Analysis 2x: Main Analysis with Matched Data (Movers)

Fan Lu & Gento Kato

January 8, 2020

Analytical Strategy

Variables

- Outcome: Foreigner Suffrage (min 0, max 1)
- Mediator 1: (Objective) Political Knowledge (min = 0, max = 1)
- Mediator 2: Ideology (min 0 = left/liberal, max 1 = right/conservative)
- Mediator 3: LDP - DPJ FT (min 0 = favor DPJ, max 1 = favor LDP)
- Mediator 4: Favorability of South Korea (min = 0, max = 1)
- Mediator 5: Favorability of China (min = 0, max = 1)
- Mediator 6: Favorability of USA (min = 0, max = 1)
- Mediator 7: Income (percentile, min = 0, max = 1)
- Independent Variable: University Education (0 = Junior College or Less, 1 = University or More)
- Moderator 1: Gender (0 = Female, 1 = Male), This means that all "base" coefficients are for female.
- Moderator 2: Age (by 10 years, centered at 20). Reasoning: Two trends may influence the role of university education. (1) There is an evident increase in number of university graduates over the years, especially among women. This trend may impies that university experience may be more gendered in the past than today. (2) There is a trend of "internationalization" in university education in recent days. Therefore, the diversifying and liberalizing effect of education may be stronger for younger generation.
- Control 1: Percent in life residing locally. More locally-identified individuals may dislike outsiders more.
- Control 2: (ZIP level) Residing in densely inhabited district (DID)
- Control 3: (ZIP level) Percent of foreigners in neighborhood (transformed by square root)
- Control 4: (ZIP level) Percent of university graduates in neighborhood (by 10 percent)
- Control 5: (Municipality level) Percent of residents residing in DID
- Control 6: (Municipality level) Percent of foreigners (transformed by square root)
- Control 7: (Municipality level) Percent of university graduates (by 10 percent)

Subset Data

Analysis is conducted on the following subset.

If age - years of local ZIP residence is 23 or larger. 23 is the age of graduating university (the youngest possible) in Japan. Assuming that an individual is living in the local ZIP continuously, this condition implies that one moved to the ZIP of current residence (likely) after graduating the university. This incorporates the possibility that education changes attitudes through the movement in residence.

Modeling Strategy

All models are estimated by OLS. For outcome model, alternative model is estimated by the multinomial logit model, with 3 category DV (disagree, neither, agree), with disagree as a reference category.

Robustness Check (in this file)

SIFCCT has one special survey where they conducted a survey through mail. Mail survey contains identical set of variables as online survey. So I replicated the analysis with the mail survey.

Preparation

```
## Clean Up Space
rm(list=ls())

## Set Working Directory (Automatically) ##
require(rstudioapi); require(rprojroot)
if (rstudioapi::isAvailable()==TRUE) {
  setwd(dirname(rstudioapi::getActiveDocumentContext()$path));
}
projdir <- find_root(has_file("thisishome.txt"))
cat(paste("Working Directory Set to:\n",projdir))
```

```
## Working Directory Set to:
##  /home/gentok/GoogleDrive/Projects/Fan-Gento-Lab/ForeignerJapan
```

```
setwd(projdir)

## Original Data
originaldir1a <- paste0(projdir, "/data/sifcct_zip_latest_v5.rds")
originaldir1b <- paste0(projdir, "/data/sifcct_zip_latest_panel_v5.rds")
original <- rbind(readRDS(originaldir1a),readRDS(originaldir1b))

## Matched/Unmatched Data Locations
datadir0x <- paste0(projdir, "/data/sifcct_moved_unmatched_v5.rds")
datadir1x <- paste0(projdir,"/data/sifcct_moved_matched_1_all_v5.rds")

## packages
require(sandwich)
require(lmtest)
require(MASS)
# devtools::install_github("tidyverse/ggplot2") # Need development version (as of Dec 31, 2019)
library(ggplot2)
require(texreg)
# require(nnet)
require(mlogit)
```

```
require(dfidx)
require(Formula)


## Formula (SIFCCT) ##

basemod0 <- formula(  ~ edu2*male*agex + lvpr +
                        as.factor(wave)) # sifcct
basemodA <- formula(  ~ edu2*male*agex + lvpr +
                        zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10) +
                        as.factor(wave)) # sifcct
basemodB <- formula(  ~ edu2*male*agex + lvpr +
                        didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
                        as.factor(wave)) # sifcct
basemodC <- formula(  ~ edu2*male*agex + lvpr +
                        zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10) +
                        didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
                        as.factor(wave)) # sifcct

## Formula (SIFCCT.mlogit) ##

outmod0.mlogit <- Formula(foreignsuff3x  ~ 0 | edu2*male*agex + lvpr +
                            as.factor(wave)) # sifcct
outmodA.mlogit <- Formula(foreignsuff3x  ~ 0 | edu2*male*agex + lvpr +
                            zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10) +
                            as.factor(wave)) # sifcct
outmodB.mlogit <- Formula(foreignsuff3x  ~ 0 | edu2*male*agex + lvpr +
                            didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
                            as.factor(wave)) # sifcct
outmodC.mlogit <- Formula(foreignsuff3x  ~ 0 | edu2*male*agex + lvpr +
                            zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10) +
                            didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
                            as.factor(wave)) # sifcct

## Variable Names ##

vnmap <- list("edu2" = "University education",
              "edu2 (1)" = "University education",
              "female" = "Gender (female)",
              "male" = "Gender (male)",
              "male (1)" = "Gender (male)",
              "age2" = "Age 50s or older",
              "agex" = "Age (by 10 years, centered at 45)",
              "edu2:female" = "University * Female",
              "edu2:male" = "University * Male",
              "edu2 (2)" = "University * Male",
              "edu2:age2" = "University * >=50s",
              "edu2:agex" = "University * Age",
              "edu2 (3)" = "University * Age",
              "edu2:female:age2" = "University * Female * >=50s",
              "edu2:male:age2" = "University * Male * >=50s",
              "edu2:female:agex" = "University * Female * Age",
              "edu2:male:agex" = "University * Male * Age",
```

```
              "edu2 (4)" = "University * Male * Age",
              "female:age2" = "Female * >=50s",
              "male:age2" = "Male * >=50s",
              "female:agex" = "Female * Age",
              "male:agex" = "Male * Age",
              "male (2)" = "Male * Age",
              "agecatMiddle Aged (40-50s)" = "Middle Aged (40-50s)",
              "agecatElder (>=60s)" = "Elder (>=60s)",
              "lvpr" = "% of Life Residing Locally (zip)",
              "zip_did" = "DID residence (zip)",
              "sqrt(c10_sreg_fper)" = "Foreigner % sqrt. (zip)",
              "c10_sreg_edu_ugsP" = "University % (zip)",
              "I(c10_sreg_edu_ugsP/10)" = "University % by 10% (zip)",
              "didper" = "DID proportion (mun.)",
              "sqrt(c10_mun_fper)" = "Foreigner % sqrt. (mun.)",
              "I(c10_mun_edu_ugsP/10)" = "University % by 10% (mun.)",
              "c10_mun_edu_ugsP" = "University % (mun.)")
```

With Unmatched Data

```
sifcct <- readRDS(datadir0x)
sifcct$agex <- sifcct$age/10 - 4.5
sifcct$ldpdpjft <- original$ldpdpjft[match(paste(sifcct$id,sifcct$wave),paste(original$id,original$wave
summary(sifcct$ldpdpjft)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  0.0000  0.5000  0.5000  0.5573  0.6500  1.0000
```

```
sifcct$income <- original$income[match(paste(sifcct$id,sifcct$wave),paste(original$id,original$wave))]
summary(sifcct$income)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.04098 0.18484 0.40915 0.51647 0.78565 0.97505
```

Outcome Model

```
## Living in Local ZIP since at least age 15 ##

s0mox_10 <- lm(update(foreignsuff ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mox_1A <- lm(update(foreignsuff ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mox_1B <- lm(update(foreignsuff ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mox_1C <- lm(update(foreignsuff ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(s0mox_10,s0mox_1A,s0mox_1B,s0mox_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s0mox_10,vcov.=vcovHC(s0mox_10))[,2],
                             coeftest(s0mox_1A,vcov.=vcovHC(s0mox_1A))[,2],
                             coeftest(s0mox_1B,vcov.=vcovHC(s0mox_1B))[,2],
                             coeftest(s0mox_1C,vcov.=vcovHC(s0mox_1C))[,2]),
          override.pvalues = list(coeftest(s0mox_10,vcov.=vcovHC(s0mox_10))[,4],
                                  coeftest(s0mox_1A,vcov.=vcovHC(s0mox_1A))[,4],
                                  coeftest(s0mox_1B,vcov.=vcovHC(s0mox_1B))[,4],
                                  coeftest(s0mox_1C,vcov.=vcovHC(s0mox_1C))[,4]),
          omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
```

```
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ============================================================================================
##                                    Base            ZIP             Municipality    Full
## --------------------------------------------------------------------------------------------
## University education                -0.0019         -0.0002         -0.0012         -0.0002
##                                     (0.0063)        (0.0064)        (0.0063)        (0.0064)
## Gender (male)                       -0.0560 ***     -0.0566 ***     -0.0564 ***     -0.0566 ***
##                                     (0.0076)        (0.0076)        (0.0076)        (0.0076)
## Age (by 10 years, centered at 45)   -0.0126 ***     -0.0122 ***     -0.0124 ***     -0.0123 ***
##                                     (0.0034)        (0.0034)        (0.0034)        (0.0034)
## University * Male                   -0.0208 *       -0.0204 *       -0.0206 *       -0.0205 *
##                                     (0.0098)        (0.0098)        (0.0098)        (0.0098)
## University * Age                     0.0125 *        0.0122 *        0.0123 *        0.0122 *
##                                     (0.0051)        (0.0051)        (0.0051)        (0.0051)
## University * Male * Age             -0.0045         -0.0041         -0.0043         -0.0041
##                                     (0.0076)        (0.0076)        (0.0076)        (0.0076)
## Male * Age                           0.0170 **       0.0166 **       0.0167 **       0.0166 **
##                                     (0.0057)        (0.0057)        (0.0057)        (0.0057)
## % of Life Residing Locally (zip)    -0.0276 +       -0.0307 *       -0.0290 +       -0.0305 *
##                                     (0.0149)        (0.0149)        (0.0149)        (0.0150)
## DID residence (zip)                                 -0.0162 **                      -0.0190 **
##                                                     (0.0056)                        (0.0066)
## Foreigner % sqrt. (zip)                             -0.0037                         -0.0021
##                                                     (0.0039)                        (0.0054)
## University % by 10% (zip)                           -0.0001                         -0.0024
##                                                     (0.0025)                        (0.0036)
## DID proportion (mun.)                                                -0.0103         0.0077
##                                                                      (0.0101)        (0.0119)
## Foreigner % sqrt. (mun.)                                             -0.0071         -0.0049
##                                                                      (0.0053)        (0.0074)
## University % by 10% (mun.)                                           0.0012          0.0036
##                                                                      (0.0038)        (0.0052)
## --------------------------------------------------------------------------------------------
## R^2                                  0.0122          0.0127          0.0124          0.0128
## Adj. R^2                             0.0110          0.0115          0.0111          0.0114
## Num. obs.                           24147           24147           24147           24147
## ============================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

```
extout <- function(gender,ageset,sub=1) {

  if (gender=="Male") sifcct$gender <- sifcct$female
  if (gender=="Female") sifcct$gender <- sifcct$male
  sifcct$ageset <- (sifcct$age - ageset)/10

  if (sub==1) {
    modset <- lm(foreignsuff ~ edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
                   I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
                   as.factor(wave), data=sifcct[which(sifcct$age - sifcct$lvlen<=15),])
    subname = "Stayed"
  } else {
```

```
    modset <- lm(foreignsuff ~ edu2 * gender * ageset + lvpr + as.factor(wave),
                 data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
    subname = "Moved"
  }


  res <- c(gender,ageset,coef(modset)[2],
           coefci(modset, vcov.=vcovHC(modset), level = 0.95)[2,],
           coefci(modset, vcov.=vcovHC(modset), level = 0.90)[2,],
           coeftest(modset, vcov.=vcovHC(modset))[2,c(2,4)],
           subname)
  names(res) <- c("gender","age","est","lci95","uci95","lci90","uci90","se","p","lv")

  return(res)

}

outdt0x <- rbind(extout("Female",25,2),
                 extout("Female",35,2),
                 extout("Female",45,2),
                 extout("Female",55,2),
                 extout("Female",65,2),
                 extout("Male",25,2),
                 extout("Male",35,2),
                 extout("Male",45,2),
                 extout("Male",55,2),
                 extout("Male",65,2))
outdt0x <- as.data.frame(outdt0x)
for(i in 2:9) outdt0x[,i] <- as.numeric(outdt0x[,i])
outdt0x$gender <- factor(outdt0x$gender, levels=unique(outdt0x$gender))
summary(outdt0x)
```

