

Untitled

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```
require(readstata13)

## Loading required package: readstata13
## Warning: package 'readstata13' was built under R version 3.5.3

library(dplyr)

## Warning: package 'dplyr' was built under R version 3.5.2
##
## 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)
dat <- read.dta13("AfroBarometerSubsetRound5.dta", nonint.factors = TRUE)

## Warning in read.dta13("AfroBarometerSubsetRound5.dta", nonint.factors = TRUE):
##   REGION:
##   Duplicated factor levels detected - generating unique labels.
## Warning in read.dta13("AfroBarometerSubsetRound5.dta", nonint.factors = TRUE):
##   Q99:
##   Duplicated factor levels detected - generating unique labels.
COUNTRY_ALPHA = Country in alphabetical order REGION = Province or region
Q61F = And during the last national election in [20xx], how often, if ever did a candidate or someone from a
political party offer you something, like food or a gift or money, in return for your vote? Q89A = Do you feel
close to any particular political party?

#recode Countries
dat$Q61F = as.character(dat$Q61F)
dat$Q89A = as.character(dat$Q89A)

dat$Q61F[dat$Q61F == "Never"] = 0
dat$Q61F[dat$Q61F == "Once or Twice"] = 1
dat$Q61F[dat$Q61F == "A Few Times"] = 2
dat$Q61F[dat$Q61F == "Often"] = 3

dat$Q89A[dat$Q89A == "Yes, feels close to a party"] = 1
dat$Q89A[dat$Q89A == "No, not close to any party"] = 0

