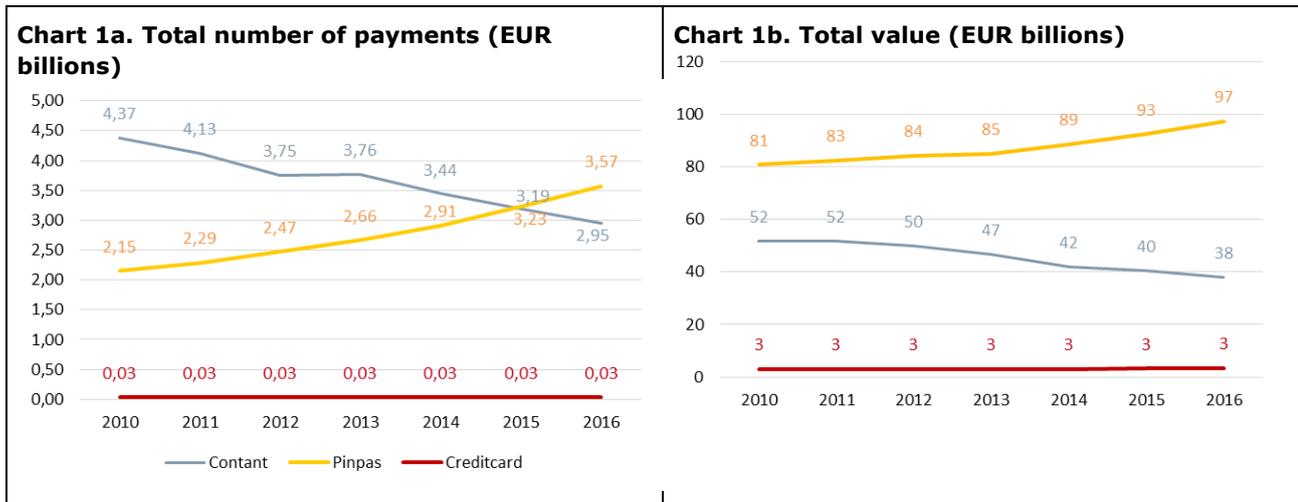


Point of sale payments in 2016

Results of the study by De Nederlandsche Bank and the Dutch Payments Association into the use of cash and debit cards in the Netherlands in 2016

Use of payment instruments, 2010-2016



In 2016, the number of debit card payments by Dutch consumers for the first time slightly outstripped the number of cash payments at points of sale (POS). Between 2010 and 2016 the number of cash payments went down by almost one third, from 4.37 billion payments in 2010 to 2.95 billion in 2016. The total value of these payments decreased by 27%, from EUR 52 billion to EUR 38 billion. The average amount paid in cash was EUR 12.85 per transaction in 2016, which is more than EUR 1 higher than in 2010, when it was EUR 11.80. Between 2010 and 2016 the number of debit card payments increased by two thirds, from 2.15 billion to 3.57 billion. The value of these payments increased by 20%, from EUR 81 billion to EUR 97 billion. There is a continuing trend of consumers using their debit cards more often to pay for smaller purchases. The trend of annually decreasing average debit card payment amounts seems to have slowed down, however, as it dropped by 1.4% to EUR 28.27 from EUR 28.67. Between 2010 and 2015, the average debit card payment amount dropped by 5.3% annually.

