-PCOB, Koepel Gepensioneerden and NOOM (senior citizens' associations)	Wim Huijs
Koninklijke Horeca Nederland (Dutch Association of Hospitality Establishments)	Paul Schoormans
Ieder(in) (umbrella organisation for people with functional impairments, mental impairments or chronic illnesses)	Thijs Hardick
Ministry of Finance	Annick Besançon Yannick Déjean
MKB-Nederland (SME umbrella)	Els Prins
Oogvereniging Nederland (Eye Association Netherlands)	Dennis Dondergoor (until April 2020) Luuk-Jan Boon (from April 2020)
Samenwerkende Brancheorganisaties Filantropie (association of philanthropic sector organisations)	Anoek Smith
VNPI/BETA (Association for the Dutch Petroleum Industry)	Fred Zaat