Socioeconomic status and the 2020 vote

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R Markdown

```
# Load necessary packages
library(readxl)
library(dplyr)
library(tidyr)
library(scales)
library(kableExtra)

# Load data and rename key variables for clarity
data <- read_excel("C:/Users/brynn/OneDrive/Documents/thesis data.xlsx") %>%
  rename(
    household_income_summary = V201617x,
    education = V201511x,
    student_loan_debt = V202562,
    labor_union = V201544,
    middle_class = V202353,
    attitude_towards_rural_gov_attention = V202276x,
    rural_gov_influence = V202277,
    rural_respect = V202282x,
    rural_urban_self_identity = V202356,
    public_assistance = V202563,
    financial_concern = V201594,
    ability_to_pay_healthcare = V201593,
    marital_status = V201508,
    evangelical = V201435,
    post_election_presidential_vote_choice = V202073,
    summary_party_id = V201231x,
    conservative = V201201,
    immigration = V202233,
    race_summary = V201549x,
    Sex = V201600,
    age = V201507x,
    economic_condition = V201502
  )
```

```
data <- data %>%
  mutate(
    # Recode income into 4 buckets and scale 0-1
    # Recode income as binary: 1 = $250k+, 0 = less
```

```r
income_250k_binary = case_when(
  household_income_summary == 22 ~ 1,
  household_income_summary %in% 1:21 ~ 0,
  TRUE ~ NA_real_
),

    # Binary indicators
    education_binary = case_when(
      education %in% 4:5 ~ 1,  # Bachelor's or higher
      education %in% 1:3 ~ 0,  # Less than bachelor's
      TRUE ~ NA_real_
    ),
    no_student_loan_debt = case_when(
      student_loan_debt == 1 ~ 0,  # Has debt
      student_loan_debt == 2 ~ 1,  # No debt
      TRUE ~ NA_real_
    ),
    labor_union = case_when(labor_union == 1 ~ 1, labor_union == 2 ~ 0, TRUE ~ NA_real_),
    middle_class_perception = case_when(middle_class %in% 1:2 ~ 1, middle_class == 3 ~ 0, TRUE ~ NA_real
    public_assistance = case_when(public_assistance == 1 ~ 1, public_assistance == 2 ~ 0, TRUE ~ NA_real

    # Rural-related items scaled 0-1
    attitude_towards_rural_gov_attention = 1 - rescale(attitude_towards_rural_gov_attention, to = c(0,
    rural_gov_influence = case_when(  # Recode into 1 (too little), 0.5 (right), 0 (too much)
      rural_gov_influence == 2 ~ 1,
      rural_gov_influence == 3 ~ 0.5,
      rural_gov_influence == 1 ~ 0,
      TRUE ~ NA_real_
    ),
    rural_respect = rescale(rural_respect, to = c(0, 1)),
    rural_identity = rescale(
      ifelse(rural_urban_self_identity %in% 1:5, rural_urban_self_identity, NA_real_),
      to = c(0, 1),
      na.rm = TRUE
    ),

    # Financial concern: reverse-coded and scaled
    financial_concern = rescale(6 - financial_concern, to = c(0, 1), na.rm = TRUE),
    ability_to_pay_healthcare = rescale(ability_to_pay_healthcare, to = c(0, 1), na.rm = TRUE),

    # Control variables
    married = case_when(marital_status %in% 1:2 ~ 1, marital_status %in% 3:6 ~ 0, TRUE ~ NA_real_),
    evangelical = case_when(evangelical == 1 ~ 1, evangelical %in% 2:12 ~ 0, TRUE ~ NA_real_),

    # Outcome variable: vote for Trump = 1
    gop_vote = case_when(
      post_election_presidential_vote_choice %in% c(2, 7) ~ 1,
      post_election_presidential_vote_choice %in% c(1, 3, 4, 5, 8) ~ 0,
      TRUE ~ NA_real_
    ),

    # Party ID scaled 0-1
    scaled_party_id = ifelse(between(summary_party_id, 1, 7), (summary_party_id - 1) / 6, NA_real_),
```

```
    # Conservative self-ID
    self_identified_ideology = case_when(
      conservative == 2 ~ 1,
      conservative %in% c(1, 3) ~ 0,
      TRUE ~ NA_real_
    ),

    # Immigration attitudes (scaled)
    immigrants_take_jobs = case_when(
