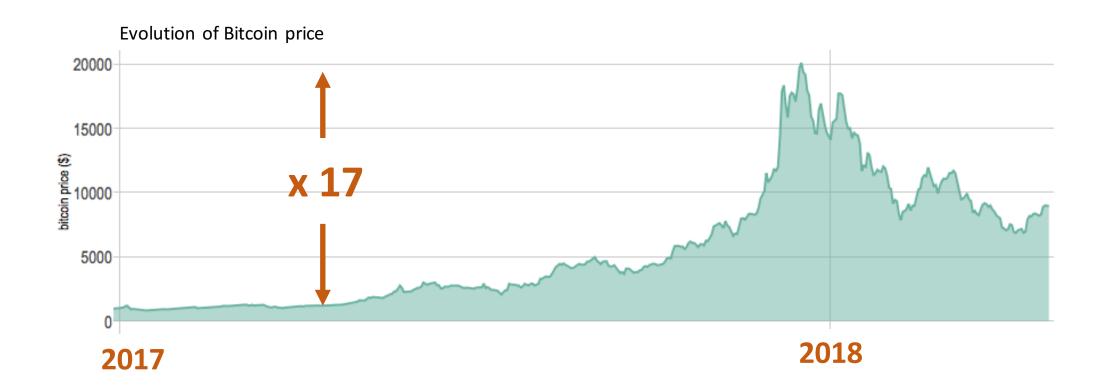
#### GETTING RICH WITH R, ARBITRAGE AND CRYPTOCURRENCIES?





# Crypto Currency <- Digital asset



#### Several Currencies exist:



### Bought and sold on Exchanges





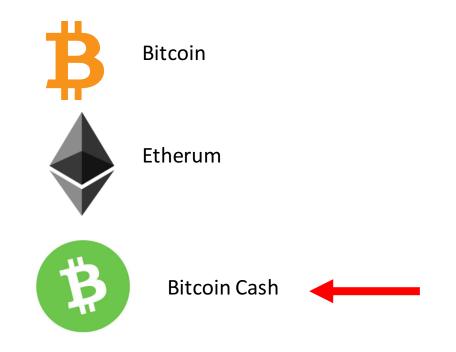






#### Several Currencies exist:

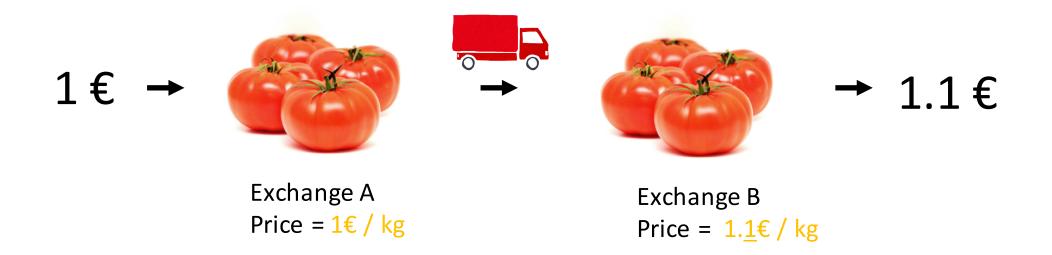
### Bought and sold on Exchanges





# What is arbitrage?

# What is arbitrage?



# PART I – Investigating price differences

### Harvesting data

• Use R to get price at time <- t

```
# Recover the information
library(RCurl)
adress <- "https://api.kraken.com/0/public/Ticker?pair=BTCEUR"
ticker <- getURLContent(adress)</pre>
```