Relative use of payment instruments, 2010-2016

Chart 2a. Total number of payments by payment instrument

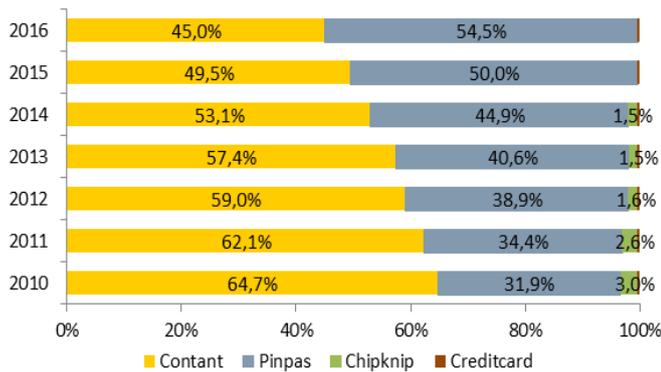
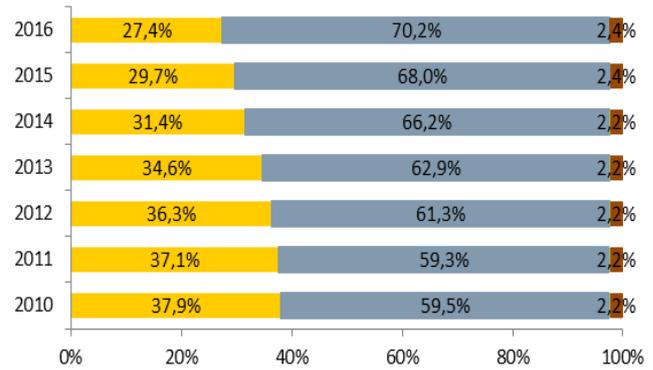


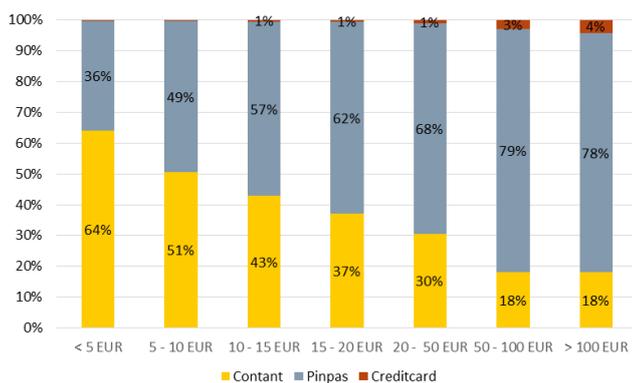
Chart 2b. Total value of payments by payment instrument



The share of cash in the total number of POS payments fell from 49.5% in 2015 to 45.0% in 2016, a shift of 4.5 percentage points. Dutch consumers made 54.5% of their POS purchases by debit card in 2015, compared to 50.0% in 2016. In 2015, 70.2% of all payments were made by debit card and 27.4% by cash in value terms. Between 2015 and 2016, the share of cash in the total value of POS payments fell by 2.3 percentage points. The share of credit card payments in the total number of payments has remained stable over the years, at 0.5%. In terms of value, the share of credit card payments was more than 2%.

Use of payment instruments, by amount

Chart 3. Share of payment instruments by amount

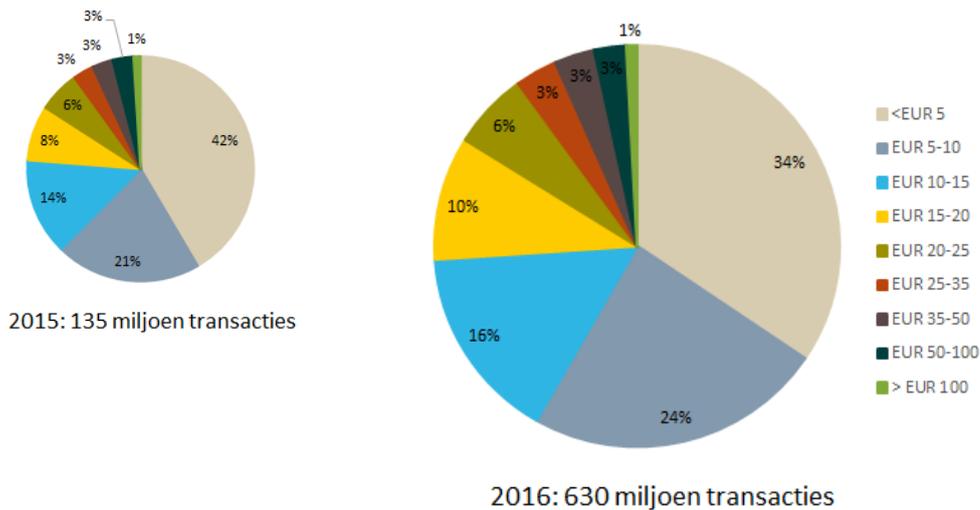


Cash continued to be the most used means of payment for amounts up to EUR 5 in 2016. For amounts between EUR 5 and EUR 10, the number of debit card payments almost equalled that of cash payments. The majority of consumers used debit cards to pay for amounts over EUR 10.

