

Central Bank Digital Currencies: Consumer Attitudes and Expectations in the United States

by Tom Akana, Julia Cheney, and Robert Hunt¹

Beginning around 2014, central banks around the world began exploring the idea of creating and issuing a digital form of money in response to the increasingly digital nature of their economies.² Like physical currency, a general-purpose “central bank digital currency” (CBDC) would be a liability of the central bank that is intended to be widely available to the public. While there are potential benefits to CBDCs, including easing money transfers and promoting financial inclusion, CBDCs may also present trade-offs and implications for consumers, market participants, the payment system, and the execution of monetary policy. These are some of the characteristics of a CBDC that central banks around the world are carefully considering within the context of their specific jurisdictions.

Over the past few decades, the use of physical currency has changed as technology has continued to move financial transactions into the digital realm. Consumers have increasingly used digital platforms to make credits (inflows) and debits (outflows) to their bank account balances. For example, many consumers use direct deposit for their paychecks or use online banking systems to move money between accounts and to pay bills electronically. In addition, more consumers are paying for goods and services with person-to-person (P2P) transfers through applications like Venmo or Zelle, systems that allow users to send and receive payments electronically. In all of these cases, the money is moved digitally and not by sending a check or by exchanging or handing over the paper banknotes.

The Consumer Finance Institute (CFI) at the Federal Reserve Bank of Philadelphia conducts research on how people earn, spend, save, and invest, as well as how credit markets and payment systems affect the economy. As part of

¹ The views expressed in this report are solely those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System. Nothing in the text should be construed as an endorsement of any organization or its products or services. Any errors or omissions are the responsibility of the authors. No statements here should be treated as legal advice.

² See the International Monetary Fund (IMF) page, <https://www.imf.org/en/Publications/fandd/issues/2022/09/Picture-this-The-ascent-of-CBDCs>.

our broader study in consumer payments, CFI conducted a survey in October 2022 to ask consumers about their interest in this potential new form of digital money — a general-purpose CBDC. We wanted to better understand consumer preferences for a U.S. CBDC, the likelihood of widespread adoption, and barriers to adoption.³ We found that a slight majority of consumers were generally receptive to the idea of a CBDC, but widespread consumer adoption will require that the product does not require fees to access or use, be accepted widely in the marketplace, be uncomplicated to adopt, and provides high levels of security and privacy for consumers. At the same time, not all consumers were confident they could render an opinion about a CBDC. This paper presents a summary of the results.

Note: This special report represents Reserve Bank staff research and therefore is separate from and independent of the Federal Reserve Board’s 2022 discussion paper on CBDCs, titled “Money and Payments: The U.S. Dollar in the Age of Digital Transformation.”⁴ Per the discussion paper, no decisions have been made on whether to pursue a CBDC in the U.S.

Survey Background

The survey was conducted by Dynata, an online market research firm providing access to survey panels that are nationally representative of the U.S. population. Responses were managed throughout the survey process to mirror census demographic distributions and to ensure that certain survey populations were appropriately represented (e.g., those with higher incomes, urban and rural residents, and self-employed individuals). While geographic distributions at the state level are consistent with general population distributions, we recognize that finer subsets of the sample may not be fully representative.

The survey was administered on October 16–31, 2022, and generated 5,215 responses from a national panel of online survey takers ages 18 or older. After data cleansing and exclusions, responses were weighted by income, age, and gender to reflect the 2020 American Community Survey. After processing, 4,691 responses remained to be analyzed from the national sample.

³ We would like to thank Michael Palumbo, Geng Li, and Kevin Moore, all from the Board of Governors of the Federal Reserve System, for their invaluable assistance in designing the CBDC question module.

⁴ See [Money and Payments: The U.S. Dollar in the Age of Digital Transformation \(federalreserve.gov\)](https://www.federalreserve.gov/discussionpapers/2022/01/01/money-and-payments-the-u-s-dollar-in-the-age-of-digital-transformation/). To fully evaluate a potential CBDC, the discussion paper asked for public comment on 22 questions. All responses, including a summary of responses, are posted on the Federal Reserve Board’s website. See [Money and Payments: The U.S. Dollar in the Age of Digital Transformation, Summary of Public Comments; April 2023 \(federalreserve.gov\)](https://www.federalreserve.gov/discussionpapers/2022/01/01/money-and-payments-the-u-s-dollar-in-the-age-of-digital-transformation-summary-of-public-comments-april-2023/).

Survey participants received the following description of a CBDC:

We'd like to ask you a few questions about a potential new form of currency called a "central bank digital currency" (CBDC) that is currently being discussed in a number of countries, including the United States.

A CBDC is a digital version of cash that is issued directly by the central bank and could be used for the same purposes that cash has been used traditionally or could be used to purchase items online or transfer money to family or friends. You would likely be able to store [a] CBDC and access it through a "digital wallet," even offline, using a card, a phone, or a computer.