### create electoral system column. 1 if SMD 0 if PR, ignore MIXED countries
dat$ELECTORAL_SYSTEM = 0 #default 0
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Botswana"] = 1
```

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dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Cameroon"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Cote d'Ivoire"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Egypt"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Ghana"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Kenya"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Liberia"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Malawi"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Mali"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Mauritius"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Nigeria"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Sierra Leone"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Swaziland"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Tanzania"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Uganda"] = 1
dat$ELECTORAL_SYSTEM[dat$COUNTRY_ALPHA == "Zambia"] = 1

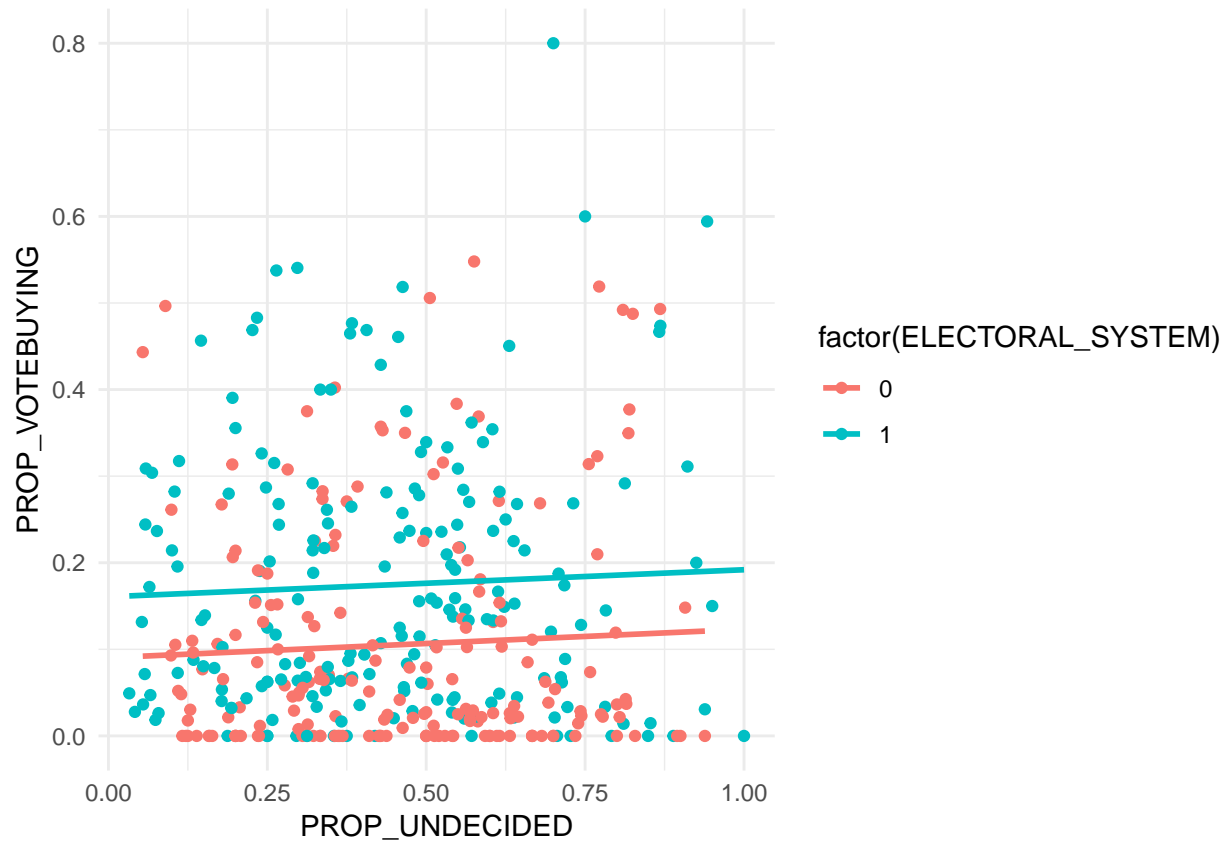
dat1 = dat %>%
  select(COUNTRY_ALPHA, COUNTRY_BY_REGION, REGION, Q61F, Q89A, ELECTORAL_SYSTEM) %>%
  filter(!COUNTRY_ALPHA %in% c("Guinea", "Lesotho", "Madagascar", "Senegal", "Sudan", "Zimbabwe") & Q61F > 0)
  group_by(COUNTRY_ALPHA, REGION) %>%
  mutate(PROP_UNDECIDED = mean(Q89A == 0)) %>%
  mutate(PROP_VOTEBUYING = mean(Q61F > 0)) %>%
  mutate(AVERAGE_VOTEBUYING = mean(as.numeric(Q61F)))

dat1 = dat1 %>%
  select(COUNTRY_ALPHA, COUNTRY_BY_REGION, REGION, ELECTORAL_SYSTEM, PROP_UNDECIDED, PROP_VOTEBUYING, AVERAGE_VOTEBUYING) %>%
  distinct()

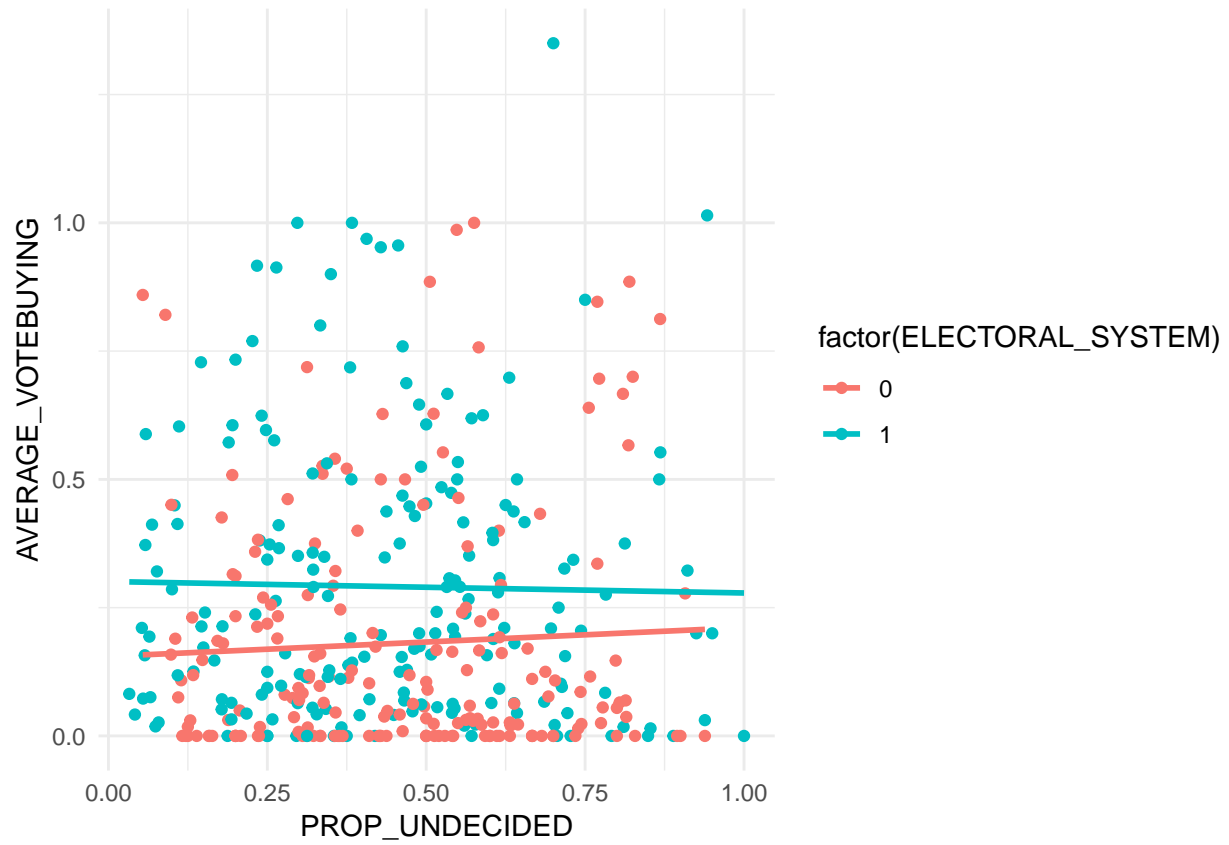
library(ggplot2)

ggplot(data = dat1, aes(x = PROP_UNDECIDED, y = PROP_VOTEBUYING, color = factor(ELECTORAL_SYSTEM))) + geom_point()