In general, debit card use increased for all amounts compared to 2015, with the smallest amounts showing the largest increase. For amounts up to EUR 5, the number of debit card payments increased by 6 percentage points, from 30% in 2015 to 36% in 2016. A similar increase of 6 percentage points could be seen for amounts between EUR 5 and EUR 10 and between EUR 10 and EUR 15.

The debit card has for many years been the preferred form of payment for amounts of EUR 50 or more. For amounts between EUR 50 and EUR 100, this share is still rising, however, by 3 percentage points compared to 2015. For amounts of EUR 100 and higher it remained the same.

Chart 4. Share of contactless payment by amount

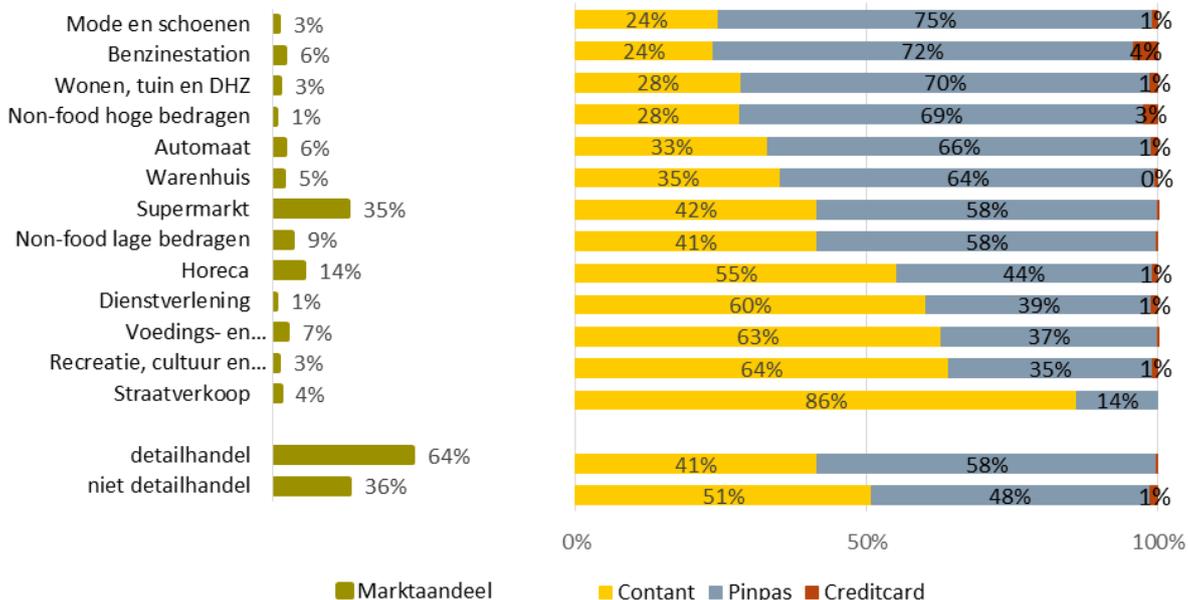


2014 saw the introduction of contactless payment in the Netherlands. As it is no longer necessary to enter a PIN code for amounts up to EUR 25, contactless payment is frequently used for small amounts.

Of all contactless payments in 2016, 90% were amounts of up to EUR 25. However, compared to 2015 a subtle shift can be noted: in 2015, 42% of all contactless payments involved amounts under EUR 5. In 2016, consumers increasingly started to use contactless payments for larger amounts. As a result, the share of payments under EUR 5 fell to 34%, but the share of payments between EUR 5 and EUR 20 increased.