After reading the description, respondents were asked to select up to four potential features, or design choices, of a CBDC that would be important to them; respondents who selected *None of these — I would not use a CBDC* are classified as *cool to CBDC*, while those who selected any of the other attributes as being important are classified as *warm to CBDC*.

According to this definition, slightly more than half (52.6 percent) of respondents are considered *warm to CBDC* (**Table 1**). The demographic populations that are most likely to be *warm* include those who are younger (more than 60 percent of those ages 55 years or younger), more affluent (more than 56 percent of those earning \$75,000 or more), non-White (58.8 percent and 63.2 percent of Black and Hispanic respondents, respectively), and male (56.9 percent of men).

Survey Results

What features in the design of a CBDC would be most important to you?

Respondents were presented with the following list of CBDC design features to select from:

- A. CBDC is widely accepted.
- B. Payments made using a CBDC remain private.
- C. You can store your CBDC on a physical card instead of or in addition to your phone or computer.
- D. Paying with a CBDC would not require an internet connection.
- E. You don't pay fees to use a CBDC.
- F. CBDC can be transferred directly to other people in the United States.
- G. CBDC can be transferred directly to other people outside the United States.
- H. The ability to earn interest on CBDC balances in my digital wallets like with a bank account.
- I. None of these — I would not use a CBDC.

Among those who are *warm* to a CBDC, two features stand out as the most important for those consumers. The most frequently selected feature was *You don't pay fees to use a CBDC*, selected by 63.5 percent of *warm* respondents (**Table 2**). The second most commonly cited feature was *widespread acceptance of a CBDC in the marketplace* at 57.3 percent. *Privacy of payments* (42.0 percent), *ability to earn interest* (39.2 percent), and *having a physical card* (34.3 percent) were all selected by more than one-third of respondents. *Money transfers within the United States* (26.5 percent), *offline payment ability* (23.1 percent), and *money transfers outside of the United States* (10.6 percent) were cited less frequently.

Across demographic groups, a *no fees* response was the most commonly selected feature for all but a handful of groups (Table 2); high earners (\$125,000 and more), and Black respondents were more likely to select *wide acceptance* as their most important feature. Clearly these two features appear to be the most important for most respondents. *Foreign transfer* capability was the least selected feature across all demographic groups. However, there is some variation across demographics: Younger respondents, higher earners, and non-White groups were somewhat more interested in this feature than their counterparts, even though it was still the least popular feature for all groups.

How likely would you be to use a CBDC in the following situations?

Respondents were asked about their likelihood of using a CBDC in certain situations:

- A. Payment at online stores.
- B. Payment at stores in person.
- C. Person-to-Person payments (e.g., paying a tradesman or sending money to a friend).
- D. To store money or savings.
- E. To enable a family member without a bank account to make payments (e.g., kids).
- F. Transfer money to people or businesses in a different country.

The following statistics represent the percentage of the population that indicated they would *likely* or *definitely* use a CBDC in certain cases.

Among *warm* users, more than 60 percent said they would be *likely to use a CBDC to make payments online*, in a store, or in a person-to-person (P2P) scenario (69.9 percent, 64.3 percent, and 63.8 percent, respectively) (**Table 3**). A majority of respondents also indicated interest in using a CBDC *to store money or savings* (58.0 percent) or *to enable an unbanked family member to make payments* (51.4 percent). Only 34.8 percent of respondents believe they would use a CBDC *to transfer money to a different country*.

Across demographics, we see similar relationships between the potential CBDC uses, with *making payments* being the most selected, *storing money or savings* and *enabling unbanked payments* in the next tranche, and *foreign transfers* the least popular. We also see similar relationships between demographic cohorts that we observed in the important features question; for instance, younger, higher-earning, non-White, and male respondents were more likely to say that they would use a CBDC to make foreign transfers.

Among those who are *cool* to a CBDC, *online and in-person payments* were the most frequently selected options; however, only 12.7 percent and 12.3 percent of respondents, respectively, would use a CBDC in these situations compared with more than 60 percent of *warm* users (**Table 4**).

If you were to use a CBDC to make payments, which existing payment methods would you use less often?

Respondents were asked to respond to this question by selecting from the following list:

- A. Bank transfers
- B. Cash
- C. Payment apps (e.g., Venmo or PayPal)
- D. Debit cards
- E. Cryptocurrencies
- F. Credit Cards

Cash, debit cards, credit cards, and payment apps like Venmo or Zelle were all selected by about one-third of the *warm* respondents (ranging from 33.3 percent for cash to 31.5 percent for payment apps) (**Table 5**). *Bank transfers and cryptocurrencies* were selected by 18.2 percent and 10.2 percent of respondents, respectively. The general ranking of which products might be replaced is fairly similar across demographic groups. Credit cards showed the largest difference in replacement rates; respondents who are older or more affluent are much more likely to replace a credit card than those who are younger or less affluent.

