Setting up a strategy l

FINANCIAL TRADING IN R



Ilya Kipnis

Professional Quantitative Analyst and R programmer



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

Let's practice!

FINANCIAL TRADING IN R



Setting up a strategy II

FINANCIAL TRADING IN R



Ilya Kipnis

Professional Quantitative Analyst and R programmer



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"</pre>
```

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

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"</pre>
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)
```

Let's practice!

FINANCIAL TRADING IN R