• Do it for 5 exchanges, 5 currencies, every 4 seconds, for 2 weeks

• Get about 800,000 data points

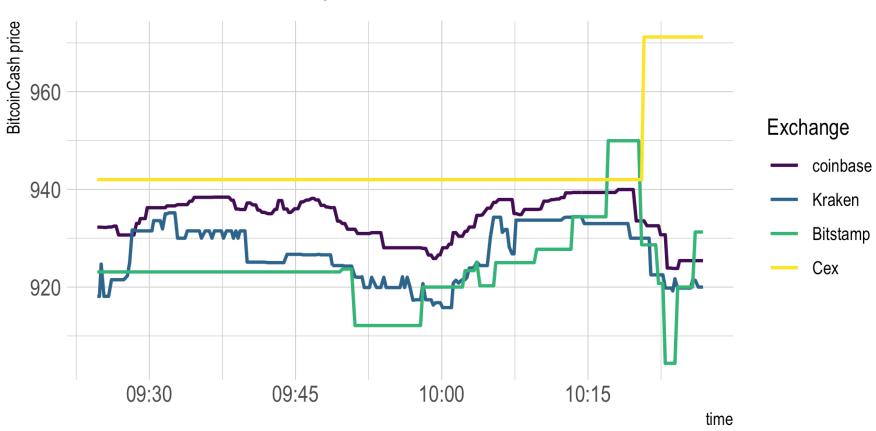
## Prices are highly correlated among exchanges