Among respondents who were *cool* to a CBDC, we see a similar ordering, with *cash* the most likely to be replaced (32.5 percent), followed by *credit cards* (29.4 percent), *debit cards* (24.7 percent), and *payment apps* (22.0 percent) (**Table 6**).

In most instances, the relative order in which existing means of payments might be affected by adoption of a CBDC — as reported in these survey responses — seems to reflect the existing mix of payments used by consumers. In other words, survey respondents seem to suggest they would substitute a CBDC for their existing payments in proportion to their current usage of those payments. To gain perspective on this, we reviewed data from the 2022 [Survey and Diary of Consumer Payment Choice](#) (SDCPC) from the Federal Reserve Bank of Atlanta. In Table 5,

we include statistics from the SDCPC on payment adoption and use (the definition of *adoption* encompasses a combination of ownership and use of different methods). Generally speaking, the most common payment methods in the SDCPC results — cash, debit cards, and credit cards — are also the most likely methods that our respondents identified as being affected by a CBDC, if they begin to use it. These responses are therefore consistent with the hypothesis that, when asked to speculate about substituting a CBDC for existing forms of payments, respondents do not currently believe that certain existing payments will be affected disproportionately more than others.

Which of the following items are the most important reasons that you would choose NOT to use a CBDC if it were available?

All respondents selected from the following list of possible barriers to using a CBDC:

- A. I don't think it will be accepted widely enough or work often enough.
- B. I am afraid that my purchase habits will be tracked.
- C. I don't think it will be secure.
- D. Existing digital payments are sufficient.
- E. Sounds too complicated to switch.
- F. I'm against all forms of digital money.
- G. None of these.

Among *warm* respondents, *acceptance* and *security* were the two barriers cited most frequently, at 39.7 percent and 35.0 percent, respectively (**Table 7**). The next most common responses were concerns about the *complication of switching* (24.3 percent), *satisfaction with existing digital payments* (22.5 percent), and *fear of tracking* (21.8 percent). Less than 10 percent of *warm* respondents said that none of the items of the list would be a barrier to them.⁵

Most demographic groups show similar results to the overall population of *warm* respondents, with a few exceptions that we would like to call out.

- Less affluent respondents are concerned about *security*, with 36.9 percent of those earning less than \$40,000 saying, “I don't think it will be secure.”
- More affluent respondents are more likely to think *existing digital payment options are sufficient* (28.9 percent for those earning more than \$125,000).

⁵ Interestingly, 8.6 percent of *warm* respondents said that they were against all forms of digital money. While that is a contradiction on the surface, it is possible that they are generally against digital currency, but they may see it as something that is inevitable; therefore, they responded that they would likely use it if it became a reality.

- Black respondents are significantly more likely to be concerned about the potential for their *purchases to be monitored* than other racial/ethnic groups (28.9 percent versus less than 22 percent for all other groups).
- Older respondents are more likely to cite *too complicated to switch* (30.0 percent for those older than 65).

Cool respondents were most likely to cite *security* concerns (33.3 percent) and *resistance to all forms of digital money* (24.4 percent) as the main barriers to their hypothetical use of a CBDC. The remaining barriers were selected by fewer than 21 percent of *cool* respondents (**Table 8**).

If you were planning to keep some amount of your money in a CBDC, what balances in other accounts would you most likely reduce?

Respondents selected from the following list of account types:

- A. Cash or physical currency
- B. Checking account at a bank
- C. Savings account at a bank
- D. Money market fund
- E. Cryptocurrency balance (such as Bitcoin or Eth)
- F. Stablecoin balance (such as Tether or USDC)
- G. I would not keep any assets in CBDC

A small portion of *warm* respondents indicated that they would not keep any assets in a CBDC (18.1 percent) (**Table 9**). Respondents who are older, less affluent, White, or female were more likely to say that *they would not hold CBDC assets*. Across the remaining choices, *cash* and *traditional retail bank accounts* were most likely to be reduced; 34.8 percent would reduce *cash holdings*, 37.6 would reduce *checking account balances*, and 23.1 percent would reduce *savings account balances*.

We asked the respondents who indicated that they would hold assets in a CBDC to report the dollar amount that they thought they would hold. Just more than half (51.4 percent) would hold *less than \$500*; an additional 26.1 percent would hold *between \$501 and \$1,000*; and 22.5 percent would hold *more than \$1,000* (**Table 10**). Respondents who are more affluent or male were more likely to select higher dollar amounts.

Understandably, a large majority of *cool* respondents (68.4 percent) indicated that *they would not hold any CBDC assets* (**Table 11**). Otherwise, the rank order for the remaining asset types was similar to the *warm* respondents,

with the assets most likely to be reduced being *cash* (13.1 percent), *checking accounts* (13.5 percent), and *savings accounts* (9.0 percent). None of the other options were selected by more than 4 percent of the group.

On a scale of 1 to 5, where 1 is “Not confident at all” and 5 is “Completely confident,” how confident are you in your responses to these CBDC questions?

