Transactions by payment method over time

library(knitr)  
library(dplyr)

##   
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':  
##   
## filter, lag

## The following objects are masked from 'package:base':  
##   
## intersect, setdiff, setequal, union

library(ggplot2)  
library(readxl)  
  
transactions\_summary <- read\_excel("/Users/saraparker/Library/CloudStorage/OneDrive-Personal/KU Leuven/MBA - Accounting/Masters Thesis/data/sample\_pmt\_year\_graph.xlsx")  
  
transactions\_summary$Payment\_Method <- factor(transactions\_summary$Payment\_Method, levels = c("Shares", "Mixed", "Cash"))  
  
transactions\_summary$year\_of\_announcement <- as.integer(transactions\_summary$year\_of\_announcement)  
  
transactions\_summary <- transactions\_summary %>%  
 arrange(year\_of\_announcement) %>%  
 group\_by(year\_of\_announcement, Payment\_Method) %>%  
 summarise(Frequency = n(), .groups = 'drop')  
  
ggplot(transactions\_summary, aes(x = year\_of\_announcement, y = Frequency, fill = Payment\_Method)) + geom\_bar(stat = "identity", position = "stack", color = "black") +  
scale\_fill\_manual(values = c("Cash" = "black", "Shares" = "grey", "Mixed" = "white")) + theme\_minimal() + labs(x = "Year", y = "Frequency", fill =  
"Payment Type") + theme(axis.text.x = element\_text(angle = 90, vjust = 0.5, hjust=1)) # Rotate x axis labels if needed