```
##     gender       age          est                lci95               uci95                lci90
##  Female:5   Min.   :25   Min.   :-0.038697   Min.   :-0.070512   Min.   :-0.0084444   Min.   :-0.065
##  Male  :5   1st Qu.:35   1st Qu.:-0.025859   1st Qu.:-0.048402   1st Qu.:-0.0056096   1st Qu.:-0.044
##             Median :45   Median :-0.014550   Median :-0.029892   Median : 0.0007912   Median :-0.027
##             Mean   :45   Mean   :-0.012305   Mean   :-0.031594   Mean   : 0.0069831   Mean   :-0.028
##             3rd Qu.:55   3rd Qu.:-0.003113   3rd Qu.:-0.017312   3rd Qu.: 0.0124302   3rd Qu.:-0.015
##             Max.   :65   Max.   : 0.023066   Max.   : 0.001465   Max.   : 0.0446669   Max.   : 0.004
##      uci90                 se                  p                lv
##  Min.   :-0.012021   Min.   :0.006296   Min.   :0.002659   Length:10
##  1st Qu.:-0.009158   1st Qu.:0.007436   1st Qu.:0.021370   Class :character
##  Median :-0.001675   Median :0.009408   Median :0.036055   Mode  :character
##  Mean   : 0.003882   Mean   :0.009841   Mean   :0.165248
##  3rd Qu.: 0.009550   3rd Qu.:0.011268   3rd Qu.:0.139450
##  Max.   : 0.041194   Max.   :0.016232   Max.   :0.759719
```

Outcome Model 2

```
## Living in Local ZIP since at least age 15 ##

# require(nnet)
# s0mox2_10 <- multinom(update(foreignsuff3x ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvle
```

```
# s0mox2_1A <- multinom(update(foreignsuff3x ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvle
# s0mox2_1B <- multinom(update(foreignsuff3x ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvle
# s0mox2_1C <- multinom(update(foreignsuff3x ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvle

sifcct.mlogit <- dfidx(sifcct[which(sifcct$age - sifcct$lvlen>=23),],
                       shape = "wide", choice = "foreignsuff3x")
# # levels(sifcct.mlogit$idx$id2) <- c("Disagree","Neither","Agree")
s0mox2_10 <- mlogit(outmod0.mlogit, data=sifcct.mlogit, reflevel="Disagree")
s0mox2_1A <- mlogit(outmodA.mlogit, data=sifcct.mlogit, reflevel="Disagree")
s0mox2_1B <- mlogit(outmodB.mlogit, data=sifcct.mlogit, reflevel="Disagree")
s0mox2_1C <- mlogit(outmodC.mlogit, data=sifcct.mlogit, reflevel="Disagree")

screenreg(list(s0mox2_10,s0mox2_1A), digits = 4, #single.row = T,
          override.se = list(coeftest(s0mox2_10,vcov=sandwich)[grep(":Neither",names(coef(s0mox2_10))),
                             coeftest(s0mox2_10,vcov=sandwich)[grep(":Agree",names(coef(s0mox2_10))),2]
                             coeftest(s0mox2_1A,vcov=sandwich)[grep(":Neither",names(coef(s0mox2_1A))),
                             coeftest(s0mox2_1A,vcov=sandwich)[grep(":Agree",names(coef(s0mox2_1A))),2]
          override.pvalues = list(coeftest(s0mox2_10,vcov=sandwich)[grep(":Neither",names(coef(s0mox2_1
                                  coeftest(s0mox2_10,vcov=sandwich)[grep(":Agree",names(coef(s0mox2_10)
                                  coeftest(s0mox2_1A,vcov=sandwich)[grep(":Neither",names(coef(s0mox2_1
                                  coeftest(s0mox2_1A,vcov=sandwich)[grep(":Agree",names(coef(s0mox2_1A)
          beside = T,
          omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.model.names = c("Base: Agree","Base: Neither",
                                 "ZIP: Agree","ZIP: Neither"),
          custom.coef.map = vnmap)
```

```
##
## ============================================================================================
##                                    Base: Agree      Base: Neither    ZIP: Agree       ZIP: Neither
## --------------------------------------------------------------------------------------------
## University education                0.0063 ***      -0.3391          0.0199 ***      -0.3256
##                                    (0.0498)         (0.0503)         (0.0503)         (0.0508)
## Gender (male)                      -0.3609 ***      -0.5868 ***      -0.3662 ***      -0.5918 ***
##                                    (0.0563)         (0.0580)         (0.0563)         (0.0581)
## Age (by 10 years, centered at 45)  -0.0835 ***      -0.1487 **       -0.0807 ***      -0.1470 **
##                                    (0.0271)         (0.0281)         (0.0272)         (0.0281)
## University * Male                  -0.1262           0.0215 +        -0.1232           0.0239 +
##                                    (0.0734)         (0.0738)         (0.0734)         (0.0738)
## University * Age                    0.0947 *         0.1007 *         0.0927 *         0.0997 *
##                                    (0.0398)         (0.0402)         (0.0398)         (0.0402)
## University * Male * Age            -0.0331          -0.0377          -0.0301          -0.0370
##                                    (0.0569)         (0.0563)         (0.0569)         (0.0564)
## Male * Age                          0.1272           0.0550 **        0.1244           0.0535 **
##                                    (0.0428)         (0.0431)         (0.0428)         (0.0431)
## % of Life Residing Locally (zip)   -0.2106          -0.0032 +        -0.2329          -0.0243 *
##                                    (0.1123)         (0.1081)         (0.1128)         (0.1085)
## DID residence (zip)                                                 -0.1274          -0.0373 **
##                                                                     (0.0418)         (0.0409)
## Foreigner % sqrt. (zip)                                             -0.0176          -0.0425
##                                                                     (0.0290)         (0.0280)
## University % by 10% (zip)                                           -0.0036          -0.0168
##                                                                     (0.0185)         (0.0183)
## --------------------------------------------------------------------------------------------
```

```
## AIC                                51942.8378      51942.8378      51938.2602      51938.2602
## Log Likelihood                    -25913.4189     -25913.4189     -25905.1301     -25905.1301
## Num. obs.                          24147           24147           24147           24147
## K                                      3               3               3               3
## ==========================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

```
screenreg(list(s0mox2_1B,s0mox2_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s0mox2_1B,vcov=sandwich)[grep(":Neither",names(coef(s0mox2_1B))),
                             coeftest(s0mox2_1B,vcov=sandwich)[grep(":Agree",names(coef(s0mox2_1B))),2]
                             coeftest(s0mox2_1C,vcov=sandwich)[grep(":Neither",names(coef(s0mox2_1C))),
                             coeftest(s0mox2_1C,vcov=sandwich)[grep(":Agree",names(coef(s0mox2_1C))),2]
          override.pvalues = list(coeftest(s0mox2_1B,vcov=sandwich)[grep(":Neither",names(coef(s0mox2_1
                                  coeftest(s0mox2_1B,vcov=sandwich)[grep(":Agree",names(coef(s0mox2_1B)
                                  coeftest(s0mox2_1C,vcov=sandwich)[grep(":Neither",names(coef(s0mox2_1
                                  coeftest(s0mox2_1C,vcov=sandwich)[grep(":Agree",names(coef(s0mox2_1C)
          beside = T,
          omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Mun.: Agree","Mun.: Neither",
                                 "Full: Agree","Full: Neither"))
```

```
##
## ==========================================================================================
##                                    Mun.: Agree      Mun.: Neither    Full: Agree      Full: Neither
## ------------------------------------------------------------------------------------------
## University education                0.0126 ***      -0.3328          0.0197 ***      -0.3261
##                                    (0.0502)         (0.0506)         (0.0503)         (0.0508)
## Gender (male)                      -0.3639 ***      -0.5893 ***      -0.3657 ***      -0.5914 ***
##                                    (0.0563)         (0.0581)         (0.0563)         (0.0581)
## Age (by 10 years, centered at 45)  -0.0823 ***      -0.1478 **       -0.0813 ***      -0.1472 **
##                                    (0.0272)         (0.0281)         (0.0272)         (0.0281)
## University * Male                  -0.1245           0.0226 +        -0.1238           0.0237 +
##                                    (0.0734)         (0.0738)         (0.0734)         (0.0738)
## University * Age                    0.0935 *         0.1001 *         0.0932 *         0.1004 *
##                                    (0.0398)         (0.0402)         (0.0398)         (0.0402)
## University * Male * Age            -0.0317          -0.0369          -0.0306          -0.0381
##                                    (0.0569)         (0.0563)         (0.0569)         (0.0563)
## Male * Age                          0.1256           0.0543 **        0.1248           0.0541 **
##                                    (0.0428)         (0.0431)         (0.0428)         (0.0431)
## % of Life Residing Locally (zip)   -0.2215          -0.0098 *        -0.2318          -0.0260 *
##                                    (0.1126)         (0.1083)         (0.1130)         (0.1087)
## DID residence (zip)                                                 -0.1480          -0.0490 **
##                                                                     (0.0494)         (0.0483)
## Foreigner % sqrt. (zip)                                             -0.0169 +        -0.0685
##                                                                     (0.0403)         (0.0391)
## University % by 10% (zip)                                           -0.0157          -0.0262
##                                                                     (0.0263)         (0.0261)
## DID proportion (mun.)              -0.0794          -0.0162          0.0607           0.0327
##                                    (0.0752)         (0.0739)         (0.0887)         (0.0871)
## Foreigner % sqrt. (mun.)           -0.0296          -0.0201          -0.0114          0.0436
##                                    (0.0394)         (0.0388)         (0.0539)         (0.0536)
## University % by 10% (mun.)          0.0003          -0.0162          0.0163           0.0113
##                                    (0.0280)         (0.0275)         (0.0384)         (0.0380)
## ------------------------------------------------------------------------------------------
```

```
## AIC                                51951.2486       51951.2486       51948.0233       51948.0233
## Log Likelihood                    -25911.6243      -25911.6243      -25904.0117      -25904.0117
## Num. obs.                          24147            24147            24147            24147
## K                                      3                3                3                3
## ==========================================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

```
extout <- function(gender,ageset,sub=1) {

  if (gender=="Male") sifcct$gender <- sifcct$female
  if (gender=="Female") sifcct$gender <- sifcct$male
  sifcct$ageset <- (sifcct$age - ageset)/10

  if (sub==1) {
    # modset <- multinom(foreignsuff3x ~ edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
    #                      I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10
    #                      as.factor(wave), data=sifcct[which(sifcct$age - sifcct$lvlen<=15),],
    #                    Hess = TRUE)
    sifcct.mlogit.tmp <- dfidx(sifcct[which(sifcct$age - sifcct$lvlen<=15),],
                               shape = "wide", choice = "foreignsuff3x")
    # levels(sifcct.mlogit.tmp$idx$id2) <- c("Disagree","Neither","Agree")
    modset <- mlogit(foreignsuff3x ~ 0 | edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
                     I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
                     as.factor(wave), data=sifcct.mlogit.tmp, reflevel = "Disagree")
    subname = "Stayed"
  } else {
    # modset <- multinom(foreignsuff3x ~ edu2 * gender * ageset + lvpr + as.factor(wave),
    #                    data=sifcct[which(sifcct$age - sifcct$lvlen>=23),],
    #                    Hess = TRUE)
    sifcct.mlogit.tmp <- dfidx(sifcct[which(sifcct$age - sifcct$lvlen>=23),],
                               shape = "wide", choice = "foreignsuff3x")
    # levels(sifcct.mlogit.tmp$idx$id2) <- c("Disagree","Neither","Agree")
    modset <- mlogit(foreignsuff3x ~ 0 | edu2 * gender * ageset + lvpr + as.factor(wave),
                     data=sifcct.mlogit.tmp, reflevel = "Disagree")
    subname = "Moved"
  }

  # modres <- extract(modset)

  # res <- c(gender,ageset,modres@coef[grep("^Agree: edu2$",modres@coef.names)],
  #          modres@coef[grep("^Agree: edu2$",modres@coef.names)] - qnorm(0.975)*modres@se[grep("^Agree
  #          modres@coef[grep("^Agree: edu2$",modres@coef.names)] + qnorm(0.975)*modres@se[grep("^Agree
  #          modres@coef[grep("^Agree: edu2$",modres@coef.names)] - qnorm(0.95)*modres@se[grep("^Agree:
  #          modres@coef[grep("^Agree: edu2$",modres@coef.names)] + qnorm(0.95)*modres@se[grep("^Agree:
  #          modres@se[grep("^Agree: edu2$",modres@coef.names)],
  #          modres@pvalues[grep("^Agree: edu2$",modres@coef.names)],
  #          subname)
  res <- c(gender,ageset,coef(modset)[3],
           coefci(modset, vcov=sandwich, level = 0.95)[3,],
           coefci(modset, vcov=sandwich, level = 0.90)[3,],
           coeftest(modset, vcov=sandwich)[3,c(2,4)],
           subname)

  names(res) <- c("gender","age","est","lci95","uci95","lci90","uci90","se","p","lv")
```