In the United States, consumers do not have personal experience with a CBDC, and this survey presented respondents with a range of potential design choices and use cases. So, it is understandable that many respondents could be unsure about how to answer the questions posed to them. To assess this level of uncertainty, respondents were asked to rate their confidence in their responses using a five-point scale ranging from “not confident at all” to “completely confident.” To compare outcomes across populations, we look at a *net confidence rate* by subtracting the percentage of respondents reporting low confidence (bottom two categories) from those reporting high confidence (top two categories). We interpret a higher net confidence rate as a sign that the group’s responses are more likely to be a good indicator of their behavior if a CBDC is adopted. If respondents are confident in their responses, a product that meets their expectations has a higher chance of being adopted. Conversely, a low net confidence rate suggests that the group’s expected behaviors could differ as they learn more about CBDCs. In that case, a product that eventually addresses their concerns may win over consumers who are currently skeptics.

Overall, respondents had a positive net confidence in their answers to the CBDC questions at 25.7 percent (49.4 percent confident minus 23.7 percent not confident) (**Table 12**). *Warm* respondents reported a higher net confidence rate at 38.7 percent, with less than 15 percent reporting low confidence. Among *warm* respondents, those who are younger, more affluent, or male had the highest net confidence, with the highest reported level found among those earning \$125,000 or more (55.1 percent). Almost all demographic cohorts show less than 20 percent rates of reporting low confidence as well. This would seem to indicate that those who are *warm* to a CBDC may be willing to use the product if it is developed and meets their minimum expectations.

Cool respondents indicated a much lower, but still positive, net confidence of 11.3 percent, with more than one-third (34.2 percent) reporting low confidence in their answers. Generally, there are no clear patterns among demographic cohorts, but among non-White respondents, we see slightly negative net confidence rates (e.g., more respondents in these groups report low confidence in their responses). These results imply a general opportunity to increase interest in a CBDC among those who are currently *cool* to the product, especially if their concerns can be addressed appropriately.

Conclusion

Our survey data indicate that a slight majority of U.S. consumers may be open to the idea of a CBDC. The survey results also suggest that, to facilitate adoption and use, a CBDC would have to address some key consumer concerns.

In particular, respondents expressed a strong aversion to paying fees to hold or use a CBDC. A perception of widespread acceptance in the marketplace also appears to be extremely important for the adoption decisions of consumers. Respondents are also averse to perceived and actual adoption complexity (a challenge that many previous new payment methods have encountered) and have concerns about security or lack of privacy. A sizable minority of respondents are *cool* to CBDCs. Those respondents are generally less confident about their understanding of CBDCs. This suggests there is opportunity to increase interest and adoption if the end product is well designed and well communicated.

Appendix

Table 1 — Percentage of Respondents *Warm* to a CBDC

	<i>% Warm to CBDC</i>	<i>% Cool to CBDC</i>
All Respondents	52.6%	47.4%
18–35 Years Old	65.1%	34.9%
36–55 Years Old	60.2%	39.8%
56–65 Years Old	43.2%	56.8%
66+ Years Old	28.6%	71.4%
<\$40,000	49.9%	50.1%
\$40,000–\$74,999	55.5%	44.5%
\$75,000–\$124,999	59.0%	41.0%
\$125,000+	56.8%	43.2%
White (Non-Hispanic)	49.5%	50.5%
Black	58.8%	41.2%
Hispanic	63.2%	36.8%
Other/Unknown	50.7%	49.3%
Male	56.9%	43.1%
Female	48.5%	51.5%

Table 2 — Most Important Features of a CBDC to *Warm* Respondents

Of those <i>warm</i> to CBDC ...	CBDC is widely accepted	Payments made using a CBDC remain private	You can store your CBDC on a physical card instead of or in addition to your phone or computer	Paying with a CBDC would not require an internet connection	You don't pay fees to use a CBDC	CBDC can be transferred directly to other people in the United States	CBDC can be transferred directly to other people outside the United States	The ability to earn interest on CBDC balances in my digital wallets like with a bank account
All Respondents	57.3%	42.0%	34.3%	23.1%	63.5%	26.5%	10.6%	39.2%
18–35 Years Old	52.3%	37.2%	32.4%	24.7%	57.3%	28.0%	11.5%	35.8%
36–55 Years Old	58.4%	43.9%	34.5%	22.4%	63.1%	27.3%	12.6%	40.4%
56–65 Years Old	68.0%	45.4%	37.8%	22.7%	74.5%	23.3%	8.3%	38.2%
66+ Years Old	58.2%	48.4%	36.0%	20.4%	73.5%	22.4%	3.4%	48.5%
<\$40,000	58.3%	42.5%	37.3%	22.7%	66.3%	26.4%	7.7%	37.7%
\$40,000–\$74,999	56.6%	40.8%	29.1%	23.0%	64.6%	25.4%	12.0%	40.0%
\$75,000–\$124,999	56.9%	41.2%	30.5%	24.7%	58.5%	27.7%	15.5%	42.5%
\$125,000+	52.3%	43.0%	34.1%	24.2%	46.1%	28.6%	20.3%	42.6%
White (Non-Hispanic)	61.4%	45.1%	34.8%	24.0%	69.4%	25.8%	8.1%	40.6%
Black	55.5%	37.9%	39.5%	24.2%	52.3%	30.1%	14.3%	36.8%
Hispanic	44.8%	33.1%	32.2%	18.4%	53.8%	25.1%	17.4%	34.9%
Other/Unknown	54.2%	42.6%	25.0%	24.9%	53.2%	30.2%	9.1%	41.7%
Male	56.2%	41.8%	34.3%	23.0%	56.3%	26.6%	12.0%	36.1%
Female	58.5%	42.1%	34.3%	23.3%	71.6%	26.3%	9.0%	42.7%