Use of payment instruments, broken down by place of purchase

Chart 5. Share of payment instrument by place of purchase



In all sectors, the use of debit cards over cash is increasing. At supermarkets, where more than a third of all POS payments are made, the share of debit card transactions was 58% in 2016. This represents a rise of 5 percentage points compared to 2015. Other strong risers are catering and hospitality (7 percentage points), vending machines (8 percentage points), recreation, culture and entertainment (6 percentage points) and street vending (5 percentage points). The latter two have the lowest share of debit card payments.

Most contactless payments were made in supermarkets and in catering and hospitality in 2016. Together, these sectors accounted for 70% of all contactless payments in the Netherlands in that year.

Seasonal trends in payment behaviour

Chart 6a. Relative deviation of monthly cash payments compared to the annual average, 2014-2016

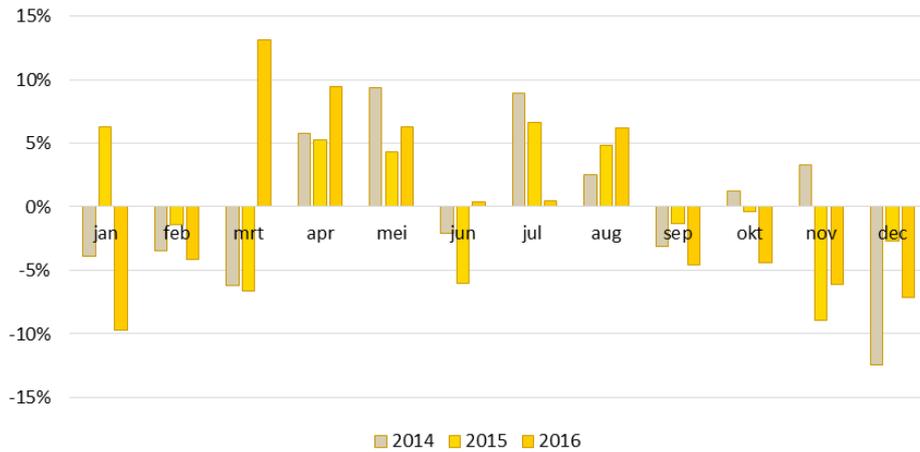
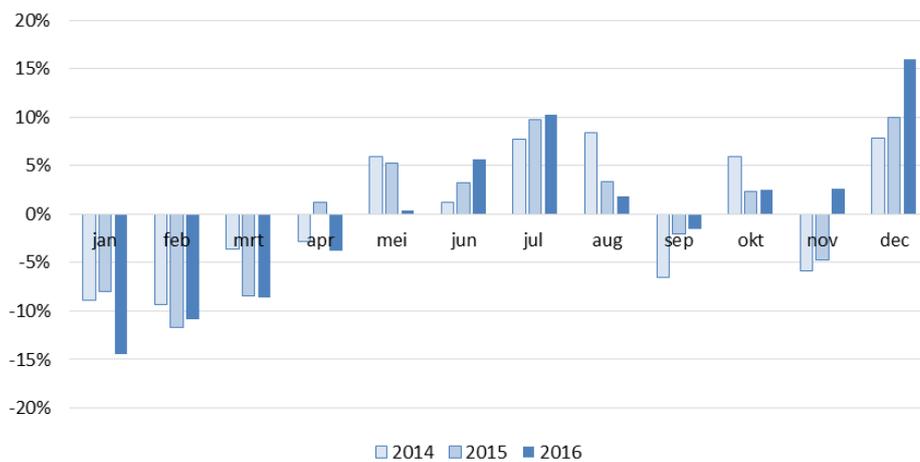


Chart 6b. Relative deviation of monthly debit card payments compared to the annual average, 2014-2016

