レプリケーション：福祉国家に対する態度決定要因としての社会保障の普遍性と消費税の逆進性

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```
## Read Data
d <- readRDS("main_data_tax_v3.rds")

## Drop Satisficers
d <- d[which(d$satisficer==0),]

## Keep Respondents without missing values for relevant variables
dtmp <- d[complete.cases(d[,c("tax1_opi","tax2_opi","inc",
                              "knall","fem","age","lvlen","ownh",
                              "edu3","wk","mar","cld")]),]
# nrow(dtmp)
```

イデオロギー指標間の相関（表 A2）

```
ctab <- cor(dtmp[,c("ide_self","ide_psup","ide_iss_1","ide_iss_2")])
ctab[upper.tri(ctab)] <- NA
colnames(ctab) <- rownames(ctab) <- c("自己申告","政党支持","外交安全保障","権利機会平等")

## 表 A2
round(ctab, 3)
```

```
##              自己申告 政党支持 外交安全保障 権利機会平等
## 自己申告        1.000       NA           NA           NA
## 政党支持        0.336    1.000           NA           NA
## 外交安全保障    0.372    0.414        1.000           NA
## 権利機会平等    0.277    0.143        0.118            1
```

```
# print(xtable(ctab, digits=3,caption="イデオロギー指標間の相関"),
#       caption.placement="top")
```

記述統計

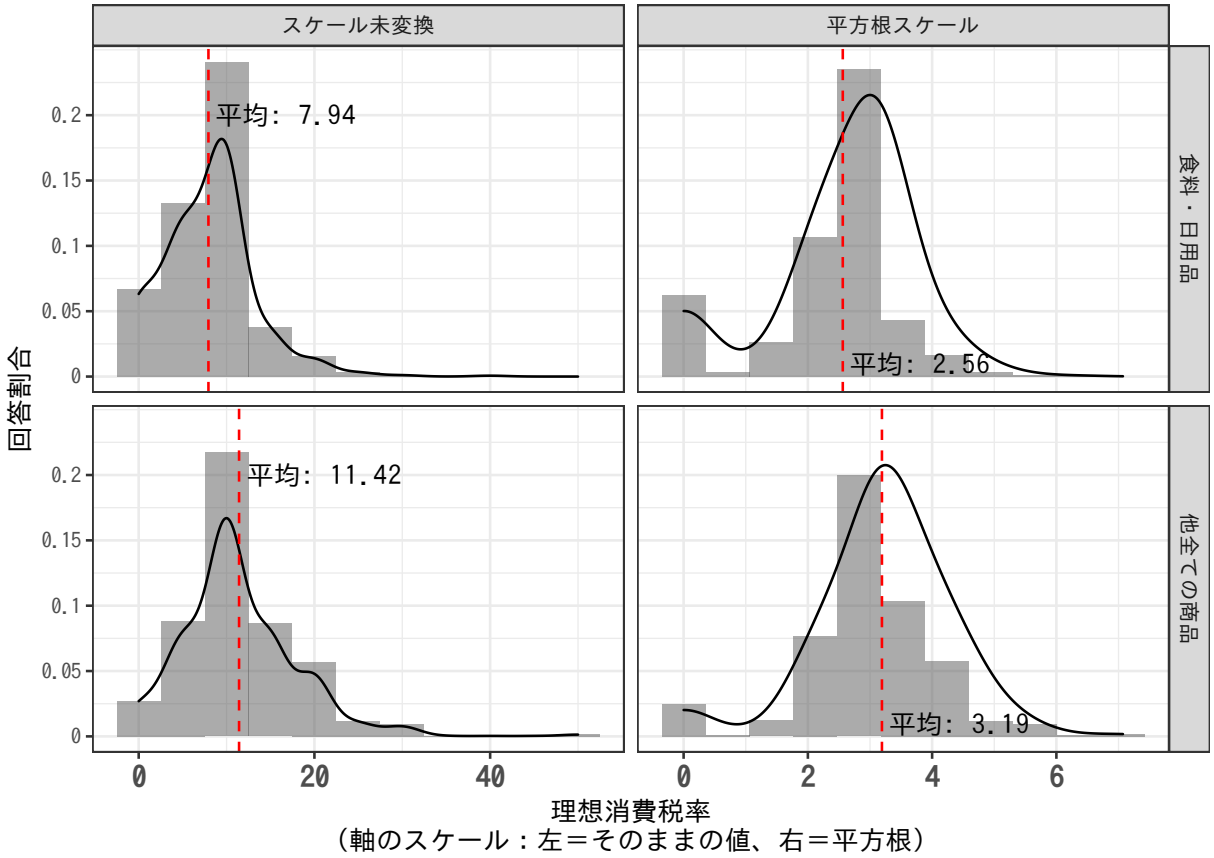
従属変数

理想消費税率の分布（図 A1）

```
tab <- data.frame(tax_opi=c(dtmp$tax1_opi,rep(NA, nrow(dtmp)),
                            dtmp$tax2_opi,rep(NA, nrow(dtmp))),
                  tax_opi_sq=c(rep(NA, nrow(dtmp)),sqrt(dtmp$tax1_opi),
                               rep(NA, nrow(dtmp)),sqrt(dtmp$tax2_opi)),
                  taxcat=rep(c("食料・日用品","他全ての商品"),
                             each=nrow(dtmp)*2),
                  scale=rep(c("スケール未変換","平方根スケール"),
                            each=nrow(dtmp)))
tab$taxcat <- factor(tab$taxcat, levels=unique(tab$taxcat))

tab2 <- data.frame(tax_opi_m = c(mean(dtmp$tax1_opi, na.rm=TRUE),
                                 mean(sqrt(dtmp$tax1_opi), na.rm=TRUE),
                                 mean(dtmp$tax2_opi, na.rm=TRUE),
                                 mean(sqrt(dtmp$tax2_opi), na.rm=TRUE)),
                   taxcat=rep(c("食料・日用品","他全ての商品"),
                              each=2),
                   scale=rep(c("スケール未変換","平方根スケール"),
                             2),
                   y = c(0.4,0.02,0.4,0.02))
tab2$taxcat <- factor(tab2$taxcat, levels=unique(tab$taxcat))
tab2$tax_opi_lab <- paste0("平均: ", sprintf("%2.2f",tab2$tax_opi_m))

## 図 A1
p <- ggplot(tab) +
  geom_histogram(aes(x=tax_opi, y=(..count../sum(..count..))*2), bins=11, alpha=0.5) +
  geom_density(aes(x=tax_opi, y=..density..*4), bw=2) +
  geom_histogram(aes(x=tax_opi_sq, y=(..count../sum(..count..))*2), bins=11, alpha=0.5) +
  geom_density(aes(x=tax_opi_sq), bw=0.5) +
  geom_vline(data=tab2, aes(xintercept=tax_opi_m), color="red", linetype=2) +
  geom_text(data=tab2, aes(label=tax_opi_lab, x=tax_opi_m, y=y), hjust=-0.05) +
  facet_grid(taxcat~scale, scales = "free_x") +
  scale_y_continuous(breaks = c(0,0.1,0.2,0.3,0.4),
                     labels = c(0,0.05,0.1,0.15,0.2)) +
```

```
  # scale_x_continuous(breaks=sqrt(c(0,2.5,5,10,25,50,100)),
  #                    labels=c(0,1,5,10,25,50,100)) +
  ylab("回答割合") + xlab("理想消費税率¥n（軸のスケール：左＝そのままの値、右＝平方根）") +
  #ggtitle("理想消費税率の回答分布") +
  theme_bw() +
  theme(plot.title = element_text(hjust=0.5, face="bold"),
        axis.text.x = element_text(size=12, face="bold"))
```

```
p
```




```
# ggsave("dvdist.png", p, width=7, height=5)
```

独立変数：収入とイデオロギー

収入

```
tab <- table(dtmp$inc)/sum(table(dtmp$inc))
tab <- data.frame(prop = as.numeric(tab),
                  names = c("～¥n200 万円¥n(1)",
                            "200～¥n400 万円¥n(2)",
```

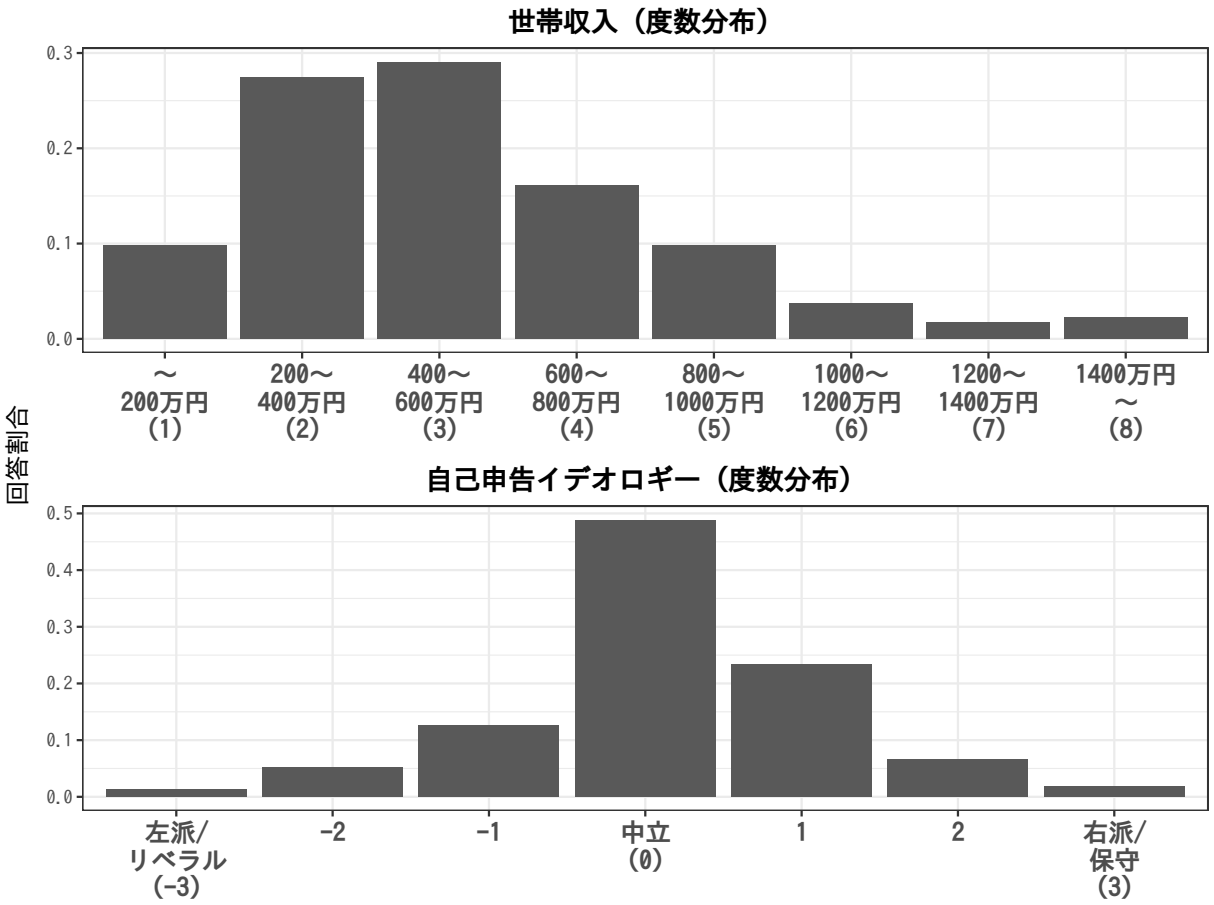
```
                              "400～¥n600 万円¥n(3)",
                              "600～¥n800 万円¥n(4)",
                              "800～¥n1000 万円¥n(5)",
                              "1000～¥n1200 万円¥n(6)",
                              "1200～¥n1400 万円¥n(7)",
                              "1400 万円¥n～¥n(8)"))
tab$names <- factor(tab$names, levels=tab$names)

## 図 A2（上側）
p0 <- ggplot(tab, aes(x=names,y=prop)) +
  geom_bar(stat="identity") +
  ylab(NULL) + xlab(NULL) +
  ggtitle("世帯収入（度数分布）") +
  theme_bw() +
  theme(plot.title = element_text(hjust=0.5, face="bold"),
        axis.text.x = element_text(size=12, face="bold"))
# p0
```

自己申告イデオロギー

```
tab <- table(dtmp$ide_self)/sum(table(dtmp$ide_self))
tab <- data.frame(prop = as.numeric(tab),
                  names = c("左派/¥nリベラル¥n(-3)","-2","-1",
                            "中立¥n(0)","1","2","右派/¥n保守¥n(3)"))
tab$names <- factor(tab$names, levels=tab$names)

## 図 A2（下側）
p1 <- ggplot(tab, aes(x=names,y=prop)) +
  geom_bar(stat="identity") +
  ylab(NULL) + xlab(NULL) +
  ggtitle("自己申告イデオロギー（度数分布）") +
  theme_bw() +
  theme(plot.title = element_text(hjust=0.5, face="bold"),
        axis.text.x = element_text(size=12, face="bold"))
# p1
```

世帯収入と自己申告イデオロギーの分布（図 A2）

```
ggplot() + theme_void()
p <- arrangeGrob(p0,p1, nrow=2, left="回答割合")
grid.draw(p)
```




```
# ggsave("incide.png", p, width=8, height=6)
```

争点態度イデオロギー

```
## 図 A7（中央）
p2_1 <- ggplot(dtmp[,"ide_iss_1"],
               aes(x=ide_iss_1,y=..count../sum(..count..))) +
  geom_histogram(bins=10, color="white") +
  ylab(NULL) + xlab(NULL) +
  ggtitle("外交安全保障¥nイデオロギー¥n（ヒストグラム）") +
  scale_x_continuous(breaks=c(-3,-2,-1,0,1,2,3),
```

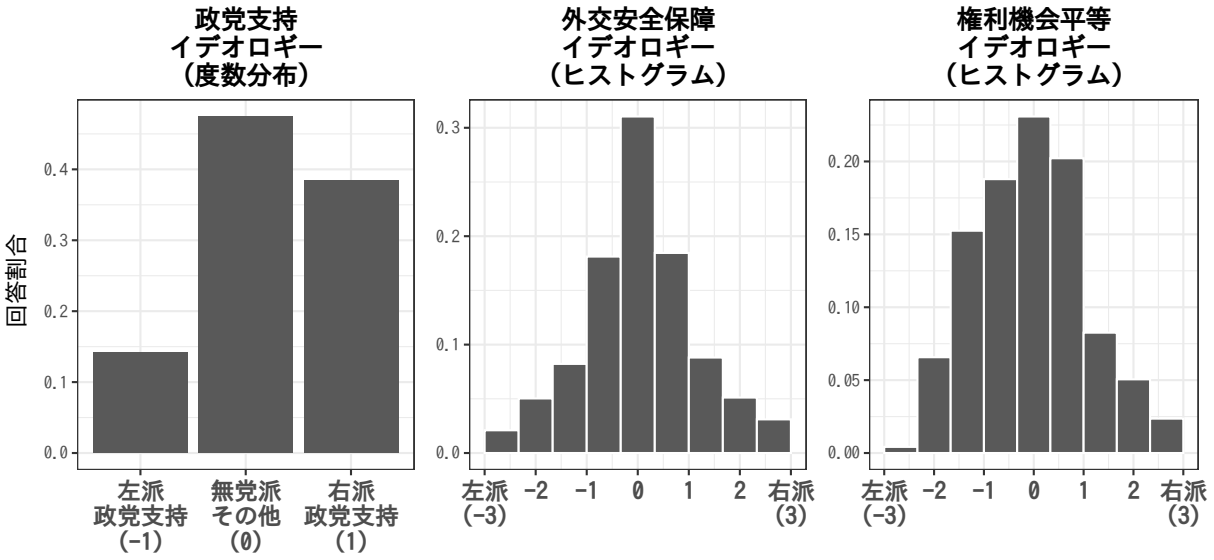
```
                    limits=c(-3,3),
                    labels=c("左派¥n(-3)¥n","-2","-1","0","1","2","右派¥n(3)¥n")) +
  theme_bw() +
  theme(plot.title = element_text(hjust=0.5, face="bold"),
        axis.text.x = element_text(size=12, face="bold"))
# p2_1

## 図A7（右）
p2_2 <- ggplot(dtmp[,"ide_iss_2"],
               aes(x=ide_iss_2,y=..count../sum(..count..))) +
  geom_histogram(bins=10,color="white") +
  ylab(NULL) + xlab(NULL) +
  ggtitle("権利機会平等¥nイデオロギー¥n（ヒストグラム）") +
  scale_x_continuous(breaks=c(-3,-2,-1,0,1,2,3),
                     limits=c(-3,3),
                     labels=c("左派¥n(-3)¥n","-2","-1","0","1","2","右派¥n(3)¥n")) +
  theme_bw() +
  theme(plot.title = element_text(hjust=0.5, face="bold"),
        axis.text.x = element_text(size=12, face="bold"))
# p2_2
```

政党支持イデオロギー

```
## 図A7（左）
tab <- table(dtmp$ide_psup)/sum(table(dtmp$ide_psup))
tab <- data.frame(prop = as.numeric(tab),
                  names = c("左派¥n政党支持¥n(-1)","無党派¥nその他¥n(0)",
                            "右派¥n政党支持¥n(1)"))
tab$names <- factor(tab$names, levels=tab$names)

p3 <- ggplot(tab, aes(x=names,y=prop)) +
  geom_bar(stat="identity") +
  ylab(NULL) + xlab(NULL) +
  ggtitle("政党支持¥nイデオロギー¥n（度数分布）") +
  theme_bw() +
  theme(plot.title = element_text(hjust=0.5, face="bold"),
        axis.text.x = element_text(size=12, face="bold"))
# p3
```

政党支持・争点態度イデオロギー変数の分布（図 A7）

```
ggplot() + theme_void()
p <- arrangeGrob(p3,p2_1,p2_2, nrow=1, left="回答割合")
grid.draw(p)
```




```
# ggsave("idedist32.png", p, width=8.5, height=4)
```

実験群比較

準備

```
# 統制変数
ctl <- formula( ~ .+ knall + fem + age + lvlen + ownh +
                  as.factor(edu3) + wk + mar + cld)


# 変数名
vn <- c("（定数項）",
        "1. 逆進性",
        "2. 社会保障普遍性",
        "3. 社会保障選別性",
        "4. 逆進性＆社会保障普遍性",
        "5. 逆進性＆社会保障選別性",
        "政治知識","性別（女性）",
```

```
          "年齢","居住年数","持ち家",
          "教育：短大／高専／専門学校",
          "教育：大卒以上",
          "就労","婚姻","子ども")

vnx <- c(vn[1:6],"イデオロギー",vn[7:16],
          "イデオロギー ×1. 逆進",
          "イデオロギー ×2. 普遍",
          "イデオロギー ×3. 選別",
          "イデオロギー ×4. 逆進＆普遍",
          "イデオロギー ×5. 逆進＆選別",
          "イデオロギー",
          "イデオロギー ×1. 逆進",
          "イデオロギー ×2. 普遍",
          "イデオロギー ×3. 選別",
          "イデオロギー ×4. 逆進＆普遍",
          "イデオロギー ×5. 逆進＆選別",
          "イデオロギー",
          "イデオロギー ×1. 逆進",
          "イデオロギー ×2. 普遍",
          "イデオロギー ×3. 選別",
          "イデオロギー ×4. 逆進＆普遍",
          "イデオロギー ×5. 逆進＆選別")
vnx2 <- c(vn,vnx[c(7,18:34)])

vnxinc <- c(vn[1:6],"世帯収入",vn[7:16],
             "世帯収入 ×1. 逆進",
             "世帯収入 ×2. 普遍",
             "世帯収入 ×3. 選別",
             "世帯収入 ×4. 逆進＆普遍",
             "世帯収入 ×5. 逆進＆選別")
```

バランスチェック（図 A3）