Table 3 — Likely Uses of a CBDC Among *Warm* Respondents

<i>Warm</i> to CBDC (% in Top 2 Box)	Payment at online stores	Payment at stores in person	Person-to- Person payments (e.g., paying a tradesman or sending money to a friend)	To store money or savings	To enable a family member without a bank account to make payments (e.g., kids)	Transfer money to people or businesses in a different country
All Respondents	69.9%	64.3%	63.8%	58.0%	51.4%	34.8%
18–35 Years Old	71.6%	65.9%	66.8%	63.0%	55.4%	39.8%
36–55 Years Old	75.1%	66.8%	70.2%	61.3%	59.8%	41.7%
56–65 Years Old	62.8%	57.9%	52.9%	46.4%	35.9%	20.4%
66+ Years Old	55.3%	57.9%	45.4%	43.7%	27.5%	11.7%
<\$40,000	68.1%	62.8%	59.8%	54.4%	48.9%	27.6%
\$40,000–\$74,999	70.4%	63.1%	68.7%	61.8%	50.7%	40.1%
\$75,000–\$124,999	73.6%	68.9%	68.1%	63.2%	56.5%	46.4%
\$125,000+	76.9%	72.4%	72.4%	65.8%	64.7%	55.1%
White (Non-Hispanic)	66.4%	61.8%	60.9%	54.5%	47.8%	28.2%
Black	81.9%	73.3%	75.9%	70.4%	60.3%	52.0%
Hispanic	72.8%	68.1%	66.8%	61.8%	57.1%	42.7%
Other/Unknown	73.5%	60.9%	61.1%	58.9%	53.3%	45.4%
Male	70.5%	63.5%	65.2%	59.2%	51.9%	40.4%
Female	69.3%	65.1%	62.3%	56.8%	50.8%	28.6%

Table 4 — Likely Uses of a CBDC Among *Cool* Respondents

<i>Cool</i> to CBDC (% in Top 2 Box)	Payment at online stores	Payment at stores in person	Person-to- Person payments (e.g., paying a tradesman or sending money to a friend)	To store money or savings	To enable a family member without a bank account to make payments (e.g., kids)	Transfer money to people or businesses in a different country
All Respondents	12.7%	12.3%	9.4%	10.2%	7.2%	5.3%
18–35 Years Old	24.4%	22.9%	18.5%	23.4%	12.2%	10.5%
36–55 Years Old	14.8%	15.2%	12.6%	10.9%	11.3%	6.9%
56–65 Years Old	8.6%	9.8%	6.2%	6.9%	4.5%	5.0%
66+ Years Old	4.6%	3.2%	1.6%	1.7%	1.3%	0.2%
<\$40,000	14.3%	12.8%	9.6%	11.1%	7.1%	6.0%
\$40,000–\$74,999	10.7%	13.4%	10.0%	9.9%	8.1%	3.8%
\$75,000–\$124,999	9.6%	9.9%	8.6%	8.8%	7.0%	5.0%
\$125,000+	7.8%	7.1%	6.2%	4.8%	4.7%	3.8%
White (Non-Hispanic)	9.1%	8.1%	6.2%	6.5%	4.8%	3.1%
Black	29.8%	30.7%	20.5%	25.5%	14.2%	12.8%
Hispanic	22.0%	21.2%	20.3%	18.3%	14.0%	10.9%
Other/Unknown	11.3%	15.0%	9.2%	14.5%	10.2%	8.5%
Male	11.1%	12.8%	8.2%	9.7%	6.9%	7.9%
Female	14.0%	11.8%	10.3%	10.7%	7.4%	3.3%

