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# Knowledge and appreciation of euro banknotes in the Netherlands

2021 Survey

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# **Summary**

In February 2021, a telephone survey was held among 1,003 Dutch citizens about their knowledge and appreciation of euro banknotes in the Netherlands.

#### Use and familiarity

The survey shows that over three-quarters of the Dutch population usually carry banknotes (76%). For coins, this percentage is even higher (85%). Older people tend to carry banknotes and coins more often than young people. Most people paying in cash are generally not or not particularly concerned about the spread of coronavirus via cash (77%). Over three-quarters of the population expect they will still be using cash in five years' time.

In general, Dutch citizens have held the higher denominations of €200 and €500 less frequently than the €100 denomination. The need for these banknotes is limited (€100 - 17%, €200 - 3%, €500 - 2%). This does not apply to the €5 banknote; 68% of Dutch citizens indicate they need this banknote.

As in 2019, most of the population can only mention the most prominent features of the  $\in$ 50 banknote - such as the number 50, the word 'Euro' and the orange and brown shades of colour of this note. The features are mentioned equally often compared to the 2019 survey.

#### Appreciation

The average appreciation of the euro banknotes increased slightly this year compared with 2019. Looking at appreciation levels since the introduction of the euro, the Dutch are reasonably stable in their assessment. Like in 2019, they assess the  $\in$ 20 banknote as the most attractive banknote. 29% choose this as the most attractive banknote in the euro banknote series. The  $\in$ 5 banknote is regarded the least attractive banknote (53%). 23% of the Dutch assess this banknote as "(very) unpresentable".

Most people (68%) have no trouble distinguishing between the different euro coins but if they do, this mainly concerns the 20-cent and 50-cent coins.

#### Confidence in authenticity

Confidence in the authenticity of banknotes is high in the Netherlands and has increased over the past 10 years. This year, the average rating for confidence stands at 7.7 (out of 10). Dutch citizens have the highest confidence in banknotes withdrawn from an ATM (8.9) and only slightly less in banknotes received as change (7.5).

59% of the Dutch have never checked the authenticity of banknotes in their private lives. Most say that they trust the provider (49%). If they do check for authenticity, they usually do so out of habit (19%) or curiosity (17%).

As in 2019, the watermark and hologram are the most well-known authenticity features. However, over three quarters of the Dutch population cannot describe the watermark of the  $\ensuremath{\in} 50$  banknote.



# 1 Introduction

# 1.1 Background and purpose of the survey

De Nederlandsche Bank (DNB) is the authority responsible for issuing banknotes and coins in the Netherlands. One of the objectives of DNB's policy is to promote the smooth functioning of cash payments, and for this purpose, a regular survey of the use of cash by Dutch consumers is carried out. The survey focuses on consumers' use, perceptions and requirements of cash,

and has been carried out since the 1980s. Panteia was asked to carry out the 2021 edition. The survey provides insight into the following:

- Knowledge of the different euro banknotes.
- Appreciation of euro banknotes.
- The extent to which Dutch citizens are familiar with the visual elements of euro banknotes.
- The level of confidence in the authenticity of euro banknotes and the extent to which banknotes are checked for authenticity.
- Expectations regarding the future use of cash.



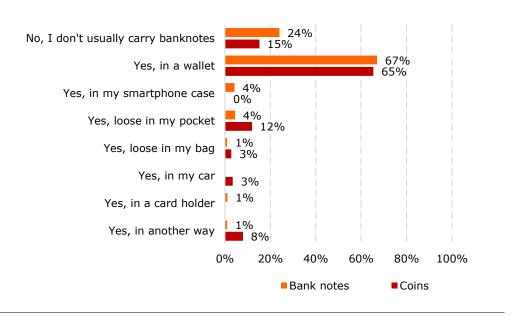
# 2 Results

This Section presents the outcomes of a telephone survey held among a total of 1,003 respondents. Rounding and questions with multiple answer options may mean that percentages do not add up to exactly 100% in some cases.

# 2.1 Carrying cash

The majority of respondents say they usually carry banknotes (76%) and/or coins (85%). Most of them keep this money in their wallets (67% and 65%, respectively). 12% say they keep coins loose in their pockets, while only 4% say they keep banknotes this way. Another 4% say they keep banknotes in their smartphone case.

Figure 1 Do you usually carry banknotes/coins with you? If so, how do you keep them? (n=1,003)



Source: Panteia 2021.

Looking at the various age brackets, young people tend to carry banknotes or coins less often than older people.

Table1 Do you usually carry banknotes/coins with you? If so, how do you keep them? (n=1,003)

	18-29 years	30-49 years	50-75 years	Total
Usually carry banknotes	63%	75%	83%	76%
Usually carry coins	79%	84%	88%	85%

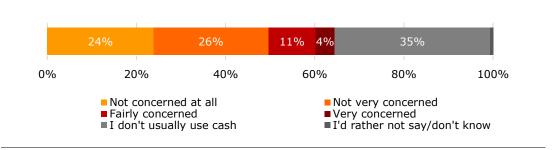
Source: Panteia 2021.

#### 2.2 Coronavirus

When asked about their concerns about contracting coronavirus through banknotes and coins, 15% of respondents say they are quite to very concerned, 50% say they are hardly or not at all concerned and 35% indicate they generally do not use cash. The differences between the various age groups are only limited.



Figure 2 If you think about all the objects and surfaces you touch when you go shopping, how concerned are you about the risk of contracting coronavirus through banknotes and coins? (n=1,003)



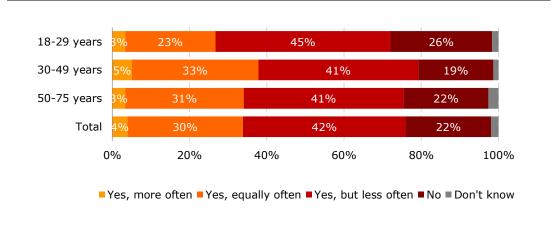
Source: Panteia 2021.