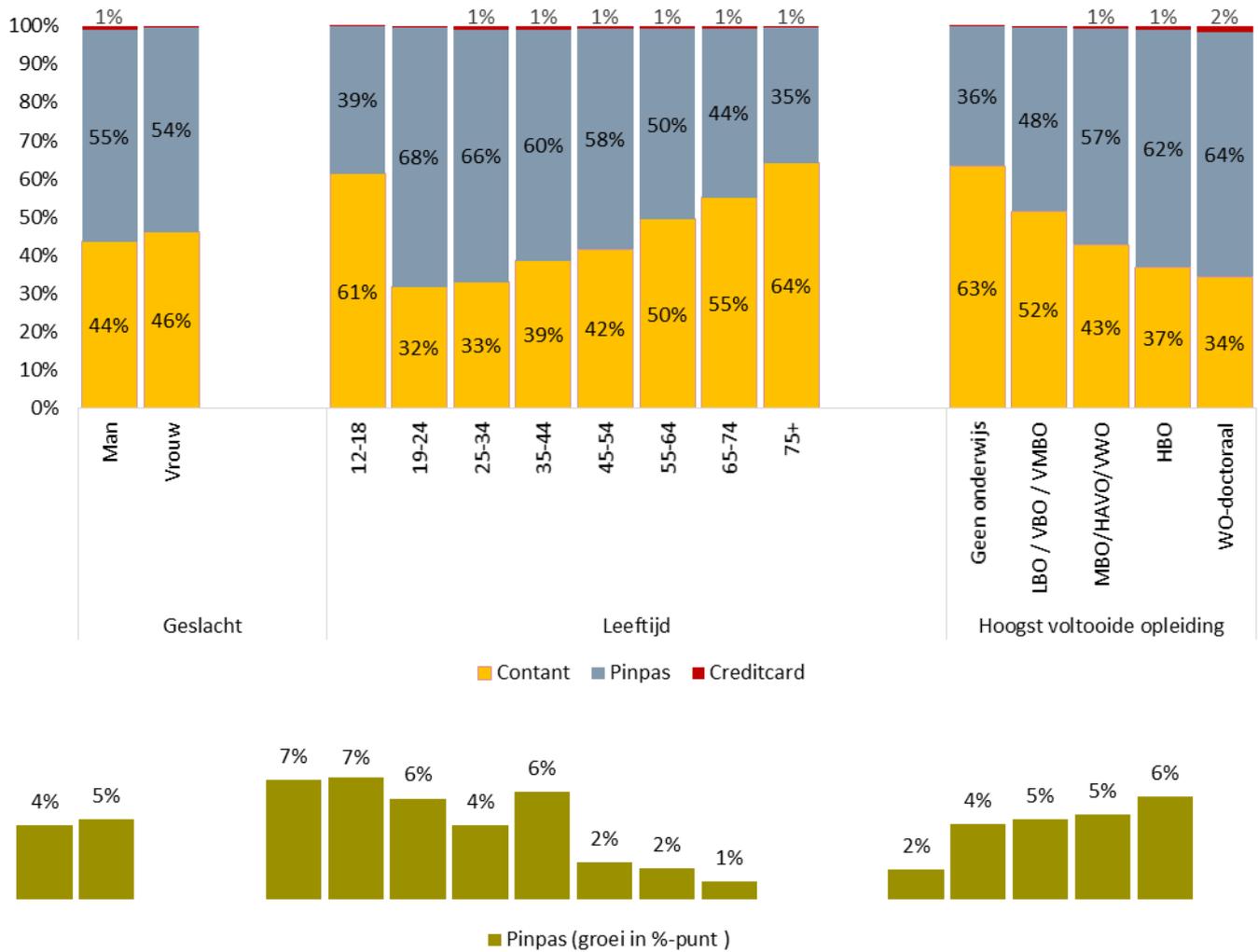


During the year, payment behaviour is influenced by several seasonal factors, e.g. holidays, the weather, holiday bonuses and thirteenth-month pay packages. These factors have an impact on both the total number of payments that consumers make and how they make them.