Table 5 — Payment Methods Possibly Replaced by a CBDC Among *Warm* Respondents

<i>Warm to CBDC</i>	Bank transfers	Cash	Payment apps (e.g., Venmo or PayPal)	Debit cards	Crypto-currencies	Credit cards
All Respondents	18.2%	33.3%	31.5%	33.1%	10.2%	32.0%
18–35 Years Old	22.2%	33.4%	35.4%	34.5%	11.8%	26.1%
36–55 Years Old	16.6%	32.8%	33.1%	33.5%	10.4%	33.8%
56–65 Years Old	14.5%	36.2%	22.9%	33.2%	5.9%	36.3%
66+ Years Old	14.1%	30.8%	23.1%	26.1%	9.2%	41.4%
<\$40,000	17.7%	32.2%	33.9%	33.3%	10.6%	28.7%
\$40,000–\$74,999	19.5%	33.8%	27.6%	34.8%	8.3%	34.3%
\$75,000–\$124,999	16.7%	37.8%	30.9%	31.3%	11.0%	35.9%
\$125,000+	20.7%	31.9%	26.5%	28.3%	12.2%	43.8%
White (Non-Hispanic)	15.9%	33.2%	32.1%	32.2%	8.1%	34.9%
Black	21.6%	31.7%	32.3%	36.5%	15.0%	30.2%
Hispanic	22.2%	34.6%	28.8%	34.7%	15.2%	22.5%
Other/Unknown	23.3%	33.2%	31.7%	30.3%	7.9%	32.4%
Male	20.1%	34.1%	27.2%	33.4%	11.9%	34.4%
Female	16.1%	32.4%	36.3%	32.7%	8.2%	29.3%
SDCPC Oct 2022						
Share of Customers Using Payment Instruments	39.9%	83.0%	No Data*	66.7%	No Data*	68.6%
Adoption	39.9%	97.7%	No Data*	87.2%	9.6%	79.3%

*Note: Payment apps are not reported in the SDCPC data on payment instruments or adoption; elsewhere in the report, payment apps account for less than 1 percent of transaction volume and value among respondents. Cryptocurrencies are reporting in the adoption (re: ownership) statistics but do not appear in the usage data.

Table 6 — Payment Methods Possible Replaced by a CBDC Among *Cool* Respondents

<i>Cool to CBDC</i>	Bank transfers	Cash	Payment apps (e.g., Venmo or PayPal)	Debit cards	Crypto-currencies	Credit cards
All Respondents	10.5%	32.5%	22.0%	24.7%	12.3%	29.4%
18–35 Years Old	12.5%	38.4%	27.5%	27.7%	14.3%	23.5%
36–55 Years Old	11.3%	29.0%	22.9%	26.4%	13.9%	26.2%
56–65 Years Old	8.9%	34.8%	21.5%	24.5%	12.0%	27.7%
66+ Years Old	9.4%	29.5%	17.3%	20.9%	9.5%	37.8%
<\$40,000	9.6%	35.4%	22.3%	26.9%	12.6%	26.9%
\$40,000–\$74,999	12.1%	27.0%	20.9%	22.1%	11.8%	33.5%
\$75,000–\$124,999	13.3%	27.5%	22.0%	19.2%	10.0%	35.7%
\$125,000+	10.7%	28.6%	22.6%	18.8%	13.7%	31.3%
White (Non-Hispanic)	9.3%	31.8%	21.3%	24.3%	11.2%	31.4%
Black	10.0%	41.6%	22.0%	32.5%	15.3%	20.9%
Hispanic	19.0%	28.2%	26.3%	24.0%	14.9%	20.4%
Other/Unknown	10.6%	33.4%	22.4%	18.4%	15.5%	34.7%
Male	10.2%	34.9%	19.1%	25.9%	11.9%	30.5%
Female	10.8%	30.5%	24.3%	23.7%	12.6%	28.5%

Table 7 — Barriers to Adopting a CBDC Among *Warm* Respondents

<i>Warm to CBDC</i>	I don't think it will be accepted widely enough or work often enough	I am afraid that my purchase habits will be tracked	I don't think it will be secure	Existing digital payments are sufficient	Sounds too complicated to switch	I'm against all forms of digital money	None of these
All Respondents	39.7%	21.8%	35.0%	22.5%	24.3%	8.6%	8.7%
18–35 Years Old	39.0%	20.6%	32.1%	23.5%	26.3%	7.5%	9.0%
36–55 Years Old	39.8%	24.3%	34.6%	21.5%	20.6%	7.7%	10.0%
56–65 Years Old	40.4%	18.5%	41.1%	24.4%	23.7%	14.1%	6.6%
66+ Years Old	40.5%	21.9%	38.9%	20.1%	30.0%	9.2%	5.9%
<\$40,000	40.5%	21.2%	36.9%	20.6%	26.0%	7.7%	7.6%
\$40,000–\$74,999	39.0%	21.1%	34.0%	25.1%	22.0%	7.6%	11.0%
\$75,000–\$124,999	41.2%	24.4%	32.7%	22.8%	21.0%	11.2%	9.1%
\$125,000+	32.9%	24.1%	26.8%	28.9%	23.6%	14.9%	9.1%
White (Non-Hispanic)	40.4%	21.3%	36.0%	23.9%	24.1%	8.4%	8.1%
Black	30.4%	28.9%	32.2%	19.8%	22.7%	9.6%	14.0%
Hispanic	40.2%	19.9%	31.8%	19.9%	26.0%	8.9%	8.9%
Other/Unknown	49.2%	18.1%	39.4%	21.3%	24.6%	8.4%	4.1%
Male	37.9%	24.0%	32.0%	23.8%	22.3%	10.4%	9.5%
Female	41.6%	19.4%	38.3%	21.1%	26.5%	6.7%	7.8%