# 2.3 Cash payments in five years' time

More than three-quarters of respondents (76%) still expect to make cash payments in five years' time, either more often or less often. Of these, 42% expect to pay with cash less often, 30% expect to pay equally often, and 4% expect to pay with cash more often than is currently the case. A small group of 2% indicate they don't know.

Young people (71%) more often expect to make less cash payments or no cash payments at all than middle-aged people (60%) or older people (63%). Respondents who handle banknotes as part of their daily/professional activities less often expect a decrease of cash payments compared with people who do not handle banknotes as part of their daily/professional activities (47% and 68%, respectively). In addition, people with higher (68%) and intermediate (66%) education levels more often expect a decrease of cash payments compared with people with lower levels of education (53%).

Figure 3 Do you still expect to pay with cash in 5 years? (n=1,003)



Source: Panteia 2021.



Respondents who expect to make less or no cash payments in five years' time were asked about the reason for this. Like in the previous survey, a large majority (78%) refer to the increased convenience of electronic payments, citing this as the main reason why cash payments will decrease or disappear. In addition,10% indicate that they do not or hardly use cash at the moment, and that the share of card payments is increasing. Another 6% expect that retailers' acceptance of cash will decrease. Other reasons cited include coronavirus (4%), security (3%) and accessibility (2%).

Table 2 Why do you expect to pay less/no longer with cash in five years?

	2019 (n=692)	2021 (n=644)
Electronic payments are increasingly convenient	73%	78%
Cash is hardly/no longer used/Increased use of card payments	-	10%
Retailers are less willing to accept cash	14%	6%
Coronavirus	-	4%
Security	-	3%
Access to ATMs is difficult	5%	2%
Other	33%	14%
Don't know	0%	1%

Source: Panteia 2021

# 2.4 Higher denominations

Most people have held a €100, €200 or €500 banknote in the past (78%). When asked if they held one of these banknotes in the past year, 44% responded affirmatively.

In general, respondents have held the higher denominations of  $\in$ 200 and  $\in$ 500 less frequently than the  $\in$ 100 denomination. This also applies when specifically asked about the past year. Compared with the 2019 survey, the percentage of respondents that have held a  $\in$ 100,  $\in$ 200 or  $\in$ 500 banknote in the past has fallen.

In general, men have held higher-denomination banknotes more often than women, such as the €100 banknote (75% vs 64%), the €200 banknote (45% vs 29%) and the €500 banknote (34% vs 17%).

Dutch citizens who handle banknotes as part of their daily/professional activities have held higher-denomination banknotes more often than those who do not (85% vs 77%).

Table 3 Which of the following euro banknotes have you ever held/in the past year? (2019, n=1.001; 2021 n=1.003)

	Have held sometime in the past		Have held in t	he past year
	2019	2021	2019	2021
€100 banknote	81%	70%	45%	39%
€200 banknote	49%	37%	20%	14%
€500 banknote	34%	26%	12%	6%

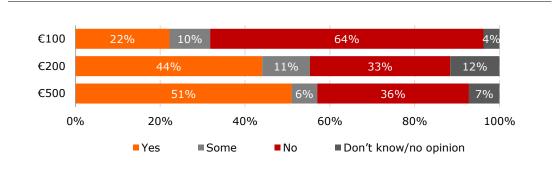
Source: Panteia 2021

Respondents who have held one or more of these banknotes in the past year were asked if they encountered any problems when using them, for example because they were not



accepted in a shop. Figure 4 Shows the results for each of these denominations. In general, the higher the value of the banknote, the more difficult it is to use it to make payments: over half of the respondents encounters problems when using the  $\in$ 500 banknote (51%), while this applies to 22% of the holders of a  $\in$ 100 banknote.

Figure 4 Did you encounter any problems when using the banknote, for example because it was not accepted in a shop? (n=310, n=108, n=50)



Source: Panteia 2021

#### 2.5 Need for denominations

To gain a better understanding of the need for lower and higher denominations, respondents were asked about their own personal need for banknotes of €5, €100, €200 and €500. 28% indicate they do not need any of these denominations. Of those who have a need for any of these denominations, 68% say they need the €5 banknote. The need for higher-denomination banknotes is far less pronounced, at 17% for €100, 3% for €200 and 2% for €500.

# 2.6 Illegal activities

The higher the denomination, the more often respondents believe that these banknotes are mainly used for illegal activities. For example, 30% of respondents link the €100 banknote to illegal activities, and for the €200 and €500 banknotes these percentages are 47% and 56%, respectively. 22% of respondents do not link the €100, €200 and €500 banknotes to illegal activities, and 13% answered 'don't know'.  $^{1}$ 

#### 2.7 Visible features of the €50 banknote

Respondents were asked to describe in as much detail as possible and off the top of their head, everything that can be seen on a €50 banknote, such as images, symbols, and colours. They were also asked to describe any other figures, symbols and texts. Table 4 shows the outcomes.

Most people only mention the most striking features, such as the figure 50 (81%), the word `Euro' (29%) and the orange and brown shades (51% and 28%, respectively). A smaller group of respondents also mentions the less striking features, such as the serial number (16%), the image of a building (18%), the hologram (18%), the watermark (17%) and the euro symbol (15%). A limited group is able to mention further aspects.

The features are mentioned more or less equally often compared to the 2019 survey. The serial number is mentioned slightly less frequently (16% vs 21%). The same applies

<sup>&</sup>lt;sup>1</sup> The survey includes one question about the extent to which banknotes are linked to illegal activities. This should be taken into account when interpreting the current account surplus.



to the word 'Euro' (29% vs 33%). The euro symbol is mentioned more frequently, however (15% vs 5%).