These seasonal patterns are presented in the above chart. In 2014, 2015 and 2016 consumers made relatively few cash payments in the months of February (limited number of shopping days), September and December, and relatively many in the months of April, May and August. They also appear to make relatively few cash payments between January and March, and relatively many in the summer holiday period. The summer holiday period is the only period in which Dutch consumers make relatively many payments in general, both in cash and by debit card. Consumers make most debit card payments in December, however, for festive and relatively larger purchases.

Use of payment instruments, broken down by demographics

Chart 7. Use of payment instruments by gender, age and level of education

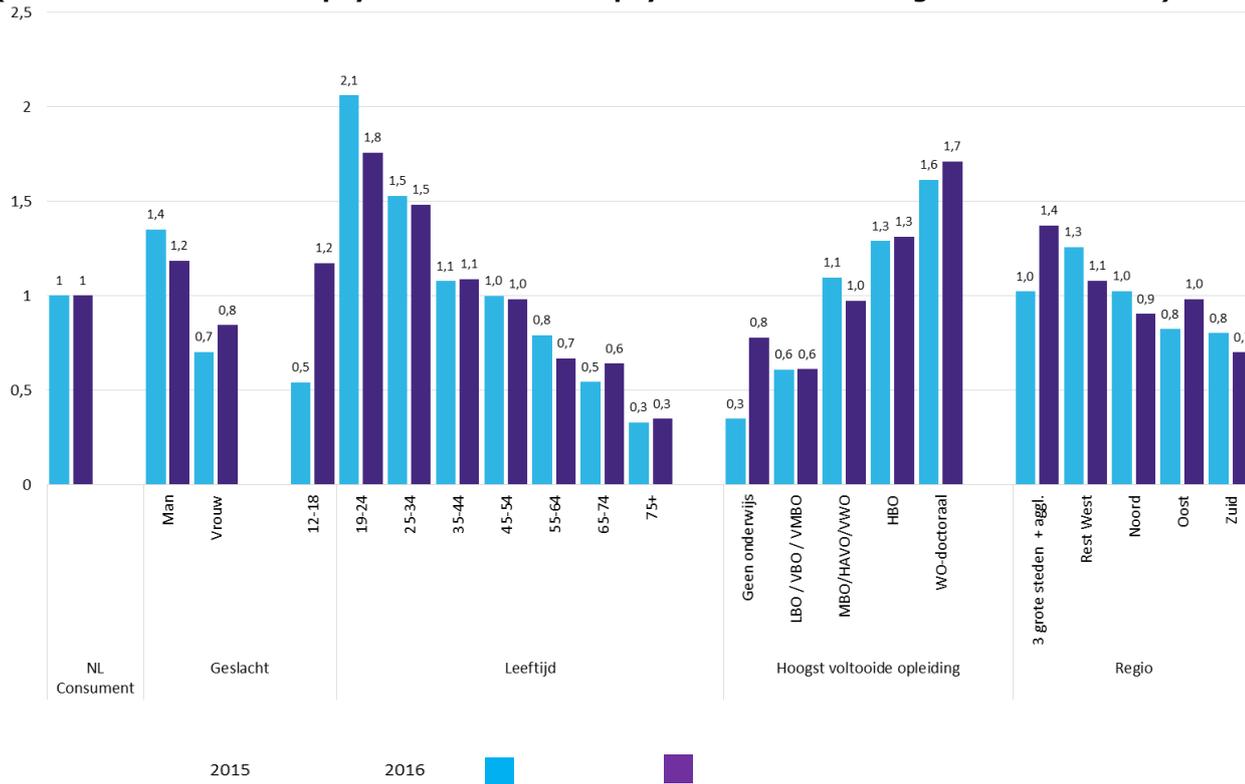


On average, consumers pay more often by debit card than in cash. This trend can be observed in a growing number of demographic groups, but not in all. Youths aged 12-18, the over 65s and the lower-educated continue to pay mostly in cash. For all age categories, consumers aged 19-34 use cash the least. Like the university-educated, they pay one out of three purchases by cash. Gender hardly seems to have an effect on consumers' payment habits. Men made 55% of their total payments by debit card and women 54%.

