



FINANCIAL TRADING IN R

Setting up a Strategy - I

Three Important Dates

- quantstrat needs an init date, a from date, and a to date
- YYYY-MM-DD, ex. “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)
```



FINANCIAL TRADING IN R

Let's practice!



FINANCIAL TRADING IN R

Setting up a Strategy - II

Trade Size and Initial Equity

- Must define trade size (`tradesize`) and initial equity (`initeq`)

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

tradesize should not be more than initeq

Three Important Objects

Account 1					
Portfolio 1		Portfolio 2		Portfolio 3	
Strategy 1	Strategy 2	Strategy 3	Strategy 4	Strategy 5	Strategy 6

Naming and Removing Strategies

- One account, one portfolio, one strategy:

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

- If you ran the strategy already, you need to remove it from your environment using `rm.strat()`

```
> 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
> initeq <- 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 = initeq)
> initOrders(portfolio.st, initDate = initdate)
> strategy(strategy.st, store = TRUE)
```



FINANCIAL TRADING IN R

Let's practice!