Table 4 Spontaneous description of the €50 banknote (2019, n=1,001; 2021 n=1,003)

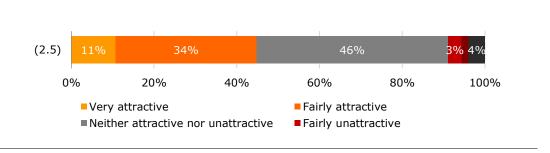
	2019	2021
Colours		
Orange	50%	51%
Brown	30%	28%
Other colours	37%	36%
Buildings		
(Part of) a building/an old building	17%	18%
Bridge	5%	8%
Gate, door	4%	3%
Window	3%	2%
Security features		
Watermark/the gate in the watermark	16%	17%
hologram, silver seal, foil on front side	18%	18%
Other		
Stars/EU Stars, circle of stars	6%	7%
(Countries of) Europe/map of Europe	3%	4%
The flag of the European Union	3%	3%
Euro symbol	4%	6%
Thin lines	1%	3%
Renaissance	0.6%	1%
Other images/symbols	22%	21%
Other texts/figures	24%	18%
Figures		
The figure 50	83%	81%
The serial number	21%	16%
The figure 50 in the watermark	3%	4%
Year, date	3%	2%
The see-through figure	2%	1%
TEXTS		
The word EURO	33%	29%
The word EYPO/('euro' in Greek)	8%	9%
The euro symbol	5%	15%
Signature of European Central Bank President	7%	4%
5 variants of European Central Bank abbreviations	3%	4%
The name 'Europese Centrale Bank' in Dutch	4%	3%
The name 'European Central Bank'		1%
Small print	2%	4%
Copyright sign	.2%	.4%
Don't know		
Can't mention any images, symbols or colours	11%	11%
Can't mention any figures or texts	12%	12%



## 2.8 Appreciation of banknotes

Most citizens believe the euro banknotes are neither attractive, nor unattractive (46%). Some 4% has 'no opinion'. Most of the remaining respondents are positive about the euro banknotes, with 45% classifying them as 'very attractive' or 'fairly attractive'. Only 5% of respondents say the euro banknotes are 'fairly unattractive' or 'very unattractive'. On a 5-point scale, ranging from very attractive (1) to very unattractive (5), respondents awarded 2.5 on average.

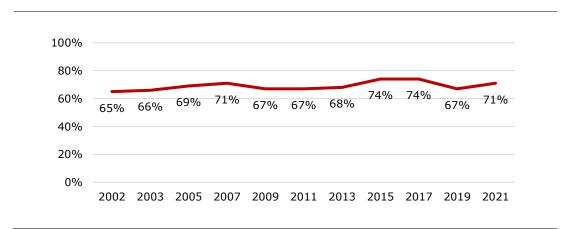
Figure 5 What about the look of the euro banknotes? (n=1,003)



Source: Panteia 2021

Looking at the average level of appreciation relative to earlier surveys, the level has risen compared to the previous survey two years ago. In 2019, an average of 67% of respondents assessed the banknotes as attractive, against 71% in 2021. The Dutch are reasonably stable in their assessment, with appreciation levels hovering around 70% since the introduction of the euro.

Figure 6 Banknote appreciation levels over time, according to the dichotomous method<sup>2</sup>.



Source: Panteia 2021

There are seven euro banknote denominations. Of those surveyed, 29% consider the €20 banknote the most attractive one, followed by the €50 banknote (17%). Like in

Previous surveys included assessments for each of the banknotes separately, to which the dichotomous method was then applied. This year only includes a general assessment.

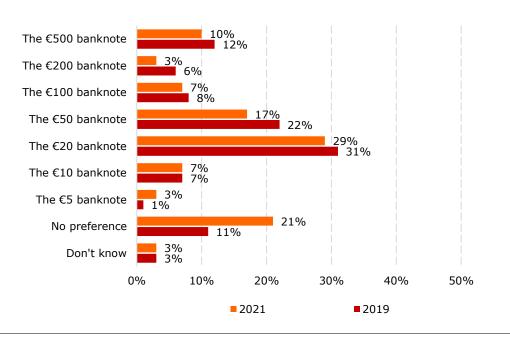


<sup>&</sup>lt;sup>2</sup> Dichotomous method:

% attractive = \frac{\text{number "very attractive"} + \text{number "fairly attractive"} + (0,5 \* \text{number "neither attractive nor unattractive"})}{(\text{total number respondents} - \text{number "don't know"})} \* 100

2019, the €20 banknote is the most popular, followed by the €50 banknote (17%) and the €500 banknote (10%). The €5 and €200 banknotes are least often considered the most attractive ones (3%). Compared with the previous survey, more respondents say they have no preference (21% vs 11%).

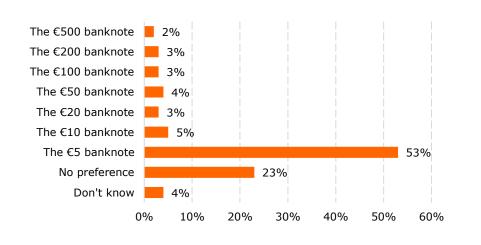
Figure 7 Which of the seven banknotes do you find the most attractive? (n=1,003)



Source: Panteia 2021

Respondents were also asked which of the seven banknotes they find the most unattractive. Over half of them chose the €5 banknote (53%). Almost a quarter has no preference (23%)

Figure 8 Which of the seven euro banknotes do you find the most unattractive? (n=1,003)



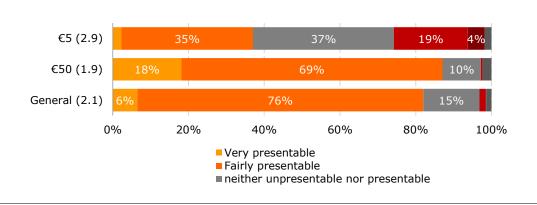
Source: Panteia 2021



# 2.9 Quality of the banknotes

Most respondents assess the quality of the banknotes as fairly presentable (76%). A very small share assesses them as unpresentable or very unpresentable (2%). An average assessment has been calculated using a five-point scale ranging from 1 (very presentable) to 5 (very unpresentable). The lower the rating, the better the quality of the banknote. In general, the quality of the €50 banknote (average rating of 1.9) is considered better than that of the €5 banknote (average rating of 2.9). Almost a quarter of respondents (23%) assesses the quality of the €5 banknote as unpresentable to very unpresentable. The average assessment is virtually unchanged from the previous survey. In 2019, the average rating was 2.9 for the €5 banknote, 1.9 for the €50 banknote and 2.1 for all euro banknotes in together.