```
## バランスチェック関数
checkbal <- function(dtlist, dtnames, robust=TRUE){

  restab <- list()
```

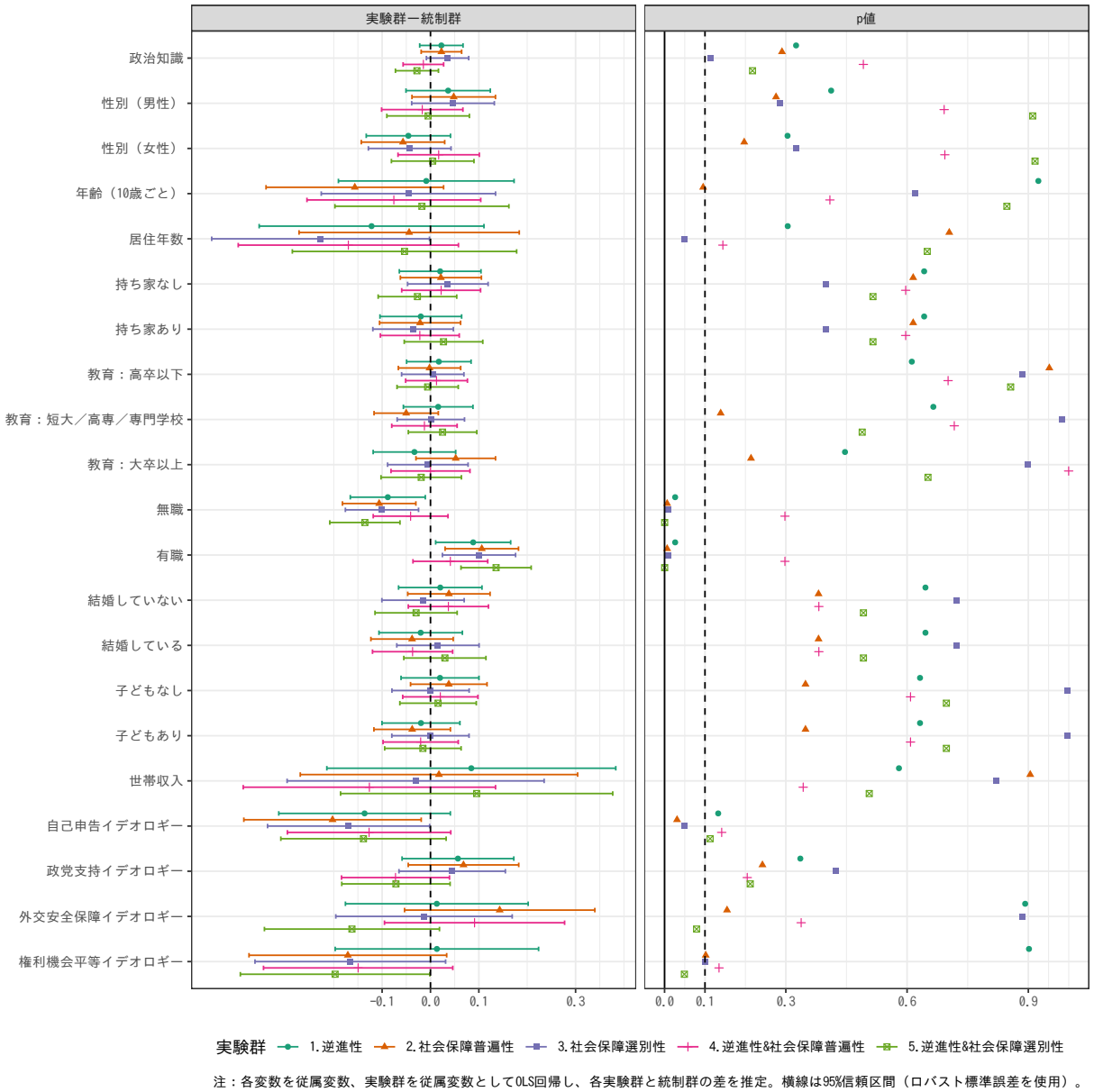
```
datasub <- list()
for(i in 1:length(dtlist)){

  dt <- dtlist[[i]]

  dmod <- data.frame(
    knall = dt$knall,
    fem0 = ifelse(dt$fem==0,1,0),
    fem1 = ifelse(dt$fem==1,1,0),
    ageby10 = dt$age/10,
    lvlen = dt$lvlen,
    ownh0 = ifelse(dt$ownh==0,1,0),
    ownh1 = ifelse(dt$ownh==1,1,0),
    edu30 = ifelse(dt$edu3==0,1,0),
    edu31 = ifelse(dt$edu3==1,1,0),
    edu32 = ifelse(dt$edu3==2,1,0),
    wk0 = ifelse(dt$wk==0,1,0),
    wk1 = ifelse(dt$wk==1,1,0),
    mar0 = ifelse(dt$mar==0,1,0),
    mar1 = ifelse(dt$mar==1,1,0),
    cld0 = ifelse(dt$cld==0,1,0),
    cld1 = ifelse(dt$cld==1,1,0),
    inc = dt$inc,
    ide_self = dt$ide_self,
    ide_psup = dt$ide_psup,
    ide_iss_1 = dt$ide_iss_1,
    ide_iss_2 = dt$ide_iss_2
  )

  if (robust==TRUE){
    res1 <- apply(dmod, 2, function(x) coeftest(lm(x~dt$treated),
                                                vcov.=vcovHC(lm(x~dt$treated),type="HC2")))
  } else {
    res1 <- apply(dmod, 2, function(x) coeftest(lm(x~dt$treated)))
  }

  res2 <- as.data.frame(t(apply(res1,2,function(x) c(x[2],x[4],x[8]))))
  colnames(res2) <- c("coef","se","pval")
  res2$lCI <- res2$coef - 1.96*res2$se
```

```
  res2$uCI <- res2$coef + 1.96*res2$se

  res3 <- data.frame(Variable=
                       rep(
                         c("政治知識",
                           "性別（男性）",
                           "性別（女性）",
                           "年齢（10 歳ごと）",
                           "居住年数",
                           "持ち家なし",
                           "持ち家あり",
                           "教育：高卒以下",
                           "教育：短大／高専／専門学校",
                           "教育：大卒以上",
                           "無職",
                           "有職",
                           "結婚していない",
                           "結婚している",
                           "子どもなし",
                           "子どもあり",
                           "世帯収入",
                           "自己申告イデオロギー",
                           "政党支持イデオロギー",
                           "外交安全保障イデオロギー",
                           "権利機会平等イデオロギー"
                         ),2),
                     stat = c(res2$coef,res2$pval),
                     lCI = c(res2$lCI,rep(NA,nrow(res2))),
                     uCI = c(res2$uCI,rep(NA,nrow(res2))),
                     val = rep(c("実験群ー統制群","p 値"),each=21)
  )
  res3$Variable <- factor(res3$Variable,levels=rev(unique(res3$Variable)))
  res3$val <- factor(res3$val,levels=unique(res3$val))
  restab[[i]] <- res3

}

if(length(dtlist)==1){
  restab <- restab[[1]]
```

```
  } else {
    restabtemp <- restab[[1]]
    restabtemp$group <- dtnames[1]
    for (i in 2:length(dtlist)){
      restabtemp2 <- restab[[i]]
      restabtemp2$group <- dtnames[i]
      restabtemp <- rbind(restabtemp,restabtemp2)
    }
    restab <- restabtemp
  }
  restab$group <- factor(restab$group, unique(restab$group))

  data2 <- data.frame(val=c("実験群ー統制群","p 値"),
                      vloc1=c(NA,0),
                      vloc2=c(0,0.1))
  data2$val <- factor(data2$val,levels=unique(data2$val))

  p <- ggplot(restab, aes(x=Variable,y=stat)) +
    geom_errorbar(aes(ymin=lCI,ymax=uCI, color=group),width=0.5,
                  position=position_dodge(width=-0.7)) +
    geom_point(aes(shape=group, color=group),
               position=position_dodge(width=-0.7)) +
    geom_hline(data=data2, aes(yintercept=vloc1), linetype=1) +
    geom_hline(data=data2, aes(yintercept=vloc2), linetype=2) +
    scale_y_continuous(breaks=c(-0.1,0,0.1,0.3,0.6,0.9)) +
    scale_shape_discrete(name="実験群") +
    scale_color_brewer(name="実験群", palette=2, type = "qual") +
    facet_grid(.~val, scales = "free_x") + coord_flip() +
    xlab(NULL) + ylab(NULL) +
    labs(caption = "注：各変数を従属変数、実験群を従属変数として OLS 回帰し、各実験群と統制群の差を推定。横線は 9
    theme_bw() +
    theme(legend.position = "bottom")

  return(p)
}

dlist <- lapply(c(1,2,3,4,5), function(k) {
  out <- subset(d, g_ctax_N%in%c(0,k))
  out$treated = ifelse(out$g_ctax_N>0,1,0)
```

```
  return(out)
})
dnames <- c("1. 逆進性","2. 社会保障普遍性","3. 社会保障選別性",
            "4. 逆進性 & 社会保障普遍性","5. 逆進性 & 社会保障選別性")

# 図 A3
pbalance <- checkbal(dlist,dnames)
```

```
pbalance
```



注：各変数を従属変数、実験群を従属変数としてOLS回帰し、各実験群と統制群の差を推定。横線は95%信頼区間（ロバスト標準誤差を使用）。

実験刺激の直接効果

```
# 推定
m_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N),ctl), data=dtmp)
m0_1 <- m_ctax1
m_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N),ctl), data=dtmp)
m0_2 <- m_ctax2

coeftest(m_ctax1, vcov.=vcovHC(m_ctax1,"HC2"))
```

```
##
## t test of coefficients:
##
##                       Estimate Std. Error t value  Pr(>|t|)
## (Intercept)           9.868844   0.832957 11.8480 < 2.2e-16 ***
## as.factor(g_ctax_N)1 -0.807642   0.499554 -1.6167   0.10620
## as.factor(g_ctax_N)2 -0.301932   0.508001 -0.5944   0.55239
## as.factor(g_ctax_N)3  0.622476   0.513020  1.2134   0.22524
## as.factor(g_ctax_N)4 -0.964443   0.482447 -1.9991   0.04583 *
## as.factor(g_ctax_N)5  0.167813   0.519189  0.3232   0.74658
## knall                -1.049986   0.607869 -1.7273   0.08437 .
## fem                  -0.308261   0.304806 -1.0113   0.31206
## age                  -0.077268   0.015040 -5.1376 3.253e-07 ***
## lvlen                 0.241966   0.123068  1.9661   0.04952 *
## ownh                  0.217747   0.329816  0.6602   0.50925
## as.factor(edu3)1      0.215133   0.479038  0.4491   0.65345
## as.factor(edu3)2      0.468642   0.422339  1.1096   0.26738
## wk                    0.313816   0.329039  0.9537   0.34041
## mar                   1.056123   0.432377  2.4426   0.01473 *
## cld                   0.954622   0.454317  2.1012   0.03583 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
coeftest(m_ctax2, vcov.=vcovHC(m_ctax2,"HC2"))
```

```
##
## t test of coefficients:
##
##                       Estimate Std. Error t value  Pr(>|t|)
```

```
## (Intercept)          11.090322   1.061503 10.4478 < 2.2e-16 ***
## as.factor(g_ctax_N)1 -0.158345   0.643409 -0.2461  0.805645
## as.factor(g_ctax_N)2  0.112570   0.676590  0.1664  0.867888
## as.factor(g_ctax_N)3  0.861546   0.632289  1.3626  0.173274
## as.factor(g_ctax_N)4 -0.220517   0.584187 -0.3775  0.705888
## as.factor(g_ctax_N)5  0.737309   0.636408  1.1585  0.246875
## knall                -0.047926   0.724129 -0.0662  0.947242
## fem                  -0.429783   0.407748 -1.0540  0.292080
## age                  -0.053873   0.019138 -2.8150  0.004959 **
## lvlen                 0.378553   0.153134  2.4720  0.013575 *
## ownh                  0.190396   0.427753  0.4451  0.656324
## as.factor(edu3)1      0.048368   0.607778  0.0796  0.936584
## as.factor(edu3)2      1.089470   0.554050  1.9664  0.049489 *
## wk                    0.053348   0.446423  0.1195  0.904899
## mar                   1.176035   0.541277  2.1727  0.030001 *
## cld                   0.859408   0.569917  1.5080  0.131834
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

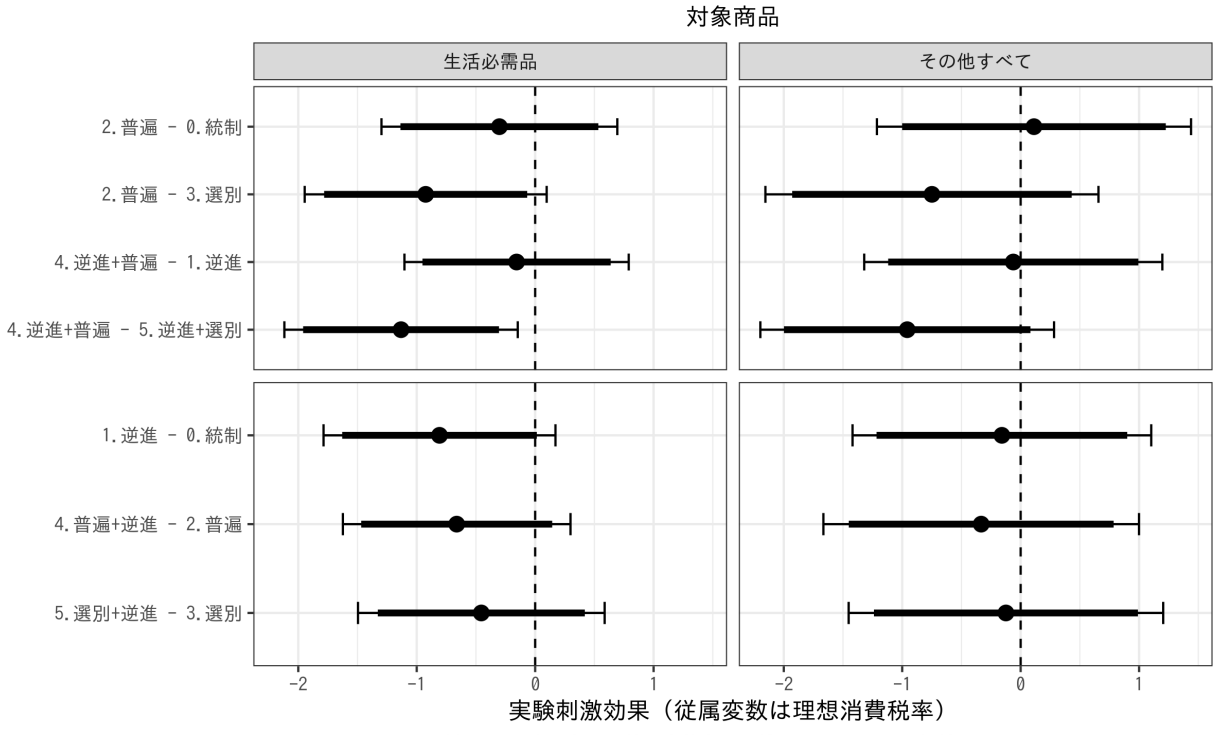
```
# 普遍性刺激の効果（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
m0_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5)),ctl), data=dtmp)
m0_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5)),ctl), data=dtmp)
m0_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5)),ctl), data=dtmp)
m0_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5)),ctl), data=dtmp)
m0_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5)),ctl), data=dtmp)
m0_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5)),ctl), data=dtmp)
m0_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3)),ctl), data=dtmp)
m0_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3)),ctl), data=dtmp)

m0r_h10_1 <- coeftest(m0_h10_1, vcov.=vcovHC(m0_h10_1,"HC2"))
m0r_h10_2 <- coeftest(m0_h10_2, vcov.=vcovHC(m0_h10_2,"HC2"))
m0r_h11_1 <- coeftest(m0_h11_1, vcov.=vcovHC(m0_h11_1,"HC2"))
m0r_h11_2 <- coeftest(m0_h11_2, vcov.=vcovHC(m0_h11_2,"HC2"))
m0r_h12_1 <- coeftest(m0_h12_1, vcov.=vcovHC(m0_h12_1,"HC2"))
m0r_h12_2 <- coeftest(m0_h12_2, vcov.=vcovHC(m0_h12_2,"HC2"))
m0r_h13_1 <- coeftest(m0_h13_1, vcov.=vcovHC(m0_h13_1,"HC2"))
m0r_h13_2 <- coeftest(m0_h13_2, vcov.=vcovHC(m0_h13_2,"HC2"))

# 逆進性刺激の効果（3 種類）
```

```
# 統制群 vs 実験群 1 &実験群 2vs 実験群 4 & 実験群 3vs 実験群 5
m0_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5)),ctl), data=dtmp)
m0_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5)),ctl), data=dtmp)
m0_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5)),ctl), data=dtmp)
m0_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5)),ctl), data=dtmp)
m0_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4)),ctl), data=dtmp)
m0_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4)),ctl), data=dtmp)

m0r_h20_1 <- coeftest(m0_h20_1, vcov.=vcovHC(m0_h20_1,"HC2"))
m0r_h20_2 <- coeftest(m0_h20_2, vcov.=vcovHC(m0_h20_2,"HC2"))
m0r_h21_1 <- coeftest(m0_h21_1, vcov.=vcovHC(m0_h21_1,"HC2"))
m0r_h21_2 <- coeftest(m0_h21_2, vcov.=vcovHC(m0_h21_2,"HC2"))
m0r_h22_1 <- coeftest(m0_h22_1, vcov.=vcovHC(m0_h22_1,"HC2"))
m0r_h22_2 <- coeftest(m0_h22_2, vcov.=vcovHC(m0_h22_2,"HC2"))
```

仮説に関係する実験群比較に関連する直接効果（図 A4）

```
## 作図用データ
htest <- data.frame(dv = rep(c("生活必需品","その他すべて"), each=7),
                    h = rep(c("社会保障普遍性","社会保障普遍性",
                              "社会保障普遍性","社会保障普遍性",
                              "消費税逆進性","消費税逆進性",
                              "消費税逆進性"),2),
                    cp = rep(c("2. 普遍 - 0. 統制",
                               "2. 普遍 - 3. 選別",
                               "4. 逆進 + 普遍 - 1. 逆進",
                               "4. 逆進 + 普遍 - 5. 逆進 + 選別",
                               "1. 逆進 - 0. 統制",
                               "4. 普遍 + 逆進 - 2. 普遍",
                               "5. 選別 + 逆進 - 3. 選別"),2),
                    rbind(m0r_h10_1[2,],m0r_h11_1[2,],m0r_h12_1[2,],m0r_h13_1[2,],
                          m0r_h20_1[2,],m0r_h21_1[2,],m0r_h22_1[2,],
                          m0r_h10_2[2,],m0r_h11_2[2,],m0r_h12_2[2,],m0r_h13_2[2,],
                          m0r_h20_2[2,],m0r_h21_2[2,],m0r_h22_2[2,]))
htest$dv <- factor(htest$dv, levels=unique(htest$dv))
htest$cp <- factor(htest$cp, levels=rev(unique(htest$cp)))
htest$h <- factor(htest$h, levels=unique(htest$h))
htest$lo95 <- htest$Estimate - qnorm(0.975)*htest$Std..Error
htest$up95 <- htest$Estimate + qnorm(0.975)*htest$Std..Error
```

```r
htest$lo90 <- htest$Estimate - qnorm(0.95)*htest$Std..Error
htest$up90 <- htest$Estimate + qnorm(0.95)*htest$Std..Error

## プロット
p <- ggplot(htest, aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95), width=0.25) +
  geom_errorbar(aes(ymin=lo90,ymax=up90), width=0, size=1.5) +
  geom_point(size=3) +
  facet_grid(h~dv, scale="free_y", switch="y") +
  coord_flip() +
  # scale_color_brewer(name="対象商品", type="qual", palette=2) +
  labs(x=NULL, y="実験刺激効果（従属変数は理想消費税率）",
       caption="分析の詳細は回帰表を参照。統制変数有。太線は90%信頼区間、細線は95%信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() +
  theme(plot.subtitle = element_text(hjust=0.5),
        strip.background.y = element_blank(),
        strip.text.y = element_blank(),
        strip.placement = "outside")
```



```
# ggsave("htest_m0_originalscale.png", p, width=8, height=5)
```

世帯収入による条件付け

```
# 推定
mx_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N)*inc,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                            Estimate Std. Error t value  Pr(>|t|)
## (Intercept)              11.205550   1.148232  9.7590 < 2.2e-16 ***
## as.factor(g_ctax_N)1     -3.709747   1.092747 -3.3949 0.0007095 ***
## as.factor(g_ctax_N)2     -2.427874   1.194938 -2.0318 0.0423986 *
## as.factor(g_ctax_N)3      0.013914   1.298417  0.0107 0.9914520
## as.factor(g_ctax_N)4     -2.526512   1.174553 -2.1510 0.0316764 *
## as.factor(g_ctax_N)5     -2.180839   1.127100 -1.9349 0.0532410 .
## inc                      -0.357187   0.251021 -1.4229 0.1550189
## knall                    -1.073699   0.611006 -1.7573 0.0791330 .
## fem                      -0.331499   0.306349 -1.0821 0.2794329
## age                      -0.073799   0.015400 -4.7922  1.86e-06 ***
## lvlen                     0.208535   0.123686  1.6860 0.0920611 .
## ownh                      0.160521   0.333243  0.4817 0.6301124
## as.factor(edu3)1          0.170731   0.481523  0.3546 0.7229786
## as.factor(edu3)2          0.396865   0.421185  0.9423 0.3462539
## wk                        0.241389   0.327860  0.7363 0.4617225
## mar                       0.826085   0.444091  1.8602 0.0631110 .
## cld                       1.000974   0.454171  2.2040 0.0277206 *
## as.factor(g_ctax_N)1:inc  0.897296   0.322332  2.7838 0.0054594 **
## as.factor(g_ctax_N)2:inc  0.667145   0.358767  1.8596 0.0631989 .
## as.factor(g_ctax_N)3:inc  0.183230   0.375520  0.4879 0.6256854
## as.factor(g_ctax_N)4:inc  0.488881   0.355363  1.3757 0.1691688
## as.factor(g_ctax_N)5:inc  0.729663   0.338774  2.1538 0.0314561 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mA_1 <- mx_ctax1
mx_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N)*inc,ctl), data=dtmp)
```

```
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                            Estimate Std. Error t value Pr(>|t|)
## (Intercept)              12.475409   1.418896  8.7923  < 2e-16 ***
## as.factor(g_ctax_N)1     -1.765725   1.476926 -1.1955  0.23212
## as.factor(g_ctax_N)2     -2.834471   1.693506 -1.6737  0.09445 .
## as.factor(g_ctax_N)3      1.281962   1.594299  0.8041  0.42151
## as.factor(g_ctax_N)4     -2.389313   1.423046 -1.6790  0.09342 .
## as.factor(g_ctax_N)5     -2.497505   1.382806 -1.8061  0.07116 .
## inc                      -0.311074   0.307640 -1.0112  0.31215
## knall                    -0.138466   0.733019 -0.1889  0.85021
## fem                      -0.541397   0.408880 -1.3241  0.18573
## age                      -0.049577   0.019576 -2.5326  0.01145 *
## lvlen                     0.323629   0.154496  2.0947  0.03641 *
## ownh                      0.115965   0.437530  0.2650  0.79102
## as.factor(edu3)1         -0.065288   0.614642 -0.1062  0.91542
## as.factor(edu3)2          0.977138   0.554108  1.7634  0.07809 .
## wk                       -0.059108   0.446309 -0.1324  0.89466
## mar                       0.885559   0.561544  1.5770  0.11506
## cld                       0.913883   0.580492  1.5743  0.11568
## as.factor(g_ctax_N)1:inc  0.498973   0.424097  1.1766  0.23961
## as.factor(g_ctax_N)2:inc  0.924911   0.530009  1.7451  0.08123 .
## as.factor(g_ctax_N)3:inc -0.149198   0.445322 -0.3350  0.73766
## as.factor(g_ctax_N)4:inc  0.686411   0.425708  1.6124  0.10714
## as.factor(g_ctax_N)5:inc  1.000520   0.398259  2.5122  0.01213 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mA_2 <- mx_ctax2

# 仮説 1 の検証（4 種類）
# 統制群 vs 実験群 2 &実験群 3vs 実験群 2 &実験群 1vs 実験群 4 &実験群 5vs 実験群 4
mA1_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-2),ctl), data=dtmp)
```