```
  return(res)

}

outdt0xm <- rbind(extout("Female",25,2),
                  extout("Female",35,2),
                  extout("Female",45,2),
                  extout("Female",55,2),
                  extout("Female",65,2),
                  extout("Male",25,2),
                  extout("Male",35,2),
                  extout("Male",45,2),
                  extout("Male",55,2),
                  extout("Male",65,2))
outdt0xm <- as.data.frame(outdt0xm)
for(i in 2:9) outdt0xm[,i] <- as.numeric(outdt0xm[,i])
outdt0xm$gender <- factor(outdt0xm$gender, levels=unique(outdt0xm$gender))
summary(outdt0xm)
```

```
##     gender       age          est                lci95              uci95               lci90
##  Female:5   Min.   :25   Min.   :-0.243140   Min.   :-0.47155   Min.   :-0.021194   Min.   :-0.43483
##  Male  :5   1st Qu.:35   1st Qu.:-0.166098   1st Qu.:-0.31315   1st Qu.:-0.005643   1st Qu.:-0.28920
##             Median :45   Median :-0.073352   Median :-0.18847   Median : 0.042493   Median :-0.17057
##             Mean   :45   Mean   :-0.056795   Mean   :-0.20097   Mean   : 0.087382   Mean   :-0.17779
##             3rd Qu.:55   3rd Qu.: 0.005561   3rd Qu.:-0.10201   3rd Qu.: 0.129604   3rd Qu.:-0.08472
##             Max.   :65   Max.   : 0.195778   Max.   : 0.02856   Max.   : 0.363000   Max.   : 0.05544
##      uci90                se                p                lv
##  Min.   :-0.05145   Min.   :0.04746   Min.   :0.02175   Length:10
##  1st Qu.:-0.02656   1st Qu.:0.05482   1st Qu.:0.02910   Class :character
##  Median : 0.02387   Median :0.06967   Median :0.07742   Mode  :character
##  Mean   : 0.06420   Mean   :0.07356   Mean   :0.25585
##  3rd Qu.: 0.10943   3rd Qu.:0.08443   3rd Qu.:0.21760
##  Max.   : 0.33611   Max.   :0.11653   Max.   :0.96055
```

Mediator Models

Knowledge

```
s0mmx01_10 <- lm(update(knowledge ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx01_1A <- lm(update(knowledge ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx01_1B <- lm(update(knowledge ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx01_1C <- lm(update(knowledge ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(s0mmx01_10,s0mmx01_1A,s0mmx01_1B,s0mmx01_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s0mmx01_10,vcov.=vcovHC(s0mmx01_10))[,2],
                             coeftest(s0mmx01_1A,vcov.=vcovHC(s0mmx01_1A))[,2],
                             coeftest(s0mmx01_1B,vcov.=vcovHC(s0mmx01_1B))[,2],
                             coeftest(s0mmx01_1C,vcov.=vcovHC(s0mmx01_1C))[,2]),
          override.pvalues = list(coeftest(s0mmx01_10,vcov.=vcovHC(s0mmx01_10))[,4],
                                  coeftest(s0mmx01_1A,vcov.=vcovHC(s0mmx01_1A))[,4],
                                  coeftest(s0mmx01_1B,vcov.=vcovHC(s0mmx01_1B))[,4],
                                  coeftest(s0mmx01_1C,vcov.=vcovHC(s0mmx01_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
```

```
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ============================================================================================
##                                    Base            ZIP             Municipality    Full
## --------------------------------------------------------------------------------------------
## University education                0.1545 ***      0.1438 ***      0.1467 ***      0.1436 ***
##                                    (0.0058)        (0.0059)        (0.0059)        (0.0059)
## Gender (male)                       0.1738 ***      0.1781 ***      0.1767 ***      0.1780 ***
##                                    (0.0069)        (0.0069)        (0.0069)        (0.0069)
## Age (by 10 years, centered at 45)   0.0668 ***      0.0656 ***      0.0658 ***      0.0655 ***
##                                    (0.0032)        (0.0032)        (0.0032)        (0.0032)
## University * Male                   0.0035          0.0017          0.0023          0.0018
##                                    (0.0088)        (0.0087)        (0.0087)        (0.0087)
## University * Age                   -0.0119 *       -0.0123 **      -0.0116 *       -0.0121 **
##                                    (0.0047)        (0.0047)        (0.0047)        (0.0047)
## University * Male * Age            -0.0238 ***     -0.0238 ***     -0.0244 ***     -0.0240 ***
##                                    (0.0065)        (0.0065)        (0.0065)        (0.0065)
## Male * Age                          0.0196 ***      0.0199 ***      0.0200 ***      0.0199 ***
##                                    (0.0050)        (0.0049)        (0.0049)        (0.0049)
## % of Life Residing Locally (zip)   -0.0369 **      -0.0235 +       -0.0307 *       -0.0250 *
##                                    (0.0127)        (0.0127)        (0.0127)        (0.0127)
## DID residence (zip)                                 0.0079 +                        0.0108 +
##                                                    (0.0047)                        (0.0056)
## Foreigner % sqrt. (zip)                             0.0092 **                       0.0068
##                                                    (0.0032)                        (0.0046)
## University % by 10% (zip)                           0.0234 ***                      0.0179 ***
##                                                    (0.0021)                        (0.0030)
## DID proportion (mun.)                                                -0.0041        -0.0135
##                                                                      (0.0086)        (0.0101)
## Foreigner % sqrt. (mun.)                                              0.0086 +        0.0028
##                                                                      (0.0044)        (0.0061)
## University % by 10% (mun.)                                            0.0298 ***      0.0118 **
##                                                                      (0.0032)        (0.0044)
## --------------------------------------------------------------------------------------------
## R^2                                 0.2267          0.2325          0.2312          0.2328
## Adj. R^2                            0.2258          0.2315          0.2302          0.2317
## Num. obs.                          24147           24147           24147           24147
## ============================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Ideology

```
s0mmx02_10 <- lm(update(ideology ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx02_1A <- lm(update(ideology ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx02_1B <- lm(update(ideology ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx02_1C <- lm(update(ideology ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(s0mmx02_10,s0mmx02_1A,s0mmx02_1B,s0mmx02_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s0mmx02_10,vcov.=vcovHC(s0mmx02_10))[,2],
                             coeftest(s0mmx02_1A,vcov.=vcovHC(s0mmx02_1A))[,2],
                             coeftest(s0mmx02_1B,vcov.=vcovHC(s0mmx02_1B))[,2],
                             coeftest(s0mmx02_1C,vcov.=vcovHC(s0mmx02_1C))[,2]),
          override.pvalues = list(coeftest(s0mmx02_10,vcov.=vcovHC(s0mmx02_10))[,4],
```

```
                                  coeftest(s0mmx02_1A,vcov.=vcovHC(s0mmx02_1A))[,4],
                                  coeftest(s0mmx02_1B,vcov.=vcovHC(s0mmx02_1B))[,4],
                                  coeftest(s0mmx02_1C,vcov.=vcovHC(s0mmx02_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ============================================================================================
##                                    Base            ZIP             Municipality    Full
## --------------------------------------------------------------------------------------------
## University education                -0.0132 ***     -0.0130 ***     -0.0125 **      -0.0129 ***
##                                     (0.0039)        (0.0039)        (0.0039)        (0.0039)
## Gender (male)                       -0.0377 ***     -0.0378 ***     -0.0379 ***     -0.0379 ***
##                                     (0.0052)        (0.0052)        (0.0052)        (0.0052)
## Age (by 10 years, centered at 45)   -0.0082 ***     -0.0083 ***     -0.0081 ***     -0.0082 ***
##                                     (0.0022)        (0.0022)        (0.0022)        (0.0022)
## University * Male                    0.0229 ***      0.0229 ***      0.0230 ***      0.0230 ***
##                                     (0.0065)        (0.0065)        (0.0065)        (0.0065)
## University * Age                    -0.0061 +       -0.0059 +       -0.0061 +       -0.0060 +
##                                     (0.0032)        (0.0032)        (0.0032)        (0.0032)
## University * Male * Age             -0.0025         -0.0028         -0.0024         -0.0026
##                                     (0.0050)        (0.0050)        (0.0050)        (0.0050)
## Male * Age                           0.0144 ***      0.0146 ***      0.0144 ***      0.0145 ***
##                                     (0.0039)        (0.0039)        (0.0039)        (0.0039)
## % of Life Residing Locally (zip)     0.0184 +        0.0184 +        0.0178 +        0.0182 +
##                                     (0.0098)        (0.0098)        (0.0098)        (0.0098)
## DID residence (zip)                                  0.0096 **                       0.0144 ***
##                                                     (0.0036)                        (0.0043)
## Foreigner % sqrt. (zip)                             -0.0017                          0.0001
##                                                     (0.0025)                        (0.0035)
## University % by 10% (zip)                           -0.0023                         -0.0003
##                                                     (0.0016)                        (0.0023)
## DID proportion (mun.)                                                -0.0009        -0.0146 +
##                                                                      (0.0065)        (0.0077)
## Foreigner % sqrt. (mun.)                                             -0.0012        -0.0016
##                                                                      (0.0035)        (0.0047)
## University % by 10% (mun.)                                           -0.0023        -0.0020
##                                                                      (0.0024)        (0.0033)
## --------------------------------------------------------------------------------------------
## R^2                                  0.0069          0.0072          0.0069          0.0074
## Adj. R^2                             0.0057          0.0059          0.0057          0.0060
## Num. obs.                           24147           24147           24147           24147
## ============================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

LDP - DPJ FT

```
s0mmx03_10 <- lm(update(ldpdpjft ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx03_1A <- lm(update(ldpdpjft ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx03_1B <- lm(update(ldpdpjft ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx03_1C <- lm(update(ldpdpjft ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(s0mmx03_10,s0mmx03_1A,s0mmx03_1B,s0mmx03_1C), digits = 4, #single.row = T,
```