Figure 9 What is your opinion about its general appearance in terms of dirt, creases, writing, tape, etc.? In general, euro banknotes look... (n=1,003)



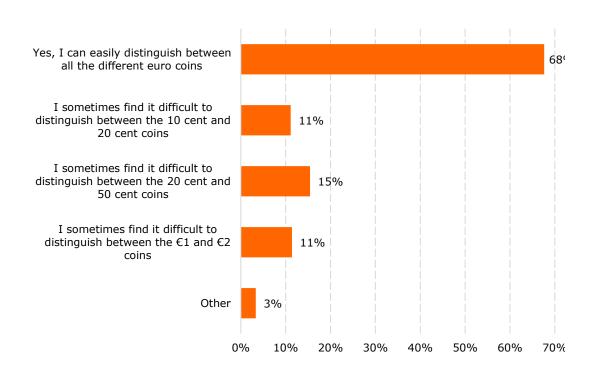
Source: Panteia 2021

# 2.10 Distinguishing between euro coins

Over two-thirds of respondents (68%) have no trouble distinguishing between the different euro coins. Distinguishing between the 20 cent and 50 cent coins is the most difficult, with 15% of respondents saying these coins look very similar. The difference with the other answering options is small, however. 11% indicate they find it difficult to distinguish between the 10 cent and 20 cent coins, and another 11% say so about distinguishing between the  $\mathfrak{C}1$  and  $\mathfrak{C}2$  coins.



Figure 10 Can you easily distinguish between the different euro coins? (n=1,003)

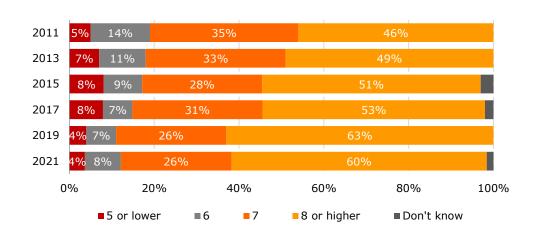




## 2.11 Confidence in authenticity

Banknotes must be reliable and counterfeit-proof. Respondents were asked about their confidence in the authenticity of the banknotes they receive. Figure 11 shows that confidence in the authenticity of banknotes has risen over the past 10 years. In 2011, 46% of respondents rated their level of confidence as 8 or higher, against 60% in 2021. Compared with the previous survey of 2019, there are no significant differences. The average level of confidence is rated at 7.7.

Figure 11 How would you rate your confidence in the authenticity of the euro banknotes you receive? (n=1,003)



Source: Panteia 2021

When looking at the frequency of checking for authenticity, the results show that those who have checked banknotes twice or more often have significantly less confidence in the authenticity of banknotes compared to those who have never checked for authenticity or not in the past year. However, the level of confidence is still more than sufficient among respondents who actually check banknotes for authenticity.

Table 5 Confidence in the authenticity of euro banknotes x have you checked a euro banknote for authenticity in the past year? (n=1,003)

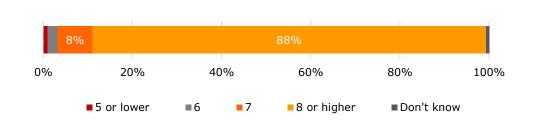
	Average
Yes, once	7.8
Yes, twice or more often	7.4
No, not checked	7.9
No, I have never checked a banknote for authenticity	7.7
Total	7.7

Source: Panteia 2021

People have the most confidence in the authenticity of banknotes they withdraw from ATMs. Almost all respondents rate their confidence in the authenticity of these banknotes at 7 or higher. At 37%, the share of respondents who give a rating of 10 is the largest. Another 28% give a rating of 9. This is similar to the results of the 2019 survey. The average confidence level for the authenticity of banknotes withdrawn from ATMs is 8.9.

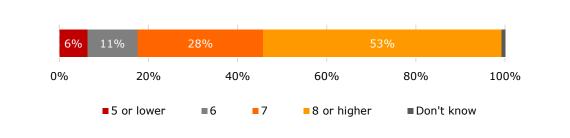


Figure 12 How would you rate your confidence in the authenticity of the euro banknotes you withdraw from an ATM? (n=1,003)



The confidence in the authenticity of banknotes received as change from retailers is considerably lower compared to confidence in the authenticity of banknotes withdrawn from an ATM, but still high at 7.5. 81% of respondents rate this at 7 or higher. 6% of respondents has little confidence in the authenticity of banknotes received as change from retailers, and rates this at 5 or lower. Compared with the 2019 survey, the distribution of ratings is roughly the same.

Figure 13 How would you rate your confidence in the authenticity of the euro banknotes you receive as change from a retailer in a shop? (n=1,003)



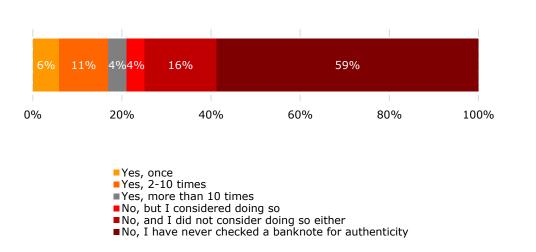
Source: Panteia 2021

#### 2.12 Checking authenticity

Most respondents (59%) have never checked the authenticity of banknotes in their private lives. Those who checked banknotes in the past year (17%) did so only occasionally, however. Only 4% checked banknotes for authenticity more than 10 times in the past year. Another 4% say they did not do so, but considered it at the time. 16% did not check any banknotes in the past year and did not consider doing so either.