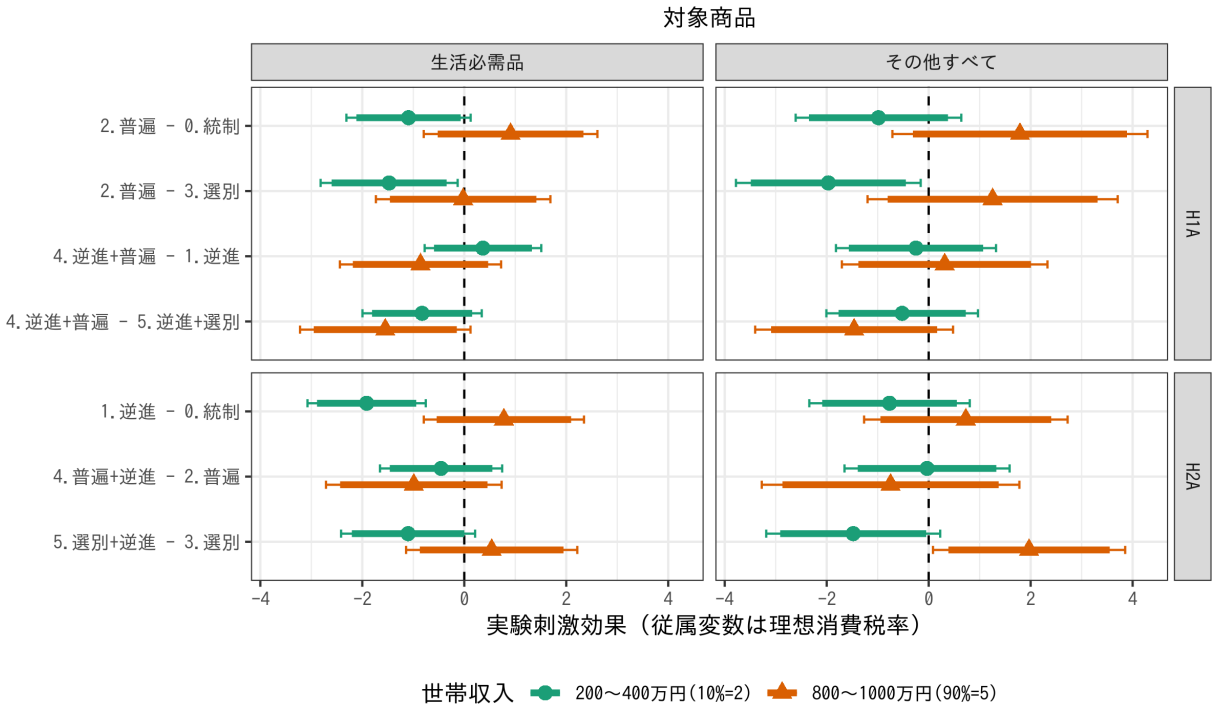
```
mA1_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-2),ctl), data=dtmp)
mA1_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-2),ctl), data=dtmp)

mA1r_h10_1 <- coeftest(mA1_h10_1, vcov.=vcovHC(mA1_h10_1,"HC2"))
mA1r_h10_2 <- coeftest(mA1_h10_2, vcov.=vcovHC(mA1_h10_2,"HC2"))
mA1r_h11_1 <- coeftest(mA1_h11_1, vcov.=vcovHC(mA1_h11_1,"HC2"))
mA1r_h11_2 <- coeftest(mA1_h11_2, vcov.=vcovHC(mA1_h11_2,"HC2"))
mA1r_h12_1 <- coeftest(mA1_h12_1, vcov.=vcovHC(mA1_h12_1,"HC2"))
mA1r_h12_2 <- coeftest(mA1_h12_2, vcov.=vcovHC(mA1_h12_2,"HC2"))
mA1r_h13_1 <- coeftest(mA1_h13_1, vcov.=vcovHC(mA1_h13_1,"HC2"))
mA1r_h13_2 <- coeftest(mA1_h13_2, vcov.=vcovHC(mA1_h13_2,"HC2"))

mA2_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-5),ctl), data=dtmp)
mA2_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-5),ctl), data=dtmp)

mA2r_h10_1 <- coeftest(mA2_h10_1, vcov.=vcovHC(mA2_h10_1,"HC2"))
mA2r_h10_2 <- coeftest(mA2_h10_2, vcov.=vcovHC(mA2_h10_2,"HC2"))
mA2r_h11_1 <- coeftest(mA2_h11_1, vcov.=vcovHC(mA2_h11_1,"HC2"))
mA2r_h11_2 <- coeftest(mA2_h11_2, vcov.=vcovHC(mA2_h11_2,"HC2"))
mA2r_h12_1 <- coeftest(mA2_h12_1, vcov.=vcovHC(mA2_h12_1,"HC2"))
mA2r_h12_2 <- coeftest(mA2_h12_2, vcov.=vcovHC(mA2_h12_2,"HC2"))
mA2r_h13_1 <- coeftest(mA2_h13_1, vcov.=vcovHC(mA2_h13_1,"HC2"))
mA2r_h13_2 <- coeftest(mA2_h13_2, vcov.=vcovHC(mA2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 &実験群 2vs 実験群 4 & 実験群 3vs 実験群 5
mA1_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-2),ctl), data=dtmp)
mA1_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-2),ctl), data=dtmp)
```

```
mA1r_h20_1 <- coeftest(mA1_h20_1, vcov.=vcovHC(mA1_h20_1,"HC2"))
mA1r_h20_2 <- coeftest(mA1_h20_2, vcov.=vcovHC(mA1_h20_2,"HC2"))
mA1r_h21_1 <- coeftest(mA1_h21_1, vcov.=vcovHC(mA1_h21_1,"HC2"))
mA1r_h21_2 <- coeftest(mA1_h21_2, vcov.=vcovHC(mA1_h21_2,"HC2"))
mA1r_h22_1 <- coeftest(mA1_h22_1, vcov.=vcovHC(mA1_h22_1,"HC2"))
mA1r_h22_2 <- coeftest(mA1_h22_2, vcov.=vcovHC(mA1_h22_2,"HC2"))

mA2_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-5),ctl), data=dtmp)
mA2_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-5),ctl), data=dtmp)

mA2r_h20_1 <- coeftest(mA2_h20_1, vcov.=vcovHC(mA2_h20_1,"HC2"))
mA2r_h20_2 <- coeftest(mA2_h20_2, vcov.=vcovHC(mA2_h20_2,"HC2"))
mA2r_h21_1 <- coeftest(mA2_h21_1, vcov.=vcovHC(mA2_h21_1,"HC2"))
mA2r_h21_2 <- coeftest(mA2_h21_2, vcov.=vcovHC(mA2_h21_2,"HC2"))
mA2r_h22_1 <- coeftest(mA2_h22_1, vcov.=vcovHC(mA2_h22_1,"HC2"))
mA2r_h22_2 <- coeftest(mA2_h22_2, vcov.=vcovHC(mA2_h22_2,"HC2"))
```

世帯収入に条件付けされた実験情報刺激の限界効果を用いた仮説検証（図 2）

```
htest <- data.frame(int = rep(c("200～400 万円 (10%=2)","800～1000 万円 (90%=5)"), each=14),
                    dv = rep(c(" 生活必需品"," その他すべて"), each=7),
                    h = rep(c("H1A","H1A",
                              "H1A","H1A",
                              "H2A","H2A",
                              "H2A"),4),
                    cp = rep(c("2. 普遍 - 0. 統制",
                               "2. 普遍 - 3. 選別",
                               "4. 逆進 + 普遍 - 1. 逆進",
                               "4. 逆進 + 普遍 - 5. 逆進 + 選別",
                               "1. 逆進 - 0. 統制",
                               "4. 普遍 + 逆進 - 2. 普遍",
                               "5. 選別 + 逆進 - 3. 選別"),4),
                    rbind(mA1r_h10_1[2,],mA1r_h11_1[2,],mA1r_h12_1[2,],mA1r_h13_1[2,],
                          mA1r_h20_1[2,],mA1r_h21_1[2,],mA1r_h22_1[2,],
```

```
                        mA1r_h10_2[2,],mA1r_h11_2[2,],mA1r_h12_2[2,],mA1r_h13_2[2,],
                        mA1r_h20_2[2,],mA1r_h21_2[2,],mA1r_h22_2[2,],
                        mA2r_h10_1[2,],mA2r_h11_1[2,],mA2r_h12_1[2,],mA2r_h13_1[2,],
                        mA2r_h20_1[2,],mA2r_h21_1[2,],mA2r_h22_1[2,],
                        mA2r_h10_2[2,],mA2r_h11_2[2,],mA2r_h12_2[2,],mA2r_h13_2[2,],
                        mA2r_h20_2[2,],mA2r_h21_2[2,],mA2r_h22_2[2,]))
htest$dv <- factor(htest$dv, levels=unique(htest$dv))
htest$cp <- factor(htest$cp, levels=rev(unique(htest$cp)))
htest$lo95 <- htest$Estimate - qnorm(0.975)*htest$Std..Error
htest$up95 <- htest$Estimate + qnorm(0.975)*htest$Std..Error
htest$lo90 <- htest$Estimate - qnorm(0.95)*htest$Std..Error
htest$up90 <- htest$Estimate + qnorm(0.95)*htest$Std..Error

p <- ggplot(htest, aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95, color=int), width=0.25, position = position_dodge(width=-0.5)) +
  geom_errorbar(aes(ymin=lo90,ymax=up90, color=int), width=0, size=1.5, position = position_dodge(width=-
  geom_point(aes(color=int, shape=int), size=3, position = position_dodge(width=-0.5)) +
  facet_grid(h~dv, scales = "free_y", space = "free_y") +
  coord_flip() +
  scale_color_brewer(name="世帯収入", type="qual", palette=2) +
  scale_shape_discrete(name="世帯収入") +
  labs(x=NULL, y="実験刺激効果（従属変数は理想消費税率）",
       caption="分析の詳細は回帰表を参照。太線は 90% 信頼区間、細線は 95% 信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() + theme(legend.position="bottom",
                     plot.subtitle = element_text(hjust=0.5),
                     strip.placement = "outside")
```



分析の詳細は回帰表を参照。太線は90%信頼区間、細線は95%信頼区間を示している。

```
# ggsave("htest_mA_originalscale.png", p, width=8, height=6)
```

自己申告イデオロギーによる条件付け

```
# 推定
mx_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N)*ide_self,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                              Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                  9.813412   0.853374 11.4995 < 2.2e-16 ***
## as.factor(g_ctax_N)1        -0.762377   0.528441 -1.4427  0.149374
## as.factor(g_ctax_N)2        -0.271343   0.534260 -0.5079  0.611628
## as.factor(g_ctax_N)3         0.707019   0.540032  1.3092  0.190717
## as.factor(g_ctax_N)4        -0.847809   0.514285 -1.6485  0.099513 .
## as.factor(g_ctax_N)5         0.198634   0.539304  0.3683  0.712705
## ide_self                     0.123790   0.385938  0.3208  0.748456
## knall                       -0.989429   0.612882 -1.6144  0.106712
## fem                         -0.367512   0.309140 -1.1888  0.234751
```

```
## age                            -0.077935   0.015118 -5.1551 2.972e-07 ***
## lvlen                           0.246578   0.123324  1.9994  0.045791 *
## ownh                            0.234809   0.332306  0.7066  0.479953
## as.factor(edu3)1                0.198773   0.478608  0.4153  0.677987
## as.factor(edu3)2                0.434859   0.422871  1.0283  0.303997
## wk                              0.342669   0.331731  1.0330  0.301830
## mar                             1.127097   0.436404  2.5827  0.009923 **
## cld                             0.938813   0.455998  2.0588  0.039733 *
## as.factor(g_ctax_N)1:ide_self -0.198629   0.514285 -0.3862  0.699402
## as.factor(g_ctax_N)2:ide_self -0.162164   0.565067 -0.2870  0.774177
## as.factor(g_ctax_N)3:ide_self -0.456225   0.507698 -0.8986  0.369042
## as.factor(g_ctax_N)4:ide_self -0.753870   0.528721 -1.4258  0.154181
## as.factor(g_ctax_N)5:ide_self -0.121175   0.517519 -0.2341  0.814912
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mB_1 <- mx_ctax1
mx_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N)*ide_self,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                               Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                  11.023624   1.078323 10.2229 < 2.2e-16 ***
## as.factor(g_ctax_N)1         -0.043186   0.666650 -0.0648  0.948359
## as.factor(g_ctax_N)2          0.116997   0.698781  0.1674  0.867060
## as.factor(g_ctax_N)3          0.884464   0.642328  1.3770  0.168785
## as.factor(g_ctax_N)4         -0.204848   0.604973 -0.3386  0.734966
## as.factor(g_ctax_N)5          0.736136   0.649510  1.1334  0.257290
## ide_self                     -0.050996   0.438887 -0.1162  0.907519
## knall                         0.034691   0.727168  0.0477  0.961958
## fem                          -0.493489   0.410091 -1.2034  0.229077
## age                          -0.053010   0.019125 -2.7718  0.005664 **
## lvlen                         0.382626   0.153901  2.4862  0.013050 *
## ownh                          0.239129   0.429563  0.5567  0.577853
## as.factor(edu3)1              0.062839   0.606669  0.1036  0.917521
## as.factor(edu3)2              1.094034   0.557233  1.9633  0.049843 *
## wk                            0.023653   0.447170  0.0529  0.957825
## mar                           1.201335   0.548578  2.1899  0.028727 *
```

```
## cld                             0.866271   0.575052  1.5064  0.132228
## as.factor(g_ctax_N)1:ide_self -0.679197   0.616445 -1.1018  0.270776
## as.factor(g_ctax_N)2:ide_self -0.463431   0.757620 -0.6117  0.540859
## as.factor(g_ctax_N)3:ide_self -0.187458   0.629238 -0.2979  0.765822
## as.factor(g_ctax_N)4:ide_self -0.148503   0.650471 -0.2283  0.819452
## as.factor(g_ctax_N)5:ide_self -0.039499   0.632587 -0.0624  0.950222
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mB_2 <- mx_ctax2

# 仮説 1 の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
mB1_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self+1),ctl), data=dtmp)
mB1_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self+1),ctl), data=dtmp)

mB1r_h10_1 <- coeftest(mB1_h10_1, vcov.=vcovHC(mB1_h10_1,"HC2"))
mB1r_h10_2 <- coeftest(mB1_h10_2, vcov.=vcovHC(mB1_h10_2,"HC2"))
mB1r_h11_1 <- coeftest(mB1_h11_1, vcov.=vcovHC(mB1_h11_1,"HC2"))
mB1r_h11_2 <- coeftest(mB1_h11_2, vcov.=vcovHC(mB1_h11_2,"HC2"))
mB1r_h12_1 <- coeftest(mB1_h12_1, vcov.=vcovHC(mB1_h12_1,"HC2"))
mB1r_h12_2 <- coeftest(mB1_h12_2, vcov.=vcovHC(mB1_h12_2,"HC2"))
mB1r_h13_1 <- coeftest(mB1_h13_1, vcov.=vcovHC(mB1_h13_1,"HC2"))
mB1r_h13_2 <- coeftest(mB1_h13_2, vcov.=vcovHC(mB1_h13_2,"HC2"))

mB2_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self-1),ctl), data=dtmp)
mB2_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self-1),ctl), data=dtmp)
```

```
mB2r_h10_1 <- coeftest(mB2_h10_1, vcov.=vcovHC(mB2_h10_1,"HC2"))
mB2r_h10_2 <- coeftest(mB2_h10_2, vcov.=vcovHC(mB2_h10_2,"HC2"))
mB2r_h11_1 <- coeftest(mB2_h11_1, vcov.=vcovHC(mB2_h11_1,"HC2"))
mB2r_h11_2 <- coeftest(mB2_h11_2, vcov.=vcovHC(mB2_h11_2,"HC2"))
mB2r_h12_1 <- coeftest(mB2_h12_1, vcov.=vcovHC(mB2_h12_1,"HC2"))
mB2r_h12_2 <- coeftest(mB2_h12_2, vcov.=vcovHC(mB2_h12_2,"HC2"))
mB2r_h13_1 <- coeftest(mB2_h13_1, vcov.=vcovHC(mB2_h13_1,"HC2"))
mB2r_h13_2 <- coeftest(mB2_h13_2, vcov.=vcovHC(mB2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
mB1_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self+1),ctl), data=dtmp)
mB1_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self+1),ctl), data=dtmp)

mB1r_h20_1 <- coeftest(mB1_h20_1, vcov.=vcovHC(mB1_h20_1,"HC2"))
mB1r_h20_2 <- coeftest(mB1_h20_2, vcov.=vcovHC(mB1_h20_2,"HC2"))
mB1r_h21_1 <- coeftest(mB1_h21_1, vcov.=vcovHC(mB1_h21_1,"HC2"))
mB1r_h21_2 <- coeftest(mB1_h21_2, vcov.=vcovHC(mB1_h21_2,"HC2"))
mB1r_h22_1 <- coeftest(mB1_h22_1, vcov.=vcovHC(mB1_h22_1,"HC2"))
mB1r_h22_2 <- coeftest(mB1_h22_2, vcov.=vcovHC(mB1_h22_2,"HC2"))

mB2_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self-1),ctl), data=dtmp)
mB2_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self-1),ctl), data=dtmp)

mB2r_h20_1 <- coeftest(mB2_h20_1, vcov.=vcovHC(mB2_h20_1,"HC2"))
mB2r_h20_2 <- coeftest(mB2_h20_2, vcov.=vcovHC(mB2_h20_2,"HC2"))
mB2r_h21_1 <- coeftest(mB2_h21_1, vcov.=vcovHC(mB2_h21_1,"HC2"))
mB2r_h21_2 <- coeftest(mB2_h21_2, vcov.=vcovHC(mB2_h21_2,"HC2"))
mB2r_h22_1 <- coeftest(mB2_h22_1, vcov.=vcovHC(mB2_h22_1,"HC2"))
mB2r_h22_2 <- coeftest(mB2_h22_2, vcov.=vcovHC(mB2_h22_2,"HC2"))
```

