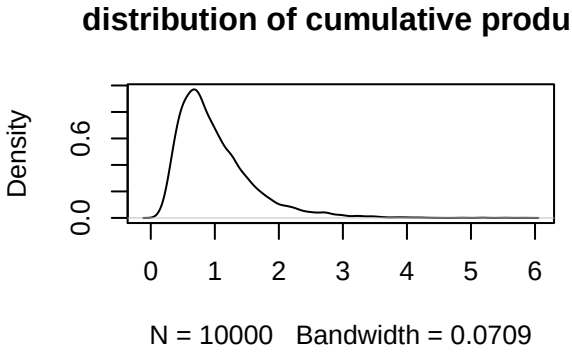
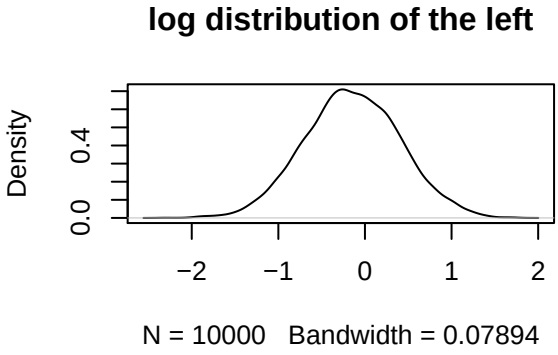
R Notebook

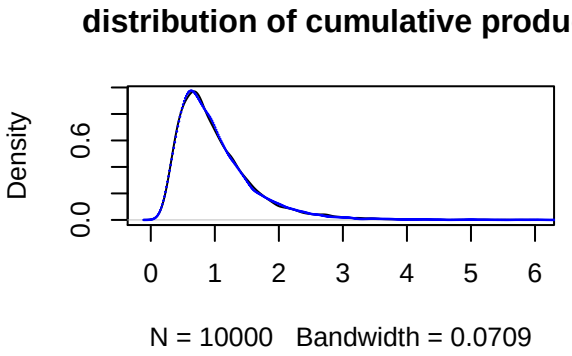
```
knitr::opts_chunk$set(echo=F)
```

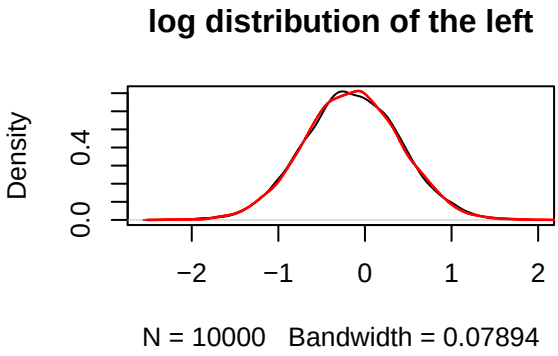
Simulations

Situation 1










```
## lognormal(simulated vs fitted)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.09821 0.59491 0.85882 1.00596 1.26100 5.83824
```