      immigration == 1 ~ 1,
      immigration == 2 ~ 2/3,
      immigration == 3 ~ 1/3,
      immigration == 4 ~ 0,
      TRUE ~ NA_real_
    ),

    # Grouping
    group = case_when(
      Sex == 2 & race_summary == 1 ~ "White Women",
      Sex == 2 & race_summary != 1 ~ "Women of Color",
      TRUE ~ NA_character_
    ),
    white = ifelse(race_summary == 1, 1, 0),
    black = ifelse(group == "Women of Color" & race_summary == 2, 1, 0)
  ) %>%
  rowwise() %>%
  # Create composite indices as row means of relevant items
    mutate(
   SES = mean(c_across(c(income_250k_binary, education_binary, no_student_loan_debt)), na.rm = TRUE),
    cultural_class = mean(c_across(c(labor_union, middle_class_perception)), na.rm = TRUE),
    rural_urban_attitude = mean(c_across(c(attitude_towards_rural_gov_attention, rural_gov_influence, ru
    precarity = mean(c_across(c(ability_to_pay_healthcare, financial_concern, public_assistance)), na.rm
  ) %>%
  ungroup() %>%
  filter(Sex == 2, !is.na(gop_vote))  # Keep only women who reported a vote choice
```

```
# Split the dataset by group
all_women <- data
white_women <- filter(data, group == "White Women")
women_of_color <- filter(data, group == "Women of Color")

# Run OLS regressions by group
models <- list(
  all = lm(gop_vote ~ SES + cultural_class + rural_urban_attitude + precarity +
             self_identified_ideology + married + evangelical + age + economic_condition +
             scaled_party_id + immigrants_take_jobs + white, data = all_women),

  white = lm(gop_vote ~ SES + cultural_class + rural_urban_attitude + precarity +
               self_identified_ideology + married + evangelical + age + economic_condition +
               scaled_party_id + immigrants_take_jobs, data = white_women),

  woc = lm(gop_vote ~ SES + cultural_class + rural_urban_attitude + precarity +
             self_identified_ideology + married + evangelical + age + economic_condition +
```

```
            scaled_party_id + immigrants_take_jobs + black, data = women_of_color)
)
```

```
# Overall summary for all voting women
ses_all <- data %>%
  summarise(
    `Bachelor's Degree or Higher` = mean(education_binary, na.rm = TRUE),
    `Household Income $250K+` = mean(income_250k_binary, na.rm = TRUE),
    `No Student Loan Debt` = mean(no_student_loan_debt, na.rm = TRUE)
  ) %>%
  mutate(group = "All Women")

# Group summaries for White Women and Women of Color
ses_by_group <- data %>%
  filter(!is.na(group)) %>%
  group_by(group) %>%
  summarise(
    `Bachelor's Degree or Higher` = mean(education_binary, na.rm = TRUE),
    `Household Income $250K+` = mean(income_250k_binary, na.rm = TRUE),
    `No Student Loan Debt` = mean(no_student_loan_debt, na.rm = TRUE),
    .groups = "drop"
  )

# Combine and format for display
socioeconomic_summary <- bind_rows(ses_all, ses_by_group) %>%
  pivot_longer(-group, names_to = "SES Indicator", values_to = "Mean Value") %>%
  pivot_wider(names_from = group, values_from = `Mean Value`) %>%
  arrange(`SES Indicator`)

# Display the styled table
kable(socioeconomic_summary,
      digits = 3,
      format = "latex",
      booktabs = TRUE,
      caption = "\\textbf{Distribution of Socioeconomic Status Indicators by Group}") %>%
  kable_styling(full_width = FALSE, position = "center") %>%
  row_spec(0, bold = TRUE) %>%
  footnote(
    general = "SES indicators include income (1 = \\$250K+), education (1 = BA+), and student loan statu
    threeparttable = TRUE
  )
```

```
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## Use 'xfun::attr2()' instead.
## See help("Deprecated")

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```