```
          override.se = list(coeftest(s0mmx03_10,vcov.=vcovHC(s0mmx03_10))[,2],
                             coeftest(s0mmx03_1A,vcov.=vcovHC(s0mmx03_1A))[,2],
                             coeftest(s0mmx03_1B,vcov.=vcovHC(s0mmx03_1B))[,2],
                             coeftest(s0mmx03_1C,vcov.=vcovHC(s0mmx03_1C))[,2]),
          override.pvalues = list(coeftest(s0mmx03_10,vcov.=vcovHC(s0mmx03_10))[,4],
                                  coeftest(s0mmx03_1A,vcov.=vcovHC(s0mmx03_1A))[,4],
                                  coeftest(s0mmx03_1B,vcov.=vcovHC(s0mmx03_1B))[,4],
                                  coeftest(s0mmx03_1C,vcov.=vcovHC(s0mmx03_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ============================================================================================
##                                    Base            ZIP             Municipality    Full
## --------------------------------------------------------------------------------------------
## University education                  -0.0122 ***     -0.0131 ***     -0.0125 ***     -0.0131 ***
##                                       (0.0030)        (0.0030)        (0.0030)        (0.0030)
## Gender (male)                          0.0195 ***      0.0198 ***      0.0197 ***      0.0198 ***
##                                       (0.0037)        (0.0037)        (0.0037)        (0.0037)
## Age (by 10 years, centered at 45)      0.0018          0.0016          0.0017          0.0016
##                                       (0.0017)        (0.0017)        (0.0017)        (0.0017)
## University * Male                      0.0093 +        0.0091 +        0.0092 +        0.0091 +
##                                       (0.0047)        (0.0047)        (0.0047)        (0.0047)
## University * Age                      -0.0097 ***     -0.0095 ***     -0.0096 ***     -0.0096 ***
##                                       (0.0025)        (0.0025)        (0.0025)        (0.0025)
## University * Male * Age                0.0028          0.0027          0.0027          0.0027
##                                       (0.0038)        (0.0038)        (0.0038)        (0.0038)
## Male * Age                            -0.0072 *       -0.0070 *       -0.0070 *       -0.0070 *
##                                       (0.0029)        (0.0029)        (0.0029)        (0.0029)
## % of Life Residing Locally (zip)      -0.0062         -0.0046         -0.0056         -0.0043
##                                       (0.0075)        (0.0075)        (0.0075)        (0.0075)
## DID residence (zip)                                    0.0062 *                        0.0071 *
##                                                       (0.0028)                        (0.0033)
## Foreigner % sqrt. (zip)                                0.0038 *                        0.0049 +
##                                                       (0.0019)                        (0.0027)
## University % by 10% (zip)                              0.0001                          0.0018
##                                                       (0.0012)                        (0.0018)
## DID proportion (mun.)                                                  0.0050          -0.0019
##                                                                       (0.0049)        (0.0058)
## Foreigner % sqrt. (mun.)                                               0.0036          -0.0010
##                                                                       (0.0026)        (0.0036)
## University % by 10% (mun.)                                            -0.0011          -0.0031
##                                                                       (0.0018)        (0.0025)
## --------------------------------------------------------------------------------------------
## R^2                                    0.1203          0.1207          0.1204          0.1208
## Adj. R^2                               0.1192          0.1196          0.1193          0.1196
## Num. obs.                             24147           24147           24147           24147
## ============================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Favorability of South Korea

```
s0mmx04_10 <- lm(update(familiarityFT_KOR ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s0mmx04_1A <- lm(update(familiarityFT_KOR ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s0mmx04_1B <- lm(update(familiarityFT_KOR ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s0mmx04_1C <- lm(update(familiarityFT_KOR ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
screenreg(list(s0mmx04_10,s0mmx04_1A,s0mmx04_1B,s0mmx04_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s0mmx04_10,vcov.=vcovHC(s0mmx04_10))[,2],
                             coeftest(s0mmx04_1A,vcov.=vcovHC(s0mmx04_1A))[,2],
                             coeftest(s0mmx04_1B,vcov.=vcovHC(s0mmx04_1B))[,2],
                             coeftest(s0mmx04_1C,vcov.=vcovHC(s0mmx04_1C))[,2]),
          override.pvalues = list(coeftest(s0mmx04_10,vcov.=vcovHC(s0mmx04_10))[,4],
                                  coeftest(s0mmx04_1A,vcov.=vcovHC(s0mmx04_1A))[,4],
                                  coeftest(s0mmx04_1B,vcov.=vcovHC(s0mmx04_1B))[,4],
                                  coeftest(s0mmx04_1C,vcov.=vcovHC(s0mmx04_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ============================================================================================
##                                    Base            ZIP             Municipality    Full
## --------------------------------------------------------------------------------------------
## University education                0.0100 *       0.0104 *        0.0099 +        0.0103 *
##                                    (0.0050)        (0.0051)        (0.0050)        (0.0051)
## Gender (male)                      -0.0589 ***     -0.0591 ***     -0.0590 ***     -0.0591 ***
##                                    (0.0057)        (0.0057)        (0.0057)        (0.0058)
## Age (by 10 years, centered at 45)  -0.0015         -0.0014         -0.0015         -0.0014
##                                    (0.0027)        (0.0027)        (0.0027)        (0.0027)
## University * Male                   0.0077          0.0078          0.0078          0.0078
##                                    (0.0074)        (0.0074)        (0.0074)        (0.0074)
## University * Age                   -0.0001         -0.0002         -0.0001         -0.0001
##                                    (0.0040)        (0.0040)        (0.0040)        (0.0040)
## University * Male * Age             0.0004          0.0006          0.0005          0.0005
##                                    (0.0057)        (0.0057)        (0.0057)        (0.0057)
## Male * Age                          0.0272 ***      0.0271 ***      0.0272 ***      0.0271 ***
##                                    (0.0043)        (0.0043)        (0.0043)        (0.0043)
## % of Life Residing Locally (zip)   -0.0209 +       -0.0218 *       -0.0215 *       -0.0222 *
##                                    (0.0108)        (0.0109)        (0.0108)        (0.0109)
## DID residence (zip)                                -0.0083 *                       -0.0082 +
##                                                    (0.0041)                        (0.0049)
## Foreigner % sqrt. (zip)                             0.0004                         -0.0023
##                                                    (0.0028)                        (0.0039)
## University % by 10% (zip)                           0.0005                         -0.0009
##                                                    (0.0018)                        (0.0026)
## DID proportion (mun.)                                                -0.0092        -0.0013
##                                                                      (0.0073)        (0.0087)
## Foreigner % sqrt. (mun.)                                             0.0025          0.0048
##                                                                      (0.0039)        (0.0052)
## University % by 10% (mun.)                                           0.0016          0.0026
##                                                                      (0.0027)        (0.0038)
## --------------------------------------------------------------------------------------------
## R^2                                0.0684          0.0686          0.0685          0.0686
## Adj. R^2                           0.0673          0.0674          0.0673          0.0673
```

```
## Num. obs.                          24147          24147          24147          24147
## ================================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Favorability of China

```
s0mmx05_10 <- lm(update(familiarityFT_CHN ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s0mmx05_1A <- lm(update(familiarityFT_CHN ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s0mmx05_1B <- lm(update(familiarityFT_CHN ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s0mmx05_1C <- lm(update(familiarityFT_CHN ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
screenreg(list(s0mmx05_10,s0mmx05_1A,s0mmx05_1B,s0mmx05_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s0mmx05_10,vcov.=vcovHC(s0mmx05_10))[,2],
                             coeftest(s0mmx05_1A,vcov.=vcovHC(s0mmx05_1A))[,2],
                             coeftest(s0mmx05_1B,vcov.=vcovHC(s0mmx05_1B))[,2],
                             coeftest(s0mmx05_1C,vcov.=vcovHC(s0mmx05_1C))[,2]),
          override.pvalues = list(coeftest(s0mmx05_10,vcov.=vcovHC(s0mmx05_10))[,4],
                                  coeftest(s0mmx05_1A,vcov.=vcovHC(s0mmx05_1A))[,4],
                                  coeftest(s0mmx05_1B,vcov.=vcovHC(s0mmx05_1B))[,4],
                                  coeftest(s0mmx05_1C,vcov.=vcovHC(s0mmx05_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ================================================================================================
##                                    Base            ZIP             Municipality    Full
## ------------------------------------------------------------------------------------------------
## University education                0.0201 ***      0.0196 ***      0.0190 ***      0.0194 ***
##                                    (0.0043)        (0.0043)        (0.0043)        (0.0043)
## Gender (male)                      -0.0137 **      -0.0136 **      -0.0134 **      -0.0136 **
##                                    (0.0049)        (0.0050)        (0.0050)        (0.0050)
## Age (by 10 years, centered at 45)  -0.0000         -0.0001         -0.0001         -0.0001
##                                    (0.0024)        (0.0024)        (0.0024)        (0.0024)
## University * Male                   0.0029          0.0029          0.0028          0.0029
##                                    (0.0064)        (0.0064)        (0.0064)        (0.0064)
## University * Age                   -0.0024         -0.0024         -0.0023         -0.0022
##                                    (0.0034)        (0.0034)        (0.0034)        (0.0034)
## University * Male * Age             0.0014          0.0015          0.0014          0.0013
##                                    (0.0049)        (0.0049)        (0.0049)        (0.0049)
## Male * Age                          0.0070 +        0.0070 +        0.0071 +        0.0071 +
##                                    (0.0037)        (0.0037)        (0.0037)        (0.0037)
## % of Life Residing Locally (zip)   -0.0257 **      -0.0250 **      -0.0252 **      -0.0259 **
##                                    (0.0094)        (0.0094)        (0.0094)        (0.0094)
## DID residence (zip)                                -0.0022                         -0.0014
##                                                    (0.0035)                        (0.0041)
## Foreigner % sqrt. (zip)                             0.0027                         -0.0008
##                                                    (0.0024)                        (0.0033)
## University % by 10% (zip)                           0.0009                         -0.0024
##                                                    (0.0016)                        (0.0022)
## DID proportion (mun.)                                                -0.0064        -0.0052
##                                                                      (0.0064)        (0.0075)
## Foreigner % sqrt. (mun.)                                              0.0049          0.0055
##                                                                      (0.0034)        (0.0046)
## University % by 10% (mun.)                                            0.0042 +        0.0066 *
```

```
##                                                                                  (0.0024)        (0.0033)
## ---------------------------------------------------------------------------------------------------------
## R^2                                      0.0241          0.0242          0.0244          0.0244
## Adj. R^2                                 0.0230          0.0229          0.0231          0.0231
## Num. obs.                            24147           24147           24147           24147
## =========================================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Favorability of USA

```
s0mmx06_10 <- lm(update(familiarityFT_USA ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s0mmx06_1A <- lm(update(familiarityFT_USA ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s0mmx06_1B <- lm(update(familiarityFT_USA ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s0mmx06_1C <- lm(update(familiarityFT_USA ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
screenreg(list(s0mmx06_10,s0mmx06_1A,s0mmx06_1B,s0mmx06_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s0mmx06_10,vcov.=vcovHC(s0mmx06_10))[,2],
                             coeftest(s0mmx06_1A,vcov.=vcovHC(s0mmx06_1A))[,2],
                             coeftest(s0mmx06_1B,vcov.=vcovHC(s0mmx06_1B))[,2],
                             coeftest(s0mmx06_1C,vcov.=vcovHC(s0mmx06_1C))[,2]),
          override.pvalues = list(coeftest(s0mmx06_10,vcov.=vcovHC(s0mmx06_10))[,4],
                                  coeftest(s0mmx06_1A,vcov.=vcovHC(s0mmx06_1A))[,4],
                                  coeftest(s0mmx06_1B,vcov.=vcovHC(s0mmx06_1B))[,4],
                                  coeftest(s0mmx06_1C,vcov.=vcovHC(s0mmx06_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ==========================================================================================================
##                                      Base            ZIP             Municipality    Full
## ----------------------------------------------------------------------------------------------------------
## University education                  0.0128 **       0.0090 *        0.0104 *        0.0091 *
##                                      (0.0041)        (0.0041)        (0.0041)        (0.0041)
## Gender (male)                         0.0061          0.0077          0.0070          0.0077
##                                      (0.0052)        (0.0052)        (0.0052)        (0.0052)
## Age (by 10 years, centered at 45)     0.0080 ***      0.0076 ***      0.0077 ***      0.0076 ***
##                                      (0.0023)        (0.0023)        (0.0023)        (0.0023)
## University * Male                     0.0215 ***      0.0209 **       0.0211 **       0.0209 **
##                                      (0.0065)        (0.0065)        (0.0065)        (0.0065)
## University * Age                     -0.0045         -0.0048         -0.0044         -0.0048
##                                      (0.0032)        (0.0032)        (0.0032)        (0.0032)
## University * Male * Age              -0.0034         -0.0032         -0.0036         -0.0033
##                                      (0.0049)        (0.0049)        (0.0049)        (0.0049)
## Male * Age                            0.0207 ***      0.0206 ***      0.0208 ***      0.0207 ***
##                                      (0.0038)        (0.0038)        (0.0038)        (0.0038)
## % of Life Residing Locally (zip)     -0.0151         -0.0107         -0.0130         -0.0104
##                                      (0.0095)        (0.0095)        (0.0095)        (0.0095)
## DID residence (zip)                                  -0.0036                         -0.0058
##                                                      (0.0036)                        (0.0043)
## Foreigner % sqrt. (zip)                               0.0030                          0.0025
##                                                      (0.0025)                        (0.0034)
## University % by 10% (zip)                             0.0096 ***                      0.0098 ***
##                                                      (0.0016)                        (0.0023)
## DID proportion (mun.)                                                 0.0014          0.0075
```

```
##                                                                    (0.0065)        (0.0076)
## Foreigner % sqrt. (mun.)                                            0.0024          0.0006
##                                                                    (0.0035)        (0.0047)
## University % by 10% (mun.)                                          0.0086 ***     -0.0012
##                                                                    (0.0024)        (0.0033)
## ------------------------------------------------------------------------------------------
## R^2                                  0.0324          0.0341          0.0334          0.0341
## Adj. R^2                             0.0313          0.0328          0.0321          0.0328
## Num. obs.                         24147           24147           24147           24147
## ==========================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Income

```
s0mmx07_10 <- lm(update(income ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx07_1A <- lm(update(income ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx07_1B <- lm(update(income ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s0mmx07_1C <- lm(update(income ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(s0mmx07_10,s0mmx07_1A,s0mmx07_1B,s0mmx07_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s0mmx07_10,vcov.=vcovHC(s0mmx07_10))[,2],
                             coeftest(s0mmx07_1A,vcov.=vcovHC(s0mmx07_1A))[,2],
                             coeftest(s0mmx07_1B,vcov.=vcovHC(s0mmx07_1B))[,2],
                             coeftest(s0mmx07_1C,vcov.=vcovHC(s0mmx07_1C))[,2]),
          override.pvalues = list(coeftest(s0mmx07_10,vcov.=vcovHC(s0mmx07_10))[,4],
                                  coeftest(s0mmx07_1A,vcov.=vcovHC(s0mmx07_1A))[,4],
                                  coeftest(s0mmx07_1B,vcov.=vcovHC(s0mmx07_1B))[,4],
                                  coeftest(s0mmx07_1C,vcov.=vcovHC(s0mmx07_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ==========================================================================================
##                                    Base            ZIP             Municipality    Full
## ------------------------------------------------------------------------------------------
## University education                0.0961 ***      0.0747 ***      0.0807 ***      0.0742 ***
##                                    (0.0054)        (0.0053)        (0.0053)        (0.0053)
## Gender (male)                      -0.0430 ***     -0.0342 ***     -0.0374 ***     -0.0340 ***
##                                    (0.0059)        (0.0058)        (0.0058)        (0.0058)
## Age (by 10 years, centered at 45)  -0.0049 +       -0.0072 *       -0.0069 *       -0.0072 *
##                                    (0.0028)        (0.0028)        (0.0028)        (0.0028)
## University * Male                   0.0385 ***      0.0350 ***      0.0362 ***      0.0351 ***
##                                    (0.0078)        (0.0076)        (0.0077)        (0.0076)
## University * Age                    0.0332 ***      0.0320 ***      0.0342 ***      0.0325 ***
##                                    (0.0044)        (0.0043)        (0.0044)        (0.0043)
## University * Male * Age            -0.0167 **      -0.0160 **      -0.0178 **      -0.0168 **
##                                    (0.0060)        (0.0060)        (0.0060)        (0.0060)
## Male * Age                         -0.0056         -0.0055         -0.0045         -0.0051
##                                    (0.0043)        (0.0043)        (0.0043)        (0.0043)
## % of Life Residing Locally (zip)    0.1046 ***      0.1305 ***      0.1169 ***      0.1279 ***
##                                    (0.0127)        (0.0125)        (0.0126)        (0.0125)
## DID residence (zip)                                -0.0031                         -0.0028
##                                                    (0.0044)                        (0.0052)
## Foreigner % sqrt. (zip)                             0.0169 ***                     -0.0042
```

