

CASH IS ALIVE: HOW ECONOMISTS EXPLAIN HOLDING AND USE OF CASH

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GUIDE TO CODE AND DATA

I. OVERVIEW

All data are taken from public sources (ECB, BIS, World Bank, and Federal Reserve websites). Each source is listed in each caption of each Figure and Table in the paper. More detailed descriptions of the sources are provided in this ReadMe.pdf file (see data section below).

There are eight (8) data files in R data format (.RDS) and one (1) R-code file (.R). To reproduce the tables and charts, please follow the following steps:

1. Place all 9 files into a single directory (folder) in your computer.
2. Launch the CASH_2022_4_1.R file using your R-software (for example, R-Studio for just R).
3. Change the working director (WD) to the folder where all 9 files are stored on your computer.
4. Run the code using theCASH_2022_4_1.R file.

The code should generate all tables and charts using the 8 data (.RDS) files.

II. DATA AND PROGRAMS

Program. The code will run on R. R is a free software environment for statistical computing and graphics and can be downloaded from <https://www.r-project.org>. I recommend using R-Studio to run R, which can be downloaded from <https://www.rstudio.com>.

All tables and charts can be constructed using a single R-code file:CASH_2022_4_1.R. The tables are constructed as data frames and then transformed into the LaTeX table format. Charts can be exported from R-Studio in various formats such as PDF, PNG, JPEG, TIFF, ESP, and more.

Data. The 8 data (.RDS) files are called by the R-code file when they are needed for the construction of a table or a chart. Below, I list the name of each data file and how it is used by the R-code to construct a specific table or chart.

The description of the data files below contains also descriptions of the data sources. The source files had to be manually edited to reach their final formats that are provided in the .RDS files.

HOARD.RDS. This data file is used for drawing Figure 3.
The raw data were taken from the Federal Reserve Board: Data on currency and coin Services.
Available at https://www.federalreserve.gov/paymentsystems/coin_data.htm#value (accessed March 31, 2022). This webpage provides charts and data tables of USD currency in circulation by volume and value by year.

HOARD_EU.RDS. This data file is used for drawing Figure 4.
The raw data were taken from the European Central Bank (ECB): Banknotes and coins statistics. Available at <https://sdw.ecb.europa.eu/reports.do?node=1000004105> (accessed March 31, 2022). This site provides data on Euro currency in circulation (volume, value, and by denomination) from 2002 and on.

TREE_210210.RDS. This data file is used for drawing Figure 5.
The raw data were taken from the Federal Reserve Bank of Atlanta: The 2017, 2018, and 2019 Diary of Consumer Payment Choice.
Available at <https://www.frbatlanta.org/banking-and-payments/consumer-payments.aspx> (accessed March 31, 2022). The diary is a yearly survey and the data as well as codebooks (by year) are provided at <https://www.atlantafed.org/banking-and-payments/consumer-payments/diary-of-consumer-payment-choice?panel=2> (accessed March 31, 2022).

PI_SHARE_210207.RDS. This data file is used for drawing Figure 6.
The raw data were taken from the Federal Reserve Bank of Atlanta: The 2017, 2018, and 2019 Diary of Consumer Payment Choice.
Available at <https://www.frbatlanta.org/banking-and-payments/consumer-payments.aspx> (accessed March 31, 2022). The diary is a yearly survey and the data as well as codebooks (by year) are provided at <https://www.atlantafed.org/banking-and-payments/consumer-payments/diary-of-consumer-payment-choice?panel=2> (accessed March 31, 2022).

ATM_48_COUNTRIES.RDS. This data file is used for drawing Figure 7.
The raw data were taken from the World Bank: Data on automated teller machines (ATMs) and GDP per capita. Available at <https://data.worldbank.org/indicator/FB.ATM.TOTL.P5> and

<https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD> (accessed March 31, 2022). Both websites provide country-specific data for the latest year that the data are available.

CIC_BIS_2012_2019.RDS. This data file is used for the construction of Table 1. The raw data were taken from the Bank of International Settlements (BIS): Payments and financial market infrastructures. Available at <https://stats.bis.org/statx/toc/CPMI.html> (accessed March 31, 2022). This website provides a comparative table on banknotes and coins in circulation for selected countries. The data on Norway is from a paper that is cited in the paper as Norges Bank (2020).

PI_SHARE_210207.RDS. This data file is used for the construction of Table 4. Note that this table uses the same .RDS file as Figure 6. In fact, the R-code first plots Figure 6 and only then proceeds to the construction of Table 4. The raw data were taken from the Federal Reserve Bank of Atlanta: The 2017, 2018, and 2019 Diary of Consumer Payment Choice. Available at <https://www.frbatlanta.org/banking-and-payments/consumer-payments.aspx> (accessed March 31, 2022). The diary is a yearly survey and the data as well as codebooks (by year) are provided at <https://www.atlantafed.org/banking-and-payments/consumer-payments/diary-of-consumer-payment-choice?panel=2> (accessed March 31, 2022).

ASSESSMENTS_210310.RDS. This data file is used for the construction of Table 5. The raw data were taken from the Federal Reserve Bank of Atlanta: The 2019 Survey of Consumer Payment Choice. Available at <https://www.atlantafed.org/banking-and-payments/consumer-payments/survey-of-consumer-payment-choice.aspx> (accessed March 31, 2022). This website provides archives of survey data from 2008 until 2020. Summary tables are also available including tables that summarize respondents' assessments of each payment method.

DIARY171819_210206.RDS. This data file is used for the construction of Table 6. The raw data were taken from the Federal Reserve Bank of Atlanta: The 2017, 2018, and 2019 Survey and Diary of Consumer Payment Choice. Available at <https://www.frbatlanta.org/banking-and-payments/consumer-payments.aspx>. The survey and diary websites provide data on adoption of credit cards, debit cards, and bank accounts, and annual household income.