## Labor Force Participation Rate

Matthew Houser
December 7, 2019

```
#Import data
fredr set key("2d4104c35bfc5185ef631b380c2f78dd")
male_lfpr <- fredr(series_id = "LNS11300001",frequency = "m")</pre>
female_lfpr <- fredr(series_id = "LNS11300002",frequency = "m")</pre>
#Remove series id
male_lfpr <- select(male_lfpr, -series_id)</pre>
female_lfpr <- select(female_lfpr, -series_id)</pre>
#Rename columns
names(male_lfpr) <- c("date", "Male_LFP")</pre>
names(female_lfpr) <- c("date", "Female_LFP")</pre>
#Join data
df <- left_join(male_lfpr, female_lfpr, by = "date")</pre>
#Add column for gender gap
df <- mutate(df, gap = Male_LFP-Female_LFP)</pre>
ggplot(df) +
  geom_line(aes(date, Male_LFP, color = "Male"), size = 1) +
  geom_line(aes(date, gap, color = "Gender Gap"), size = 1) +
  geom_line(aes(date, Female_LFP, color = "Female"), size = 1) +
  ggtitle("Monthly Labor Force Participation Rate, 1948-2018") +
 ylab("Labor Force Participation Rate") +
  xlab("Year") +
  scale_y_continuous(limits = c(4, 96), breaks = c(0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100))+
  theme_bw() +
  guides(color = guide_legend(reverse = TRUE)) +
  theme(legend.title = element_blank())
```