```

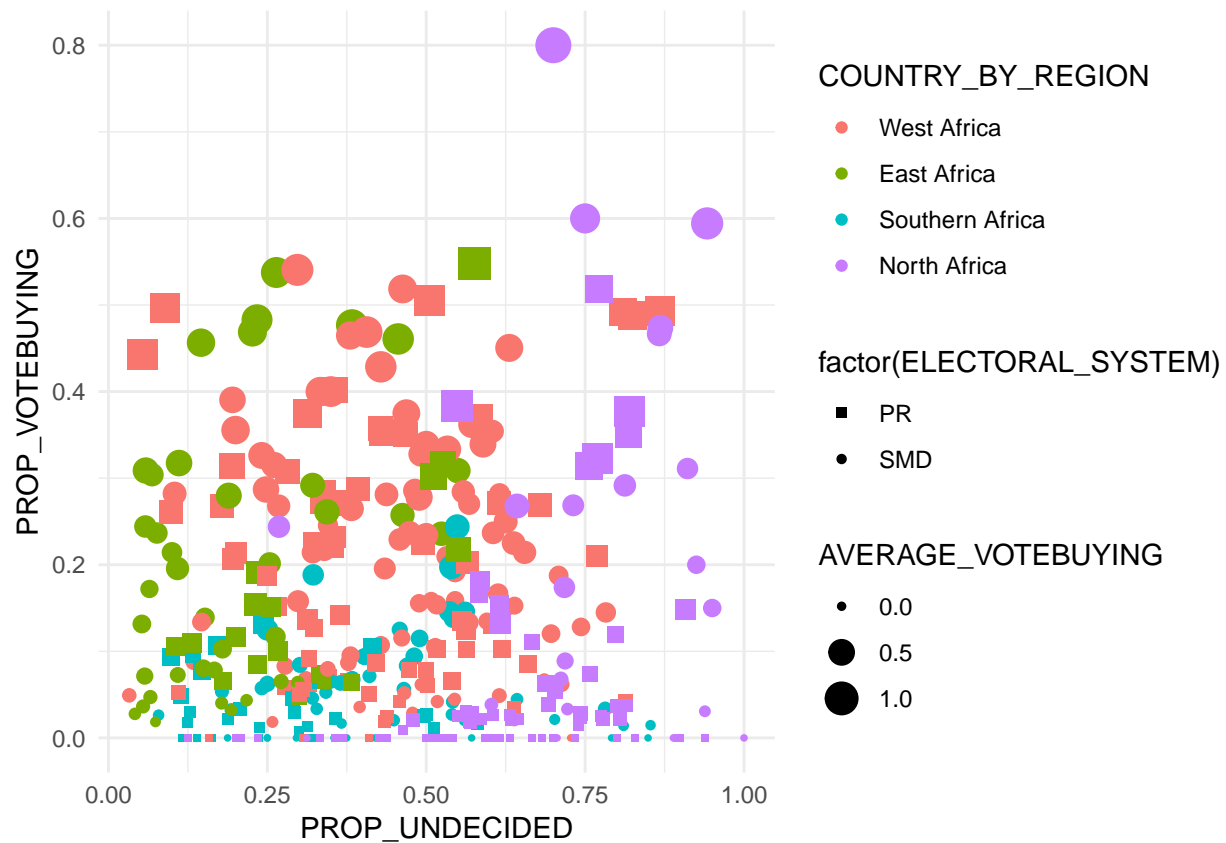


```
ggplot(data = dat1, aes(x = PROP_UNDECIDED, y = AVERAGE_VOTEBUYING, color = factor(ELECTORAL_SYSTEM)))
```



```
ggplot(data = dat1, aes(x = PROP_UNDECIDED, y = PROP_VOTEBUYING)) +
  geom_point(aes(shape = factor(ELECTORAL_SYSTEM), color = COUNTRY_BY_REGION, size = AVERAGE_VOTEBUYING)) +
  scale_shape_manual(values = c(15,16), labels = c("PR", "SMD")) +

  theme_minimal()
```



Regression equation

```
regression = lm(PROP_VOTEBUYING ~ ELECTORAL_SYSTEM + PROP_UNDECIDED + ELECTORAL_SYSTEM*PROP_UNDECIDED, data = dat1)
summary(regression)
```

```
##
## Call:
## lm(formula = PROP_VOTEBUYING ~ ELECTORAL_SYSTEM + PROP_UNDECIDED +
##     ELECTORAL_SYSTEM * PROP_UNDECIDED, data = dat1)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.19192 -0.10238 -0.04492  0.07463  0.61745
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.090351   0.024360   3.709 0.000239 ***
## ELECTORAL_SYSTEM
##      0.070324    0.033202    2.118 0.034819 *
## PROP_UNDECIDED
##      0.032721    0.048029    0.681 0.496118
## ELECTORAL_SYSTEM:PROP_UNDECIDED
##     -0.001473    0.066316   -0.022 0.982288
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.143 on 378 degrees of freedom
## Multiple R-squared:  0.05776,    Adjusted R-squared:  0.05028
## F-statistic: 7.724 on 3 and 378 DF,  p-value: 5.089e-05
```