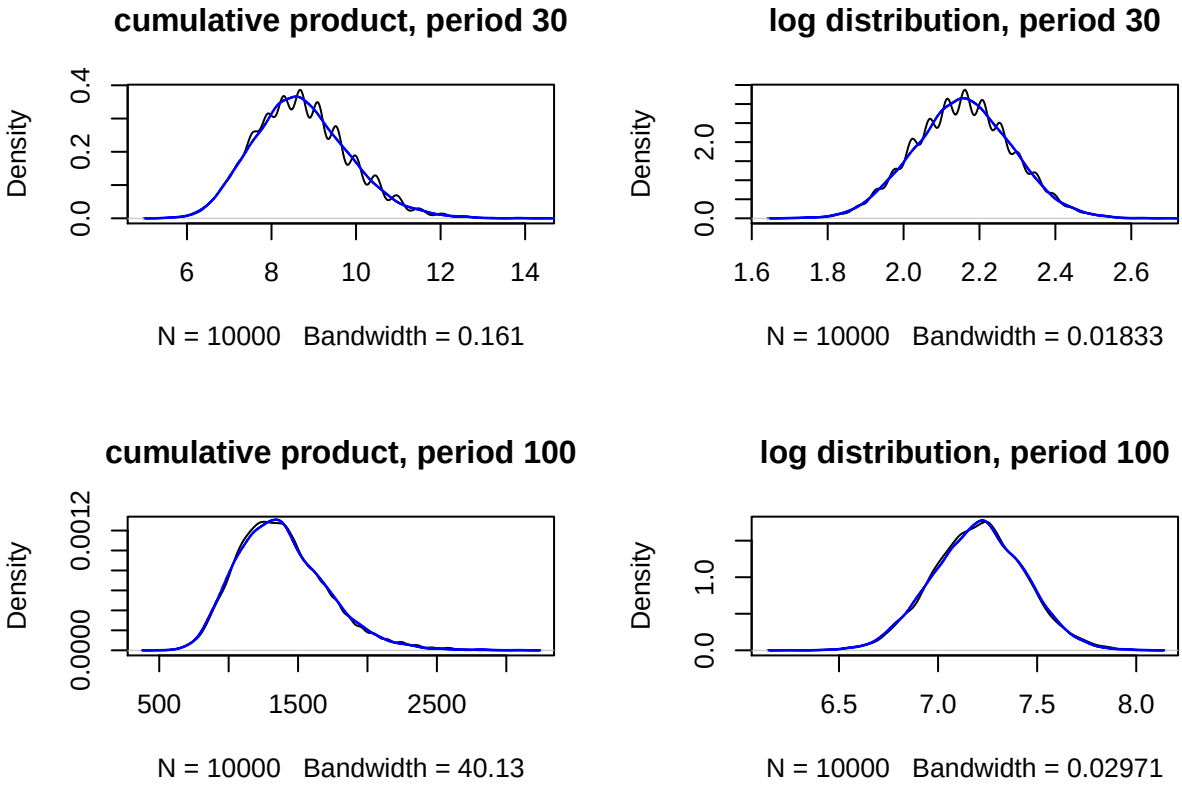
```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  0.1025  0.5966  0.8657  1.0095  1.2568  7.9309
```

```
##
##  normal(simulated vs fitted)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## -2.3206 -0.5193 -0.1522 -0.1464  0.2319  1.7644
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## -2.2781 -0.5166 -0.1442 -0.1446  0.2286  2.0708
```

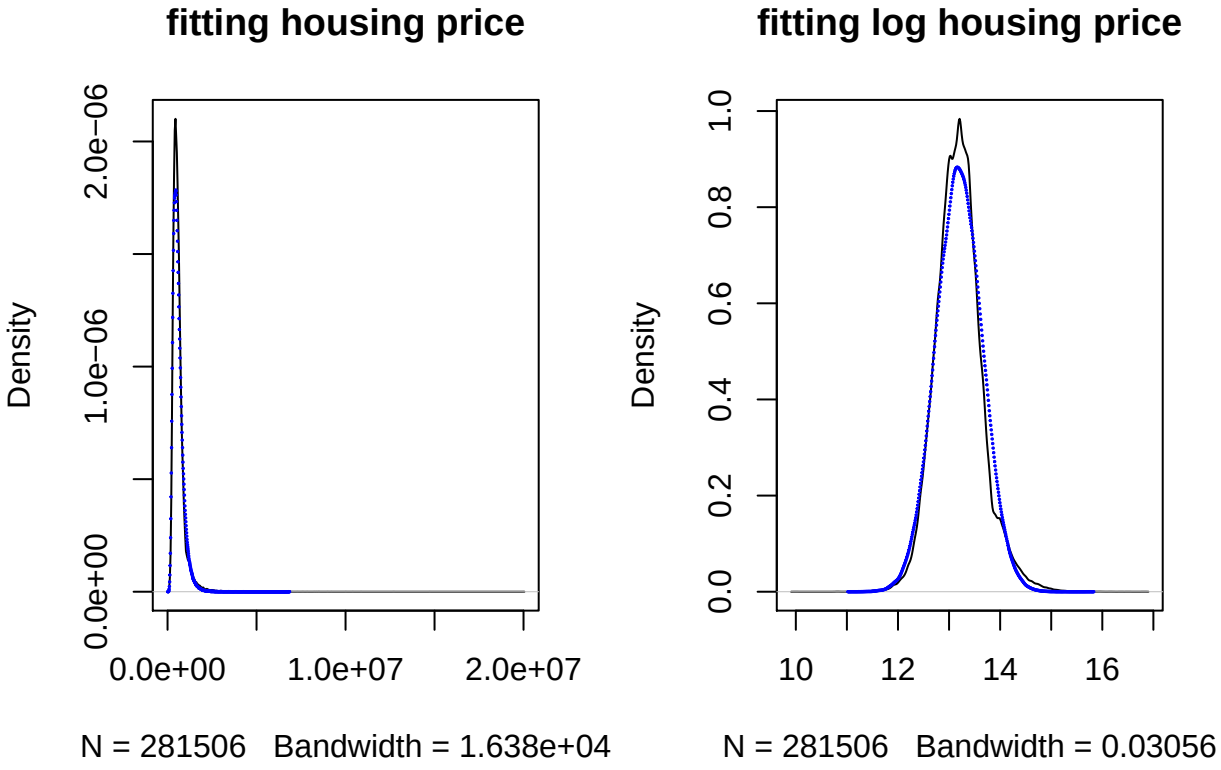
Situation2




```
##
## period 30(simulated vs fitted)

##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   5.454   7.913   8.684   8.717   9.531  13.828

##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   5.499   7.946   8.649   8.724   9.437  14.825

##
##  period 100(simulated vs fitted)

##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   506.8  1170.8  1346.2  1383.3  1547.8  3110.0

##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   516.8  1153.3  1351.3  1383.2  1579.4  3106.3
```