Table 8 — Barriers to Adopting a CBDC Among *Cool* Respondents

<i>Cool</i> to CBDC	I don't think it will be accepted widely enough or work often enough	I am afraid that my purchase habits will be tracked	I don't think it will be secure	Existing digital payments are sufficient	Sounds too complicated to switch	I'm against all forms of digital money	None of these
All Respondents	19.9%	12.6%	33.3%	14.6%	20.9%	24.4%	20.0%
18–35 Years Old	17.1%	15.4%	29.0%	17.1%	24.3%	5.2%	27.8%
36–55 Years Old	22.2%	15.7%	34.0%	15.7%	22.0%	16.3%	18.4%
56–65 Years Old	18.8%	13.7%	35.8%	12.6%	18.1%	32.1%	18.7%
66+ Years Old	20.8%	7.0%	34.2%	13.1%	19.3%	41.4%	16.2%
<\$40,000	19.6%	11.4%	33.7%	14.4%	21.2%	22.9%	22.2%
\$40,000–\$74,999	18.6%	15.2%	34.9%	14.2%	22.9%	27.6%	13.8%
\$75,000–\$124,999	26.0%	14.7%	31.5%	16.1%	17.9%	22.7%	18.6%
\$125,000+	18.3%	13.3%	26.5%	16.1%	16.7%	32.3%	20.2%
White (Non-Hispanic)	20.4%	11.9%	34.0%	14.7%	22.0%	28.5%	17.1%
Black	13.3%	18.7%	29.3%	13.0%	18.5%	11.3%	32.8%
Hispanic	20.7%	12.4%	30.7%	13.5%	19.8%	13.3%	27.1%
Other/Unknown	22.8%	11.6%	36.0%	18.6%	15.7%	18.5%	20.4%
Male	19.8%	12.8%	29.3%	15.4%	19.4%	27.0%	21.0%
Female	20.0%	12.4%	36.5%	14.1%	22.2%	22.4%	19.1%

Table 9 — Asset Types Potentially Replaced by a CBDC Among *Warm* Respondents

<i>Warm to CBDC</i>	Cash or physical currency	Checking account at a bank	Savings account at a bank	Money market fund	Cryptocurrency balance (such as Bitcoin or Eth)	Stablecoin balance (such as Tether or USDC)	I would not keep any assets in CBDC
All Respondents	34.8%	37.6%	23.1%	9.5%	10.9%	4.1%	18.1%
18–35 Years Old	37.6%	38.7%	23.9%	11.6%	13.5%	4.9%	15.4%
36–55 Years Old	36.8%	34.9%	22.2%	9.8%	12.5%	4.6%	17.1%
56–65 Years Old	29.1%	40.4%	24.5%	4.4%	4.8%	2.1%	22.8%
66+ Years Old	25.1%	38.7%	21.7%	7.0%	4.1%	2.4%	24.9%
<\$40,000	34.1%	35.3%	21.0%	9.0%	8.4%	4.3%	22.5%
\$40,000–\$74,999	36.6%	40.0%	22.8%	9.8%	14.6%	3.7%	12.9%
\$75,000–\$124,999	35.2%	40.7%	27.6%	10.3%	14.0%	3.8%	11.4%
\$125,000+	33.7%	42.5%	32.8%	10.6%	13.3%	4.9%	11.4%
White (Non-Hispanic)	32.9%	37.6%	23.2%	7.3%	8.2%	3.5%	20.5%
Black	40.5%	40.7%	23.0%	14.0%	19.8%	6.0%	11.0%
Hispanic	35.8%	34.6%	25.1%	13.8%	13.1%	5.4%	15.3%
Other/Unknown	39.5%	39.2%	17.3%	11.2%	14.2%	3.6%	15.1%
Male	35.7%	40.4%	27.4%	10.6%	12.5%	4.9%	12.9%
Female	33.8%	34.4%	18.3%	8.2%	9.1%	3.2%	23.8%