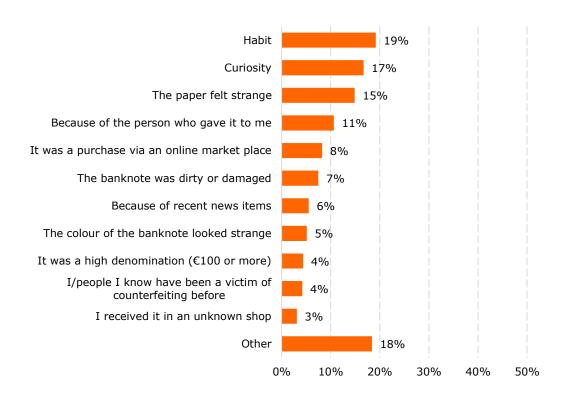


Figure 14 Have you checked a banknote for authenticity in the past year (i.e. for your own personal use and not in the context of your work)? (n=1,003)



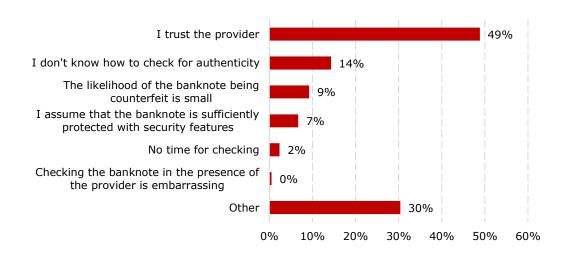
Respondents who answered they had checked banknotes for authenticity at least once were asked for the reasons why they had done so. Most people check banknotes out of habit (19%) or curiosity (17%). 15% say the paper felt strange. Distrust of the person providing the banknote may also be a reason to check for authenticity. Only 4% cite the denomination of a banknote as the reason for checking its authenticity. 'Other' reasons mainly include distrust or general doubts.





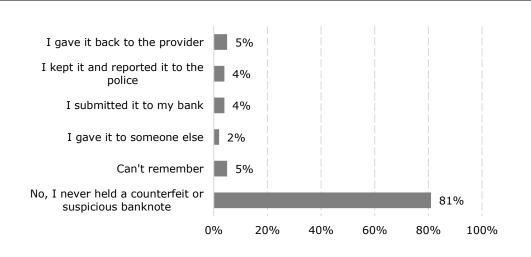
Respondents who answered they had not checked any banknotes for authenticity in the past or in the past year were asked for the reasons why they had not done so. Almost half of respondents (49%) say they trust the provider. 14% do not know how to check for authenticity and 9% believe the likelihood of receiving a counterfeit banknote to be small. Another 7% assumes that banknotes are sufficiently protected with security features.





A large majority of respondents (81%) say they have never held a counterfeit or suspicious euro banknote. Those who have held a counterfeit or suspicious euro banknote dealt with it in different ways: 5% returned the banknote to the provider, 4% kept it and reported it to the police, 4% submitted it to their bank and 2% gave it to someone else. Another 5% say they can't remember what they did with it.

Figure 17 Have you ever held a counterfeit/suspicious banknote? If so, what did you do with it? (n=1,003)



Source: Panteia 2021

# 2.13 Familiarity with security features

The European Central Bank tries to combat counterfeiting of euro banknotes in as many ways as possible. Euro banknotes have several security features that can be used to check whether a note is genuine. Respondents were asked if they could mention a few of these security features.



The watermark is the most-cited security feature (69%), followed by the hologram (39%). Most respondents are also aware of the type of paper (27%) and the security thread (20%).

Table 6 Familiarity with security features (in %)

	2011	2013	2015	2017	2019	2021
	1,003	1,020	1,010	1,002	1,001	1,003
Watermark	75	79	71	68	73	69
Hologram/silver-coloured stripe or seal	49	57	37	37	41	39
Security thread	16	13	14	18	12	20
Shiny golden stripe	2	3	5	4	4	3
Ink that changes colours in the light	3	3	3	4	4	5
(Emerald) green figure	n/a	n/a	1	2	2	2
Tactile ink layer	8	14	12	4	11	9
Type of paper	11	17	12	16	24	27
Small print	6	4	2	2	3	4
Part of banknote visible in infrared light	4	9	4	3	4	3
See-through window/window in foil	-	-	-	-	-	4
Portrait window	6	8	4	2	4	3
Check with devices <sup>3</sup>	-	-	-	-	-	24
Markings for the blind	14	14	11	16	17	17
Serial number	5	5	7	6	1	6
Cannot be photocopied	-	-	-	-	-	1
Signature	1	1	1	1	-	1
Colour	-	-	-	-	-	6
Size of the banknote	-	-	-	-	-	3
Other	-	-	-	-	-	6
Average number of features	2.3	2.6	2.4	2.2	2.5	2.5
Can't mention anything	11	6	13	14	9	10

Source: Panteia 2021

Most respondents are able to mention one or more security features. Only 10% are unable to provide a response to the question of how you can tell that a euro banknote is genuine.



 $<sup>^{\</sup>rm 3}$  This includes: check with marker, authentication device, UV effects and the DNB app

Table 7 Number of security features mentioned (n=1,003)

	_
	2021
None	10%
One feature	16%
Two features	24%
Three features	24%
Four or more features	26%

On average, middle-aged respondents mention the most security features (2.9) and elderly respondents the least (2.3).

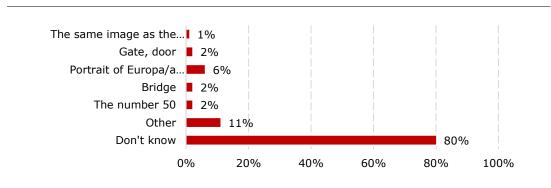
Table 8 Average number of security features mentioned by age bracket (n=1,003)

	Average number of
	security features
	mentioned
18-29 years	2.4
30-49 years	2.9
50-75 years	2.3
Total	2.5

Source: Panteia 2021

As indicated, the watermark is the most-cited security feature. Watermarks are images that become visible when the banknote is held against the light. Respondents were asked whether they could describe the watermark of the  $\[mathcal{\in}$ 50 banknote. The vast majority (80%) could not. 6% mentioned the portrait of Europa (woman). 2% mentioned the gate/door and another 2% the figure 50.