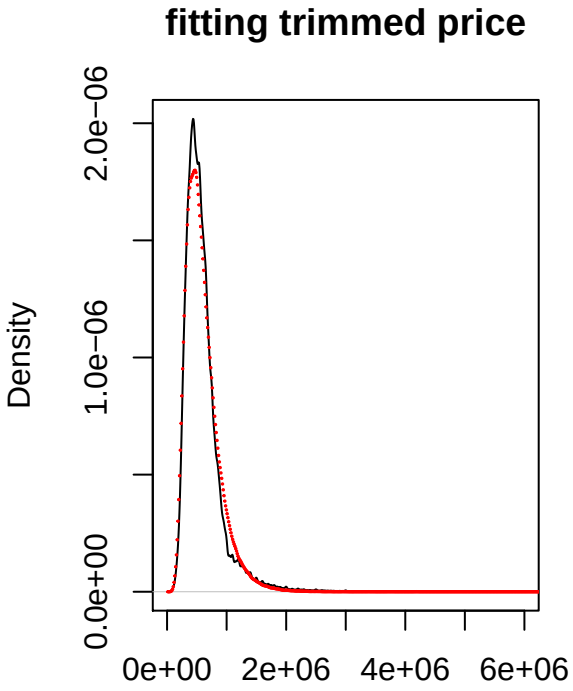
Housing Price

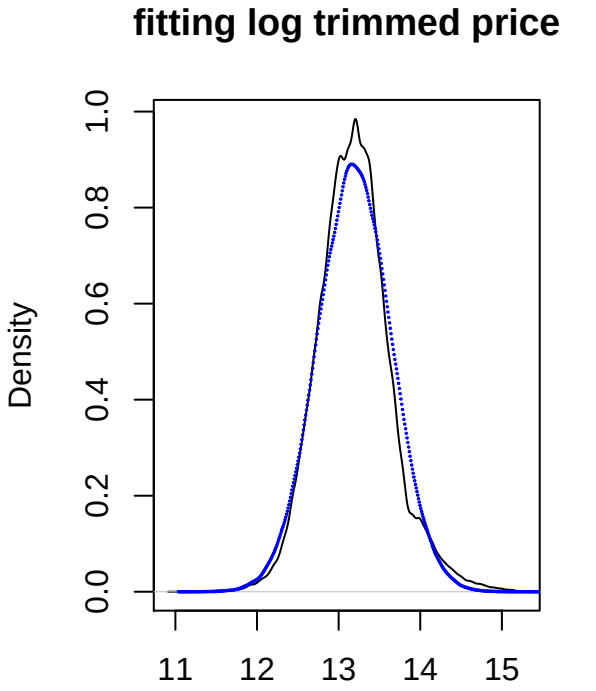
Fitting raw housing prices with lognormal




```
##                          Min.  1st Qu. Median     Mean  3rd Qu.     Max.
## House price         22000.0 400000.0 530000 601999.7 700000.0 20000000
## Fitted distribution 67625.4 395968.9 538346 596965.1 731516.4  6799310
```

Fitting trimmed housing prices with lognormal






```
##                          Min.  1st Qu.   Median     Mean  3rd Qu.    Max.
## Trimmed house_price 60000.00 400000.0 530000.0 599008.7 700000.0 3980000
## Fitted distribution 68667.07 396406.5 537614.3 595169.9 728726.9 6653286
```