

montecarlo

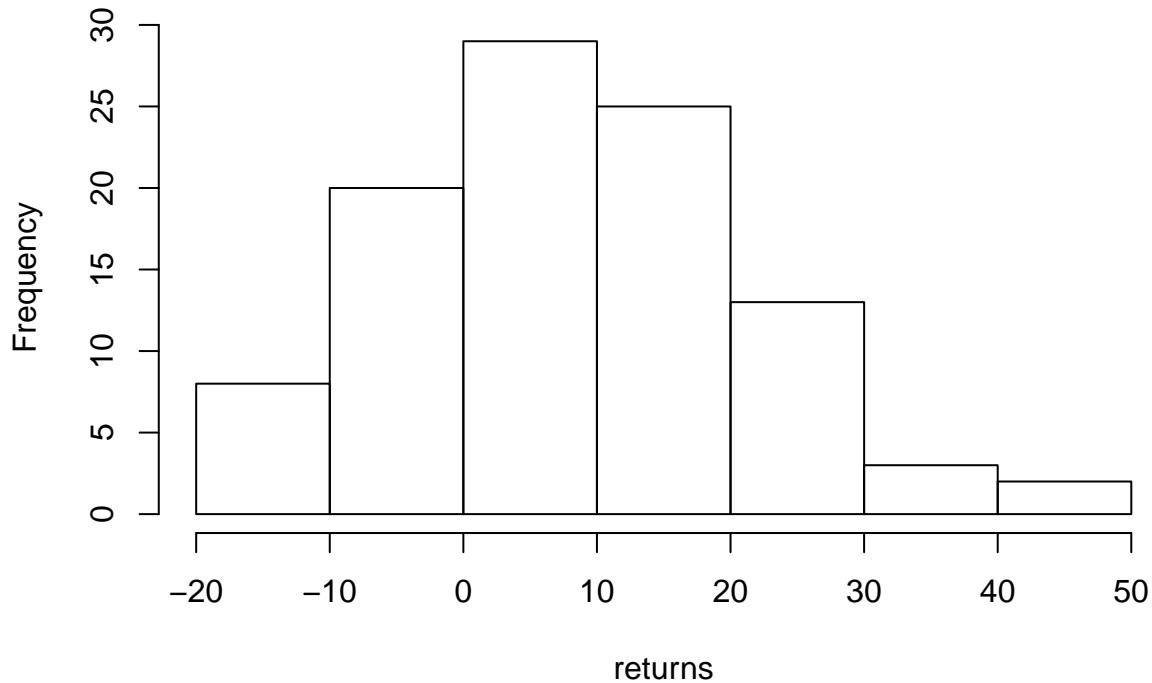
Planning & Regional Development

5/18/2020

```
## Loading required package: snow
```

So, we're buying stock in Black Flag (roach motels). Average returns are 7% (SD is 9%).

Histogram of returns



We want to ignore it for five years, then check in to see where it's landed.

```
## [1] -11.23316 20.70092 12.15241 33.32897 27.15410
```

That's five years of returns. But try again ...

```
## [1] -16.492794 1.816873 28.290844 17.306721
```

... and there are five different returns.

A quick Monte Carlo tells us what to expect. You sample from the vector of potential returns, then take the mean for each year.

```
##           [,1]      [,2]      [,3]      [,4]      [,5]
## [1,] -3.944686 -15.284592  5.637753  3.8189737 26.853325
## [2,] 25.396331 13.599314 24.158375 15.8441012 -1.195276
## [3,]  6.385720  1.834974 -5.251126 -11.7088606  6.817008
## [4,] 15.289663 -4.993514 -1.379871 24.1583755 11.623856
## [5,] -1.195276  6.165402 17.408236 13.7091599 16.408540
## [6,]  0.206540  8.595957 -10.529478 -0.7471806 -6.383195
```

Grab the column means for an expectation for each year:

```
## [1] 7.991142 9.338879 8.762916 8.494974 8.897184
```