Figure 18 The €50 banknote has a watermark. Do you know what it is? What does it represent? (n=1,003)



Source: Panteia 2021



# Questionnaire

Appendix 1

#### **QUESTION 1. Introduction**

Hello, my name is and I'm calling on behalf of We are conducting research on euro
banknotes. May I please speak to the youngest adult male in the household aged 18 or over?
(if not available, ask about the youngest adult female in the household aged 18 or over) The
survey will take about 15 minutes to complete. Do you have time to participate in the survey?

2	Yes, can participate in survey now. No, make an appointment No, doesn't want to participate. Record refusal.

#### QUESTION 2. Cash payments in five years' time MULTIPLE

We would like to talk to you about cash payments, with coins and banknotes.

Do you still expect to pay with cash in 5 years?

2	Yes, more often Yes, equally ofter Yes, but less ofte
4	No Don't know

#### QUESTION 3. Cash payments in five years' time MULTIPLE

If the respondent answered "Yes, but less often" or "No" to question 2:

Why do you expect to pay less/no longer with cash in five years?

1	Retailers are less willing to accept cash
2	Access to ATMs is difficult
3	Electronic payments are increasingly convenient
4	Other (please specify)
5	Don't know

# QUESTION 4. Guided response to denominations held MULTIPLE

This question is specifically about the higher denominations. Which of the following euro banknotes have you <u>ever held</u>?

1 🗆	€100 banknote
2 🗆	€200 banknote
3 🗆	€500 banknote
4 🗆	None of these



# QUESTION 5. Response to denominations held MULTIPLE This question is specifically about the higher denominations. Have you held a €100, €200 or €500 banknote in the past year? No 2 🗆 A €100 banknote 3 🗆 A €200 banknote A €500 banknote 4 🗆 QUESTION 6. If you answered "yes" to question 5, did you encounter any problems when using the banknote, for example because it was not accepted in a shop? 1 🗆 No 2 🗆 Some Don't know/no opinion 3 □ 4 □ Yes QUESTION 7. Do you need the following denominations for your own, personal use... MULTIPLE 1 □ €5 banknotes 2 □ €100 banknotes 3 □ €200 banknotes 4 □ €500 banknotes QUESTION 8. High denominations and criminal activities MULTIPLE Do you believe the higher denominations are mainly used for illegal activities? Do you believe this applies to: 1 □ €100 banknotes

QUESTION 9. Spontaneous response on image elements of €50 banknote MULTIPLE

2 □ €200 banknotes 3 □ €500 banknotes



I'm now going to ask you about the €50 banknote. Please describe, in as much detail as possible and off the top of your head, everything that can be seen on a €50 banknote, such as images, symbols, colours, etc. This is not about figures or text!

#### Probe twice:

- 1) Can you mention anything more?
- 2) What else can you see, apart from the texts?

Enq: Don't read, but ask probing questions.

3 4 5	(Part of) a building/an old building Renaissance period/style Gate, door
6	Window
7	Bridge
8	Orange/shades of orange
9	Brown/shades of brown
10	Mentions other colours
11	Flag/EU Flag
12	Stars/EU stars, circle of stars
13	(Countries of) Europe/map of Europe
14	The euro symbol
15	Hologram, silver seal, foil on front side
16	Watermark/the gate in the watermark
17	Thin lines
18	Other (please specify)
19	Can't mention anything



# QUESTION 10. Spontaneous response on text elements of €50 banknote MULTIPLE

There are also figures and texts on the €50 banknote. Please describe, in as much detail as possible and off the top of your head, the figures, symbols and texts that can be seen on the

€50 Danknote.	
	ntion any other texts? ntion more texts?
Enq: Don't read	l, but ask probing questions.
3	The word EURO The word EYPO/('euro' in Greek) The euro symbol The figure '50'/the number '50' The signature of the European Central Bank President (Duisenberg, Trichet, Draghi, Lagarde) Serial number(s) The figure 50 in the watermark Copyright sign, c in a circle 5 European Central Bank abbreviation variants (BCE, ECB, EZB, EKT, EKP) The name 'Europese Centrale Bank' The name 'European Central Bank' Year, date Small print The see-through register (the 'half' figure becomes fully visible when the note is held against the light) Other (please specify)
18 🗆	Can't mention anything
<b>QUESTION 11</b>	. Appreciation of euro banknotes
	look of the euro banknotes? m very attractive, fairly unattractive, very unattractive, or etween?
1	Very attractive Fairly attractive ither attractive nor unattractive Fairly unattractive Very unattractive Don't know
<b>QUESTION 12</b>	. Most attractive banknote
There are sever most attractive	n euro banknotes in total. Which of the seven euro banknotes do you find the ?
1	The €500 banknote The €200 banknote The €100 banknote The €50 banknote The €20 banknote The €20 banknote The €10 banknote

# **QUESTION 13. Most unattractive banknote**

The €5 banknote

No preference

Don't know

7 🗆

8 🗆

9 🗆



There are seven euro banknotes in total. Which of the seven euro banknotes do you find the most unattractive?			
1	The €500 banknote The €200 banknote The €100 banknote The €50 banknote The €50 banknote The €20 banknote The €10 banknote The €5 banknote The €5 banknote Don't know		
<b>QUESTION 14</b>	. Presentable/unpresentable €5 banknote		
	e the quality of the 5 euro banknote? What is your opinion about its general erms of dirt, creases, tears, writing, tape, etc.?		
In general, €5 b Enq: Read out 1	panknotes look L-5		
1	Very presentable Fairly presentable Neither unpresentable nor presentable unpresentable Very unpresentable Don't know/no opinion		
<b>QUESTION 15</b>	. Presentable/unpresentable €50 banknote		
	e the quality of the 50 euro banknote? What is your opinion about its general erms of dirt, creases, tears, writing, tape, etc.?		
In general, €50 Enq: Read out :	banknotes look 1-5		
1	Very presentable Fairly presentable Neither unpresentable nor presentable unpresentable Very unpresentable Don't know/no opinion		
<b>QUESTION 16</b>	. Presentable/unpresentable euro banknote series		
	e the quality of euro banknotes in general, regardless of denomination? What is out their general appearance in terms of dirt, creases, tears, writing, tape,		
In general, euro Enq: Read out I	o banknotes look 1-5		
1	Very presentable Fairly presentable Neither unpresentable nor presentable unpresentable Very unpresentable Don't know/no opinion		



# QUESTION 17. Distinguishing between euro coins

MULTIPLE

Can you easily distinguish between the different euro coins?