```
##                                                  (0.0031)                    (0.0042)
## University % by 10% (zip)                         0.0514 ***                  0.0455 ***
##                                                  (0.0020)                    (0.0029)
## DID proportion (mun.)                                                -0.0118  -0.0055
##                                                                      (0.0080) (0.0094)
## Foreigner % sqrt. (mun.)                                              0.0326 ***  0.0386 ***
##                                                                      (0.0043) (0.0059)
## University % by 10% (mun.)                                            0.0549 ***  0.0095 *
##                                                                      (0.0031) (0.0042)
## ---------------------------------------------------------------------------------------------
## R^2                                  0.0537      0.0847      0.0765      0.0866
## Adj. R^2                             0.0526      0.0835      0.0754      0.0853
## Num. obs.                         24147       24147       24147       24147
## =============================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

With Matched Data (Without Distance Adjustment)

```
sifcct <- readRDS(datadir1x)
sifcct$agex <- sifcct$age/10 - 4.5
sifcct$ldpdpjft <- original$ldpdpjft[match(paste(sifcct$id,sifcct$wave),paste(original$id,original$wave
summary(sifcct$ldpdpjft)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  0.0000  0.5000  0.5000  0.5564  0.6500  1.0000
```

```
sifcct$income <- original$income[match(paste(sifcct$id,sifcct$wave),paste(original$id,original$wave))]
summary(sifcct$income)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.04098 0.18484 0.40915 0.50495 0.78565 0.97505
```

Outcome Model

```
## Living in Local ZIP since at least age 15 ##

s1mox_10 <- lm(update(foreignsuff ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mox_1A <- lm(update(foreignsuff ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mox_1B <- lm(update(foreignsuff ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mox_1C <- lm(update(foreignsuff ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(s1mox_10,s1mox_1A,s1mox_1B,s1mox_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s1mox_10,vcov.=vcovHC(s1mox_10))[,2],
                             coeftest(s1mox_1A,vcov.=vcovHC(s1mox_1A))[,2],
                             coeftest(s1mox_1B,vcov.=vcovHC(s1mox_1B))[,2],
                             coeftest(s1mox_1C,vcov.=vcovHC(s1mox_1C))[,2]),
          override.pvalues = list(coeftest(s1mox_10,vcov.=vcovHC(s1mox_10))[,4],
                                  coeftest(s1mox_1A,vcov.=vcovHC(s1mox_1A))[,4],
                                  coeftest(s1mox_1B,vcov.=vcovHC(s1mox_1B))[,4],
                                  coeftest(s1mox_1C,vcov.=vcovHC(s1mox_1C))[,4]),
          omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
```

```
## ================================================================================================
##                                    Base            ZIP             Municipality    Full
## ------------------------------------------------------------------------------------------------
## University education                -0.0063         -0.0048         -0.0057         -0.0048
##                                     (0.0071)        (0.0072)        (0.0072)        (0.0072)
## Gender (male)                       -0.0589 ***     -0.0592 ***     -0.0590 ***     -0.0591 ***
##                                     (0.0081)        (0.0081)        (0.0081)        (0.0081)
## Age (by 10 years, centered at 45)   -0.0091 *       -0.0088 *       -0.0092 *       -0.0090 *
##                                     (0.0044)        (0.0044)        (0.0045)        (0.0045)
## University * Male                   -0.0238 *       -0.0234 *       -0.0238 *       -0.0236 *
##                                     (0.0118)        (0.0118)        (0.0118)        (0.0118)
## University * Age                     0.0075          0.0070          0.0072          0.0071
##                                     (0.0060)        (0.0060)        (0.0060)        (0.0060)
## University * Male * Age              0.0039          0.0042          0.0040          0.0041
##                                     (0.0091)        (0.0091)        (0.0091)        (0.0091)
## Male * Age                           0.0118 +        0.0113 +        0.0116 +        0.0114 +
##                                     (0.0063)        (0.0063)        (0.0063)        (0.0063)
## % of Life Residing Locally (zip)    -0.0067         -0.0103         -0.0075         -0.0096
##                                     (0.0192)        (0.0192)        (0.0192)        (0.0193)
## DID residence (zip)                                 -0.0139 *                       -0.0200 *
##                                                     (0.0069)                        (0.0082)
## Foreigner % sqrt. (zip)                             -0.0090 +                       -0.0070
##                                                     (0.0049)                        (0.0068)
## University % by 10% (zip)                            0.0016                         -0.0010
##                                                     (0.0032)                        (0.0045)
## DID proportion (mun.)                                                -0.0005         0.0188
##                                                                      (0.0126)        (0.0149)
## Foreigner % sqrt. (mun.)                                             -0.0133 *       -0.0064
##                                                                      (0.0067)        (0.0093)
## University % by 10% (mun.)                                           0.0019          0.0031
##                                                                      (0.0048)        (0.0066)
## ------------------------------------------------------------------------------------------------
## R^2                                  0.0133          0.0139          0.0136          0.0141
## Adj. R^2                             0.0115          0.0119          0.0116          0.0119
## Num. obs.                           15252           15252           15252           15252
## ================================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

```r
extout <- function(gender,ageset,sub=1) {

  if (gender=="Male") sifcct$gender <- sifcct$female
  if (gender=="Female") sifcct$gender <- sifcct$male
  sifcct$ageset <- (sifcct$age - ageset)/10

  if (sub==1) {
    modset <- lm(foreignsuff ~ edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
                   I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
                   as.factor(wave), data=sifcct[which(sifcct$age - sifcct$lvlen<=15),])
    subname = "Stayed"
  } else {
    modset <- lm(foreignsuff ~ edu2 * gender * ageset + lvpr + as.factor(wave),
                 data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
    subname = "Moved"
  }
```

```
  res <- c(gender,ageset,coef(modset)[2],
           coefci(modset, vcov.=vcovHC(modset), level = 0.95)[2,],
           coefci(modset, vcov.=vcovHC(modset), level = 0.90)[2,],
           coeftest(modset, vcov.=vcovHC(modset))[2,c(2,4)],
           subname)
  names(res) <- c("gender","age","est","lci95","uci95","lci90","uci90","se","p","lv")

  return(res)

}

outdt1x <- rbind(extout("Female",25,2),
                 extout("Female",35,2),
                 extout("Female",45,2),
                 extout("Female",55,2),
                 extout("Female",65,2),
                 extout("Male",25,2),
                 extout("Male",35,2),
                 extout("Male",45,2),
                 extout("Male",55,2),
                 extout("Male",65,2))
outdt1x <- as.data.frame(outdt1x)
for(i in 2:9) outdt1x[,i] <- as.numeric(outdt1x[,i])
outdt1x$gender <- factor(outdt1x$gender, levels=unique(outdt1x$gender))
summary(outdt1x)
```

```
##     gender       age          est                lci95              uci95               lci90
##  Female:5   Min.   :25   Min.   :-0.052828   Min.   :-0.09244   Min.   :-0.013634   Min.   :-0.08607
##  Male  :5   1st Qu.:35   1st Qu.:-0.027854   1st Qu.:-0.04975   1st Qu.:-0.009429   1st Qu.:-0.04553
##             Median :45   Median :-0.016217   Median :-0.03395   Median : 0.006637   Median :-0.03110
##             Mean   :45   Mean   :-0.018163   Mean   :-0.04119   Mean   : 0.004863   Mean   :-0.03749
##             3rd Qu.:55   3rd Qu.:-0.006526   3rd Qu.:-0.02278   3rd Qu.: 0.013895   3rd Qu.:-0.02017
##             Max.   :65   Max.   : 0.008715   Max.   :-0.01585   Max.   : 0.034568   Max.   :-0.01298
##      uci90                 se                  p                lv
##  Min.   :-0.019585   Min.   :0.007107   Min.   :0.001321   Length:10
##  1st Qu.:-0.012287   1st Qu.:0.008871   1st Qu.:0.012454   Class :character
##  Median : 0.002760   Median :0.010875   Median :0.156826   Mode  :character
##  Mean   : 0.001161   Mean   :0.011748   Mean   :0.266470
##  3rd Qu.: 0.010528   3rd Qu.:0.013936   3rd Qu.:0.475869
##  Max.   : 0.030411   Max.   :0.020209   Max.   :0.888705
```

Outcome Model 2

```
## Living in Local ZIP since at least age 15 ##

# require(nnet)
# s1mox2_10 <- multinom(update(foreignsuff3x ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvle
# s1mox2_1A <- multinom(update(foreignsuff3x ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvle
# s1mox2_1B <- multinom(update(foreignsuff3x ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvle
# s1mox2_1C <- multinom(update(foreignsuff3x ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvle

sifcct.mlogit <- dfidx(sifcct[which(sifcct$age - sifcct$lvlen>=23),],
```

```
                        shape = "wide", choice = "foreignsuff3x")
# # levels(sifcct.mlogit$idx$id2) <- c("Disagree","Neither","Agree")
s1mox2_10 <- mlogit(outmod0.mlogit, data=sifcct.mlogit, reflevel="Disagree")
s1mox2_1A <- mlogit(outmodA.mlogit, data=sifcct.mlogit, reflevel="Disagree")
s1mox2_1B <- mlogit(outmodB.mlogit, data=sifcct.mlogit, reflevel="Disagree")
s1mox2_1C <- mlogit(outmodC.mlogit, data=sifcct.mlogit, reflevel="Disagree")

screenreg(list(s1mox2_10,s1mox2_1A), digits = 4, #single.row = T,
          override.se = list(coeftest(s1mox2_10,vcov=sandwich)[grep(":Neither",names(coef(s1mox2_10))),
                             coeftest(s1mox2_10,vcov=sandwich)[grep(":Agree",names(coef(s1mox2_10))),2]
                             coeftest(s1mox2_1A,vcov=sandwich)[grep(":Neither",names(coef(s1mox2_1A))),
                             coeftest(s1mox2_1A,vcov=sandwich)[grep(":Agree",names(coef(s1mox2_1A))),2]
          override.pvalues = list(coeftest(s1mox2_10,vcov=sandwich)[grep(":Neither",names(coef(s1mox2_1
                                  coeftest(s1mox2_10,vcov=sandwich)[grep(":Agree",names(coef(s1mox2_10))
                                  coeftest(s1mox2_1A,vcov=sandwich)[grep(":Neither",names(coef(s1mox2_1A
                                  coeftest(s1mox2_1A,vcov=sandwich)[grep(":Agree",names(coef(s1mox2_1A))
          beside = T,
          omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.model.names = c("Base: Agree","Base: Neither",
                                 "ZIP: Agree","ZIP: Neither"),
          custom.coef.map = vnmap)
```

```
##
## ============================================================================================
##                                    Base: Agree      Base: Neither    ZIP: Agree       ZIP: Neither
## --------------------------------------------------------------------------------------------
## University education                -0.0154 ***      -0.3494          -0.0065 ***      -0.3375
##                                     (0.0563)         (0.0571)         (0.0570)         (0.0579)
## Gender (male)                       -0.3766 ***      -0.5889 ***      -0.3785 ***      -0.5919 ***
##                                     (0.0607)         (0.0627)         (0.0607)         (0.0628)
## Age (by 10 years, centered at 45)   -0.0666 ***      -0.1437 +        -0.0643 ***      -0.1432 +
##                                     (0.0350)         (0.0366)         (0.0351)         (0.0367)
## University * Male                   -0.1583           0.0201 +        -0.1560           0.0216 +
##                                     (0.0870)         (0.0873)         (0.0870)         (0.0874)
## University * Age                     0.0621 +         0.0857           0.0584 +         0.0844
##                                     (0.0469)         (0.0480)         (0.0469)         (0.0480)
## University * Male * Age              0.0235          -0.0014           0.0262          -0.0024
##                                     (0.0679)         (0.0676)         (0.0679)         (0.0676)
## Male * Age                           0.0966           0.0351 *         0.0933           0.0343 +
##                                     (0.0477)         (0.0487)         (0.0477)         (0.0487)
## % of Life Residing Locally (zip)    -0.0466           0.1499          -0.0701           0.1302
##                                     (0.1436)         (0.1383)         (0.1442)         (0.1389)
## DID residence (zip)                                                  -0.1058           0.0173 *
##                                                                      (0.0524)         (0.0511)
## Foreigner % sqrt. (zip)                                              -0.0553 *        -0.0738
##                                                                      (0.0366)         (0.0355)
## University % by 10% (zip)                                            0.0151          -0.0143
##                                                                      (0.0236)         (0.0234)
## --------------------------------------------------------------------------------------------
## AIC                                 32956.9671       32956.9671       32956.4506       32956.4506
## Log Likelihood                     -16420.4836      -16420.4836      -16414.2253      -16414.2253
## Num. obs.                           15252            15252            15252            15252
## K                                       3                3                3                3
## ============================================================================================
```