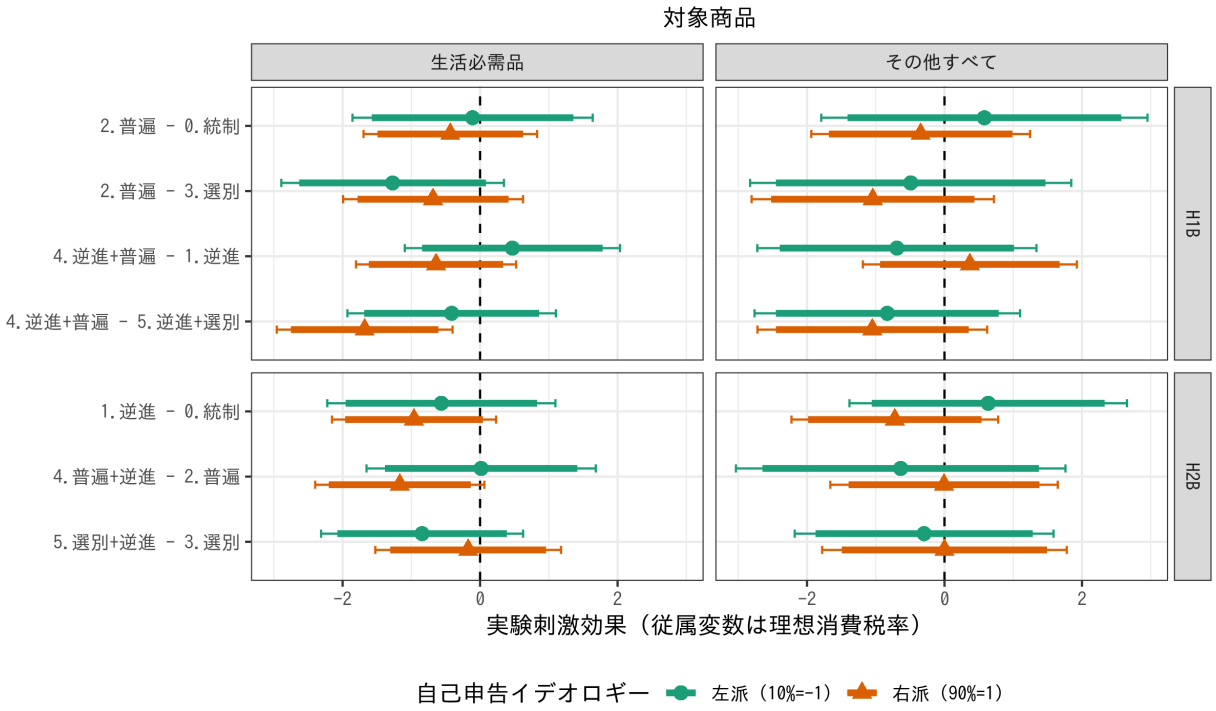
自己申告イデオロギーに条件付けされた実験情報刺激の限界効果を用いた仮説検証（図 A5）

```
htest <- data.frame(int = rep(c("左派 (10%=-1)", "右派 (90%=1)"), each=14),
                    dv = rep(c("生活必需品","その他すべて"), each=7),
                    h = rep(c("H1B","H1B",
                              "H1B","H1B",
                              "H2B","H2B",
                              "H2B"),4),
                    cp = rep(c("2. 普遍 - 0. 統制",
                               "2. 普遍 - 3. 選別",
                               "4. 逆進 + 普遍 - 1. 逆進",
                               "4. 逆進 + 普遍 - 5. 逆進 + 選別",
                               "1. 逆進 - 0. 統制",
                               "4. 普遍 + 逆進 - 2. 普遍",
                               "5. 選別 + 逆進 - 3. 選別"),4),
                    rbind(mB1r_h10_1[2,],mB1r_h11_1[2,],mB1r_h12_1[2,],mB1r_h13_1[2,],
                          mB1r_h20_1[2,],mB1r_h21_1[2,],mB1r_h22_1[2,],
                          mB1r_h10_2[2,],mB1r_h11_2[2,],mB1r_h12_2[2,],mB1r_h13_2[2,],
                          mB1r_h20_2[2,],mB1r_h21_2[2,],mB1r_h22_2[2,],
                          mB2r_h10_1[2,],mB2r_h11_1[2,],mB2r_h12_1[2,],mB2r_h13_1[2,],
                          mB2r_h20_1[2,],mB2r_h21_1[2,],mB2r_h22_1[2,],
                          mB2r_h10_2[2,],mB2r_h11_2[2,],mB2r_h12_2[2,],mB2r_h13_2[2,],
                          mB2r_h20_2[2,],mB2r_h21_2[2,],mB2r_h22_2[2,]))
htest$dv <- factor(htest$dv, levels=unique(htest$dv))
htest$cp <- factor(htest$cp, levels=rev(unique(htest$cp)))
htest$int <- factor(htest$int, levels=unique(htest$int))
levels(htest$int)
```

```
## [1] "左派 (10%=-1)" "右派 (90%=1)"
```

```
htest$lo95 <- htest$Estimate - qnorm(0.975)*htest$Std..Error
htest$up95 <- htest$Estimate + qnorm(0.975)*htest$Std..Error
htest$lo90 <- htest$Estimate - qnorm(0.95)*htest$Std..Error
htest$up90 <- htest$Estimate + qnorm(0.95)*htest$Std..Error

p <- ggplot(htest, aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95, color=int), width=0.25, position = position_dodge(width=-0.5)) +
  geom_errorbar(aes(ymin=lo90,ymax=up90, color=int), width=0, size=1.5, position = position_dodge(width=-
```

```
  geom_point(aes(color=int, shape=int), size=3, position = position_dodge(width=-0.5)) +
  facet_grid(h~dv, scales = "free_y", space = "free_y") +
  coord_flip() +
  scale_color_brewer(name="自己申告イデオロギー", type="qual", palette=2) +
  scale_shape_discrete(name="自己申告イデオロギー") +
  labs(x=NULL, y="実験刺激効果（従属変数は理想消費税率）",
       caption="分析の詳細は回帰表を参照。太線は 90% 信頼区間、細線は 95% 信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() + theme(legend.position="bottom",
                     plot.subtitle = element_text(hjust=0.5),
                     strip.placement = "outside")
```




```
# ggsave("htest_mB_originalscale.png", p, width=8, height=6)
```

争点態度イデオロギー条件付け

外交安全保障

```
mx_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N)*ide_iss_1,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
```

```
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                     9.851668   0.841839 11.7026 < 2.2e-16 ***
## as.factor(g_ctax_N)1           -0.808530   0.500591 -1.6152   0.10655
## as.factor(g_ctax_N)2           -0.239799   0.515352 -0.4653   0.64180
## as.factor(g_ctax_N)3            0.621823   0.513406  1.2112   0.22607
## as.factor(g_ctax_N)4           -0.979797   0.481359 -2.0355   0.04203 *
## as.factor(g_ctax_N)5            0.178514   0.532545  0.3352   0.73753
## ide_iss_1                      -0.041447   0.324785 -0.1276   0.89848
## knall                          -1.109017   0.615412 -1.8021   0.07179 .
## fem                            -0.289858   0.314857 -0.9206   0.35745
## age                            -0.076751   0.015243 -5.0353 5.516e-07 ***
## lvlen                           0.239166   0.124048  1.9280   0.05410 .
## ownh                            0.239399   0.331530  0.7221   0.47037
## as.factor(edu3)1                0.228578   0.481692  0.4745   0.63521
## as.factor(edu3)2                0.488048   0.427101  1.1427   0.25340
## wk                              0.315429   0.331657  0.9511   0.34176
## mar                             1.063703   0.433471  2.4539   0.01428 *
## cld                             0.931492   0.456299  2.0414   0.04143 *
## as.factor(g_ctax_N)1:ide_iss_1 -0.100291   0.475377 -0.2110   0.83295
## as.factor(g_ctax_N)2:ide_iss_1 -0.279913   0.460257 -0.6082   0.54319
## as.factor(g_ctax_N)3:ide_iss_1  0.339880   0.473437  0.7179   0.47296
## as.factor(g_ctax_N)4:ide_iss_1  0.155988   0.434863  0.3587   0.71988
## as.factor(g_ctax_N)5:ide_iss_1  0.169896   0.502746  0.3379   0.73547
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBa_1 <- mx_ctax1
mx_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N)*ide_iss_1,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value Pr(>|t|)
## (Intercept)                    10.925612   1.050025 10.4051  < 2e-16 ***
## as.factor(g_ctax_N)1           -0.150582   0.644027 -0.2338  0.81517
## as.factor(g_ctax_N)2            0.049451   0.680772  0.0726  0.94211
## as.factor(g_ctax_N)3            0.871613   0.632603  1.3778  0.16852
```

```
## as.factor(g_ctax_N)4           -0.305922   0.582670 -0.5250  0.59966
## as.factor(g_ctax_N)5            0.806395   0.656880  1.2276  0.21984
## ide_iss_1                      -0.244726   0.401323 -0.6098  0.54211
## knall                          -0.193535   0.726989 -0.2662  0.79012
## fem                            -0.239088   0.423613 -0.5644  0.57259
## age                            -0.049221   0.019132 -2.5727  0.01021 *
## lvlen                           0.352807   0.154891  2.2778  0.02292 *
## ownh                            0.208222   0.427960  0.4865  0.62667
## as.factor(edu3)1                0.105274   0.604975  0.1740  0.86188
## as.factor(edu3)2                1.194090   0.549646  2.1725  0.03002 *
## wk                              0.010164   0.447951  0.0227  0.98190
## mar                             1.122063   0.542695  2.0676  0.03890 *
## cld                             0.815189   0.566634  1.4387  0.15052
## as.factor(g_ctax_N)1:ide_iss_1  0.520492   0.579902  0.8976  0.36961
## as.factor(g_ctax_N)2:ide_iss_1  0.688975   0.694517  0.9920  0.32139
## as.factor(g_ctax_N)3:ide_iss_1  0.848168   0.599000  1.4160  0.15705
## as.factor(g_ctax_N)4:ide_iss_1  0.962616   0.564826  1.7043  0.08860 .
## as.factor(g_ctax_N)5:ide_iss_1  0.810976   0.668878  1.2124  0.22559
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBa_2 <- mx_ctax2

# 仮説 1 の検証（4 種類）
# 統制群 vs 実験群 2 &実験群 3vs 実験群 2 &実験群 1vs 実験群 4 &実験群 5vs 実験群 4
mBa1_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1+1.35),ctl), data=d

mBa1r_h10_1 <- coeftest(mBa1_h10_1, vcov.=vcovHC(mBa1_h10_1,"HC2"))
mBa1r_h10_2 <- coeftest(mBa1_h10_2, vcov.=vcovHC(mBa1_h10_2,"HC2"))
mBa1r_h11_1 <- coeftest(mBa1_h11_1, vcov.=vcovHC(mBa1_h11_1,"HC2"))
mBa1r_h11_2 <- coeftest(mBa1_h11_2, vcov.=vcovHC(mBa1_h11_2,"HC2"))
mBa1r_h12_1 <- coeftest(mBa1_h12_1, vcov.=vcovHC(mBa1_h12_1,"HC2"))
mBa1r_h12_2 <- coeftest(mBa1_h12_2, vcov.=vcovHC(mBa1_h12_2,"HC2"))
```

```
mBa1r_h13_1 <- coeftest(mBa1_h13_1, vcov.=vcovHC(mBa1_h13_1,"HC2"))
mBa1r_h13_2 <- coeftest(mBa1_h13_2, vcov.=vcovHC(mBa1_h13_2,"HC2"))

mBa2_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1-1.53),ctl), data=d

mBa2r_h10_1 <- coeftest(mBa2_h10_1, vcov.=vcovHC(mBa2_h10_1,"HC2"))
mBa2r_h10_2 <- coeftest(mBa2_h10_2, vcov.=vcovHC(mBa2_h10_2,"HC2"))
mBa2r_h11_1 <- coeftest(mBa2_h11_1, vcov.=vcovHC(mBa2_h11_1,"HC2"))
mBa2r_h11_2 <- coeftest(mBa2_h11_2, vcov.=vcovHC(mBa2_h11_2,"HC2"))
mBa2r_h12_1 <- coeftest(mBa2_h12_1, vcov.=vcovHC(mBa2_h12_1,"HC2"))
mBa2r_h12_2 <- coeftest(mBa2_h12_2, vcov.=vcovHC(mBa2_h12_2,"HC2"))
mBa2r_h13_1 <- coeftest(mBa2_h13_1, vcov.=vcovHC(mBa2_h13_1,"HC2"))
mBa2r_h13_2 <- coeftest(mBa2_h13_2, vcov.=vcovHC(mBa2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
mBa1_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1+1.35),ctl), data=d

mBa1r_h20_1 <- coeftest(mBa1_h20_1, vcov.=vcovHC(mBa1_h20_1,"HC2"))
mBa1r_h20_2 <- coeftest(mBa1_h20_2, vcov.=vcovHC(mBa1_h20_2,"HC2"))
mBa1r_h21_1 <- coeftest(mBa1_h21_1, vcov.=vcovHC(mBa1_h21_1,"HC2"))
mBa1r_h21_2 <- coeftest(mBa1_h21_2, vcov.=vcovHC(mBa1_h21_2,"HC2"))
mBa1r_h22_1 <- coeftest(mBa1_h22_1, vcov.=vcovHC(mBa1_h22_1,"HC2"))
mBa1r_h22_2 <- coeftest(mBa1_h22_2, vcov.=vcovHC(mBa1_h22_2,"HC2"))

mBa2_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1-1.53),ctl), data=d
```

```
mBa2_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1-1.53),ctl), data=d

mBa2r_h20_1 <- coeftest(mBa2_h20_1, vcov.=vcovHC(mBa2_h20_1,"HC2"))
mBa2r_h20_2 <- coeftest(mBa2_h20_2, vcov.=vcovHC(mBa2_h20_2,"HC2"))
mBa2r_h21_1 <- coeftest(mBa2_h21_1, vcov.=vcovHC(mBa2_h21_1,"HC2"))
mBa2r_h21_2 <- coeftest(mBa2_h21_2, vcov.=vcovHC(mBa2_h21_2,"HC2"))
mBa2r_h22_1 <- coeftest(mBa2_h22_1, vcov.=vcovHC(mBa2_h22_1,"HC2"))
mBa2r_h22_2 <- coeftest(mBa2_h22_2, vcov.=vcovHC(mBa2_h22_2,"HC2"))
```

権利機会平等

```
mx_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N)*ide_iss_2,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                     9.475970   0.844792 11.2169 < 2.2e-16 ***
## as.factor(g_ctax_N)1           -0.783730   0.497867 -1.5742  0.115716
## as.factor(g_ctax_N)2           -0.353066   0.504882 -0.6993  0.484501
## as.factor(g_ctax_N)3            0.565421   0.511576  1.1053  0.269276
## as.factor(g_ctax_N)4           -0.964994   0.482461 -2.0002  0.045714 *
## as.factor(g_ctax_N)5            0.056286   0.510978  0.1102  0.912306
## ide_iss_2                      -0.165748   0.333973 -0.4963  0.619782
## knall                          -0.875998   0.600726 -1.4582  0.145044
## fem                            -0.635723   0.318394 -1.9967  0.046093 *
## age                            -0.066519   0.015461 -4.3022 1.831e-05 ***
## lvlen                           0.263744   0.123262  2.1397  0.032584 *
## ownh                            0.266962   0.326379  0.8180  0.413551
## as.factor(edu3)1                0.274321   0.478788  0.5729  0.566789
## as.factor(edu3)2                0.424020   0.421228  1.0066  0.314321
## wk                              0.260099   0.331419  0.7848  0.432726
## mar                             1.119351   0.425119  2.6330  0.008574 **
## cld                             0.941963   0.449768  2.0943  0.036444 *
## as.factor(g_ctax_N)1:ide_iss_2 -0.429061   0.432046 -0.9931  0.320870
```

```
## as.factor(g_ctax_N)2:ide_iss_2 -0.445843   0.451706 -0.9870  0.323837
## as.factor(g_ctax_N)3:ide_iss_2 -0.753707   0.476408 -1.5821  0.113905
## as.factor(g_ctax_N)4:ide_iss_2 -0.218013   0.431203 -0.5056  0.613237
## as.factor(g_ctax_N)5:ide_iss_2 -0.700413   0.485092 -1.4439  0.149040
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBb_1 <- mx_ctax1
mx_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N)*ide_iss_2,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                   10.204230   1.068767  9.5477 < 2.2e-16 ***
## as.factor(g_ctax_N)1          -0.095510   0.639923 -0.1493  0.881380
## as.factor(g_ctax_N)2          -0.014281   0.652731 -0.0219  0.982549
## as.factor(g_ctax_N)3           0.760360   0.619022  1.2283  0.219571
## as.factor(g_ctax_N)4          -0.230442   0.575669 -0.4003  0.689006
## as.factor(g_ctax_N)5           0.605820   0.628878  0.9633  0.335578
## ide_iss_2                     -0.162812   0.431522 -0.3773  0.706022
## knall                          0.301325   0.710986  0.4238  0.671780
## fem                           -1.110301   0.408763 -2.7162  0.006700 **
## age                           -0.029141   0.019726 -1.4773  0.139869
## lvlen                          0.416378   0.151235  2.7532  0.005993 **
## ownh                           0.263718   0.418552  0.6301  0.528769
## as.factor(edu3)1               0.146914   0.598504  0.2455  0.806136
## as.factor(edu3)2               0.997017   0.545603  1.8274  0.067898 .
## wk                            -0.036001   0.442439 -0.0814  0.935163
## mar                            1.357630   0.527575  2.5733  0.010194 *
## cld                            0.747557   0.559472  1.3362  0.181748
## as.factor(g_ctax_N)1:ide_iss_2 -1.218090   0.649392 -1.8757  0.060939 .
## as.factor(g_ctax_N)2:ide_iss_2 -1.613535   0.629799 -2.5620  0.010531 *
## as.factor(g_ctax_N)3:ide_iss_2 -1.456359   0.601239 -2.4223  0.015575 *
## as.factor(g_ctax_N)4:ide_iss_2 -0.951338   0.554237 -1.7165  0.086337 .
## as.factor(g_ctax_N)5:ide_iss_2 -0.913700   0.653153 -1.3989  0.162105
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBb_2 <- mx_ctax2

# 仮説１の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
mBb1_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2+1.50),ctl), data=d

mBb1r_h10_1 <- coeftest(mBb1_h10_1, vcov.=vcovHC(mBb1_h10_1,"HC2"))
mBb1r_h10_2 <- coeftest(mBb1_h10_2, vcov.=vcovHC(mBb1_h10_2,"HC2"))
mBb1r_h11_1 <- coeftest(mBb1_h11_1, vcov.=vcovHC(mBb1_h11_1,"HC2"))
mBb1r_h11_2 <- coeftest(mBb1_h11_2, vcov.=vcovHC(mBb1_h11_2,"HC2"))
mBb1r_h12_1 <- coeftest(mBb1_h12_1, vcov.=vcovHC(mBb1_h12_1,"HC2"))
mBb1r_h12_2 <- coeftest(mBb1_h12_2, vcov.=vcovHC(mBb1_h12_2,"HC2"))
mBb1r_h13_1 <- coeftest(mBb1_h13_1, vcov.=vcovHC(mBb1_h13_1,"HC2"))
mBb1r_h13_2 <- coeftest(mBb1_h13_2, vcov.=vcovHC(mBb1_h13_2,"HC2"))

mBb2_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2-1.48),ctl), data=d

mBb2r_h10_1 <- coeftest(mBb2_h10_1, vcov.=vcovHC(mBb2_h10_1,"HC2"))
mBb2r_h10_2 <- coeftest(mBb2_h10_2, vcov.=vcovHC(mBb2_h10_2,"HC2"))
mBb2r_h11_1 <- coeftest(mBb2_h11_1, vcov.=vcovHC(mBb2_h11_1,"HC2"))
mBb2r_h11_2 <- coeftest(mBb2_h11_2, vcov.=vcovHC(mBb2_h11_2,"HC2"))
mBb2r_h12_1 <- coeftest(mBb2_h12_1, vcov.=vcovHC(mBb2_h12_1,"HC2"))
mBb2r_h12_2 <- coeftest(mBb2_h12_2, vcov.=vcovHC(mBb2_h12_2,"HC2"))
mBb2r_h13_1 <- coeftest(mBb2_h13_1, vcov.=vcovHC(mBb2_h13_1,"HC2"))
mBb2r_h13_2 <- coeftest(mBb2_h13_2, vcov.=vcovHC(mBb2_h13_2,"HC2"))
```

```
# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
mBb1_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2+1.50),ctl), data=d

mBb1r_h20_1 <- coeftest(mBb1_h20_1, vcov.=vcovHC(mBb1_h20_1,"HC2"))
mBb1r_h20_2 <- coeftest(mBb1_h20_2, vcov.=vcovHC(mBb1_h20_2,"HC2"))
mBb1r_h21_1 <- coeftest(mBb1_h21_1, vcov.=vcovHC(mBb1_h21_1,"HC2"))
mBb1r_h21_2 <- coeftest(mBb1_h21_2, vcov.=vcovHC(mBb1_h21_2,"HC2"))
mBb1r_h22_1 <- coeftest(mBb1_h22_1, vcov.=vcovHC(mBb1_h22_1,"HC2"))
mBb1r_h22_2 <- coeftest(mBb1_h22_2, vcov.=vcovHC(mBb1_h22_2,"HC2"))

mBb2_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2-1.48),ctl), data=d

mBb2r_h20_1 <- coeftest(mBb2_h20_1, vcov.=vcovHC(mBb2_h20_1,"HC2"))
mBb2r_h20_2 <- coeftest(mBb2_h20_2, vcov.=vcovHC(mBb2_h20_2,"HC2"))
mBb2r_h21_1 <- coeftest(mBb2_h21_1, vcov.=vcovHC(mBb2_h21_1,"HC2"))
mBb2r_h21_2 <- coeftest(mBb2_h21_2, vcov.=vcovHC(mBb2_h21_2,"HC2"))
mBb2r_h22_1 <- coeftest(mBb2_h22_1, vcov.=vcovHC(mBb2_h22_1,"HC2"))
mBb2r_h22_2 <- coeftest(mBb2_h22_2, vcov.=vcovHC(mBb2_h22_2,"HC2"))
```