```
# All Women summary
cultural_all <- data %>%
```

Table 1: **Distribution of Socioeconomic Status Indicators by Group**

SES Indicator	All Women	White Women	Women of Color
Bachelor's Degree or Higher	0.484	0.499	0.438
Household Income $250K+	0.054	0.059	0.041
No Student Loan Debt	0.778	0.811	0.676

Note:
SES indicators include income (1 = \$250K+), education (1 = BA+), and student loan status (1 = no debt).

```
  summarise(
    `Union Household` = mean(labor_union, na.rm = TRUE),
    `Perceives Self as Middle/Lower Middle Class` = mean(middle_class_perception, na.rm = TRUE)
  ) %>%
  mutate(group = "All Women")

# Group summaries
cultural_by_group <- data %>%
  filter(!is.na(group)) %>%
  group_by(group) %>%
  summarise(
    `Union Household` = mean(labor_union, na.rm = TRUE),
    `Perceives Self as Middle/Lower Middle Class` = mean(middle_class_perception, na.rm = TRUE),
    .groups = "drop"
  )

# Combine and pivot
cultural_class_table <- bind_rows(cultural_all, cultural_by_group) %>%
  pivot_longer(-group, names_to = "Cultural Class Indicator", values_to = "Mean Value") %>%
  pivot_wider(names_from = group, values_from = `Mean Value`) %>%
  arrange(`Cultural Class Indicator`)

# Display the styled table
kable(cultural_class_table,
      digits = 3,
      format = "latex",
      booktabs = TRUE,
      caption = "\\textbf{Distribution of Cultural Class Indicators by Group}") %>%
  kable_styling(full_width = FALSE, position = "center") %>%
  row_spec(0, bold = TRUE) %>%
  footnote(
    general = "Cultural class indicators include union household membership (1 = yes) and self-perceptio
    threeparttable = TRUE
  )
```

```
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```

Table 2: **Distribution of Cultural Class Indicators by Group**

Cultural Class Indicator	All Women	White Women	Women of Color
Perceives Self as Middle/Lower Middle Class	0.736	0.715	0.821
Union Household	0.133	0.131	0.139

Note:
Cultural class indicators include union household membership (1 = yes) and self-perception as lower or middle-middle class (1 = yes). Responses to the class identity question were recoded to reflect perceived class disadvantage, with those identifying as 'lower class' or 'working class' coded as 1 and all others as 0. This approach captures symbolic class identification, consistent with prior research.

```
## See help("Deprecated")
```

```
# All Women summary
rural_all <- data %>%
  summarise(
    `Gov. Attention to Rural (Inverted)` = mean(attitude_towards_rural_gov_attention, na.rm = TRUE),
    `Political Influence Too Little` = mean(rural_gov_influence, na.rm = TRUE),
    `Rural Areas Deserve More Respect` = mean(rural_respect, na.rm = TRUE),
    `Strong Rural Identity` = mean(rural_identity, na.rm = TRUE)
  ) %>%
  mutate(group = "All Women")

# Group summaries
rural_by_group <- data %>%
  filter(!is.na(group)) %>%
  group_by(group) %>%
  summarise(
    `Gov. Attention to Rural (Inverted)` = mean(attitude_towards_rural_gov_attention, na.rm = TRUE),
    `Political Influence Too Little` = mean(rural_gov_influence, na.rm = TRUE),
    `Rural Areas Deserve More Respect` = mean(rural_respect, na.rm = TRUE),
    `Strong Rural Identity` = mean(rural_identity, na.rm = TRUE),
    .groups = "drop"
  )

# Combine and pivot
rural_table <- bind_rows(rural_all, rural_by_group) %>%
  pivot_longer(-group, names_to = "Rural Attitude", values_to = "Mean Response") %>%
  pivot_wider(names_from = group, values_from = `Mean Response`) %>%
  arrange(`Rural Attitude`)

# Display the styled table
kable(rural_table,
      digits = 3,
      format = "latex",
      booktabs = TRUE,
      caption = "\\textbf{Distribution of Rural-Urban Attitude Indicators by Group}") %>%
  kable_styling(full_width = FALSE, position = "center") %>%
  row_spec(0, bold = TRUE) %>%
  footnote(
    general = "All indicators scaled 0-1. Higher values reflect stronger rural identification or affini
```

