

Introduction

Since fiat currencies first becoming mainstream, consumer confidence in alternative stores of value and currencies has varied greatly. In the twenty-first century, the emergence of Web 3.0 technologies such as blockchain and smart contracts has paved the way for new stores of value to enter the arena. In particular, this paper analyses consumer behavior regarding the alternate stores of value of the future and whether consumer confidence regarding them fluctuates just like with traditional stores of value, such as gold and precious stones. The paper tests the following hypothesis; does the level of cumulative consumer confidence influence the price of gold and cryptocurrencies? It then takes a step further and tries to predict future trends by pre-defining prices for gold, cryptocurrencies and levels of consumer confidence in OECD member states, using multiple linear regression, followed by how different levels of consumer confidence influence the prices of traditional stores of value, in this case represented by the price of gold and technologically savvy ones, measured by the cumulative price of popular cryptocurrencies.

It should be noted that this paper compares the price of several cryptocurrencies and the global price of gold and contrasts it with the levels of consumer confidence among OECD member states. \

Data

How the data was obtained

This paper uses (R Core Team 2021) for statistical analyses with (**R-studioapi?**) as the integrated development environment. Relevant packages include (Wickham 2021), (Wickham, François, et al. 2021) and (Wickham and Miller 2021) for data management, manipulation and analysis. (Wickham, Chang, et al. 2021) is used for the purposes of graphing and data visualization. (François 2020) is used to generate a standardized citations that adhere to Bibtex standards. Multiple datasets were used. To analyze price points at various dates for cryptocurrencies a dataset from data.world.com (n.d.a) was used. The data for consumer confidence among OECD member states was taken from the OECD website (“Consumer Confidence Index (CCI)” 2022). Gold prices were taken from the World Gold Council (n.d.b).

Cleaning the data

For the dataset for consumer confidence among OECD member states (“Consumer Confidence Index (CCI)” 2022), a three-step cleaning process is applied. First, the Dplyer package (Wickham, François, et al. 2021) is used to sum all observations by ‘TIME,’ which the dataset uses to record the month and year. Then the same package is used to calculate the cumulative OECD average, by month for practical and readability reasons. This is followed by removing the figures for the entire OECD to make the dataset specific to OECD member states using the Tidyverse package (Wickham 2021).

The dataset used for cryptocurrencies (n.d.a) is subject to only one data cleaning process, which consists of grouping rows by month to compare and contrast data from multiple datasets better.