政党支持イデオロギー条件付け

```
mx_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N)*ide_psup,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
```

```
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                     9.683943   0.826992 11.7098 < 2.2e-16 ***
## as.factor(g_ctax_N)1           -0.717284   0.529373 -1.3550   0.17569
## as.factor(g_ctax_N)2           -0.396013   0.528527 -0.7493   0.45384
## as.factor(g_ctax_N)3            0.649238   0.611683  1.0614   0.28873
## as.factor(g_ctax_N)4           -0.854883   0.504947 -1.6930   0.09072 .
## as.factor(g_ctax_N)5            0.080323   0.517292  0.1553   0.87663
## ide_psup                        0.701381   0.460010  1.5247   0.12760
## knall                          -1.041224   0.603388 -1.7256   0.08468 .
## fem                            -0.202091   0.310171 -0.6515   0.51482
## age                            -0.075484   0.015148 -4.9833  7.19e-07 ***
## lvlen                           0.221513   0.123850  1.7886   0.07394 .
## ownh                            0.183561   0.331493  0.5537   0.57986
## as.factor(edu3)1                0.255786   0.478084  0.5350   0.59274
## as.factor(edu3)2                0.470440   0.417262  1.1274   0.25978
## wk                              0.261098   0.321928  0.8110   0.41751
## mar                             1.010474   0.432888  2.3343   0.01975 *
## cld                             0.942958   0.462790  2.0376   0.04182 *
## as.factor(g_ctax_N)1:ide_psup -0.380025   0.694395 -0.5473   0.58429
## as.factor(g_ctax_N)2:ide_psup  0.257167   0.688673  0.3734   0.70890
## as.factor(g_ctax_N)3:ide_psup -0.213796   0.849955 -0.2515   0.80144
## as.factor(g_ctax_N)4:ide_psup -0.332279   0.709093 -0.4686   0.63944
## as.factor(g_ctax_N)5:ide_psup  0.930934   0.708662  1.3136   0.18922
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBc_1 <- mx_ctax1
mx_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N)*ide_psup,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                    10.644283   1.050131 10.1362 < 2.2e-16 ***
## as.factor(g_ctax_N)1            0.134853   0.658356  0.2048  0.837738
## as.factor(g_ctax_N)2            0.222093   0.695813  0.3192  0.749643
## as.factor(g_ctax_N)3            1.143128   0.718545  1.5909  0.111903
## as.factor(g_ctax_N)4            0.114271   0.601976  0.1898  0.849478
## as.factor(g_ctax_N)5            0.836443   0.627052  1.3339  0.182486
```

```
## ide_psup                          1.665581   0.573518  2.9041  0.003751 **
## knall                            -0.017060   0.717385 -0.0238  0.981031
## fem                              -0.279982   0.413828 -0.6766  0.498815
## age                              -0.052072   0.019158 -2.7181  0.006663 **
## lvlen                             0.360710   0.155596  2.3183  0.020607 *
## ownh                              0.135678   0.429347  0.3160  0.752050
## as.factor(edu3)1                  0.113299   0.605146  0.1872  0.851516
## as.factor(edu3)2                  1.118469   0.549209  2.0365  0.041923 *
## wk                               -0.027836   0.439864 -0.0633  0.949552
## mar                               1.105033   0.541968  2.0389  0.041681 *
## cld                               0.871038   0.572828  1.5206  0.128631
## as.factor(g_ctax_N)1:ide_psup -1.210982   0.884149 -1.3697  0.171055
## as.factor(g_ctax_N)2:ide_psup -0.578106   0.954534 -0.6056  0.544869
## as.factor(g_ctax_N)3:ide_psup -1.219441   1.060907 -1.1494  0.250612
## as.factor(g_ctax_N)4:ide_psup -1.223283   0.851445 -1.4367  0.151066
## as.factor(g_ctax_N)5:ide_psup  0.302955   0.896597  0.3379  0.735503
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBc_2 <- mx_ctax2

# 仮説 1 の検証（4 種類）
# 統制群 vs 実験群 2 &実験群 3vs 実験群 2 &実験群 1vs 実験群 4 &実験群 5vs 実験群 4
mBc1_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup+1),ctl), data=dtmp)

mBc1r_h10_1 <- coeftest(mBc1_h10_1, vcov.=vcovHC(mBc1_h10_1,"HC2"))
mBc1r_h10_2 <- coeftest(mBc1_h10_2, vcov.=vcovHC(mBc1_h10_2,"HC2"))
mBc1r_h11_1 <- coeftest(mBc1_h11_1, vcov.=vcovHC(mBc1_h11_1,"HC2"))
mBc1r_h11_2 <- coeftest(mBc1_h11_2, vcov.=vcovHC(mBc1_h11_2,"HC2"))
mBc1r_h12_1 <- coeftest(mBc1_h12_1, vcov.=vcovHC(mBc1_h12_1,"HC2"))
mBc1r_h12_2 <- coeftest(mBc1_h12_2, vcov.=vcovHC(mBc1_h12_2,"HC2"))
mBc1r_h13_1 <- coeftest(mBc1_h13_1, vcov.=vcovHC(mBc1_h13_1,"HC2"))
mBc1r_h13_2 <- coeftest(mBc1_h13_2, vcov.=vcovHC(mBc1_h13_2,"HC2"))
```

```
mBc2_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup-1),ctl), data=dtmp)

mBc2r_h10_1 <- coeftest(mBc2_h10_1, vcov.=vcovHC(mBc2_h10_1,"HC2"))
mBc2r_h10_2 <- coeftest(mBc2_h10_2, vcov.=vcovHC(mBc2_h10_2,"HC2"))
mBc2r_h11_1 <- coeftest(mBc2_h11_1, vcov.=vcovHC(mBc2_h11_1,"HC2"))
mBc2r_h11_2 <- coeftest(mBc2_h11_2, vcov.=vcovHC(mBc2_h11_2,"HC2"))
mBc2r_h12_1 <- coeftest(mBc2_h12_1, vcov.=vcovHC(mBc2_h12_1,"HC2"))
mBc2r_h12_2 <- coeftest(mBc2_h12_2, vcov.=vcovHC(mBc2_h12_2,"HC2"))
mBc2r_h13_1 <- coeftest(mBc2_h13_1, vcov.=vcovHC(mBc2_h13_1,"HC2"))
mBc2r_h13_2 <- coeftest(mBc2_h13_2, vcov.=vcovHC(mBc2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
mBc1_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup+1),ctl), data=dtmp)

mBc1r_h20_1 <- coeftest(mBc1_h20_1, vcov.=vcovHC(mBc1_h20_1,"HC2"))
mBc1r_h20_2 <- coeftest(mBc1_h20_2, vcov.=vcovHC(mBc1_h20_2,"HC2"))
mBc1r_h21_1 <- coeftest(mBc1_h21_1, vcov.=vcovHC(mBc1_h21_1,"HC2"))
mBc1r_h21_2 <- coeftest(mBc1_h21_2, vcov.=vcovHC(mBc1_h21_2,"HC2"))
mBc1r_h22_1 <- coeftest(mBc1_h22_1, vcov.=vcovHC(mBc1_h22_1,"HC2"))
mBc1r_h22_2 <- coeftest(mBc1_h22_2, vcov.=vcovHC(mBc1_h22_2,"HC2"))

mBc2_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup-1),ctl), data=dtmp)
```

```
mBc2_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup-1),ctl), data=dtmp)

mBc2r_h20_1 <- coeftest(mBc2_h20_1, vcov.=vcovHC(mBc2_h20_1,"HC2"))
mBc2r_h20_2 <- coeftest(mBc2_h20_2, vcov.=vcovHC(mBc2_h20_2,"HC2"))
mBc2r_h21_1 <- coeftest(mBc2_h21_1, vcov.=vcovHC(mBc2_h21_1,"HC2"))
mBc2r_h21_2 <- coeftest(mBc2_h21_2, vcov.=vcovHC(mBc2_h21_2,"HC2"))
mBc2r_h22_1 <- coeftest(mBc2_h22_1, vcov.=vcovHC(mBc2_h22_1,"HC2"))
mBc2r_h22_2 <- coeftest(mBc2_h22_2, vcov.=vcovHC(mBc2_h22_2,"HC2"))
```

交差項による仮説検証

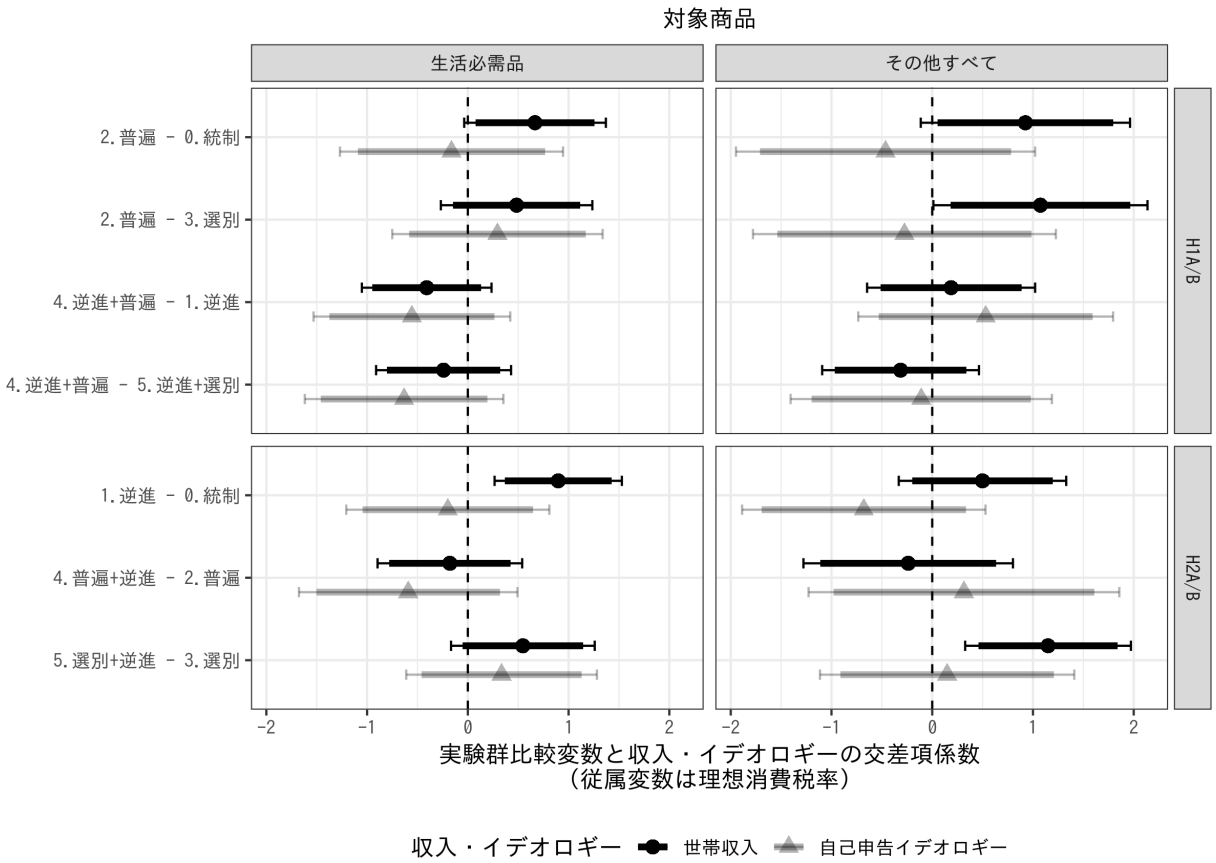
```
htest0 <- data.frame(int = rep(c("世帯収入", "自己申告イデオロギー",
                                 "外交安全保障イデオロギー",
                                 "権利機会平等イデオロギー",
                                 "政党支持イデオロギー"
), each=14),
dv = rep(c("生活必需品","その他すべて"), each=7),
h = rep(c("H1A/B","H1A/B",
          "H1A/B","H1A/B",
          "H2A/B","H2A/B",
          "H2A/B"),2*5),
cp = rep(c("2. 普遍 - 0. 統制",
           "2. 普遍 - 3. 選別",
           "4. 逆進 + 普遍 - 1. 逆進",
           "4. 逆進 + 普遍 - 5. 逆進 + 選別",
           "1. 逆進 - 0. 統制",
           "4. 普遍 + 逆進 - 2. 普遍",
           "5. 選別 + 逆進 - 3. 選別"),2*5),
rbind(mA1r_h10_1[18,],mA1r_h11_1[18,],mA1r_h12_1[18,],mA1r_h13_1[18,],
      mA1r_h20_1[18,],mA1r_h21_1[18,],mA1r_h22_1[18,],
      mA1r_h10_2[18,],mA1r_h11_2[18,],mA1r_h12_2[18,],mA1r_h13_2[18,],
      mA1r_h20_2[18,],mA1r_h21_2[18,],mA1r_h22_2[18,],
      mB1r_h10_1[18,],mB1r_h11_1[18,],mB1r_h12_1[18,],mB1r_h13_1[18,],
      mB1r_h20_1[18,],mB1r_h21_1[18,],mB1r_h22_1[18,],
      mB1r_h10_2[18,],mB1r_h11_2[18,],mB1r_h12_2[18,],mB1r_h13_2[18,],
      mB1r_h20_2[18,],mB1r_h21_2[18,],mB1r_h22_2[18,],
      mBa1r_h10_1[18,],mBa1r_h11_1[18,],mBa1r_h12_1[18,],mBa1r_h13_1[18,],
      mBa1r_h20_1[18,],mBa1r_h21_1[18,],mBa1r_h22_1[18,],
```

```
      mBa1r_h10_2[18,],mBa1r_h11_2[18,],mBa1r_h12_2[18,],mBa1r_h13_2[18,],
      mBa1r_h20_2[18,],mBa1r_h21_2[18,],mBa1r_h22_2[18,],
      mBb1r_h10_1[18,],mBb1r_h11_1[18,],mBb1r_h12_1[18,],mBb1r_h13_1[18,],
      mBb1r_h20_1[18,],mBb1r_h21_1[18,],mBb1r_h22_1[18,],
      mBb1r_h10_2[18,],mBb1r_h11_2[18,],mBb1r_h12_2[18,],mBb1r_h13_2[18,],
      mBb1r_h20_2[18,],mBb1r_h21_2[18,],mBb1r_h22_2[18,],
      mBc1r_h10_1[18,],mBc1r_h11_1[18,],mBc1r_h12_1[18,],mBc1r_h13_1[18,],
      mBc1r_h20_1[18,],mBc1r_h21_1[18,],mBc1r_h22_1[18,],
      mBc1r_h10_2[18,],mBc1r_h11_2[18,],mBc1r_h12_2[18,],mBc1r_h13_2[18,],
      mBc1r_h20_2[18,],mBc1r_h21_2[18,],mBc1r_h22_2[18,]))
htest0$int <- factor(htest0$int, levels=unique(htest0$int))
htest0$dv <- factor(htest0$dv, levels=unique(htest0$dv))
htest0$cp <- factor(htest0$cp, levels=rev(unique(htest0$cp)))
htest0$lo95 <- htest0$Estimate - qnorm(0.975)*htest0$Std..Error
htest0$up95 <- htest0$Estimate + qnorm(0.975)*htest0$Std..Error
htest0$lo90 <- htest0$Estimate - qnorm(0.95)*htest0$Std..Error
htest0$up90 <- htest0$Estimate + qnorm(0.95)*htest0$Std..Error
```

実験情報刺激効果と収入・イデオロギーの交差項係数による仮説検証（図 1）

```
p <- ggplot(subset(htest0, int%in%c("世帯収入","自己申告イデオロギー")),
            aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95, color=int, alpha=int),
                width=0.25, position = position_dodge(width=-0.7)) +
  geom_errorbar(aes(ymin=lo90,ymax=up90, color=int, alpha=int),
                width=0, size=1.5, position = position_dodge(width=-0.7)) +
  geom_point(aes(color=int, shape=int, alpha=int), size=3,
             position = position_dodge(width=-0.7)) +
  facet_grid(h~dv, scales = "free_y", space = "free_y") +
  coord_flip() +
  scale_color_manual(name="収入・イデオロギー", values=rep("black",2)) +
  # scale_color_brewer(name="収入・イデオロギー", type="qual", palette=2) +
  scale_shape_discrete(name="収入・イデオロギー") +
  scale_alpha_manual(name = "収入・イデオロギー", values=c(1,rep(0.3,1))) +
  labs(x=NULL, y="実験群比較変数と収入・イデオロギーの交差項係数¥n（従属変数は理想消費税率）",
       caption="分析の詳細は回帰表を参照。太線は 90% 信頼区間、細線は 95% 信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() + theme(legend.position="bottom",
```

```
                plot.subtitle = element_text(hjust=0.5),
                strip.placement = "outside")
```

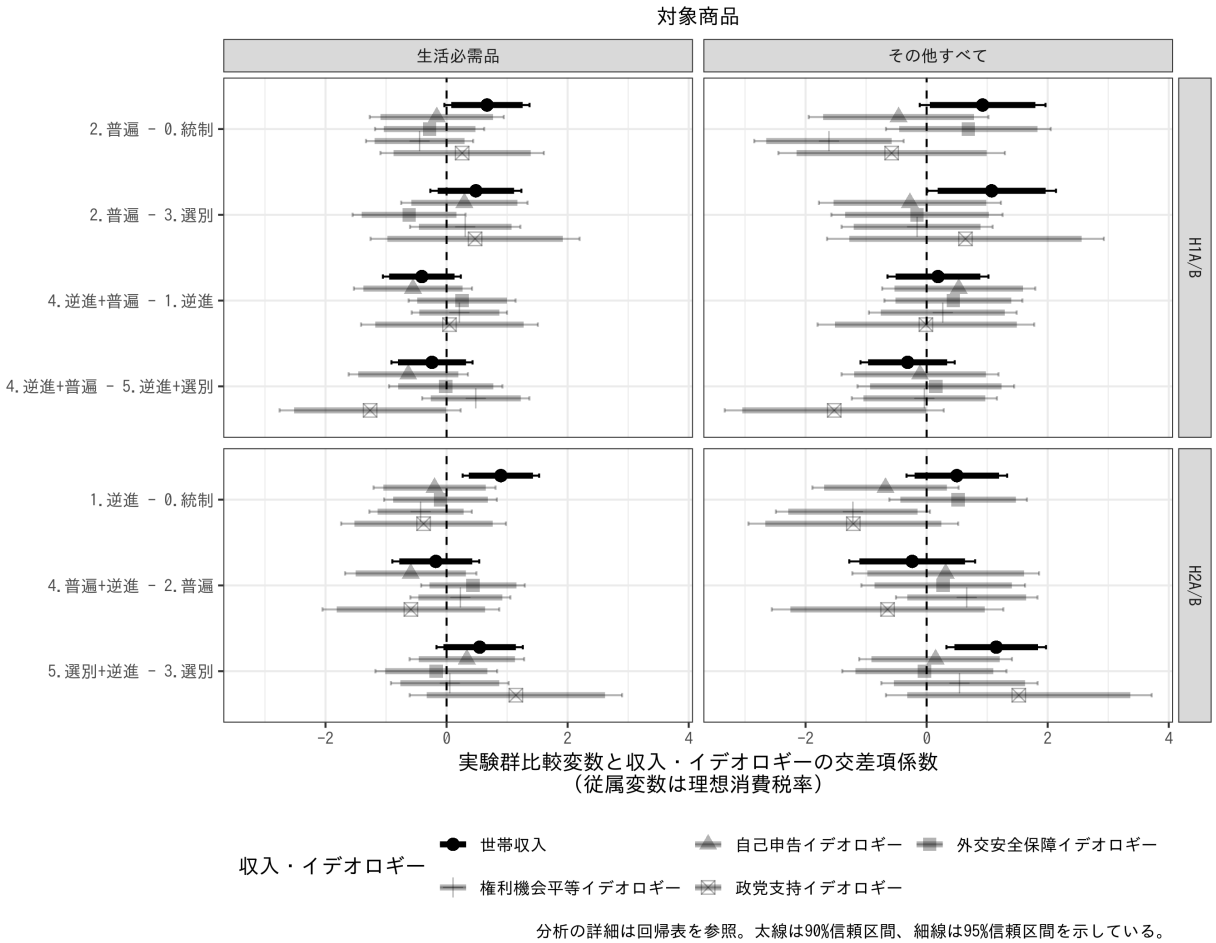



```
# ggsave("htest0_v1_originalscale.png", p, width=8, height=6)
```

実験情報刺激効果と収入・イデオロギーの交差項係数による仮説検証（その他のイデオロギー指標を含む）（図A8）

```
p <- ggplot(htest0,
            aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95, color=int, alpha=int),
                width=0.25, position = position_dodge(width=-0.7)) +
  geom_errorbar(aes(ymin=lo90,ymax=up90, color=int, alpha=int),
                width=0, size=1.5, position = position_dodge(width=-0.7)) +
  geom_point(aes(color=int, shape=int, alpha=int), size=3,
             position = position_dodge(width=-0.7)) +
  facet_grid(h~dv, scales = "free_y", space = "free_y") +
```

```
  coord_flip() +
  scale_color_manual(name="収入・イデオロギー", values=rep("black",5)) +
  # scale_color_brewer(name="収入・イデオロギー", type="qual", palette=2) +
  scale_shape_discrete(name="収入・イデオロギー") +
  scale_alpha_manual(name = "収入・イデオロギー", values=c(1,rep(0.3,4))) +
  labs(x=NULL, y="実験群比較変数と収入・イデオロギーの交差項係数¥n（従属変数は理想消費税率）",
       caption="分析の詳細は回帰表を参照。太線は 90% 信頼区間、細線は 95% 信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() + theme(legend.position="bottom",
                     plot.subtitle = element_text(hjust=0.5),
                     strip.placement = "outside") +
  guides(color=guide_legend(nrow=2,byrow=TRUE),
         shape=guide_legend(nrow=2,byrow=TRUE),
         alpha=guide_legend(nrow=2,byrow=TRUE))
```



```
# ggsave("htest0_v2_originalscale.png", p, width=9, height=7)
```

表のエクスポート

```
vnxinc_rev <- vnxinc[c(1:7,8:17,18:22)]
vnxinc_rev <- gsub("世帯収入","収入／イデオロギー",vnxinc_rev)
vnmap <- list()
for(i in c(1:7,18:22)) vnmap[[names(coef(mA_1))[i]]] = vnxinc_rev[i]
for(i in c(7,18:22)) vnmap[[names(coef(mB_1))[i]]] = vnxinc_rev[i]
for(i in c(7,18:22)) vnmap[[names(coef(mBa_1))[i]]] = vnxinc_rev[i]
for(i in c(7,18:22)) vnmap[[names(coef(mBb_1))[i]]] = vnxinc_rev[i]
for(i in c(7,18:22)) vnmap[[names(coef(mBc_1))[i]]] = vnxinc_rev[i]
for(i in c(8:17)) vnmap[[names(coef(mA_1))[i]]] = vnxinc_rev[i]

vnxA <- gsub("収入／イデオロギー","世帯収入",vnxinc_rev)
vnxB <- gsub("収入／イデオロギー","イデオロギー",vnxinc_rev)
vnmapS <- list()
for(i in c(1:7,18:22)) vnmapS[[names(coef(mA_1))[i]]] = vnxA[i]
for(i in c(7,18:22)) vnmapS[[names(coef(mB_1))[i]]] = vnxB[i]
for(i in c(7,18:22)) vnmapS[[names(coef(mBa_1))[i]]] = vnxB[i]
for(i in c(7,18:22)) vnmapS[[names(coef(mBb_1))[i]]] = vnxB[i]
for(i in c(7,18:22)) vnmapS[[names(coef(mBc_1))[i]]] = vnxB[i]
for(i in c(8:17)) vnmapS[[names(coef(mA_1))[i]]] = vnxA[i]

vnmap2 <- vnmap
for(k in names(vnmap2)) vnmap2[[k]] <- gsub("収入／イデオロギー", "イデオロギー", vnmap2[[k]])
```