Table 3: **Distribution of Rural-Urban Attitude Indicators by Group**

Rural Attitude	All Women	White Women	Women of Color
Gov. Attention to Rural (Inverted)	0.169	0.172	0.162
Political Influence Too Little	0.663	0.671	0.639
Rural Areas Deserve More Respect	0.856	0.862	0.838
Strong Rural Identity	0.343	0.370	0.262

Note:
All indicators scaled 0–1. Higher values reflect stronger rural identification or affinity.

```
    threeparttable = TRUE
  )
```

```
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```

```
# All Women summary
precarity_all <- data %>%
  summarise(
    `Financial Concern (0-1)` = mean(financial_concern, na.rm = TRUE),
    `Difficulty Paying Healthcare (0-1)` = mean(ability_to_pay_healthcare, na.rm = TRUE),
    `Receiving Public Assistance` = mean(public_assistance, na.rm = TRUE)
  ) %>%
  mutate(group = "All Women")

# Group summaries
precarity_by_group <- data %>%
  filter(!is.na(group)) %>%
  group_by(group) %>%
  summarise(
    `Financial Concern (0-1)` = mean(financial_concern, na.rm = TRUE),
    `Difficulty Paying Healthcare (0-1)` = mean(ability_to_pay_healthcare, na.rm = TRUE),
    `Receiving Public Assistance` = mean(public_assistance, na.rm = TRUE),
    .groups = "drop"
  )

# Combine and pivot
precarity_table <- bind_rows(precarity_all, precarity_by_group) %>%
  pivot_longer(-group, names_to = "Precarity Indicator", values_to = "Mean Value") %>%
  pivot_wider(names_from = group, values_from = `Mean Value`) %>%
  arrange(`Precarity Indicator`)

# Display the styled table
kable(precarity_table,
      digits = 3,
```

Table 4: **Distribution of Precarity Indicators by Group**

Precarity Indicator	All Women	White Women	Women of Color
Difficulty Paying Healthcare (0–1)	0.804	0.797	0.825
Financial Concern (0–1)	0.093	0.086	0.115
Receiving Public Assistance	0.319	0.280	0.439

Note:
Indicators include financial concern, difficulty affording healthcare, and receipt of public assistance. Higher = more precarity.

```
      format = "latex",
      booktabs = TRUE,
      caption = "\\textbf{Distribution of Precarity Indicators by Group}") %>%
  kable_styling(full_width = FALSE, position = "center") %>%
  row_spec(0, bold = TRUE) %>%
  footnote(
    general = "Indicators include financial concern, difficulty affording healthcare, and receipt of pu
    threeparttable = TRUE
  )
```

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```

```
library(stargazer)
```

```
##
## Please cite as:

##  Hlavac, Marek (2022). stargazer: Well-Formatted Regression and Summary Statistics Tables.

##  R package version 5.2.3. https://CRAN.R-project.org/package=stargazer
```

```
stargazer(models$all, models$white, models$woc,
  type = "latex",
  title = "\\textbf{OLS Regression Predicting Trump Support by Group}",
  column.labels = c("\\textbf{All Women}", "\\textbf{White Women}", "\\textbf{Women of Color}"),
  column.sep.width = "10pt",
  dep.var.labels.include = FALSE,
  covariate.labels = c(
    "SES", "Cultural Class", "Rural-Urban Attitudes", "Precarity",
    "Ideology (Conservative)", "Married", "Evangelical", "Age",
    "Economic Condition", "Party ID (Scaled)", "Immigrants Take Jobs",
    "White", "Black"
  ),
```