1  $\square$  Yes, I can easily distinguish between all the different euro coins

 $^{2}\;\;\square\;$  I sometimes find it difficult to distinguish between the 10 cent and 20 cent coins

3  $\square$  I sometimes find it difficult to distinguish between the 20 cent and 50 cent coins

4 □ I sometimes find it difficult to distinguish between the €1 and €2 coins

5 □ Other (please specify)

#### **QUESTION 18. Confidence in authenticity**

The next questions are about authenticity of banknotes. Banknotes must be reliable and counterfeit-proof.

How would you rate your confidence in the authenticity of the euro banknotes you receive?

2 □ 2 3 □ 3

4 □ 4 5 □ 5

6 6

7 □ 7 8 □ 8

8 □ 8 9 □ 9

9 □ 9 10 □ 10

11 □ Don't know

## QUESTION 19. Authenticity of banknotes withdrawn from ATM

How would you rate your confidence in the authenticity of the euro banknotes you withdraw from an ATM?

3 3

4 □ 4 5 □ 5

5 □ 5 6 □ 6

7 🗆 7

8 🗆 8

9 🗆 9

10 🗆 10

11 □ Don't know

# QUESTION 20. Authenticity of banknotes received as change

How would you rate your confidence in the authenticity of the euro banknotes you receive as change from a retailer in a shop?

1 🛚 1

2 □ 2 3 □ 3

4 🛚 4

5 □ 5 6 □ 6

7 🗆 7

8 🗆 8

9 🗆 9

10 🗆 10

11 □ Don't know



#### **QUESTION 21. Checking for authenticity**

Have <u>you</u>	checked	a banknote	e for	authenticity	<u>in</u>	the	past	year	(i.e.	for	your	own	personal	use
		text of your												

1	Yes, once
2	Yes, 2-10 times
3	Yes, more than 10 times
4	No, but I considered doing so
5	No, and I did not consider doing so either
6	No, I have never checked a banknote for authenticity

# QUESTION 22. Checking for authenticity - situation MULTIPLE

Only if respondent answered 'Yes' to question 21.

Why did you check for authenticity?

☐ Out of habit
□ Out of curiosity
$\square$ It was a purchase via an online market place
☐ The paper felt strange
☐ The colour of the banknote looked strange
☐ It was a high denomination (€100 or higher)
☐ The banknote was dirty or damaged
$\square$ Because of the person who gave it to me
☐ I received it in an unknown shop
☐ I/people I know have been a victim of counterfeiting before
☐ Because of recent news items
☐ Other (please specify)

# ANNEX 22A Not checking for authenticity MULTIPLE

Only if respondent answered 'No' to question 21.

Why didn't you check for authenticity?

- The likelihood of the banknote being counterfeit is small
- Checking the banknote in the presence of the provider is embarrassing
- No time for checking
- I trust the provider
- I assume that the banknote is sufficiently protected with security features
- I don't know how to check for authenticity
- Other (please specify)

# **QUESTION 23. Suspicious banknote**

Have you ever held a counterfeit/suspicious banknote? If so, what did you do with it?

1	I returned it to the provider
2	I kept it and reported it to the police
3	I submitted it to my bank
4	I gave it to someone else
5	Can't remember



#### QUESTION 24. Knowledge of security features MULTIPLE

The European Central Bank tries to combat counterfeiting of euro banknotes in as many ways as possible. Euro banknotes have several security features that can be used to check whether a note is genuine.

Can you name some of these security features?

#### Probe twice:

- 1) How can you check whether a euro banknote is genuine?
- 2) Can you name some more features?

Enq: Don't read out

1	Watermark, lighter and darker shades in the paper
2	Thread, dark vertical line in the paper, visible against the light (security thread), small white letters in the line
3	Hologram/silver, shiny ribbon or seal, an image in the foil, front side
4	Shiny, golden ribbon on the reverse side (iridescent stripe)
5	Ink that changes colour in the light, from purple to olive green or from green to blue
6	(Emerald) green figure, colour changing from green to blue, moving up and down, shiny
7	Tangible ink layer, front side
8	See-through window/window in foil
9	See-through register, check alignment of front side and reverse side
10	Smallprint, microtext, in several locations on the note
11	Paper remains dark under ultraviolet light (UV lamp)
12	Coloured fibres light up under ultraviolet light (UV lamp)
13	Front side: ink and colours light up under ultraviolet light (UV lamp), for example the EU flag and the signature
14	Reverse side: ink and colours light up under ultraviolet light (UV lamp), for example the bridge and the map of Europe
15	A part of the note is visible under infrared light (IR lamp)
16	Size (the higher the value, the larger the note)
17	Tactile marks, tactile marks for the blind, several lines along the side
18	Type of paper
19	Other (please specify)
20	Can't mention anything

# QUESTION 25. Knowledge of watermark in €50 banknote

There are watermarks in the euro banknotes, images that become visible when you hold the banknote against the light. The  $\le$ 50 banknote also has a watermark. Do you know what it is? What does it represent?

Enq: Don't read out

1	The same image as the one printed on the note
2	Gate, door
3	Portrait of Europa/a woman
4	Bridge
5	The figure 50
6	Other (please specify)
7	Don't know



QUESTION 26. Carrying banknotes MULTIPLE						
Do you usually	carry banknotes? If so, how do you keep them?					
1□ 2□ 3□ 4□ 5□ 6□	No, I don't usually carry banknotes Yes, in a wallet Yes, in my smartphone case Yes, loose in my pocket Yes, loose in my bag Yes, in another way (please specify)					
QUESTION 27.	Carrying coins MULTIPLE					
Do you usually	carry coins? If so, how do you keep them?					
1□ 2□ 3□ 4□ 5□ 6□ 7□	No, I don't usually carry coins Yes, in a wallet Yes, in my smartphone case Yes, loose in my pocket Yes, loose in my bag Yes, in my car Yes, in another way (please specify)					
QUESTION 28.	Coronavirus MULTIPLE					
If you think about all the objects and surfaces you touch when you go shopping, how concerned are you about the risk of contracting coronavirus through banknotes and coins?						
1	Not concerned at all Not very concerned Fairly concerned Very concerned on't usually use cash Don't know / Won't say					
QUESTION 29.	Gender					
Enq: Note the respondent's gender						
1 □ 2 □ 3 □	Male Female Don't know/Won't say					
QUESTION 30. Age						
The last few questions are for statistical reasons What is your age?						
Years						

# **QUESTION 31. Household size**

How many people live in your household?



