percentage_negative

```
library(tidyverse)

y2 <- read.csv("~/../Dropbox/negative_population_trends/10ksims_freq1_spp20_nyears2.csv")
y5 <- read.csv("~/../Dropbox/negative_population_trends/10ksims_freq1_spp20_nyears5.csv")
y10 <- read.csv("~/../Dropbox/negative_population_trends/10ksims_freq1_spp20_nyears10.csv")
y20 <- read.csv("~/../Dropbox/negative_population_trends/10ksims_freq1_spp20_nyears20.csv")
y50 <- read.csv("~/../Dropbox/negative_population_trends/10ksims_freq1_spp20_nyears50.csv")
y100 <- read.csv("~/../Dropbox/negative_population_trends/10ksims_freq1_spp20_nyears100.csv")

y2 %>% group_by(bar) %>%
                summarize(samplesize=n(),
                          negativebeta = sum(beta<0),
                          percent = negativebeta/samplesize*100)
```

```
## # A tibble: 3 × 4
##     bar samplesize negativebeta percent
##   <int>      <int>        <int>   <dbl>
## 1     1     200000        99858  49.929
## 2     2      20000        10074  50.370
## 3     3      20000        16384  81.920
```

```
y5 %>% group_by(bar) %>%
                summarize(samplesize=n(),
                          negativebeta = sum(beta<0),
                          percent = negativebeta/samplesize*100)
```

```
## # A tibble: 3 × 4
##     bar samplesize negativebeta percent
##   <int>      <int>        <int>   <dbl>
## 1     1     200000       100062  50.031
## 2     2      20000        10040  50.200
## 3     3      20000        18126  90.630
```

```
y10 %>% group_by(bar) %>%
                summarize(samplesize=n(),
                          negativebeta = sum(beta<0),
                          percent = negativebeta/samplesize*100)
```

```
## # A tibble: 3 × 4
##     bar samplesize negativebeta percent
##   <int>      <int>        <int>   <dbl>
## 1     1     200000       100229 50.1145
## 2     2      20000        10017 50.0850
## 3     3      20000        17324 86.6200
```

```
y20 %>% group_by(bar) %>%
                summarize(samplesize=n(),
                          negativebeta = sum(beta<0),
                          percent = negativebeta/samplesize*100)
```

```
## # A tibble: 3 × 4
##     bar samplesize negativebeta percent
##   <int>      <int>        <int>   <dbl>
```

```
## 1     1     200000       100031 50.0155
## 2     2      20000         9888 49.4400
## 3     3      20000        15630 78.1500
```

```
y50 %>% group_by(bar) %>%
                summarize(samplesize=n(),
                          negativebeta = sum(beta<0),
                          percent = negativebeta/samplesize*100)
```

```
## # A tibble: 3 × 4
##     bar samplesize negativebeta percent
##   <int>      <int>        <int>   <dbl>
## 1     1     200000       100109 50.0545
## 2     2      20000         9946 49.7300
## 3     3      20000        13808 69.0400
```

```
y100 %>% group_by(bar) %>%
                summarize(samplesize=n(),
                          negativebeta = sum(beta<0),
                          percent = negativebeta/samplesize*100)
```

```
## # A tibble: 3 × 4
##     bar samplesize negativebeta percent
##   <int>      <int>        <int>   <dbl>
## 1     1     200000       100360  50.180
## 2     2      20000        10097  50.485
## 3     3      20000        12787  63.935
```