直接効果

```
## 直接効果
screenreg(list(m0_1,m0_2),
          override.se = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,2],
                             coeftest(m0_2,vcovHC(m0_2,"HC2"))[,2]),
          override.pvalues = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,4],
                                  coeftest(m0_2,vcovHC(m0_2,"HC2"))[,4]),
          symbol = "+",
          single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmap,
```

```
          custom.model.names = c("1: 生活必需品","2: その他すべて"),
          caption = "理想消費税率に実験情報刺激が与える効果（重回帰分析）",
          caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
          label="basetab_os", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
          custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ============================================================
##                  1:生活必需品                2:その他すべて
## ------------------------------------------------------------
## （定数項）                9.869 (0.833) ***    11.090 (1.062) ***
## 1.逆進性               -0.808 (0.500)        -0.158 (0.643)
## 2.社会保障普遍性          -0.302 (0.508)         0.113 (0.677)
## 3.社会保障選別性           0.622 (0.513)         0.862 (0.632)
## 4.逆進性＆社会保障普遍性     -0.964 (0.482) *      -0.221 (0.584)
## 5.逆進性＆社会保障選別性      0.168 (0.519)         0.737 (0.636)
## 政治知識                -1.050 (0.608) +      -0.048 (0.724)
## 性別（女性）              -0.308 (0.305)        -0.430 (0.408)
## 年齢                  -0.077 (0.015) ***    -0.054 (0.019) **
## 居住年数                 0.242 (0.123) *       0.379 (0.153) *
## 持ち家                  0.218 (0.330)         0.190 (0.428)
## 教育：短大／高専／専門学校      0.215 (0.479)         0.048 (0.608)
## 教育：大卒以上             0.469 (0.422)         1.089 (0.554) *
## 就労                   0.314 (0.329)         0.053 (0.446)
## 婚姻                   1.056 (0.432) *       1.176 (0.541) *
## 子ども                  0.955 (0.454) *       0.859 (0.570)
## ------------------------------------------------------------
## R^2               0.053                 0.032
## Adj. R^2          0.041                 0.020
## Num. obs.      1197                  1197
## ============================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(m0_1,m0_2),
#        override.se = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,2],
#                           coeftest(m0_2,vcovHC(m0_2,"HC2"))[,2]),
#        override.pvalues = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,4],
#                                coeftest(m0_2,vcovHC(m0_2,"HC2"))[,4]),
#        # file = "basetab_originalscale.html", symbol = "&dagger;",
#        file = "basetab_originalscale.tex", symbol = "¥¥dagger",
```

```
#        single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap,
#        custom.model.names = c("1: 生活必需品","2: その他すべて"),
#        caption = " 理想消費税率に実験情報刺激が与える効果（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="basetab_os", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("basetab_originalscale.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "basetab_originalscale.tex", useBytes = TRUE)
```

収入と自己申告イデオロギーによる条件付け（表 1・表 A1）

```
## Simplified Table（表 1）
screenreg(list(mA_1,mA_2,mB_1,mB_2),
          override.se = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,2],
                             coeftest(mA_2,vcovHC(mA_2,"HC2"))[,2],
                             coeftest(mB_1,vcovHC(mB_1,"HC2"))[,2],
                             coeftest(mB_2,vcovHC(mB_2,"HC2"))[,2]),
          override.pvalues = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,4],
                                  coeftest(mA_2,vcovHC(mA_2,"HC2"))[,4],
                                  coeftest(mB_1,vcovHC(mB_1,"HC2"))[,4],
                                  coeftest(mB_2,vcovHC(mB_2,"HC2"))[,4]),
          symbol = "+",
          single.row=FALSE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmapS[c(2:18)],
          custom.model.names = c("1: 生活必需品","2: その他すべて",
                                 "3: 生活必需品","4: その他すべて"),
          custom.header = list(" 世帯収入" = 1:2, " 自己申告イデオロギー" = 3:4),
          caption = " 理想消費税率に実験情報刺激が与える効果と収入・イデオロギー（重回帰分析）",
          caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
          label="maintab_os", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
          custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. 統制変数の係数はオンライン補
```

```
##
## ==============================================================
##                          世帯収入                  自己申告イデオロギー
##                 ------------------------  ---------------------
##                 1:生活必需品       2:その他すべて    3:生活必需品      4:その他すべて
```

```
## ---------------------------------------------------------------
## 1.逆進性              -3.710 ***    -1.766      -0.762      -0.043
##                    (1.093)       (1.477)     (0.528)     (0.667)
## 2.社会保障普遍性          -2.428 *      -2.834 +    -0.271       0.117
##                    (1.195)       (1.694)     (0.534)     (0.699)
## 3.社会保障選別性           0.014         1.282       0.707       0.884
##                    (1.298)       (1.594)     (0.540)     (0.642)
## 4.逆進性＆社会保障普遍性      -2.527 *      -2.389 +    -0.848 +    -0.205
##                    (1.175)       (1.423)     (0.514)     (0.605)
## 5.逆進性＆社会保障選別性      -2.181 +      -2.498 +     0.199       0.736
##                    (1.127)       (1.383)     (0.539)     (0.650)
## 世帯収入                -0.357        -0.311
##                    (0.251)       (0.308)
## 世帯収入×1.逆進           0.897 **      0.499
##                    (0.322)       (0.424)
## 世帯収入×2.普遍           0.667 +       0.925 +
##                    (0.359)       (0.530)
## 世帯収入×3.選別           0.183        -0.149
##                    (0.376)       (0.445)
## 世帯収入×4.逆進＆普遍        0.489         0.686
##                    (0.355)       (0.426)
## 世帯収入×5.逆進＆選別        0.730 *       1.001 *
##                    (0.339)       (0.398)
## イデオロギー                                          0.124      -0.051
##                                                  (0.386)     (0.439)
## イデオロギー×1.逆進                                      -0.199      -0.679
##                                                  (0.514)     (0.616)
## イデオロギー×2.普遍                                      -0.162      -0.463
##                                                  (0.565)     (0.758)
## イデオロギー×3.選別                                      -0.456      -0.187
##                                                  (0.508)     (0.629)
## イデオロギー×4.逆進＆普遍                                    -0.754      -0.149
##                                                  (0.529)     (0.650)
## イデオロギー×5.逆進＆選別                                    -0.121      -0.039
##                                                  (0.518)     (0.633)
## ---------------------------------------------------------------
## R^2                0.064         0.043       0.057       0.036
## Adj. R^2           0.047         0.026       0.040       0.018
## Num. obs.       1197          1197        1197        1197
## ===============================================================
```

```
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用. 統
# texreg(list(mA_1,mA_2,mB_1,mB_2),
#        override.se = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,2],
#                           coeftest(mA_2,vcovHC(mA_2,"HC2"))[,2],
#                           coeftest(mB_1,vcovHC(mB_1,"HC2"))[,2],
#                           coeftest(mB_2,vcovHC(mB_2,"HC2"))[,2]),
#        override.pvalues = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,4],
#                                coeftest(mA_2,vcovHC(mA_2,"HC2"))[,4],
#                                coeftest(mB_1,vcovHC(mB_1,"HC2"))[,4],
#                                coeftest(mB_2,vcovHC(mB_2,"HC2"))[,4]),
#        # file = "maintab_originalscale.html", symbol = "&dagger;",
#        file = "maintab_originalscale.tex", symbol = "¥¥dagger",
#        single.row=FALSE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmapS[c(2:18)],
#        custom.model.names = c("1: 生活必需品","2: その他すべて",
#                               "3: 生活必需品","4: その他すべて"),
#        custom.header = list("世帯収入" = 1:2, "自己申告イデオロギー" = 3:4),
#        caption = "理想消費税率に実験情報刺激が与える効果と収入・イデオロギー（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="maintab_os", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. 統制変数の係数はオンライン補遺
# tmp <- readLines("maintab_originalscale.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "maintab_originalscale.tex", useBytes = TRUE)


## Full Table（表A1）
screenreg(list(mA_1,mA_2,mB_1,mB_2),
          override.se = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,2],
                             coeftest(mA_2,vcovHC(mA_2,"HC2"))[,2],
                             coeftest(mB_1,vcovHC(mB_1,"HC2"))[,2],
                             coeftest(mB_2,vcovHC(mB_2,"HC2"))[,2]),
          override.pvalues = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,4],
                                  coeftest(mA_2,vcovHC(mA_2,"HC2"))[,4],
                                  coeftest(mB_1,vcovHC(mB_1,"HC2"))[,4],
                                  coeftest(mB_2,vcovHC(mB_2,"HC2"))[,4]),
          symbol = "+",
          single.row=FALSE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmap,
```

```r
        custom.model.names = c("1: 生活必需品","2: その他すべて",
                               "3: 生活必需品","4: その他すべて"),
        custom.header = list(" 世帯収入" = 1:2, " 自己申告イデオロギー" = 3:4),
        caption = " 理想消費税率に実験情報刺激が与える効果と収入・イデオロギー（重回帰分析）",
        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
        label="maintab_full_os", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ==========================================================================
##                                 世帯収入                      自己申告イデオロギー
##                      --------------------------  --------------------------
##                      1:生活必需品        2:その他すべて       3:生活必需品        4:その他すべて
## --------------------------------------------------------------------------
##  （定数項）                  11.206 ***    12.475 ***     9.813 ***    11.024 ***
##                        (1.148)       (1.419)       (0.853)       (1.078)
## 1.逆進性                  -3.710 ***    -1.766        -0.762        -0.043
##                        (1.093)       (1.477)       (0.528)       (0.667)
## 2.社会保障普遍性             -2.428 *      -2.834 +      -0.271         0.117
##                        (1.195)       (1.694)       (0.534)       (0.699)
## 3.社会保障選別性              0.014         1.282         0.707         0.884
##                        (1.298)       (1.594)       (0.540)       (0.642)
## 4.逆進性＆社会保障普遍性         -2.527 *      -2.389 +      -0.848 +      -0.205
##                        (1.175)       (1.423)       (0.514)       (0.605)
## 5.逆進性＆社会保障選別性         -2.181 +      -2.498 +       0.199         0.736
##                        (1.127)       (1.383)       (0.539)       (0.650)
## 収入／イデオロギー              -0.357        -0.311         0.124        -0.051
##                        (0.251)       (0.308)       (0.386)       (0.439)
## 収入／イデオロギー×1.逆進         0.897 **      0.499        -0.199        -0.679
##                        (0.322)       (0.424)       (0.514)       (0.616)
## 収入／イデオロギー×2.普遍         0.667 +       0.925 +      -0.162        -0.463
##                        (0.359)       (0.530)       (0.565)       (0.758)
## 収入／イデオロギー×3.選別         0.183        -0.149        -0.456        -0.187
##                        (0.376)       (0.445)       (0.508)       (0.629)
## 収入／イデオロギー×4.逆進＆普遍      0.489         0.686        -0.754        -0.149
##                        (0.355)       (0.426)       (0.529)       (0.650)
## 収入／イデオロギー×5.逆進＆選別      0.730 *       1.001 *      -0.121        -0.039
##                        (0.339)       (0.398)       (0.518)       (0.633)
## 政治知識                  -1.074 +      -0.138        -0.989         0.035
```

```
##                          (0.611)       (0.733)       (0.613)       (0.727)
## 性別（女性）                -0.331        -0.541        -0.368        -0.493
##                          (0.306)       (0.409)       (0.309)       (0.410)
## 年齢                      -0.074 ***    -0.050 *      -0.078 ***    -0.053 **
##                          (0.015)       (0.020)       (0.015)       (0.019)
## 居住年数                     0.209 +       0.324 *       0.247 *       0.383 *
##                          (0.124)       (0.154)       (0.123)       (0.154)
## 持ち家                       0.161         0.116         0.235         0.239
##                          (0.333)       (0.438)       (0.332)       (0.430)
## 教育：短大／高専／専門学校          0.171        -0.065         0.199         0.063
##                          (0.482)       (0.615)       (0.479)       (0.607)
## 教育：大卒以上                 0.397         0.977 +       0.435         1.094 *
##                          (0.421)       (0.554)       (0.423)       (0.557)
## 就労                         0.241        -0.059         0.343         0.024
##                          (0.328)       (0.446)       (0.332)       (0.447)
## 婚姻                         0.826 +       0.886         1.127 **      1.201 *
##                          (0.444)       (0.562)       (0.436)       (0.549)
## 子ども                       1.001 *       0.914         0.939 *       0.866
##                          (0.454)       (0.580)       (0.456)       (0.575)
## ------------------------------------------------------------------------------
## R^2                       0.064         0.043         0.057         0.036
## Adj. R^2                  0.047         0.026         0.040         0.018
## Num. obs.              1197          1197          1197          1197
## ==============================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(mA_1,mA_2,mB_1,mB_2),
#         override.se = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,2],
#                            coeftest(mA_2,vcovHC(mA_2,"HC2"))[,2],
#                            coeftest(mB_1,vcovHC(mB_1,"HC2"))[,2],
#                            coeftest(mB_2,vcovHC(mB_2,"HC2"))[,2]),
#         override.pvalues = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,4],
#                                 coeftest(mA_2,vcovHC(mA_2,"HC2"))[,4],
#                                 coeftest(mB_1,vcovHC(mB_1,"HC2"))[,4],
#                                 coeftest(mB_2,vcovHC(mB_2,"HC2"))[,4]),
#         # file = "maintab_full_originalscale.html", symbol = "&dagger;",
#         file = "maintab_full_originalscale.tex", symbol = "¥¥dagger",
#         single.row=FALSE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#         custom.coef.map = vnmap,
#         custom.model.names = c("1: 生活必需品","2: その他すべて",
```

```
#                                  "3: 生活必需品","4: その他すべて"),
#          custom.header = list(" 世帯収入" = 1:2, " 自己申告イデオロギー" = 3:4),
#          caption = " 理想消費税率に実験情報刺激が与える効果と収入・イデオロギー（重回帰分析）",
#          caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#          label="maintab_full_os", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#          custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("maintab_full_originalscale.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "maintab_full_originalscale.tex", useBytes = TRUE)
```

その他のイデオロギーによる条件付け

```
## 他のイデオロギー（生活必需品）
screenreg(list(mBc_1,mBa_1,mBb_1),
          override.se = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,2],
                             coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,2],
                             coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,2]),
          override.pvalues = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,4],
                                  coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,4],
                                  coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,4]),
          symbol = "+",
          single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmap2,
          custom.model.names = c(" 政党支持"," 外交安全保障"," 権利機会平等"),
          caption = " 生活必需品の理想消費税率に実験情報刺激が与える効果とイデオロギー（重回帰分析）",
          caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
          label="idetab1_os", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
          custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ==============================================================================
##                 政党支持                    外交安全保障                 権利機会平等
## ------------------------------------------------------------------------------
##  （定数項）              9.684 (0.827) ***     9.852 (0.842) ***     9.476 (0.845) ***
## 1.逆進性             -0.717 (0.529)        -0.809 (0.501)        -0.784 (0.498)
## 2.社会保障普遍性         -0.396 (0.529)        -0.240 (0.515)        -0.353 (0.505)
## 3.社会保障選別性          0.649 (0.612)         0.622 (0.513)         0.565 (0.512)
## 4.逆進性＆社会保障普遍性     -0.855 (0.505) +      -0.980 (0.481) *      -0.965 (0.482) *
## 5.逆進性＆社会保障選別性      0.080 (0.517)         0.179 (0.533)         0.056 (0.511)
```

```
## イデオロギー              0.701 (0.460)        -0.041 (0.325)        -0.166 (0.334)
## イデオロギー×1.逆進        -0.380 (0.694)        -0.100 (0.475)        -0.429 (0.432)
## イデオロギー×2.普遍         0.257 (0.689)        -0.280 (0.460)        -0.446 (0.452)
## イデオロギー×3.選別        -0.214 (0.850)         0.340 (0.473)        -0.754 (0.476)
## イデオロギー×4.逆進＆普遍    -0.332 (0.709)         0.156 (0.435)        -0.218 (0.431)
## イデオロギー×5.逆進＆選別     0.931 (0.709)         0.170 (0.503)        -0.700 (0.485)
## 政治知識                -1.041 (0.603) +      -1.109 (0.615) +      -0.876 (0.601)
## 性別（女性）             -0.202 (0.310)        -0.290 (0.315)        -0.636 (0.318) *
## 年齢                   -0.075 (0.015) ***    -0.077 (0.015) ***    -0.067 (0.015) ***
## 居住年数                 0.222 (0.124) +       0.239 (0.124) +       0.264 (0.123) *
## 持ち家                  0.184 (0.331)         0.239 (0.332)         0.267 (0.326)
## 教育：短大／高専／専門学校       0.256 (0.478)         0.229 (0.482)         0.274 (0.479)
## 教育：大卒以上             0.470 (0.417)         0.488 (0.427)         0.424 (0.421)
## 就労                    0.261 (0.322)         0.315 (0.332)         0.260 (0.331)
## 婚姻                    1.010 (0.433) *       1.064 (0.433) *       1.119 (0.425) **
## 子ども                   0.943 (0.463) *       0.931 (0.456) *       0.942 (0.450) *
## ------------------------------------------------------------------------------
## R^2                0.067                 0.055                 0.071
## Adj. R^2           0.050                 0.038                 0.054
## Num. obs.       1197                  1197                  1197
## ==============================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(mBc_1,mBa_1,mBb_1),
#        override.se = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,2],
#                           coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,2],
#                           coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,2]),
#        override.pvalues = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,4],
#                                coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,4],
#                                coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,4]),
#        # file = "idetab1_originalscale.html", symbol = "&dagger;",
#        file = "idetab1_originalscale.tex", symbol = "¥¥dagger",
#        single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap2,
#        custom.model.names = c("政党支持","外交安全保障","権利機会平等"),
#        caption = "生活必需品の理想消費税率に実験情報刺激が与える効果とイデオロギー（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="idetab1_os", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("idetab1_originalscale.tex")
```

```r
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "idetab1_originalscale.tex", useBytes = TRUE)

## 他のイデオロギー（その他の商品）
screenreg(list(mBc_2,mBa_2,mBb_2),
          override.se = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,2],
                             coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,2],
                             coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,2]),
          override.pvalues = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,4],
                                  coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,4],
                                  coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,4]),
          symbol = "+",
          single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmap2,
          custom.model.names = c("政党支持","外交安全保障","権利機会平等"),
          caption = "その他全ての商品の理想消費税率に実験情報刺激が与える効果とイデオロギー（重回帰分析）",
          caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
          label="idetab2_os", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
          custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ==============================================================================
##                 政党支持                  外交安全保障                 権利機会平等
## ------------------------------------------------------------------------------
## （定数項）              10.644 (1.050) ***    10.926 (1.050) ***    10.204 (1.069) ***
## 1.逆進性               0.135 (0.658)        -0.151 (0.644)        -0.096 (0.640)
## 2.社会保障普遍性          0.222 (0.696)         0.049 (0.681)        -0.014 (0.653)
## 3.社会保障選別性          1.143 (0.719)         0.872 (0.633)         0.760 (0.619)
## 4.逆進性＆社会保障普遍性      0.114 (0.602)        -0.306 (0.583)        -0.230 (0.576)
## 5.逆進性＆社会保障選別性      0.836 (0.627)         0.806 (0.657)         0.606 (0.629)
## イデオロギー              1.666 (0.574) **     -0.245 (0.401)        -0.163 (0.432)
## イデオロギー×1.逆進       -1.211 (0.884)         0.520 (0.580)        -1.218 (0.649) +
## イデオロギー×2.普遍       -0.578 (0.955)         0.689 (0.695)        -1.614 (0.630) *
## イデオロギー×3.選別       -1.219 (1.061)         0.848 (0.599)        -1.456 (0.601) *
## イデオロギー×4.逆進＆普遍    -1.223 (0.851)         0.963 (0.565) +      -0.951 (0.554) +
## イデオロギー×5.逆進＆選別     0.303 (0.897)         0.811 (0.669)        -0.914 (0.653)
## 政治知識               -0.017 (0.717)        -0.194 (0.727)         0.301 (0.711)
## 性別（女性）             -0.280 (0.414)        -0.239 (0.424)        -1.110 (0.409) **
## 年齢                 -0.052 (0.019) **     -0.049 (0.019) *      -0.029 (0.020)
```

```
## 居住年数                0.361 (0.156) *       0.353 (0.155) *       0.416 (0.151) **
## 持ち家                  0.136 (0.429)         0.208 (0.428)         0.264 (0.419)
## 教育：短大／高専／専門学校      0.113 (0.605)         0.105 (0.605)         0.147 (0.599)
## 教育：大卒以上            1.118 (0.549) *       1.194 (0.550) *       0.997 (0.546) +
## 就労                   -0.028 (0.440)         0.010 (0.448)        -0.036 (0.442)
## 婚姻                    1.105 (0.542) *       1.122 (0.543) *       1.358 (0.528) *
## 子ども                  0.871 (0.573)         0.815 (0.567)         0.748 (0.559)
## ------------------------------------------------------------------------------------
## R^2                0.046                 0.039                 0.076
## Adj. R^2           0.029                 0.022                 0.059
## Num. obs.       1197                  1197                  1197
## ====================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(mBc_2,mBa_2,mBb_2),
#        override.se = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,2],
#                           coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,2],
#                           coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,2]),
#        override.pvalues = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,4],
#                                coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,4],
#                                coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,4]),
#        # file = "idetab2_originalscale.html", symbol = "&dagger;",
#        file = "idetab2_originalscale.tex", symbol = "¥¥dagger",
#        single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap2,
#        custom.model.names = c("政党支持","外交安全保障","権利機会平等"),
#        caption = "その他全ての商品の理想消費税率に実験情報刺激が与える効果とイデオロギー（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="idetab2_os", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("idetab2_originalscale.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "idetab2_originalscale.tex", useBytes = TRUE)
```