#### **QUESTION 32. Education** What is your highest level of education? 1 2 Primary education Lower vocational education 3 □ Intermediate general secondary education 4 □ Intermediate vocational education 5 Higher general secondary and pre-university secondary education 6 🗆 Higher vocational/professional and university education (Bachelor) 7 University education (Master) 8 Don't know/Won't say **QUESTION 33. Handling banknotes** Do you handle banknotes as part of your daily/professional activities? 1 🗆 Yes

#### **CONCLUSION**

2 🗆

That was the final question.

No

Thank you very much for your time and cooperation!



# Account of methodology

## Methodology

Appendix 2

#### Data collection

The study was carried out by means of telephone interviews among Dutch citizens aged 18 to 75. They were selected using the Random Digital Dialling method, a proven method for approaching potential respondents by generating and dialling random telephone numbers. A benefit of this method is that it also includes non-registered telephone numbers that cannot be found in the phone book or in a specific provider's database.

The fieldwork was carried out by Global Data Collection Company (GDCC) from Rotterdam, who also carried out the telephone fieldwork for the most recent measurements. Data were collected between 1 and 28 February 2021.

#### Survey

The survey has been compiled in consultation with DNB, based on the research questions and the objectives of the study. The survey used for the previous measurement (2019) formed the basis.

Prior to the start of the fieldwork, the survey questions were tested for comprehensibility and clarity in a number of test interviews. DNB representatives and Panteia's project leader were present during these test interviews. Some modifications were made to the survey based on these test interviews, after which it was finalised. The final survey is included as Annex 1 to this report.

## Response

A total of 29,623 telephone numbers were dialled for the study. 67% gave no response, referred to an answering machine or could not be used (info tone, fax number, out of use). Of the remaining share, a total of 1,003 respondents participated in the survey (response: 10%).

Annex 3 provides an overview of the response, broken down by characteristics such as age, gender and educational level.

#### Reliability and accuracy

Reliability and accuracy are important for achieving statistically sound results, as explained below.

#### Confidence interval

The confidence interval (CI) indicates the range of values which includes the actual value with a certain degree of probability. Panteia applies a CI of 95% in its studies, which means that if a study is repeated several times, the results are within the CI in at least 95% of cases. This is referred to as the 95% confidence level.

#### Inaccuracy/error band

Deviations from the actual situations occur in each and every sample-based survey: the error band. In studies with a 95% confidence level, the maximum error band is 5%. The error band can increase or decrease depending on the size of the sample.



## Representativity

For a correct interpretation of results it is important to know whether the study is representative: this means that the composition of the sample must be similar to that of the total group from which it was drawn and based on which the results are generalised.

The following criteria can be used to determine whether study results are representative:

1. The sample must be of sufficient size

The Dutch population includes 12,456,500 individuals between the ages of 18 and 75. Based on a 95% confidence level, a 5% error band and maximum data spread, a minimum sample size of 385 is required. The generalised sample size of 1,003 is well above this threshold. The sample size is important for making statements about age and education level.

- 2. The sample must be sufficiently heterogeneous
- Heterogeneity of the sample also plays a role in the reliability and representativeness of the study. All suitable respondents must be selected for participation, not only those living in a certain province or having attained a specific education level. By applying the Random Digital Dialling method, everyone with a telephone can participate in the survey without being excluded in advance. So this second criterion is also met.
- 3. The composition of the sample must reflect the composition of the total population. Are the 1,003 respondents representative for the population as a whole? We have compared the composition of the total population in terms of age, education level and gender to the sample population. Based on this analysis, the sample did not accurately match the total population in the area of education levels. To be able to make statements about the population as a whole, we have used three background characteristics to reweigh the results in the net response. Using weighting factors, the ratio of the background characteristics in the net response has been adjusted to the ratio in the population

to ensure the reweighted response and the results are representative for the study population.

The results from our analyses and the responses in this report (with a 95% confidence level) are therefore representative and apply to the population as a whole. Given the size of the net sample, the error band percentages in this report have been set at 3.09%.



# Response by background characteristic

Table 9 Response (unweighted and weighted)

Appendix 3

	Unweighted		Weighted	
	n	%	n	%
Gender				
Men	498	50%	501	50%
Women	505	50%	502	50%
Level of education				
High	547	55%	313	31%
Medium	333	33%	469	47%
Low	123	12%	220	22%
Age bracket				
18-29 years	208	21%	208	21%
30-49 years	346	34%	346	35%
50-75 years	449	45%	448	45%
Number of persons in household				
One-person household	207	21%	229	23%
Two-person household	358	36%	354	35%
Household of >3 persons	438	44%	420	42%
Handles banknotes as part of daily activities				
	142	1.40/	150	1.00/
Yes No	143 860	14% 86%	159 844	16% 84%
Province/County				
Groningen	38	4%	44	4%
Friesland	35	3%	37	4%
Drenthe	30	3%	24	2%
Overijssel	64	6%	66	7%
Flevoland	23	2%	26	3%
Gelderland	115	11%	116	12%
Utrecht	77	8%	67	7%
Noord-Holland	144	14%	131	13%
Zuid-Holland	221	22%	222	22%
Zeeland	22	2%	22	2%
Noord-Brabant	127	13%	124	12%
Limburg	68	7%	69	7%
Won't tell	39	4%	55	5%

Source: Panteia 2021