```
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

```
screenreg(list(s1mox2_1B,s1mox2_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s1mox2_1B,vcov=sandwich)[grep(":Neither",names(coef(s1mox2_1B))),1
                             coeftest(s1mox2_1B,vcov=sandwich)[grep(":Agree",names(coef(s1mox2_1B))),2]
                             coeftest(s1mox2_1C,vcov=sandwich)[grep(":Neither",names(coef(s1mox2_1C))),1
                             coeftest(s1mox2_1C,vcov=sandwich)[grep(":Agree",names(coef(s1mox2_1C))),2]]
          override.pvalues = list(coeftest(s1mox2_1B,vcov=sandwich)[grep(":Neither",names(coef(s1mox2_1
                                  coeftest(s1mox2_1B,vcov=sandwich)[grep(":Agree",names(coef(s1mox2_1B))
                                  coeftest(s1mox2_1C,vcov=sandwich)[grep(":Neither",names(coef(s1mox2_1C
                                  coeftest(s1mox2_1C,vcov=sandwich)[grep(":Agree",names(coef(s1mox2_1C))
          beside = T,
          omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Mun.: Agree","Mun.: Neither",
                                 "Full: Agree","Full: Neither"))
```

```
##
## ==========================================================================================
##                                    Mun.: Agree      Mun.: Neither    Full: Agree      Full: Neither
## ------------------------------------------------------------------------------------------
## University education                -0.0118 ***      -0.3405          -0.0063 ***      -0.3367
##                                     (0.0568)         (0.0577)         (0.0570)         (0.0579)
## Gender (male)                       -0.3769 ***      -0.5903 ***      -0.3770 ***      -0.5905 ***
##                                     (0.0607)         (0.0628)         (0.0607)         (0.0629)
## Age (by 10 years, centered at 45)   -0.0670 ***      -0.1445 +        -0.0655 ***      -0.1440 +
##                                     (0.0351)         (0.0367)         (0.0351)         (0.0367)
## University * Male                   -0.1587           0.0186 +        -0.1571           0.0201 +
##                                     (0.0870)         (0.0874)         (0.0870)         (0.0874)
## University * Age                     0.0607 +         0.0851           0.0595 +         0.0850
##                                     (0.0469)         (0.0480)         (0.0469)         (0.0480)
## University * Male * Age              0.0240          -0.0016           0.0248          -0.0030
##                                     (0.0679)         (0.0676)         (0.0680)         (0.0676)
## Male * Age                           0.0958           0.0356 *         0.0946           0.0354 +
##                                     (0.0477)         (0.0487)         (0.0477)         (0.0487)
## % of Life Residing Locally (zip)    -0.0493           0.1521          -0.0637           0.1389
##                                     (0.1440)         (0.1386)         (0.1444)         (0.1391)
## DID residence (zip)                                                  -0.1606          -0.0330 **
##                                                                      (0.0618)         (0.0605)
## Foreigner % sqrt. (zip)                                              -0.0594          -0.0788
##                                                                      (0.0519)         (0.0505)
## University % by 10% (zip)                                            0.0043          -0.0073
##                                                                      (0.0336)         (0.0333)
## DID proportion (mun.)                0.0201           0.1358           0.1757           0.1708
##                                     (0.0942)         (0.0925)         (0.1109)         (0.1092)
## Foreigner % sqrt. (mun.)            -0.0690          -0.0727          -0.0092           0.0016
##                                     (0.0496)         (0.0487)         (0.0692)         (0.0682)
## University % by 10% (mun.)           0.0032          -0.0420          -0.0000          -0.0333
##                                     (0.0357)         (0.0352)         (0.0493)         (0.0485)
## ------------------------------------------------------------------------------------------
## AIC                                32963.5875       32963.5875       32964.1731       32964.1731
## Log Likelihood                    -16417.7937      -16417.7937      -16412.0865      -16412.0865
## Num. obs.                          15252            15252            15252            15252
## K                                      3                3                3                3
## ==========================================================================================
```

```
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
extout <- function(gender,ageset,sub=1) {

  if (gender=="Male") sifcct$gender <- sifcct$female
  if (gender=="Female") sifcct$gender <- sifcct$male
  sifcct$ageset <- (sifcct$age - ageset)/10

  if (sub==1) {
    # modset <- multinom(foreignsuff3x ~ edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
    #                      I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10
    #                      as.factor(wave), data=sifcct[which(sifcct$age - sifcct$lvlen<=15),],
    #                    Hess = TRUE)
    sifcct.mlogit.tmp <- dfidx(sifcct[which(sifcct$age - sifcct$lvlen<=15),],
                               shape = "wide", choice = "foreignsuff3x")
    # levels(sifcct.mlogit.tmp$idx$id2) <- c("Disagree","Neither","Agree")
    modset <- mlogit(foreignsuff3x ~ 0 | edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
                       I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
                       as.factor(wave), data=sifcct.mlogit.tmp, reflevel = "Disagree")
    subname = "Stayed"
  } else {
    # modset <- multinom(foreignsuff3x ~ edu2 * gender * ageset + lvpr + as.factor(wave),
    #                    data=sifcct[which(sifcct$age - sifcct$lvlen>=23),],
    #                    Hess = TRUE)
    sifcct.mlogit.tmp <- dfidx(sifcct[which(sifcct$age - sifcct$lvlen>=23),],
                               shape = "wide", choice = "foreignsuff3x")
    # levels(sifcct.mlogit.tmp$idx$id2) <- c("Disagree","Neither","Agree")
    modset <- mlogit(foreignsuff3x ~ 0 | edu2 * gender * ageset + lvpr + as.factor(wave),
                     data=sifcct.mlogit.tmp, reflevel = "Disagree")
    subname = "Moved"
  }

  # modres <- extract(modset)

  # res <- c(gender,ageset,modres@coef[grep("^Agree: edu2$",modres@coef.names)],
  #          modres@coef[grep("^Agree: edu2$",modres@coef.names)] - qnorm(0.975)*modres@se[grep("^Agree
  #          modres@coef[grep("^Agree: edu2$",modres@coef.names)] + qnorm(0.975)*modres@se[grep("^Agree
  #          modres@coef[grep("^Agree: edu2$",modres@coef.names)] - qnorm(0.95)*modres@se[grep("^Agree:
  #          modres@coef[grep("^Agree: edu2$",modres@coef.names)] + qnorm(0.95)*modres@se[grep("^Agree:
  #          modres@se[grep("^Agree: edu2$",modres@coef.names)],
  #          modres@pvalues[grep("^Agree: edu2$",modres@coef.names)],
  #          subname)
  res <- c(gender,ageset,coef(modset)[3],
           coefci(modset, vcov=sandwich, level = 0.95)[3,],
           coefci(modset, vcov=sandwich, level = 0.90)[3,],
           coeftest(modset, vcov=sandwich)[3,c(2,4)],
           subname)

  names(res) <- c("gender","age","est","lci95","uci95","lci90","uci90","se","p","lv")

  return(res)

}
```

```
outdt1xm <- rbind(extout("Female",25,2),
                  extout("Female",35,2),
                  extout("Female",45,2),
                  extout("Female",55,2),
                  extout("Female",65,2),
                  extout("Male",25,2),
                  extout("Male",35,2),
                  extout("Male",45,2),
                  extout("Male",55,2),
                  extout("Male",65,2))
outdt1xm <- as.data.frame(outdt1xm)
for(i in 2:9) outdt1xm[,i] <- as.numeric(outdt1xm[,i])
outdt1xm$gender <- factor(outdt1xm$gender, levels=unique(outdt1xm$gender))
summary(outdt1xm)
```

```
##     gender       age          est                lci95              uci95              lci90
##  Female:5   Min.   :25   Min.   :-0.344897   Min.   :-0.62524   Min.   :-0.06456   Min.   :-0.58016
##  Male  :5   1st Qu.:35   1st Qu.:-0.165143   1st Qu.:-0.35545   1st Qu.:-0.02789   1st Qu.:-0.32211
##             Median :45   Median :-0.082760   Median :-0.21581   Median : 0.08655   Median :-0.19441
##             Mean   :45   Mean   :-0.094508   Mean   :-0.26585   Mean   : 0.07683   Mean   :-0.23830
##             3rd Qu.:55   3rd Qu.:-0.005643   3rd Qu.:-0.13522   3rd Qu.: 0.13969   3rd Qu.:-0.11543
##             Max.   :65   Max.   : 0.108890   Max.   :-0.08799   Max.   : 0.31257   Max.   :-0.06204
##      uci90                se                p                 lv
##  Min.   :-0.10963   Min.   :0.05569   Min.   :0.008546   Length:10
##  1st Qu.:-0.04788   1st Qu.:0.06671   1st Qu.:0.040427   Class :character
##  Median : 0.05518   Median :0.07994   Median :0.267730   Mode  :character
##  Mean   : 0.04928   Mean   :0.08741   Mean   :0.327735
##  3rd Qu.: 0.11633   3rd Qu.:0.10311   3rd Qu.:0.455550
##  Max.   : 0.27982   Max.   :0.14302   Max.   :0.975988
```

Mediator Models

Knowledge

```
s1mmx01_10 <- lm(update(knowledge ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx01_1A <- lm(update(knowledge ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx01_1B <- lm(update(knowledge ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx01_1C <- lm(update(knowledge ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(s1mmx01_10,s1mmx01_1A,s1mmx01_1B,s1mmx01_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s1mmx01_10,vcov.=vcovHC(s1mmx01_10))[,2],
                             coeftest(s1mmx01_1A,vcov.=vcovHC(s1mmx01_1A))[,2],
                             coeftest(s1mmx01_1B,vcov.=vcovHC(s1mmx01_1B))[,2],
                             coeftest(s1mmx01_1C,vcov.=vcovHC(s1mmx01_1C))[,2]),
          override.pvalues = list(coeftest(s1mmx01_10,vcov.=vcovHC(s1mmx01_10))[,4],
                                  coeftest(s1mmx01_1A,vcov.=vcovHC(s1mmx01_1A))[,4],
                                  coeftest(s1mmx01_1B,vcov.=vcovHC(s1mmx01_1B))[,4],
                                  coeftest(s1mmx01_1C,vcov.=vcovHC(s1mmx01_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ============================================================================================
##                                    Base            ZIP             Municipality    Full
```

```
## ------------------------------------------------------------------------------------------------
## University education                    0.1555 ***      0.1449 ***      0.1476 ***      0.1447 ***
##                                        (0.0067)        (0.0067)        (0.0067)        (0.0067)
## Gender (male)                           0.1737 ***      0.1776 ***      0.1764 ***      0.1775 ***
##                                        (0.0075)        (0.0074)        (0.0075)        (0.0074)
## Age (by 10 years, centered at 45)       0.0725 ***      0.0713 ***      0.0716 ***      0.0713 ***
##                                        (0.0041)        (0.0041)        (0.0041)        (0.0041)
## University * Male                       0.0017          0.0002          0.0013          0.0005
##                                        (0.0103)        (0.0103)        (0.0103)        (0.0103)
## University * Age                       -0.0180 **      -0.0182 **      -0.0176 **      -0.0181 **
##                                        (0.0056)        (0.0055)        (0.0056)        (0.0055)
## University * Male * Age                -0.0184 *       -0.0182 *       -0.0191 *       -0.0184 *
##                                        (0.0078)        (0.0077)        (0.0077)        (0.0077)
## Male * Age                              0.0151 **       0.0153 **       0.0154 **       0.0153 **
##                                        (0.0056)        (0.0055)        (0.0056)        (0.0055)
## % of Life Residing Locally (zip)       -0.0509 **      -0.0370 *       -0.0447 **      -0.0386 *
##                                        (0.0161)        (0.0162)        (0.0161)        (0.0162)
## DID residence (zip)                                     0.0032                          0.0069
##                                                        (0.0060)                        (0.0070)
## Foreigner % sqrt. (zip)                                 0.0120 **                       0.0121 *
##                                                        (0.0042)                        (0.0059)
## University % by 10% (zip)                               0.0226 ***                      0.0161 ***
##                                                        (0.0027)                        (0.0039)
## DID proportion (mun.)                                                   -0.0106         -0.0166
##                                                                        (0.0109)        (0.0127)
## Foreigner % sqrt. (mun.)                                                0.0082         -0.0025
##                                                                        (0.0056)        (0.0079)
## University % by 10% (mun.)                                              0.0307 ***      0.0143 *
##                                                                        (0.0041)        (0.0057)
## ------------------------------------------------------------------------------------------------
## R^2                                     0.2213          0.2266          0.2256          0.2269
## Adj. R^2                                0.2199          0.2250          0.2240          0.2252
## Num. obs.                           15252           15252           15252           15252
## ================================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Ideology