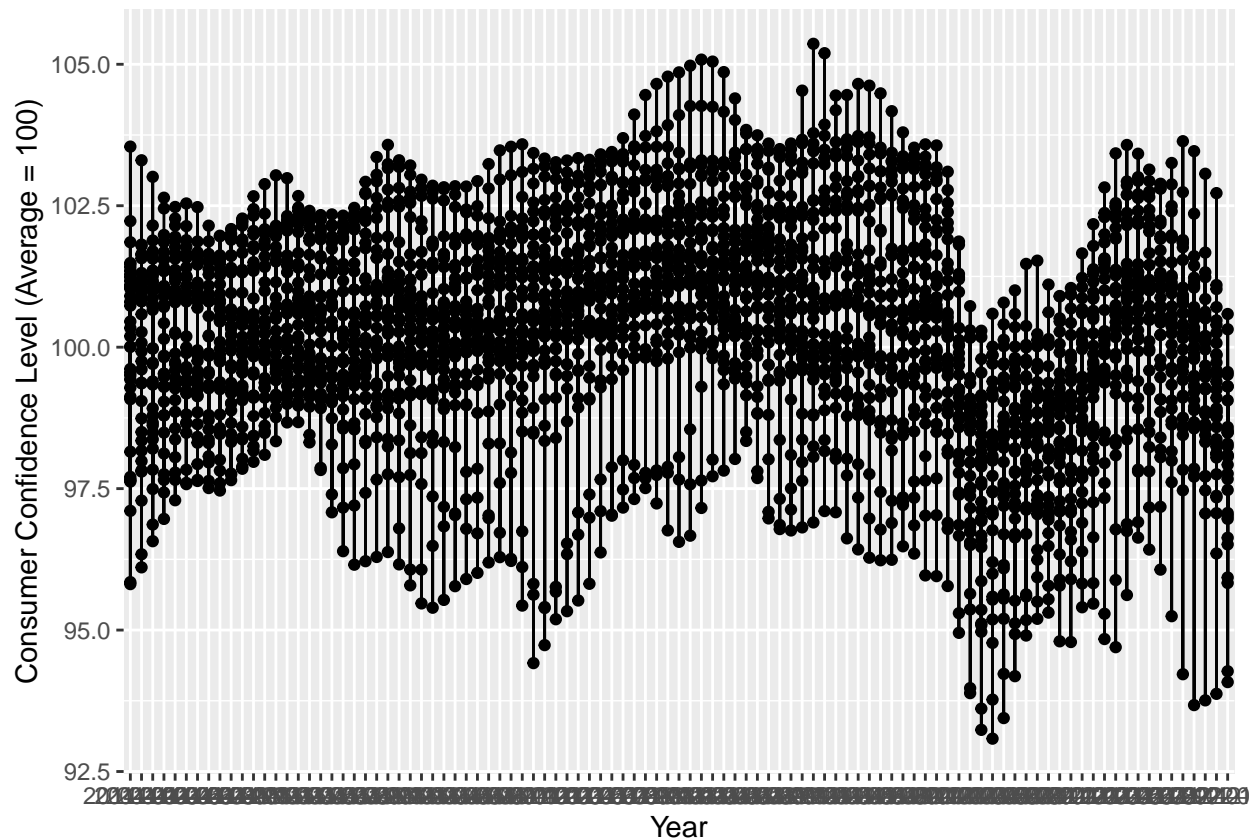
```
## Rows: 3556 Columns: 8
## -- Column specification -----
## Delimiter: ","
## chr (6): LOCATION, INDICATOR, SUBJECT, MEASURE, FREQUENCY, TIME
## dbl (1): Value
## lgl (1): Flag Codes
##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.
```

```
## # A tibble: 99 x 2
##   TIME      'mean(cc$Value)'
##   <chr>          <dbl>
## 1 2014-01          100.
## 2 2014-02          100.
## 3 2014-03          100.
## 4 2014-04          100.
## 5 2014-05          100.
## 6 2014-06          100.
## 7 2014-07          100.
## 8 2014-08          100.
## 9 2014-09          100.
## 10 2014-10         100.
## # ... with 89 more rows
```

```
## # A tibble: 99 x 8
##   LOCATION INDICATOR SUBJECT MEASURE FREQUENCY TIME Value 'Flag Codes'
##   <chr>    <chr>    <chr>    <chr>    <chr>    <chr>    <dbl> <lgl>
## 1 OECD    CCI      AMPLITUD LTRENDIDX M      2014-01  99.6 NA
## 2 OECD    CCI      AMPLITUD LTRENDIDX M      2014-02  99.6 NA
## 3 OECD    CCI      AMPLITUD LTRENDIDX M      2014-03  99.7 NA
## 4 OECD    CCI      AMPLITUD LTRENDIDX M      2014-04  99.8 NA
## 5 OECD    CCI      AMPLITUD LTRENDIDX M      2014-05  99.9 NA
## 6 OECD    CCI      AMPLITUD LTRENDIDX M      2014-06  99.9 NA
## 7 OECD    CCI      AMPLITUD LTRENDIDX M      2014-07  99.9 NA
## 8 OECD    CCI      AMPLITUD LTRENDIDX M      2014-08  99.8 NA
## 9 OECD    CCI      AMPLITUD LTRENDIDX M      2014-09  99.9 NA
## 10 OECD   CCI      AMPLITUD LTRENDIDX M      2014-10  99.9 NA
## # ... with 89 more rows
```

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Results



Discussion

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Future Research

Explore government policy reaction to control crypto and tax and regulate it.

You can also embed plots, for example:

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n.d.a. <https://data.world/og5136/cryptocurrency-price-data-2013-2018>.

n.d.b. [/home/primus/Downloads/Prices.xlsx](#).

“Consumer Confidence Index (CCI).” 2022. *Leading Indicators*. <https://doi.org/10.1787/46434d78-en>.

Francois, Romain. 2020. *Bibtex: Bibtex Parser*. <https://github.com/romainfrancois/bibtex>.

R Core Team. 2021. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.

Wickham, Hadley. 2021. *Tidyverse: Easily Install and Load the Tidyverse*. <https://CRAN.R-project.org/package=tidyverse>.

Wickham, Hadley, Winston Chang, Lionel Henry, Thomas Lin Pedersen, Kohske Takahashi, Claus Wilke, Kara Woo, Hiroaki Yutani, and Dewey Dunnington. 2021. *Ggplot2: Create Elegant Data Visualisations Using the Grammar of Graphics*. <https://CRAN.R-project.org/package=ggplot2>.

Wickham, Hadley, Romain François, Lionel Henry, and Kirill Müller. 2021. *Dplyr: A Grammar of Data Manipulation*. <https://CRAN.R-project.org/package=dplyr>.

Wickham, Hadley, and Evan Miller. 2021. *Haven: Import and Export SPSS, Stata and SAS Files*. <https://CRAN.R-project.org/package=haven>.