実験群比較 (統制変数に政治知識なし)

準備

```
# 統制変数
ctl <- formula( ~ .+ fem + age + lvlen + ownh +
```

```
                  as.factor(edu3) + wk + mar + cld)
```

実験刺激の直接効果

```
m_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N),ctl), data=dtmp)
m0_1 <- m_ctax1
m_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N),ctl), data=dtmp)
m0_2 <- m_ctax2

coeftest(m_ctax1, vcov.=vcovHC(m_ctax1,"HC2"))
```

```
##
## t test of coefficients:
##
##                       Estimate Std. Error t value  Pr(>|t|)
## (Intercept)           9.475529   0.806054 11.7555 < 2.2e-16 ***
## as.factor(g_ctax_N)1 -0.828266   0.499634 -1.6577   0.09763 .
## as.factor(g_ctax_N)2 -0.315374   0.508526 -0.6202   0.53526
## as.factor(g_ctax_N)3  0.595781   0.512796  1.1618   0.24554
## as.factor(g_ctax_N)4 -0.927247   0.479716 -1.9329   0.05349 .
## as.factor(g_ctax_N)5  0.204882   0.519769  0.3942   0.69352
## fem                  -0.260687   0.302765 -0.8610   0.38940
## age                  -0.080069   0.015048 -5.3210 1.234e-07 ***
## lvlen                 0.246516   0.123200  2.0009   0.04563 *
## ownh                  0.184802   0.329722  0.5605   0.57526
## as.factor(edu3)1      0.227193   0.481018  0.4723   0.63679
## as.factor(edu3)2      0.386808   0.418268  0.9248   0.35527
## wk                    0.317617   0.330516  0.9610   0.33676
## mar                   1.027377   0.431005  2.3837   0.01730 *
## cld                   0.969563   0.454087  2.1352   0.03295 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
coeftest(m_ctax2, vcov.=vcovHC(m_ctax2,"HC2"))
```

```
##
## t test of coefficients:
##
##                       Estimate Std. Error t value  Pr(>|t|)
## (Intercept)          11.072369   1.021036 10.8442 < 2.2e-16 ***
```

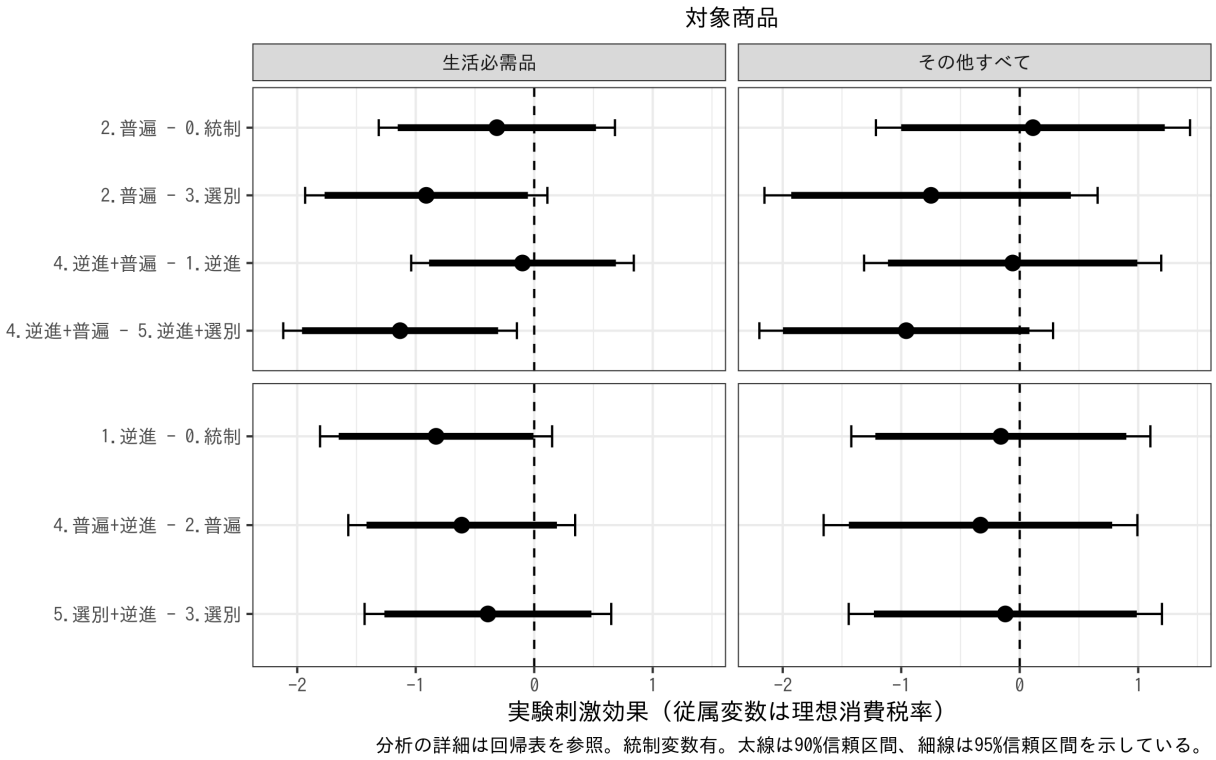
```
## as.factor(g_ctax_N)1 -0.159286   0.643883 -0.2474  0.804654
## as.factor(g_ctax_N)2  0.111956   0.676235  0.1656  0.868533
## as.factor(g_ctax_N)3  0.860328   0.631825  1.3617  0.173566
## as.factor(g_ctax_N)4 -0.218819   0.580939 -0.3767  0.706491
## as.factor(g_ctax_N)5  0.739001   0.634683  1.1644  0.244512
## fem                  -0.427611   0.404813 -1.0563  0.291038
## age                  -0.054001   0.018996 -2.8428  0.004549 **
## lvlen                 0.378760   0.152888  2.4774  0.013375 *
## ownh                  0.188892   0.427057  0.4423  0.658345
## as.factor(edu3)1      0.048918   0.607410  0.0805  0.935825
## as.factor(edu3)2      1.085735   0.551058  1.9703  0.049040 *
## wk                    0.053521   0.446284  0.1199  0.904562
## mar                   1.174723   0.540080  2.1751  0.029821 *
## cld                   0.860090   0.570110  1.5086  0.131658
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
# 普遍性刺激効果の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
m0_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5)),ctl), data=dtmp)
m0_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5)),ctl), data=dtmp)
m0_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5)),ctl), data=dtmp)
m0_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5)),ctl), data=dtmp)
m0_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5)),ctl), data=dtmp)
m0_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5)),ctl), data=dtmp)
m0_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3)),ctl), data=dtmp)
m0_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3)),ctl), data=dtmp)

m0r_h10_1 <- coeftest(m0_h10_1, vcov.=vcovHC(m0_h10_1,"HC2"))
m0r_h10_2 <- coeftest(m0_h10_2, vcov.=vcovHC(m0_h10_2,"HC2"))
m0r_h11_1 <- coeftest(m0_h11_1, vcov.=vcovHC(m0_h11_1,"HC2"))
m0r_h11_2 <- coeftest(m0_h11_2, vcov.=vcovHC(m0_h11_2,"HC2"))
m0r_h12_1 <- coeftest(m0_h12_1, vcov.=vcovHC(m0_h12_1,"HC2"))
m0r_h12_2 <- coeftest(m0_h12_2, vcov.=vcovHC(m0_h12_2,"HC2"))
m0r_h13_1 <- coeftest(m0_h13_1, vcov.=vcovHC(m0_h13_1,"HC2"))
m0r_h13_2 <- coeftest(m0_h13_2, vcov.=vcovHC(m0_h13_2,"HC2"))

# 逆進性刺激効果の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
m0_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5)),ctl), data=dtmp)
```

```
m0_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5)),ctl), data=dtmp)
m0_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5)),ctl), data=dtmp)
m0_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5)),ctl), data=dtmp)
m0_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4)),ctl), data=dtmp)
m0_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4)),ctl), data=dtmp)

m0r_h20_1 <- coeftest(m0_h20_1, vcov.=vcovHC(m0_h20_1,"HC2"))
m0r_h20_2 <- coeftest(m0_h20_2, vcov.=vcovHC(m0_h20_2,"HC2"))
m0r_h21_1 <- coeftest(m0_h21_1, vcov.=vcovHC(m0_h21_1,"HC2"))
m0r_h21_2 <- coeftest(m0_h21_2, vcov.=vcovHC(m0_h21_2,"HC2"))
m0r_h22_1 <- coeftest(m0_h22_1, vcov.=vcovHC(m0_h22_1,"HC2"))
m0r_h22_2 <- coeftest(m0_h22_2, vcov.=vcovHC(m0_h22_2,"HC2"))

htest <- data.frame(dv = rep(c("生活必需品","その他すべて"), each=7),
                    h = rep(c("社会保障普遍性","社会保障普遍性",
                              "社会保障普遍性","社会保障普遍性",
                              "消費税逆進性","消費税逆進性",
                              "消費税逆進性"),2),
                    cp = rep(c("2. 普遍 - 0. 統制",
                               "2. 普遍 - 3. 選別",
                               "4. 逆進＋普遍 - 1. 逆進",
                               "4. 逆進＋普遍 - 5. 逆進＋選別",
                               "1. 逆進 - 0. 統制",
                               "4. 普遍＋逆進 - 2. 普遍",
                               "5. 選別＋逆進 - 3. 選別"),2),
                    rbind(m0r_h10_1[2,],m0r_h11_1[2,],m0r_h12_1[2,],m0r_h13_1[2,],
                          m0r_h20_1[2,],m0r_h21_1[2,],m0r_h22_1[2,],
                          m0r_h10_2[2,],m0r_h11_2[2,],m0r_h12_2[2,],m0r_h13_2[2,],
                          m0r_h20_2[2,],m0r_h21_2[2,],m0r_h22_2[2,]))
htest$dv <- factor(htest$dv, levels=unique(htest$dv))
htest$cp <- factor(htest$cp, levels=rev(unique(htest$cp)))
htest$h <- factor(htest$h, levels=unique(htest$h))
htest$lo95 <- htest$Estimate - qnorm(0.975)*htest$Std..Error
htest$up95 <- htest$Estimate + qnorm(0.975)*htest$Std..Error
htest$lo90 <- htest$Estimate - qnorm(0.95)*htest$Std..Error
htest$up90 <- htest$Estimate + qnorm(0.95)*htest$Std..Error
```

仮説に関係する実験群比較に関連する直接効果（図 A15）

```
p <- ggplot(htest, aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95), width=0.25) +
  geom_errorbar(aes(ymin=lo90,ymax=up90), width=0, size=1.5) +
  geom_point(size=3) +
  facet_grid(h~dv, scale="free_y", switch="y") +
  coord_flip() +
  # scale_color_brewer(name="対象商品", type="qual", palette=2) +
  labs(x=NULL, y="実験刺激効果（従属変数は理想消費税率）",
       caption="分析の詳細は回帰表を参照。統制変数有。太線は 90% 信頼区間、細線は 95% 信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() +
  theme(plot.subtitle = element_text(hjust=0.5),
        strip.background.y = element_blank(),
        strip.text.y = element_blank(),
        strip.placement = "outside")
```



```
# ggsave("htest_m0_originalscale_wokn.png", p, width=8, height=5)
```

世帯収入条件付け

```
mx_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N)*inc,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                            Estimate Std. Error t value  Pr(>|t|)
## (Intercept)              10.816557   1.153660  9.3759 < 2.2e-16 ***
## as.factor(g_ctax_N)1     -3.751256   1.094066 -3.4287 0.0006274 ***
## as.factor(g_ctax_N)2     -2.381905   1.200891 -1.9834 0.0475496 *
## as.factor(g_ctax_N)3     -0.088721   1.295109 -0.0685 0.9453953
## as.factor(g_ctax_N)4     -2.465346   1.173938 -2.1001 0.0359356 *
## as.factor(g_ctax_N)5     -2.211584   1.125744 -1.9646 0.0497012 *
## inc                      -0.362932   0.250996 -1.4460 0.1484536
## fem                      -0.280010   0.303607 -0.9223 0.3565721
## age                      -0.076731   0.015385 -4.9873 7.044e-07 ***
## lvlen                     0.214129   0.123916  1.7280 0.0842474 .
## ownh                      0.127810   0.333552  0.3832 0.7016566
## as.factor(edu3)1          0.183464   0.483449  0.3795 0.7043919
## as.factor(edu3)2          0.314099   0.417579  0.7522 0.4520867
## wk                        0.248221   0.329459  0.7534 0.4513484
## mar                       0.799332   0.443579  1.8020 0.0718009 .
## cld                       1.016271   0.454045  2.2383 0.0253906 *
## as.factor(g_ctax_N)1:inc  0.903591   0.323244  2.7954 0.0052682 **
## as.factor(g_ctax_N)2:inc  0.648249   0.361833  1.7916 0.0734590 .
## as.factor(g_ctax_N)3:inc  0.207400   0.376125  0.5514 0.5814561
## as.factor(g_ctax_N)4:inc  0.481081   0.355452  1.3534 0.1761767
## as.factor(g_ctax_N)5:inc  0.750533   0.337714  2.2224 0.0264465 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mA_1 <- mx_ctax1
mx_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N)*inc,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
```

```
## t test of coefficients:
##
##                            Estimate Std. Error t value Pr(>|t|)
## (Intercept)              12.425243   1.411404  8.8035  < 2e-16 ***
## as.factor(g_ctax_N)1     -1.771078   1.475257 -1.2005  0.23018
## as.factor(g_ctax_N)2     -2.828543   1.693635 -1.6701  0.09517 .
## as.factor(g_ctax_N)3      1.268726   1.584767  0.8006  0.42354
## as.factor(g_ctax_N)4     -2.381425   1.421978 -1.6747  0.09425 .
## as.factor(g_ctax_N)5     -2.501470   1.382146 -1.8098  0.07057 .
## inc                      -0.311815   0.307140 -1.0152  0.31021
## fem                      -0.534757   0.405308 -1.3194  0.18730
## age                      -0.049955   0.019385 -2.5769  0.01009 *
## lvlen                     0.324350   0.154087  2.1050  0.03551 *
## ownh                      0.111747   0.436890  0.2558  0.79817
## as.factor(edu3)1         -0.063646   0.614275 -0.1036  0.91749
## as.factor(edu3)2          0.966465   0.552194  1.7502  0.08034 .
## wk                       -0.058227   0.446284 -0.1305  0.89622
## mar                       0.882109   0.561074  1.5722  0.11618
## cld                       0.915856   0.580865  1.5767  0.11513
## as.factor(g_ctax_N)1:inc  0.499785   0.423711  1.1795  0.23842
## as.factor(g_ctax_N)2:inc  0.922474   0.530086  1.7402  0.08208 .
## as.factor(g_ctax_N)3:inc -0.146081   0.442977 -0.3298  0.74163
## as.factor(g_ctax_N)4:inc  0.685405   0.425779  1.6098  0.10772
## as.factor(g_ctax_N)5:inc  1.003211   0.397747  2.5222  0.01179 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mA_2 <- mx_ctax2

# 仮説 1 の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
mA1_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-2),ctl), data=dtmp)
mA1_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-2),ctl), data=dtmp)
```

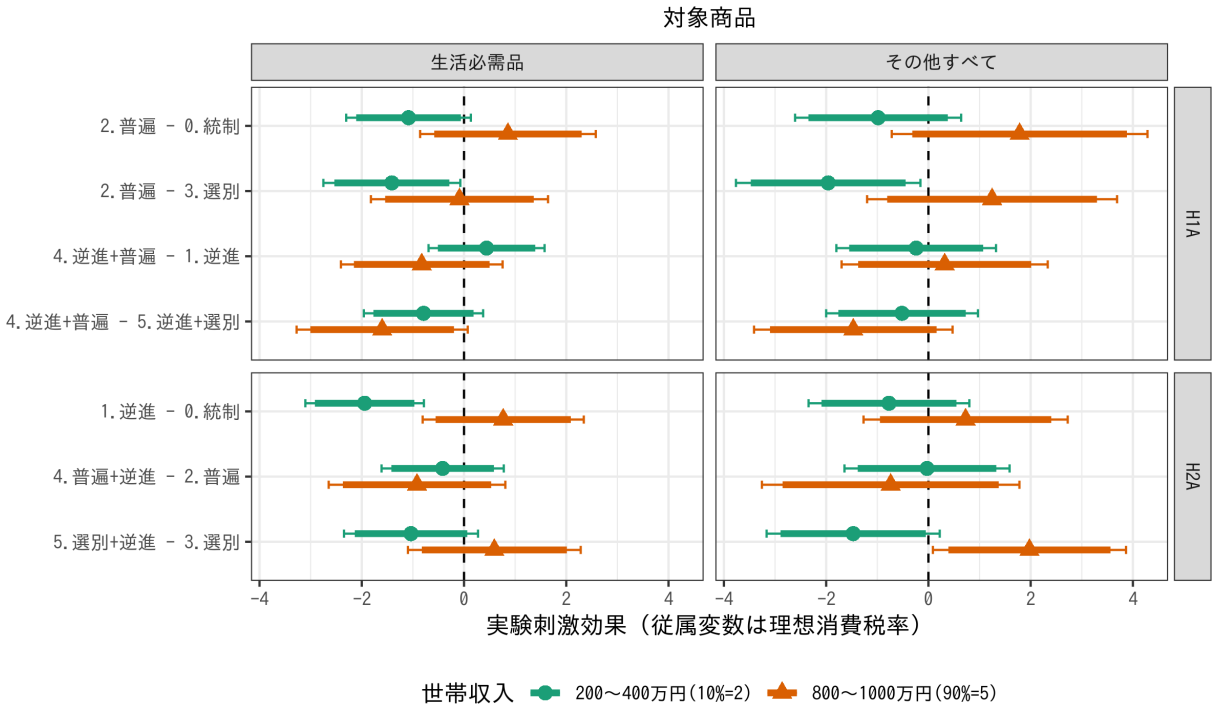
```
mA1r_h10_1 <- coeftest(mA1_h10_1, vcov.=vcovHC(mA1_h10_1,"HC2"))
mA1r_h10_2 <- coeftest(mA1_h10_2, vcov.=vcovHC(mA1_h10_2,"HC2"))
mA1r_h11_1 <- coeftest(mA1_h11_1, vcov.=vcovHC(mA1_h11_1,"HC2"))
mA1r_h11_2 <- coeftest(mA1_h11_2, vcov.=vcovHC(mA1_h11_2,"HC2"))
mA1r_h12_1 <- coeftest(mA1_h12_1, vcov.=vcovHC(mA1_h12_1,"HC2"))
mA1r_h12_2 <- coeftest(mA1_h12_2, vcov.=vcovHC(mA1_h12_2,"HC2"))
mA1r_h13_1 <- coeftest(mA1_h13_1, vcov.=vcovHC(mA1_h13_1,"HC2"))
mA1r_h13_2 <- coeftest(mA1_h13_2, vcov.=vcovHC(mA1_h13_2,"HC2"))

mA2_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-5),ctl), data=dtmp)
mA2_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-5),ctl), data=dtmp)

mA2r_h10_1 <- coeftest(mA2_h10_1, vcov.=vcovHC(mA2_h10_1,"HC2"))
mA2r_h10_2 <- coeftest(mA2_h10_2, vcov.=vcovHC(mA2_h10_2,"HC2"))
mA2r_h11_1 <- coeftest(mA2_h11_1, vcov.=vcovHC(mA2_h11_1,"HC2"))
mA2r_h11_2 <- coeftest(mA2_h11_2, vcov.=vcovHC(mA2_h11_2,"HC2"))
mA2r_h12_1 <- coeftest(mA2_h12_1, vcov.=vcovHC(mA2_h12_1,"HC2"))
mA2r_h12_2 <- coeftest(mA2_h12_2, vcov.=vcovHC(mA2_h12_2,"HC2"))
mA2r_h13_1 <- coeftest(mA2_h13_1, vcov.=vcovHC(mA2_h13_1,"HC2"))
mA2r_h13_2 <- coeftest(mA2_h13_2, vcov.=vcovHC(mA2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 &実験群 2vs 実験群 4 & 実験群 3vs 実験群 5
mA1_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-2),ctl), data=dtmp)
mA1_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-2),ctl), data=dtmp)

mA1r_h20_1 <- coeftest(mA1_h20_1, vcov.=vcovHC(mA1_h20_1,"HC2"))
mA1r_h20_2 <- coeftest(mA1_h20_2, vcov.=vcovHC(mA1_h20_2,"HC2"))
mA1r_h21_1 <- coeftest(mA1_h21_1, vcov.=vcovHC(mA1_h21_1,"HC2"))
```

```
mA1r_h21_2 <- coeftest(mA1_h21_2, vcov.=vcovHC(mA1_h21_2,"HC2"))
mA1r_h22_1 <- coeftest(mA1_h22_1, vcov.=vcovHC(mA1_h22_1,"HC2"))
mA1r_h22_2 <- coeftest(mA1_h22_2, vcov.=vcovHC(mA1_h22_2,"HC2"))

mA2_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-5),ctl), data=dtmp)
mA2_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-5),ctl), data=dtmp)

mA2r_h20_1 <- coeftest(mA2_h20_1, vcov.=vcovHC(mA2_h20_1,"HC2"))
mA2r_h20_2 <- coeftest(mA2_h20_2, vcov.=vcovHC(mA2_h20_2,"HC2"))
mA2r_h21_1 <- coeftest(mA2_h21_1, vcov.=vcovHC(mA2_h21_1,"HC2"))
mA2r_h21_2 <- coeftest(mA2_h21_2, vcov.=vcovHC(mA2_h21_2,"HC2"))
mA2r_h22_1 <- coeftest(mA2_h22_1, vcov.=vcovHC(mA2_h22_1,"HC2"))
mA2r_h22_2 <- coeftest(mA2_h22_2, vcov.=vcovHC(mA2_h22_2,"HC2"))
```