Compared to 2015, consumers from all demographic groups made more payments by debit card in 2016. There are differences in the extent to which their debit card payments increased, however. Youths aged 12-18 and young adults (19-24) showed the steepest increase (7 percentage points), followed by consumers in the 45-54 age group (6 percentage points). People over the age of 55 show a relatively low increase (1-2 percentage points). Broken down by education level, people with a university-level education show the largest increase (6 percentage points), followed by the groups with a high (HBO) to intermediate (MBO) education level (5 percentage points). For the lower-educated, the increase is limited.

Relative use of contactless payment

Chart 8. Relative use of contactless payment by gender, age, educational level and region in 2015 and 2016 (1 = share of contactless payments in total POS payments for the average Dutch consumer)



Between 2015 and 2016, the number of contactless payments by debit card or mobile phone increased by almost a factor five, from 135 million to 630 million. The above chart provides an indication of the level of contactless payment use among certain demographic groups compared to the average consumer for the years 2015 and 2016. The figures in the above chart represent the extent to which demographic groups make more or less use of contactless payments compared to the average Dutch consumer, which is represented by 1.

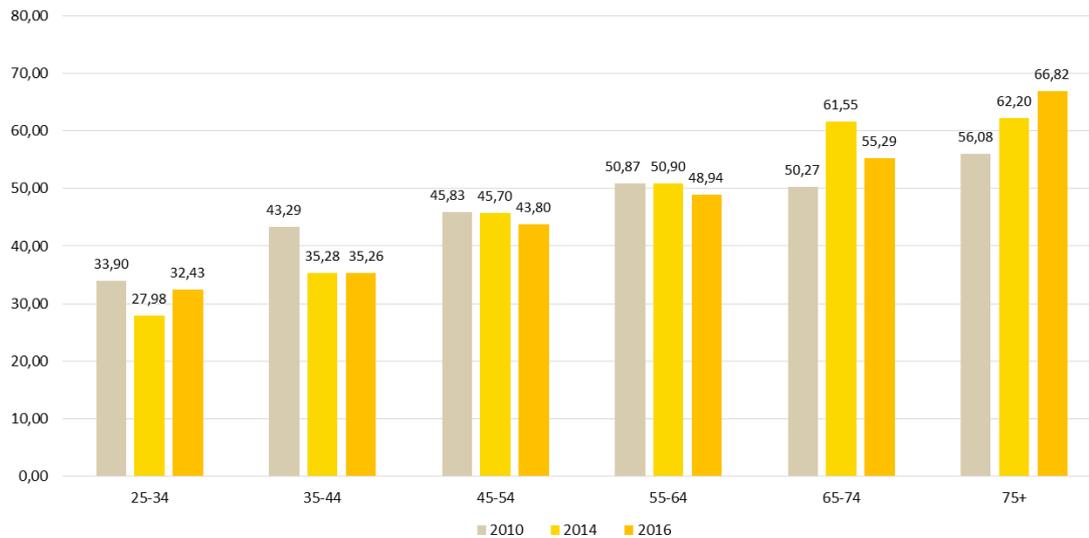
The use of contactless payments in 2016 is relatively high among men (+20% compared to the average consumer), young adults (19-24 years, +80%), people with a university-level education (+70%) and people living in the Randstad area.

Generally, the differences in payment behaviour between the different demographic groups decreased between 2015 and 2016. In 2016, the share of contactless payments in total POS payments by men was 1.5 times that by women, whereas it was twice this share in 2015. Other demographic groups show a similar trend. In 2016, youths made 20% more contactless payments compared to the average consumer, whereas in 2015 they made 50% fewer contactless payments. The group of lower-educated, too, is clearly catching up. For the over 75s, the use of contactless payments remains relatively low.