```
s1mmx02_10 <- lm(update(ideology ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx02_1A <- lm(update(ideology ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx02_1B <- lm(update(ideology ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx02_1C <- lm(update(ideology ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(s1mmx02_10,s1mmx02_1A,s1mmx02_1B,s1mmx02_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s1mmx02_10,vcov.=vcovHC(s1mmx02_10))[,2],
                             coeftest(s1mmx02_1A,vcov.=vcovHC(s1mmx02_1A))[,2],
                             coeftest(s1mmx02_1B,vcov.=vcovHC(s1mmx02_1B))[,2],
                             coeftest(s1mmx02_1C,vcov.=vcovHC(s1mmx02_1C))[,2]),
          override.pvalues = list(coeftest(s1mmx02_10,vcov.=vcovHC(s1mmx02_10))[,4],
                                  coeftest(s1mmx02_1A,vcov.=vcovHC(s1mmx02_1A))[,4],
                                  coeftest(s1mmx02_1B,vcov.=vcovHC(s1mmx02_1B))[,4],
                                  coeftest(s1mmx02_1C,vcov.=vcovHC(s1mmx02_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
```

```
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ============================================================================================
##                                    Base            ZIP             Municipality    Full
## --------------------------------------------------------------------------------------------
## University education                -0.0142 **      -0.0135 **      -0.0139 **      -0.0137 **
##                                     (0.0044)        (0.0044)        (0.0044)        (0.0044)
## Gender (male)                       -0.0384 ***     -0.0385 ***     -0.0386 ***     -0.0388 ***
##                                     (0.0055)        (0.0055)        (0.0055)        (0.0055)
## Age (by 10 years, centered at 45)   -0.0103 ***     -0.0104 ***     -0.0102 ***     -0.0103 ***
##                                     (0.0029)        (0.0029)        (0.0029)        (0.0029)
## University * Male                    0.0258 ***      0.0258 ***      0.0259 ***      0.0260 ***
##                                     (0.0077)        (0.0077)        (0.0077)        (0.0077)
## University * Age                    -0.0037         -0.0035         -0.0038         -0.0036
##                                     (0.0038)        (0.0038)        (0.0038)        (0.0038)
## University * Male * Age             -0.0068         -0.0071         -0.0066         -0.0071
##                                     (0.0060)        (0.0060)        (0.0060)        (0.0060)
## Male * Age                           0.0159 ***      0.0160 ***      0.0157 ***      0.0159 ***
##                                     (0.0042)        (0.0042)        (0.0042)        (0.0042)
## % of Life Residing Locally (zip)     0.0259 *        0.0254 *        0.0248 *        0.0241 +
##                                     (0.0125)        (0.0126)        (0.0125)        (0.0126)
## DID residence (zip)                                  0.0103 *                        0.0176 **
##                                                     (0.0045)                        (0.0054)
## Foreigner % sqrt. (zip)                             -0.0046                         -0.0042
##                                                     (0.0032)                        (0.0044)
## University % by 10% (zip)                           -0.0027                         -0.0041
##                                                     (0.0020)                        (0.0029)
## DID proportion (mun.)                                                -0.0085        -0.0252 **
##                                                                      (0.0081)        (0.0096)
## Foreigner % sqrt. (mun.)                                             -0.0031         0.0003
##                                                                      (0.0043)        (0.0060)
## University % by 10% (mun.)                                            0.0014         0.0056
##                                                                      (0.0031)        (0.0043)
## --------------------------------------------------------------------------------------------
## R^2                                  0.0083          0.0087          0.0084          0.0092
## Adj. R^2                             0.0065          0.0067          0.0064          0.0070
## Num. obs.                        15252           15252           15252           15252
## ============================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

LDP - DPJ FT

```
s1mmx03_10 <- lm(update(ldpdpjft ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx03_1A <- lm(update(ldpdpjft ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx03_1B <- lm(update(ldpdpjft ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx03_1C <- lm(update(ldpdpjft ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(s1mmx03_10,s1mmx03_1A,s1mmx03_1B,s1mmx03_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s1mmx03_10,vcov.=vcovHC(s1mmx03_10))[,2],
                             coeftest(s1mmx03_1A,vcov.=vcovHC(s1mmx03_1A))[,2],
                             coeftest(s1mmx03_1B,vcov.=vcovHC(s1mmx03_1B))[,2],
                             coeftest(s1mmx03_1C,vcov.=vcovHC(s1mmx03_1C))[,2]),
          override.pvalues = list(coeftest(s1mmx03_10,vcov.=vcovHC(s1mmx03_10))[,4],
```

```
                                  coeftest(s1mmx03_1A,vcov.=vcovHC(s1mmx03_1A))[,4],
                                  coeftest(s1mmx03_1B,vcov.=vcovHC(s1mmx03_1B))[,4],
                                  coeftest(s1mmx03_1C,vcov.=vcovHC(s1mmx03_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ============================================================================================
##                                    Base            ZIP             Municipality    Full
## --------------------------------------------------------------------------------------------
## University education                -0.0108 **      -0.0116 ***     -0.0114 ***     -0.0117 ***
##                                     (0.0034)        (0.0035)        (0.0035)        (0.0035)
## Gender (male)                        0.0187 ***      0.0189 ***      0.0189 ***      0.0189 ***
##                                     (0.0039)        (0.0040)        (0.0040)        (0.0040)
## Age (by 10 years, centered at 45)    0.0047 *        0.0046 *        0.0047 *        0.0046 *
##                                     (0.0022)        (0.0022)        (0.0022)        (0.0022)
## University * Male                    0.0096 +        0.0095 +        0.0096 +        0.0096 +
##                                     (0.0056)        (0.0056)        (0.0056)        (0.0056)
## University * Age                    -0.0142 ***     -0.0140 ***     -0.0141 ***     -0.0140 ***
##                                     (0.0030)        (0.0030)        (0.0030)        (0.0030)
## University * Male * Age              0.0053          0.0053          0.0053          0.0053
##                                     (0.0045)        (0.0045)        (0.0045)        (0.0045)
## Male * Age                          -0.0103 **      -0.0102 **      -0.0103 **      -0.0102 **
##                                     (0.0032)        (0.0032)        (0.0032)        (0.0032)
## % of Life Residing Locally (zip)    -0.0055         -0.0039         -0.0051         -0.0043
##                                     (0.0095)        (0.0096)        (0.0095)        (0.0096)
## DID residence (zip)                                  0.0033                          0.0054
##                                                     (0.0035)                        (0.0041)
## Foreigner % sqrt. (zip)                              0.0040 +                        0.0036
##                                                     (0.0024)                        (0.0034)
## University % by 10% (zip)                            0.0002                          0.0002
##                                                     (0.0016)                        (0.0022)
## DID proportion (mun.)                                                -0.0017         -0.0070
##                                                                      (0.0062)        (0.0073)
## Foreigner % sqrt. (mun.)                                              0.0047          0.0013
##                                                                      (0.0032)        (0.0045)
## University % by 10% (mun.)                                            0.0011          0.0009
##                                                                      (0.0023)        (0.0032)
## --------------------------------------------------------------------------------------------
## R^2                                  0.1193          0.1197          0.1195          0.1197
## Adj. R^2                             0.1177          0.1179          0.1177          0.1177
## Num. obs.                           15252           15252           15252           15252
## ============================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Favorability of South Korea

```
s1mmx04_10 <- lm(update(familiarityFT_KOR ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s1mmx04_1A <- lm(update(familiarityFT_KOR ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s1mmx04_1B <- lm(update(familiarityFT_KOR ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s1mmx04_1C <- lm(update(familiarityFT_KOR ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
screenreg(list(s1mmx04_10,s1mmx04_1A,s1mmx04_1B,s1mmx04_1C), digits = 4, #single.row = T,
```

```
          override.se = list(coeftest(s1mmx04_10,vcov.=vcovHC(s1mmx04_10))[,2],
                             coeftest(s1mmx04_1A,vcov.=vcovHC(s1mmx04_1A))[,2],
                             coeftest(s1mmx04_1B,vcov.=vcovHC(s1mmx04_1B))[,2],
                             coeftest(s1mmx04_1C,vcov.=vcovHC(s1mmx04_1C))[,2]),
          override.pvalues = list(coeftest(s1mmx04_10,vcov.=vcovHC(s1mmx04_10))[,4],
                                  coeftest(s1mmx04_1A,vcov.=vcovHC(s1mmx04_1A))[,4],
                                  coeftest(s1mmx04_1B,vcov.=vcovHC(s1mmx04_1B))[,4],
                                  coeftest(s1mmx04_1C,vcov.=vcovHC(s1mmx04_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ============================================================================================
##                                    Base            ZIP             Municipality    Full
## --------------------------------------------------------------------------------------------
## University education                0.0096 +        0.0103 +        0.0099 +        0.0103 +
##                                    (0.0057)        (0.0057)        (0.0057)        (0.0057)
## Gender (male)                      -0.0589 ***     -0.0591 ***     -0.0591 ***     -0.0591 ***
##                                    (0.0062)        (0.0062)        (0.0062)        (0.0062)
## Age (by 10 years, centered at 45)  -0.0003         -0.0001         -0.0002         -0.0001
##                                    (0.0035)        (0.0035)        (0.0035)        (0.0035)
## University * Male                  -0.0011         -0.0009         -0.0010         -0.0008
##                                    (0.0087)        (0.0087)        (0.0087)        (0.0087)
## University * Age                   -0.0005         -0.0007         -0.0006         -0.0006
##                                    (0.0047)        (0.0047)        (0.0047)        (0.0047)
## University * Male * Age             0.0061          0.0062          0.0062          0.0062
##                                    (0.0067)        (0.0067)        (0.0067)        (0.0067)
## Male * Age                          0.0266 ***      0.0264 ***      0.0265 ***      0.0264 ***
##                                    (0.0047)        (0.0047)        (0.0047)        (0.0047)
## % of Life Residing Locally (zip)   -0.0230 +       -0.0244 +       -0.0238 +       -0.0247 +
##                                    (0.0137)        (0.0137)        (0.0137)        (0.0137)
## DID residence (zip)                                -0.0069                         -0.0070
##                                                    (0.0051)                        (0.0060)
## Foreigner % sqrt. (zip)                            -0.0010                         -0.0022
##                                                    (0.0035)                        (0.0049)
## University % by 10% (zip)                           0.0000                         -0.0010
##                                                    (0.0023)                        (0.0033)
## DID proportion (mun.)                                                -0.0070        -0.0004
##                                                                      (0.0092)        (0.0109)
## Foreigner % sqrt. (mun.)                                             -0.0003         0.0018
##                                                                      (0.0048)        (0.0066)
## University % by 10% (mun.)                                           0.0008          0.0018
##                                                                      (0.0035)        (0.0049)
## --------------------------------------------------------------------------------------------
## R^2                                 0.0698          0.0699          0.0698          0.0699
## Adj. R^2                            0.0681          0.0680          0.0679          0.0679
## Num. obs.                          15252           15252           15252           15252
## ============================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Favorability of China

```
s1mmx05_10 <- lm(update(familiarityFT_CHN ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s1mmx05_1A <- lm(update(familiarityFT_CHN ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s1mmx05_1B <- lm(update(familiarityFT_CHN ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s1mmx05_1C <- lm(update(familiarityFT_CHN ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
screenreg(list(s1mmx05_10,s1mmx05_1A,s1mmx05_1B,s1mmx05_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s1mmx05_10,vcov.=vcovHC(s1mmx05_10))[,2],
                             coeftest(s1mmx05_1A,vcov.=vcovHC(s1mmx05_1A))[,2],
                             coeftest(s1mmx05_1B,vcov.=vcovHC(s1mmx05_1B))[,2],
                             coeftest(s1mmx05_1C,vcov.=vcovHC(s1mmx05_1C))[,2]),
          override.pvalues = list(coeftest(s1mmx05_10,vcov.=vcovHC(s1mmx05_10))[,4],
                                  coeftest(s1mmx05_1A,vcov.=vcovHC(s1mmx05_1A))[,4],
                                  coeftest(s1mmx05_1B,vcov.=vcovHC(s1mmx05_1B))[,4],
                                  coeftest(s1mmx05_1C,vcov.=vcovHC(s1mmx05_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ============================================================================================
##                                    Base            ZIP             Municipality    Full
## --------------------------------------------------------------------------------------------
## University education                0.0165 ***      0.0163 ***      0.0159 **       0.0162 ***
##                                    (0.0048)        (0.0049)        (0.0049)        (0.0049)
## Gender (male)                      -0.0181 ***     -0.0180 ***     -0.0179 ***     -0.0181 ***
##                                    (0.0053)        (0.0053)        (0.0053)        (0.0053)
## Age (by 10 years, centered at 45)  -0.0002        -0.0003         -0.0003         -0.0003
##                                    (0.0030)        (0.0030)        (0.0030)        (0.0030)
## University * Male                   0.0007          0.0006          0.0007          0.0008
##                                    (0.0075)        (0.0075)        (0.0075)        (0.0075)
## University * Age                   -0.0025         -0.0025         -0.0025         -0.0024
##                                    (0.0041)        (0.0041)        (0.0041)        (0.0041)
## University * Male * Age             0.0035          0.0035          0.0035          0.0034
##                                    (0.0058)        (0.0058)        (0.0058)        (0.0058)
## Male * Age                          0.0073 +        0.0074 +        0.0073 +        0.0074 +
##                                    (0.0042)        (0.0042)        (0.0042)        (0.0042)
## % of Life Residing Locally (zip)   -0.0238 *       -0.0234 *       -0.0236 *       -0.0242 *
##                                    (0.0118)        (0.0119)        (0.0119)        (0.0119)
## DID residence (zip)                                 0.0024                          0.0046
##                                                    (0.0044)                        (0.0052)
## Foreigner % sqrt. (zip)                             0.0009                          0.0005
##                                                    (0.0031)                        (0.0043)
## University % by 10% (zip)                          -0.0003                         -0.0032
##                                                    (0.0020)                        (0.0028)
## DID proportion (mun.)                                                -0.0046        -0.0092
##                                                                      (0.0079)        (0.0093)
## Foreigner % sqrt. (mun.)                                              0.0008          0.0000
##                                                                      (0.0042)        (0.0057)
## University % by 10% (mun.)                                            0.0033          0.0065
##                                                                      (0.0030)        (0.0041)
## --------------------------------------------------------------------------------------------
## R^2                                 0.0259          0.0259          0.0260          0.0261
## Adj. R^2                            0.0241          0.0240          0.0240          0.0239
```

```
## Num. obs.                          15252           15252           15252           15252
## ================================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Favorability of USA