Table 10 — Amount of Assets That May Be Held as a CBDC by *Warm* Respondents

<i>Warm</i> to CBDC and would hold assets	Up to \$500	\$501–\$1,000	More than \$1,000
All Respondents	51.4%	26.1%	22.5%
18–35 Years Old	56.4%	23.9%	19.7%
36–55 Years Old	46.0%	28.6%	25.4%
56–65 Years Old	52.3%	24.6%	23.2%
66+ Years Old	50.7%	27.5%	21.9%
<\$40,000	64.5%	21.1%	14.5%
\$40,000–\$74,999	42.6%	32.2%	25.2%
\$75,000–\$124,999	32.8%	29.7%	37.5%
\$125,000+	23.1%	34.3%	42.6%
White (Non- Hispanic)	50.8%	27.9%	21.2%
Black	51.8%	22.2%	26.0%
Hispanic	56.2%	21.3%	22.5%
Other/Unknown	43.5%	30.0%	26.5%
Male	44.3%	28.1%	27.6%
Female	60.7%	23.4%	15.8%

Table 11 — Asset Types Potentially Replaced by a CBDC Among *Cool* Respondents

<i>Cool</i> to CBDC	Cash or physical currency	Checking account at a bank	Savings account at a bank	Money market fund	Cryptocurrency balance (such as Bitcoin or Eth)	Stablecoin balance (such as Tether or USDC)	I would not keep any assets in CBDC
All Respondents	13.1%	13.5%	9.0%	2.7%	3.8%	1.5%	68.4%
18–35 Years Old	26.9%	20.4%	12.2%	4.3%	6.8%	3.3%	47.0%
36–55 Years Old	14.8%	15.4%	9.6%	3.6%	5.5%	2.1%	63.3%
56–65 Years Old	7.9%	11.3%	9.2%	1.6%	2.3%	0.6%	77.2%
66+ Years Old	4.5%	7.9%	5.9%	1.5%	0.9%	0.2%	83.5%
<\$40,000	14.2%	12.0%	8.8%	2.7%	3.4%	1.7%	69.5%
\$40,000–\$74,999	12.1%	17.1%	8.9%	3.3%	4.9%	1.3%	64.7%
\$75,000–\$124,999	11.5%	16.9%	11.8%	2.0%	2.9%	0.7%	65.3%
\$125,000+	8.1%	11.4%	7.6%	1.8%	4.4%	1.6%	74.4%
White (Non-Hispanic)	9.6%	11.2%	8.0%	2.0%	2.9%	1.0%	74.0%
Black	25.9%	20.1%	16.2%	3.0%	8.9%	6.6%	47.6%
Hispanic	20.1%	17.0%	7.7%	3.7%	4.2%	0.6%	59.6%
Other/Unknown	19.8%	22.5%	12.0%	8.1%	4.5%	1.5%	53.8%
Male	14.9%	15.4%	11.4%	2.2%	4.8%	2.0%	64.7%
Female	11.7%	12.0%	7.1%	3.1%	3.0%	1.2%	71.3%

Table 12 — Confidence in Answers Related to a CBDC

Overall Confidence	Not Confident	Neutral	Confident	Net (Conf-NotConf)
All Respondents	23.7%	26.8%	49.4%	25.7%
<i>Warm</i> Respondents	14.3%	32.8%	53.0%	38.7%
<i>Cool</i> Respondents	34.2%	20.2%	45.5%	11.3%
<i>Warm to CBDC</i>				
18–35 Years Old	10.7%	33.0%	56.3%	45.6%
36–55 Years Old	13.0%	32.8%	54.2%	41.2%
56–65 Years Old	18.9%	30.2%	51.0%	32.1%
66+ Years Old	25.7%	34.9%	39.4%	13.7%
<\$40,000	15.8%	35.8%	48.4%	32.6%
\$40,000–\$74,999	13.3%	29.6%	57.1%	43.8%
\$75,000–\$124,999	11.6%	29.5%	58.9%	47.4%
\$125,000+	10.4%	24.1%	65.5%	55.1%
White (Non-Hispanic)	15.5%	31.9%	52.6%	37.2%
Black	11.5%	32.0%	56.5%	45.0%
Hispanic	11.7%	37.2%	51.1%	39.4%
Other/Unknown	15.2%	30.5%	54.3%	39.1%
Male	12.7%	28.7%	58.6%	45.9%
Female	16.0%	37.3%	46.7%	30.6%
<i>Cool to CBDC</i>				
18–35 Years Old	31.5%	26.1%	42.4%	10.8%
36–55 Years Old	33.7%	26.3%	39.9%	6.2%
56–65 Years Old	34.6%	14.6%	50.8%	16.2%
66+ Years Old	36.5%	13.9%	49.5%	13.0%
<\$40,000	34.8%	20.1%	45.1%	10.3%
\$40,000–\$74,999	35.2%	21.3%	43.5%	8.3%
\$75,000–\$124,999	28.3%	20.7%	51.0%	22.7%
\$125,000+	34.2%	17.6%	48.2%	14.0%
White (Non-Hispanic)	32.3%	18.1%	49.6%	17.3%
Black	34.7%	31.6%	33.8%	-0.9%
Hispanic	42.1%	20.5%	37.4%	-4.6%
Other/Unknown	40.9%	26.2%	32.9%	-8.1%
Male	32.1%	20.9%	46.9%	14.8%
Female	35.9%	19.7%	44.4%	8.5%