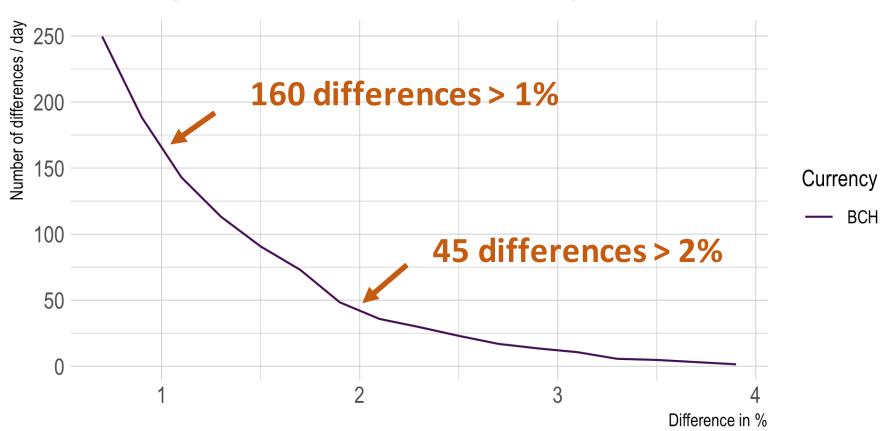
### But a few differences exist





# How many differences?

Number of price differences between Cex and Bitstamp

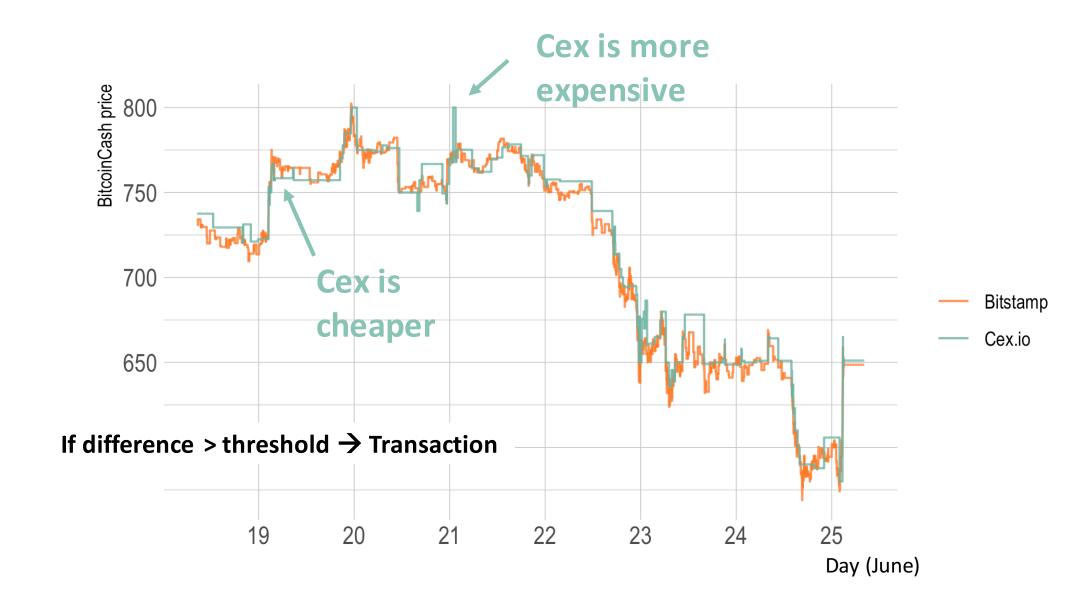


## Running an arbitrage bot – for real

Bitcoin cash | Bitstamp vs Cex | 7 days | 400 euros invested

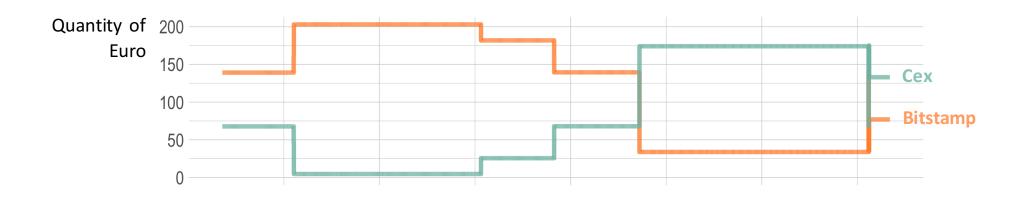


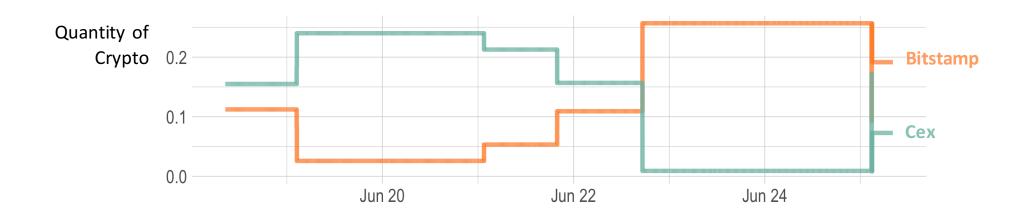






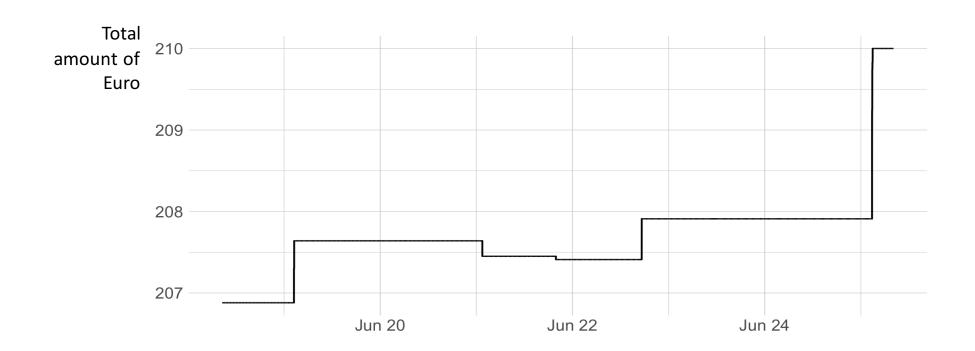
### **Evolution of Euro / Crypto accounts**





### Benefit

#### 1.21 Euros | 0.3% of initial investment | 0.04% a day | 15% a year



### Take Home

- Arbitrage = hard: fees + few differences + many other bots
- Getting even worse
- R makes the job!
- Functions available if you want to give it a try

### Read more



github.com/holtzy/Cryp-To

### lam



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R-graph-gallery.com