```
s1mmx06_10 <- lm(update(familiarityFT_USA ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s1mmx06_1A <- lm(update(familiarityFT_USA ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s1mmx06_1B <- lm(update(familiarityFT_USA ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
s1mmx06_1C <- lm(update(familiarityFT_USA ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=1
screenreg(list(s1mmx06_10,s1mmx06_1A,s1mmx06_1B,s1mmx06_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s1mmx06_10,vcov.=vcovHC(s1mmx06_10))[,2],
                             coeftest(s1mmx06_1A,vcov.=vcovHC(s1mmx06_1A))[,2],
                             coeftest(s1mmx06_1B,vcov.=vcovHC(s1mmx06_1B))[,2],
                             coeftest(s1mmx06_1C,vcov.=vcovHC(s1mmx06_1C))[,2]),
          override.pvalues = list(coeftest(s1mmx06_10,vcov.=vcovHC(s1mmx06_10))[,4],
                                  coeftest(s1mmx06_1A,vcov.=vcovHC(s1mmx06_1A))[,4],
                                  coeftest(s1mmx06_1B,vcov.=vcovHC(s1mmx06_1B))[,4],
                                  coeftest(s1mmx06_1C,vcov.=vcovHC(s1mmx06_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## ================================================================================================
##                                    Base            ZIP             Municipality    Full
## ------------------------------------------------------------------------------------------------
## University education                0.0108 *       0.0068          0.0083 +        0.0069
##                                    (0.0046)        (0.0047)        (0.0047)        (0.0047)
## Gender (male)                       0.0040          0.0057          0.0050          0.0057
##                                    (0.0056)        (0.0056)        (0.0056)        (0.0056)
## Age (by 10 years, centered at 45)   0.0104 ***      0.0100 ***      0.0100 ***      0.0100 ***
##                                    (0.0030)        (0.0030)        (0.0030)        (0.0030)
## University * Male                   0.0186 *        0.0181 *        0.0184 *        0.0180 *
##                                    (0.0077)        (0.0077)        (0.0077)        (0.0077)
## University * Age                   -0.0063         -0.0066 +       -0.0062         -0.0066 +
##                                    (0.0039)        (0.0039)        (0.0039)        (0.0039)
## University * Male * Age             0.0036          0.0038          0.0034          0.0038
##                                    (0.0058)        (0.0058)        (0.0058)        (0.0058)
## Male * Age                          0.0189 ***      0.0188 ***      0.0189 ***      0.0188 ***
##                                    (0.0042)        (0.0042)        (0.0042)        (0.0042)
## % of Life Residing Locally (zip)   -0.0254 *       -0.0210 +       -0.0234 +       -0.0207 +
##                                    (0.0122)        (0.0122)        (0.0122)        (0.0122)
## DID residence (zip)                                -0.0032                         -0.0044
##                                                    (0.0046)                        (0.0053)
## Foreigner % sqrt. (zip)                             0.0004                          0.0019
##                                                    (0.0031)                        (0.0044)
## University % by 10% (zip)                           0.0104 ***                      0.0101 ***
##                                                    (0.0020)                        (0.0029)
## DID proportion (mun.)                                              -0.0008          0.0040
##                                                                    (0.0082)        (0.0095)
## Foreigner % sqrt. (mun.)                                           -0.0021         -0.0032
##                                                                    (0.0043)        (0.0060)
## University % by 10% (mun.)                                          0.0105 ***      0.0003
```

```
##                                                                                  (0.0031)        (0.0043)
## ---------------------------------------------------------------------------------------------------------
## R^2                                      0.0323          0.0341          0.0333          0.0341
## Adj. R^2                                 0.0305          0.0321          0.0313          0.0319
## Num. obs.                             15252           15252           15252           15252
## =========================================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Income

```
s1mmx07_10 <- lm(update(income ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx07_1A <- lm(update(income ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx07_1B <- lm(update(income ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
s1mmx07_1C <- lm(update(income ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(s1mmx07_10,s1mmx07_1A,s1mmx07_1B,s1mmx07_1C), digits = 4, #single.row = T,
          override.se = list(coeftest(s1mmx07_10,vcov.=vcovHC(s1mmx07_10))[,2],
                             coeftest(s1mmx07_1A,vcov.=vcovHC(s1mmx07_1A))[,2],
                             coeftest(s1mmx07_1B,vcov.=vcovHC(s1mmx07_1B))[,2],
                             coeftest(s1mmx07_1C,vcov.=vcovHC(s1mmx07_1C))[,2]),
          override.pvalues = list(coeftest(s1mmx07_10,vcov.=vcovHC(s1mmx07_10))[,4],
                                  coeftest(s1mmx07_1A,vcov.=vcovHC(s1mmx07_1A))[,4],
                                  coeftest(s1mmx07_1B,vcov.=vcovHC(s1mmx07_1B))[,4],
                                  coeftest(s1mmx07_1C,vcov.=vcovHC(s1mmx07_1C))[,4]),
          omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
          custom.coef.map = vnmap,
          custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =========================================================================================================
##                                    Base            ZIP             Municipality    Full
## ---------------------------------------------------------------------------------------------------------
## University education                0.1103 ***      0.0886 ***      0.0946 ***      0.0881 ***
##                                    (0.0060)        (0.0060)        (0.0060)        (0.0060)
## Gender (male)                      -0.0342 ***     -0.0258 ***     -0.0289 ***     -0.0257 ***
##                                    (0.0063)        (0.0063)        (0.0063)        (0.0063)
## Age (by 10 years, centered at 45)   0.0145 ***      0.0123 ***      0.0128 ***      0.0124 ***
##                                    (0.0037)        (0.0037)        (0.0037)        (0.0037)
## University * Male                   0.0259 **       0.0229 *        0.0251 **       0.0234 **
##                                    (0.0091)        (0.0090)        (0.0091)        (0.0090)
## University * Age                    0.0081          0.0071          0.0092 +        0.0076
##                                    (0.0051)        (0.0051)        (0.0051)        (0.0051)
## University * Male * Age            -0.0120 +       -0.0111         -0.0135 +       -0.0119 +
##                                    (0.0072)        (0.0072)        (0.0072)        (0.0072)
## Male * Age                         -0.0251 ***     -0.0250 ***     -0.0243 ***     -0.0248 ***
##                                    (0.0048)        (0.0048)        (0.0048)        (0.0048)
## % of Life Residing Locally (zip)    0.1072 ***      0.1340 ***      0.1199 ***      0.1312 ***
##                                    (0.0162)        (0.0159)        (0.0160)        (0.0159)
## DID residence (zip)                                -0.0062                         -0.0039
##                                                    (0.0054)                        (0.0064)
## Foreigner % sqrt. (zip)                             0.0187 ***                     -0.0009
##                                                    (0.0038)                        (0.0054)
## University % by 10% (zip)                           0.0506 ***                      0.0446 ***
##                                                    (0.0025)                        (0.0036)
## DID proportion (mun.)                                                -0.0187 +      -0.0114
```

```
##                                                                                                  (0.0099)        (0.0116)
## Foreigner % sqrt. (mun.)                                                                          0.0316 ***      0.0351 ***
##                                                                                                  (0.0054)        (0.0074)
## University % by 10% (mun.)                                                                        0.0552 ***      0.0105 +
##                                                                                                  (0.0039)        (0.0053)
## ------------------------------------------------------------------------------------------------------------------------------
## R^2                                          0.0638          0.0933          0.0855          0.0950
## Adj. R^2                                     0.0621          0.0915          0.0836          0.0929
## Num. obs.                                15252           15252           15252           15252
## ==============================================================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Organizing Outcomes

OLS

```
outdt0x$data <- "Unmatched"
outdt1x$data <- "Matched without \nDistance Adj."

visdtx <- rbind(outdt0x,outdt1x)

visdtx$data <- factor(visdtx$data, levels = c("Unmatched",
                                              "Matched without \nDistance Adj."))
visdtx$pstar <- factor(ifelse(visdtx$p>=.1,"n.s.",ifelse(visdtx$p>=.05,"p<.1","p<.05")),
                       levels = c("p<.05","p<.1","n.s."))
```

```
saveRDS(visdtx, paste0(projdir, "/out/visdtx.rds"))
```

Multinomial Logit

```
outdt0xm$data <- "Unmatched"
outdt1xm$data <- "Matched without \nDistance Adj."

visdtxm <- rbind(outdt0xm,outdt1xm)

visdtxm$data <- factor(visdtxm$data, levels = c("Unmatched",
                                                "Matched without \nDistance Adj."))
visdtxm$pstar <- factor(ifelse(visdtxm$p>=.1,"n.s.",ifelse(visdtxm$p>=.05,"p<.1","p<.05")),
                        levels = c("p<.05","p<.1","n.s."))
```

```
saveRDS(visdtxm, paste0(projdir, "/out/visdtxm.rds"))
```

Combining OLS and Multinomial Logit

```
visdtx$method = "OLS"
visdtxm$method = "Multinomial Logit\nAgree vs. Disagree"
visdtxall <- rbind(visdtx,visdtxm)
visdtxall$method <- factor(visdtxall$method, levels = unique(visdtxall$method))
colnames(visdtxall)
```

```
##  [1] "gender" "age"    "est"    "lci95"  "uci95"  "lci90"  "uci90"  "se"     "p"      "lv"     "data
## [13] "method"
```

Including Mail

```
visdtx_mail_ols <- readRDS(paste0(projdir, "/out/visdtx_mail_ols.rds"))
visdtx_mail_ols$method <- "OLS"
visdtx_mail_multinom <- readRDS(paste0(projdir, "/out/visdtx_mail_multinom.rds"))
visdtx_mail_multinom$method <- "Multinomial Logit\nAgree vs. Disagree"
visdtx_mail <- rbind(visdtx_mail_ols,visdtx_mail_multinom)
visdtx_mail$lci95 <- NA
visdtx_mail$uci95 <- NA
visdtx_mail$lci90 <- NA
visdtx_mail$uci90 <- NA
colnames(visdtx_mail)
```

```
##  [1] "gender" "age"    "est"    "lci95"  "uci95"  "lci90"  "uci90"  "se"     "p"      "lv"     "data
## [13] "method"
```

```
visdtxall <- rbind(visdtxall,visdtx_mail)
visdtxall$data <- factor(visdtxall$data, levels = unique(visdtxall$data))
table(visdtxall$data)
```

```
##
##                       Unmatched Matched without \nDistance Adj.                          Mail-in
##                              20                              20                               20
```

```
saveRDS(visdtxall, paste0(projdir, "/out/visdtxall.rds"))
```

Save Image

```
save.image(file=paste0(projdir,"/out/heavy/analysis_2x_matched_v5.RData"))
```