```
  omit.stat = c("rsq", "f", "ser"),
  digits = 3,
  no.space = TRUE,
  notes.align = "l",
  star.cutoffs = c(0.1, 0.05, 0.01),
  notes = c(
    "OLS estimates with robust standard errors in parentheses.",
    "+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001"
  )
)
```

% Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com % Date and time: Mon, May 05, 2025 - 1:54:45 PM

```
# Subset: Women of Color with high rural-urban attitudes
high_pro_rural_woc <- data %>%
  filter(group == "Women of Color" & rural_urban_attitude > 0.66)
```

```
# Frequency count by racial subgroup, excluding Refused
woc_rural_race_breakdown <- high_pro_rural_woc %>%
  filter(race_summary != -9) %>%  # remove Refused responses
  mutate(race_label = case_when(
    race_summary == 2 ~ "Black, non-Hispanic",
    race_summary == 3 ~ "Hispanic",
    race_summary == 4 ~ "Asian or Pacific Islander",
    race_summary == 5 ~ "Native American/Other",
    race_summary == 6 ~ "Multiracial",
    TRUE ~ NA_character_
  )) %>%
  group_by(race_label) %>%
  summarise(Count = n(), .groups = "drop") %>%
  mutate(Percent = round(Count / sum(Count) * 100, 1))
```

```
woc_rural_race_breakdown %>%
  kbl(caption = "Racial Composition of Women of Color with High Pro-Rural Attitudes (Excludes Refused)"
  kable_styling(full_width = FALSE, position = "center")
```

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```

Table 5: **OLS Regression Predicting Trump Support by Group**

	Dependent variable:		
	All Women	**White Women**	**Women of Color**
	(1)	(2)	(3)
SES	-0.106^{**}	-0.146^{**}	-0.029
	(0.049)	(0.064)	(0.074)
Cultural Class	-0.035	-0.063	-0.023
	(0.031)	(0.040)	(0.045)
Rural-Urban Attitudes	0.335^{***}	0.316^{**}	0.357^{***}
	(0.093)	(0.128)	(0.126)
Precarity	0.132^{**}	0.069	0.212^{**}
	(0.063)	(0.085)	(0.089)
Ideology (Conservative)	0.118^{***}	0.163^{***}	0.054^{*}
	(0.023)	(0.031)	(0.031)
Married	0.062^{***}	0.070^{**}	0.027
	(0.022)	(0.028)	(0.033)
Evangelical	-0.037	-0.051	-0.002
	(0.026)	(0.032)	(0.046)
Age	0.0001	-0.001	0.002^{**}
	(0.001)	(0.001)	(0.001)
Economic Condition	-0.025^{**}	-0.024^{*}	-0.027^{*}
	(0.011)	(0.014)	(0.015)
Party ID (Scaled)	0.717^{***}	0.656^{***}	0.723^{***}
	(0.037)	(0.048)	(0.061)
Immigrants Take Jobs	0.276^{***}	0.387^{***}	0.124^{**}
	(0.036)	(0.050)	(0.050)
White	0.038		
	(0.025)		
Black			-0.089^{***}
			(0.033)
Constant	-0.269^{***}	-0.162	-0.297^{***}
	(0.072)	(0.102)	(0.105)
Observations	1,030	654	376
Adjusted R^2	0.492	0.495	0.397

Note: *p<0.1; **p<0.05; ***p<0.01
OLS estimates with robust standard errors in parentheses.
+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

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```

Table 6: Racial Composition of Women of Color with High Pro-Rural Attitudes (Excludes Refused)

race_label	Count	Percent
Asian or Pacific Islander	2	3.3
Black, non-Hispanic	24	40.0
Hispanic	14	23.3
Multiracial	14	23.3
Native American/Other	6	10.0