

# Setting up a strategy

I

FINANCIAL TRADING IN R



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# Three important dates

- Quantstrat needs an initDate, a from date, and a to date.
- YYYY-MM-DD, eg "2000-01-01"

```
initdate <- "1999-01-01"  
from <- "2003-01-01"  
to <- "2015-12-31"
```

# Setting up quantstrat

```
# Set system environment timezone:  
Sys.setenv(TZ = "UTC")
```

```
# Set currency (we'll use USD for now):  
currency("USD")
```

```
# Obtain financial data:  
getSymbols("LQD", from = from, to = to,  
          src = "yahoo", adjust = TRUE)  
# Treat as basic equity  
stock("LQD", currency = "USD", multiplier = 1)
```

# Overview

```
initDate = "1999-01-01"  
from = "2003-01-01"  
to = "2015-12-31"  
Sys.setenv(TZ = "UTC")  
currency("USD")  
getSymbols("LQD", from = from, to = to, src = "yahoo",  
          adjust = TRUE)
```

# Let's practice!

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# Setting up a strategy

## II

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# Trade size and initial equity

- In order to work with returns, you need to define trade size and initial equity to calculate profit and loss

```
tradesize <- 100000  
initeq <- 100000
```

tradesize should not be more than initeq

# Three important objects

- Account
  - Portfolio
    - Strategy



# Naming account, portfolio, and strategy

- Naming the account, portfolio, and strategy all the same name suffices for basic strategies

```
strategy.st <- portfolio.st <- account.st <- "firststrat"
```

# Removing existing strategy

- If you ran the strategy already, you need to remove it from your environment

```
rm.strat(strategy.st)
```

# Initialize...

- Portfolio
- Account
- Orders
- Strategy

# Initializing portfolio

- Portfolio initialization is called with `initPortf()`
- `initPortf()` requires portfolio name, symbols, initialization date, and currency

```
initPortf(portfolio.st, symbols = "LQD",  
          initDate = initdate, currency = "USD")
```

# Initializing account

- Account initialization is called with `initAcct()`
- `initAcct()` requires account name, portfolios, initialization date, currency, and initial equity

```
initAcct(account.st, portfolios = portfolio.st,  
         initDate = initdate, currency = "USD",  
         initEq = initeq)
```

# Initializing orders

- Order initialization is called with `initOrders()`
- `initOrders()` requires portfolio name and initialization date

```
initOrders(portfolio.st, initDate = initdate)
```

# Initializing strategy

- Strategy initialization is called with `strategy()`

```
strategy(strategy.st, store = TRUE)
```

# Overview

```
tradesize <- 100000
initedq <- 100000

strategy.st <- portfolio.st <- account.st <- "firststrat"
rm.strat(strategy.st)

initPortf(portfolio.st, symbols = "LQD",
          initDate = initdate, currency = "USD")
initAcct(account.st, portfolios = portfolio.st,
         initDate = initdate, currency = "USD",
         initEq = initedq)
initOrders(portfolio.st, initDate = initdate)
strategy(strategy.st, store = TRUE)
```



# Let's practice!

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