At the regional level some shifts can be observed, indicating that regional differences in the use of contactless payments have increased. In 2016, the use of contactless payments was relatively highest in the three largest cities in the west of the Netherlands (+40%), while it was average in 2015. In the east of the Netherlands, the use of contactless payments was relatively low in 2015 (-20%) compared to the average Dutch consumer, but about equal in 2016. The west (with the exception of the three largest cities), north and south of the country showed a different picture. In the latter two regions, consumers on average made fewer contactless payments than the average Dutch consumer in 2015, and this difference increased between 2015 and 2016.

Average amount of carried cash

Chart 9. Average amount of carried cash in euros by age, 2010-2016

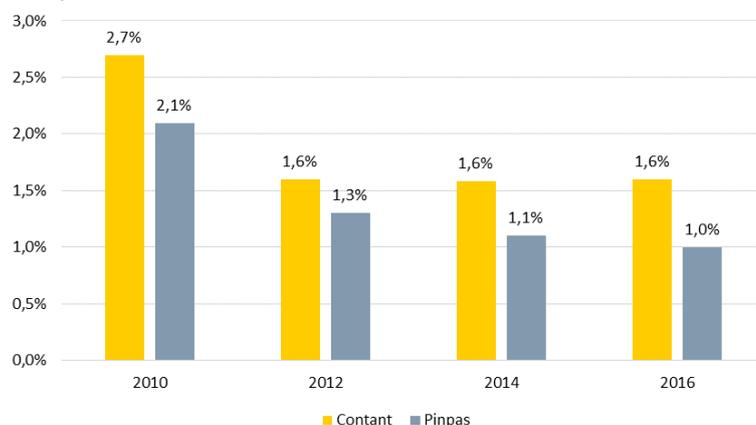


In 2016, Dutch consumers on average carried EUR 40.59. In 2010 and 2014 this amount also hovered around EUR 40. About 9% of Dutch consumers indicated they did not carry any cash at all. In 2014 this share was 8%, and in 2010 it was 7.5%.

The amount of cash carried increases with age. The over 75s carried EUR 66.82 on average in 2016, while the average amount for consumers in the 25-34 age group was EUR 32.43. With the exception of the over 75s, the amounts of cash carried have declined in the past few years for most age groups over 35.

Use of preferred payment instrument

Chart 10. Would have preferred using another payment instrument than mentioned, according to instrument used, 2010-2016



Between 2010 and 2016, consumers could more often pay using the payment instrument of their choice. Between 2012 and 2016 they would have preferred using another means of payment for 1.6% of their cash payments. In 2010, this score was still 2.7%. In most cases, the reason was that debit cards were not accepted, or the payment terminal was out of order. Consumers also indicated less often that they would have preferred to pay by other means than their debit card. In 2010 this held for 1.6% of debit card payments, compared to 1% in 2016. These consumers would have preferred to pay in cash but could not do so because cash payments were not accepted or because they did not carry enough cash.

Survey characteristics

Market research bureau GfK collected data among 29,820 respondents for the "Point of sale payments in 2016" study, performed by DNB and the Dutch Payments Association.

Research questions:

- What are the total number and total value of payments made in the Netherlands in 2016, broken down by payment instrument?
- In 2016 which payment instruments did the Dutch use most in the three sectors with the most payments?
- How has the use of cash and debit cards developed since 2010?

Survey scope:

- Payments made in the Netherlands by Dutch residents aged 12 and over.
- Payments made at points of sale –e.g. shops, bars, restaurants, hotels, petrol stations, services, markets, vending machines – and person-to-person payments.
- Online purchases and bank transfers between consumers fell outside the survey scope.

Survey method

- Single-day transaction diary and web-based questionnaire or telephone interview.
- The field work was carried out between January and December 2016.
- Respondents represent a true reflection of the Dutch population in terms of gender, age, ethnicity, education, region and income.

General comments:

- The estimated data for the value of cash payments from 2010 onwards is based on the revised household consumption data from Statistics Netherlands (CBS), which is why they differ from those previously reported. Debit card and electronic purse data are from the Dutch Payments Association, and credit card estimates are from the regular DNB statistics.

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