世帯収入に条件付けされた実験情報刺激の限界効果を用いた仮説検証（図 A14）

```
htest <- data.frame(int = rep(c("200～400 万円 (10%=2)","800～1000 万円 (90%=5)"), each=14),
                    dv = rep(c(" 生活必需品"," その他すべて"), each=7),
                    h = rep(c("H1A","H1A",
                              "H1A","H1A",
                              "H2A","H2A",
                              "H2A"),4),
                    cp = rep(c("2. 普遍 - 0. 統制",
                               "2. 普遍 - 3. 選別",
                               "4. 逆進 + 普遍 - 1. 逆進",
                               "4. 逆進 + 普遍 - 5. 逆進 + 選別",
                               "1. 逆進 - 0. 統制",
                               "4. 普遍 + 逆進 - 2. 普遍",
                               "5. 選別 + 逆進 - 3. 選別"),4),
                    rbind(mA1r_h10_1[2,],mA1r_h11_1[2,],mA1r_h12_1[2,],mA1r_h13_1[2,],
                          mA1r_h20_1[2,],mA1r_h21_1[2,],mA1r_h22_1[2,],
                          mA1r_h10_2[2,],mA1r_h11_2[2,],mA1r_h12_2[2,],mA1r_h13_2[2,],
                          mA1r_h20_2[2,],mA1r_h21_2[2,],mA1r_h22_2[2,],
                          mA2r_h10_1[2,],mA2r_h11_1[2,],mA2r_h12_1[2,],mA2r_h13_1[2,],
                          mA2r_h20_1[2,],mA2r_h21_1[2,],mA2r_h22_1[2,],
```

```
                        mA2r_h10_2[2,],mA2r_h11_2[2,],mA2r_h12_2[2,],mA2r_h13_2[2,],
                        mA2r_h20_2[2,],mA2r_h21_2[2,],mA2r_h22_2[2,]))
htest$dv <- factor(htest$dv, levels=unique(htest$dv))
htest$cp <- factor(htest$cp, levels=rev(unique(htest$cp)))
htest$lo95 <- htest$Estimate - qnorm(0.975)*htest$Std..Error
htest$up95 <- htest$Estimate + qnorm(0.975)*htest$Std..Error
htest$lo90 <- htest$Estimate - qnorm(0.95)*htest$Std..Error
htest$up90 <- htest$Estimate + qnorm(0.95)*htest$Std..Error

p <- ggplot(htest, aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95, color=int), width=0.25, position = position_dodge(width=-0.5)) +
  geom_errorbar(aes(ymin=lo90,ymax=up90, color=int), width=0, size=1.5, position = position_dodge(width=-
  geom_point(aes(color=int, shape=int), size=3, position = position_dodge(width=-0.5)) +
  facet_grid(h~dv, scales = "free_y", space = "free_y") +
  coord_flip() +
  scale_color_brewer(name="世帯収入", type="qual", palette=2) +
  scale_shape_discrete(name="世帯収入") +
  labs(x=NULL, y="実験刺激効果（従属変数は理想消費税率）",
       caption="分析の詳細は回帰表を参照。太線は90%信頼区間、細線は95%信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() + theme(legend.position="bottom",
                     plot.subtitle = element_text(hjust=0.5),
                     strip.placement = "outside")
```



分析の詳細は回帰表を参照。太線は90%信頼区間、細線は95%信頼区間を示している。

```
# ggsave("htest_mA_originalscale_wokn.png", p, width=8, height=6)
```

自己申告イデオロギー条件付け

```
mx_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N)*ide_self,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                              Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                  9.441797   0.827136 11.4150 < 2.2e-16 ***
## as.factor(g_ctax_N)1        -0.777232   0.528143 -1.4716   0.14139
## as.factor(g_ctax_N)2        -0.283159   0.534556 -0.5297   0.59641
## as.factor(g_ctax_N)3         0.683763   0.539551  1.2673   0.20531
## as.factor(g_ctax_N)4        -0.808892   0.510814 -1.5835   0.11357
## as.factor(g_ctax_N)5         0.236988   0.539621  0.4392   0.66061
## ide_self                     0.126571   0.383174  0.3303   0.74122
## fem                         -0.326745   0.307040 -1.0642   0.28747
## age                         -0.080563   0.015101 -5.3349 1.146e-07 ***
## lvlen                        0.251426   0.123398  2.0375   0.04182 *
```

```
## ownh                            0.205331   0.332263  0.6180   0.53671
## as.factor(edu3)1                0.209778   0.480320  0.4367   0.66238
## as.factor(edu3)2                0.356647   0.418026  0.8532   0.39374
## wk                              0.345685   0.332871  1.0385   0.29925
## mar                             1.101408   0.435153  2.5311   0.01150 *
## cld                             0.953388   0.455661  2.0923   0.03662 *
## as.factor(g_ctax_N)1:ide_self -0.222359   0.509590 -0.4363   0.66266
## as.factor(g_ctax_N)2:ide_self -0.171491   0.562658 -0.3048   0.76058
## as.factor(g_ctax_N)3:ide_self -0.466071   0.506755 -0.9197   0.35791
## as.factor(g_ctax_N)4:ide_self -0.780415   0.524799 -1.4871   0.13726
## as.factor(g_ctax_N)5:ide_self -0.146558   0.513921 -0.2852   0.77556
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mB_1 <- mx_ctax1
mx_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N)*ide_self,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                               Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                  11.036653   1.036324 10.6498 < 2.2e-16 ***
## as.factor(g_ctax_N)1         -0.042666   0.667052 -0.0640  0.949012
## as.factor(g_ctax_N)2          0.117411   0.698416  0.1681  0.866525
## as.factor(g_ctax_N)3          0.885280   0.641886  1.3792  0.168100
## as.factor(g_ctax_N)4         -0.206212   0.601235 -0.3430  0.731674
## as.factor(g_ctax_N)5          0.734791   0.647713  1.1344  0.256841
## ide_self                     -0.051093   0.438802 -0.1164  0.907325
## fem                          -0.494918   0.407310 -1.2151  0.224575
## age                          -0.052918   0.018978 -2.7884  0.005382 **
## lvlen                         0.382456   0.153590  2.4901  0.012907 *
## ownh                          0.240162   0.428860  0.5600  0.575585
## as.factor(edu3)1              0.062453   0.606208  0.1030  0.917963
## as.factor(edu3)2              1.096777   0.553769  1.9806  0.047873 *
## wk                            0.023547   0.446925  0.0527  0.957991
## mar                           1.202236   0.547421  2.1962  0.028274 *
## cld                           0.865760   0.575179  1.5052  0.132541
## as.factor(g_ctax_N)1:ide_self -0.678364   0.615301 -1.1025  0.270474
## as.factor(g_ctax_N)2:ide_self -0.463104   0.757646 -0.6112  0.541158
```

```
## as.factor(g_ctax_N)3:ide_self -0.187113   0.628966 -0.2975  0.766143
## as.factor(g_ctax_N)4:ide_self -0.147572   0.648948 -0.2274  0.820151
## as.factor(g_ctax_N)5:ide_self -0.038609   0.632377 -0.0611  0.951326
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mB_2 <- mx_ctax2

# 仮説 1 の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
mB1_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self+1),ctl), data=dtmp)
mB1_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self+1),ctl), data=dtmp)

mB1r_h10_1 <- coeftest(mB1_h10_1, vcov.=vcovHC(mB1_h10_1,"HC2"))
mB1r_h10_2 <- coeftest(mB1_h10_2, vcov.=vcovHC(mB1_h10_2,"HC2"))
mB1r_h11_1 <- coeftest(mB1_h11_1, vcov.=vcovHC(mB1_h11_1,"HC2"))
mB1r_h11_2 <- coeftest(mB1_h11_2, vcov.=vcovHC(mB1_h11_2,"HC2"))
mB1r_h12_1 <- coeftest(mB1_h12_1, vcov.=vcovHC(mB1_h12_1,"HC2"))
mB1r_h12_2 <- coeftest(mB1_h12_2, vcov.=vcovHC(mB1_h12_2,"HC2"))
mB1r_h13_1 <- coeftest(mB1_h13_1, vcov.=vcovHC(mB1_h13_1,"HC2"))
mB1r_h13_2 <- coeftest(mB1_h13_2, vcov.=vcovHC(mB1_h13_2,"HC2"))

mB2_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self-1),ctl), data=dtmp)
mB2_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self-1),ctl), data=dtmp)

mB2r_h10_1 <- coeftest(mB2_h10_1, vcov.=vcovHC(mB2_h10_1,"HC2"))
mB2r_h10_2 <- coeftest(mB2_h10_2, vcov.=vcovHC(mB2_h10_2,"HC2"))
mB2r_h11_1 <- coeftest(mB2_h11_1, vcov.=vcovHC(mB2_h11_1,"HC2"))
```

```
mB2r_h11_2 <- coeftest(mB2_h11_2, vcov.=vcovHC(mB2_h11_2,"HC2"))
mB2r_h12_1 <- coeftest(mB2_h12_1, vcov.=vcovHC(mB2_h12_1,"HC2"))
mB2r_h12_2 <- coeftest(mB2_h12_2, vcov.=vcovHC(mB2_h12_2,"HC2"))
mB2r_h13_1 <- coeftest(mB2_h13_1, vcov.=vcovHC(mB2_h13_1,"HC2"))
mB2r_h13_2 <- coeftest(mB2_h13_2, vcov.=vcovHC(mB2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
mB1_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self+1),ctl), data=dtmp)
mB1_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self+1),ctl), data=dtmp)
mB1_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self+1),ctl), data=dtmp)

mB1r_h20_1 <- coeftest(mB1_h20_1, vcov.=vcovHC(mB1_h20_1,"HC2"))
mB1r_h20_2 <- coeftest(mB1_h20_2, vcov.=vcovHC(mB1_h20_2,"HC2"))
mB1r_h21_1 <- coeftest(mB1_h21_1, vcov.=vcovHC(mB1_h21_1,"HC2"))
mB1r_h21_2 <- coeftest(mB1_h21_2, vcov.=vcovHC(mB1_h21_2,"HC2"))
mB1r_h22_1 <- coeftest(mB1_h22_1, vcov.=vcovHC(mB1_h22_1,"HC2"))
mB1r_h22_2 <- coeftest(mB1_h22_2, vcov.=vcovHC(mB1_h22_2,"HC2"))

mB2_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self-1),ctl), data=dtmp)
mB2_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self-1),ctl), data=dtmp)
mB2_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self-1),ctl), data=dtmp)

mB2r_h20_1 <- coeftest(mB2_h20_1, vcov.=vcovHC(mB2_h20_1,"HC2"))
mB2r_h20_2 <- coeftest(mB2_h20_2, vcov.=vcovHC(mB2_h20_2,"HC2"))
mB2r_h21_1 <- coeftest(mB2_h21_1, vcov.=vcovHC(mB2_h21_1,"HC2"))
mB2r_h21_2 <- coeftest(mB2_h21_2, vcov.=vcovHC(mB2_h21_2,"HC2"))
mB2r_h22_1 <- coeftest(mB2_h22_1, vcov.=vcovHC(mB2_h22_1,"HC2"))
mB2r_h22_2 <- coeftest(mB2_h22_2, vcov.=vcovHC(mB2_h22_2,"HC2"))
```

争点態度イデオロギー条件付け

外交安全保障

```
mx_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N)*ide_iss_1,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                                 Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                      9.444266   0.816022 11.5735 < 2.2e-16 ***
## as.factor(g_ctax_N)1            -0.830662   0.500707 -1.6590   0.09739 .
## as.factor(g_ctax_N)2            -0.257205   0.515923 -0.4985   0.61820
## as.factor(g_ctax_N)3             0.593196   0.513369  1.1555   0.24812
## as.factor(g_ctax_N)4            -0.938248   0.478528 -1.9607   0.05015 .
## as.factor(g_ctax_N)5             0.211800   0.533927  0.3967   0.69167
## ide_iss_1                       -0.049247   0.326067 -0.1510   0.87998
## fem                             -0.248015   0.313253 -0.7917   0.42867
## age                             -0.079853   0.015258 -5.2337 1.967e-07 ***
## lvlen                            0.244840   0.124249  1.9706   0.04901 *
## ownh                             0.204063   0.331312  0.6159   0.53806
## as.factor(edu3)1                 0.240607   0.483816  0.4973   0.61906
## as.factor(edu3)2                 0.400146   0.422883  0.9462   0.34422
## wk                               0.319883   0.333115  0.9603   0.33711
## mar                              1.033447   0.432132  2.3915   0.01694 *
## cld                              0.951021   0.456256  2.0844   0.03734 *
## as.factor(g_ctax_N)1:ide_iss_1 -0.096383   0.476935 -0.2021   0.83988
## as.factor(g_ctax_N)2:ide_iss_1 -0.260315   0.461578 -0.5640   0.57288
## as.factor(g_ctax_N)3:ide_iss_1  0.321862   0.474138  0.6788   0.49737
## as.factor(g_ctax_N)4:ide_iss_1  0.141399   0.435225  0.3249   0.74533
## as.factor(g_ctax_N)5:ide_iss_1  0.131463   0.503889  0.2609   0.79422
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBa_1 <- mx_ctax1
mx_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N)*ide_iss_1,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
```

```
## t test of coefficients:
##
##                                Estimate Std. Error t value Pr(>|t|)
## (Intercept)                   10.854516   1.008392 10.7642  < 2e-16 ***
## as.factor(g_ctax_N)1          -0.154444   0.644569 -0.2396  0.81068
## as.factor(g_ctax_N)2           0.046413   0.680404  0.0682  0.94563
## as.factor(g_ctax_N)3           0.866617   0.632287  1.3706  0.17076
## as.factor(g_ctax_N)4          -0.298671   0.579378 -0.5155  0.60630
## as.factor(g_ctax_N)5           0.812204   0.656047  1.2380  0.21595
## ide_iss_1                     -0.246087   0.401653 -0.6127  0.54020
## fem                           -0.231786   0.421269 -0.5502  0.58228
## age                           -0.049762   0.018983 -2.6214  0.00887 **
## lvlen                          0.353797   0.154561  2.2890  0.02225 *
## ownh                           0.202055   0.427194  0.4730  0.63631
## as.factor(edu3)1               0.107373   0.604837  0.1775  0.85913
## as.factor(edu3)2               1.178750   0.546902  2.1553  0.03134 *
## wk                             0.010942   0.447931  0.0244  0.98052
## mar                            1.116783   0.541706  2.0616  0.03946 *
## cld                            0.818597   0.566985  1.4438  0.14907
## as.factor(g_ctax_N)1:ide_iss_1  0.521175   0.580153  0.8983  0.36919
## as.factor(g_ctax_N)2:ide_iss_1  0.692395   0.694729  0.9966  0.31914
## as.factor(g_ctax_N)3:ide_iss_1  0.845024   0.597962  1.4132  0.15787
## as.factor(g_ctax_N)4:ide_iss_1  0.960070   0.565118  1.6989  0.08961 .
## as.factor(g_ctax_N)5:ide_iss_1  0.804269   0.667186  1.2055  0.22827
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBa_2 <- mx_ctax2

# 仮説 1 の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
mBa1_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1+1.35),ctl), data=d
```

```
mBa1r_h10_1 <- coeftest(mBa1_h10_1, vcov.=vcovHC(mBa1_h10_1,"HC2"))
mBa1r_h10_2 <- coeftest(mBa1_h10_2, vcov.=vcovHC(mBa1_h10_2,"HC2"))
mBa1r_h11_1 <- coeftest(mBa1_h11_1, vcov.=vcovHC(mBa1_h11_1,"HC2"))
mBa1r_h11_2 <- coeftest(mBa1_h11_2, vcov.=vcovHC(mBa1_h11_2,"HC2"))
mBa1r_h12_1 <- coeftest(mBa1_h12_1, vcov.=vcovHC(mBa1_h12_1,"HC2"))
mBa1r_h12_2 <- coeftest(mBa1_h12_2, vcov.=vcovHC(mBa1_h12_2,"HC2"))
mBa1r_h13_1 <- coeftest(mBa1_h13_1, vcov.=vcovHC(mBa1_h13_1,"HC2"))
mBa1r_h13_2 <- coeftest(mBa1_h13_2, vcov.=vcovHC(mBa1_h13_2,"HC2"))

mBa2_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1-1.53),ctl), data=d

mBa2r_h10_1 <- coeftest(mBa2_h10_1, vcov.=vcovHC(mBa2_h10_1,"HC2"))
mBa2r_h10_2 <- coeftest(mBa2_h10_2, vcov.=vcovHC(mBa2_h10_2,"HC2"))
mBa2r_h11_1 <- coeftest(mBa2_h11_1, vcov.=vcovHC(mBa2_h11_1,"HC2"))
mBa2r_h11_2 <- coeftest(mBa2_h11_2, vcov.=vcovHC(mBa2_h11_2,"HC2"))
mBa2r_h12_1 <- coeftest(mBa2_h12_1, vcov.=vcovHC(mBa2_h12_1,"HC2"))
mBa2r_h12_2 <- coeftest(mBa2_h12_2, vcov.=vcovHC(mBa2_h12_2,"HC2"))
mBa2r_h13_1 <- coeftest(mBa2_h13_1, vcov.=vcovHC(mBa2_h13_1,"HC2"))
mBa2r_h13_2 <- coeftest(mBa2_h13_2, vcov.=vcovHC(mBa2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 &実験群 2vs 実験群 4 & 実験群 3vs 実験群 5
mBa1_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1+1.35),ctl), data=d
mBa1_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1+1.35),ctl), data=d

mBa1r_h20_1 <- coeftest(mBa1_h20_1, vcov.=vcovHC(mBa1_h20_1,"HC2"))
mBa1r_h20_2 <- coeftest(mBa1_h20_2, vcov.=vcovHC(mBa1_h20_2,"HC2"))
mBa1r_h21_1 <- coeftest(mBa1_h21_1, vcov.=vcovHC(mBa1_h21_1,"HC2"))
```

```
mBa1r_h21_2 <- coeftest(mBa1_h21_2, vcov.=vcovHC(mBa1_h21_2,"HC2"))
mBa1r_h22_1 <- coeftest(mBa1_h22_1, vcov.=vcovHC(mBa1_h22_1,"HC2"))
mBa1r_h22_2 <- coeftest(mBa1_h22_2, vcov.=vcovHC(mBa1_h22_2,"HC2"))

mBa2_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1-1.53),ctl), data=d
mBa2_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1-1.53),ctl), data=d

mBa2r_h20_1 <- coeftest(mBa2_h20_1, vcov.=vcovHC(mBa2_h20_1,"HC2"))
mBa2r_h20_2 <- coeftest(mBa2_h20_2, vcov.=vcovHC(mBa2_h20_2,"HC2"))
mBa2r_h21_1 <- coeftest(mBa2_h21_1, vcov.=vcovHC(mBa2_h21_1,"HC2"))
mBa2r_h21_2 <- coeftest(mBa2_h21_2, vcov.=vcovHC(mBa2_h21_2,"HC2"))
mBa2r_h22_1 <- coeftest(mBa2_h22_1, vcov.=vcovHC(mBa2_h22_1,"HC2"))
mBa2r_h22_2 <- coeftest(mBa2_h22_2, vcov.=vcovHC(mBa2_h22_2,"HC2"))
```

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```
mx_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N)*ide_iss_2,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                    9.139956   0.818292 11.1696 < 2.2e-16 ***
## as.factor(g_ctax_N)1          -0.800777   0.497804 -1.6086  0.107968
## as.factor(g_ctax_N)2          -0.366338   0.505197 -0.7251  0.468511
## as.factor(g_ctax_N)3           0.542114   0.511055  1.0608  0.289010
## as.factor(g_ctax_N)4          -0.934109   0.479888 -1.9465  0.051831 .
## as.factor(g_ctax_N)5           0.084160   0.511001  0.1647  0.869212
## ide_iss_2                     -0.177553   0.331845 -0.5350  0.592717
## fem                           -0.603217   0.316969 -1.9031  0.057274 .
## age                           -0.068594   0.015470 -4.4340 1.012e-05 ***
## lvlen                          0.267926   0.123286  2.1732  0.029963 *
## ownh                           0.241204   0.325922  0.7401  0.459406
## as.factor(edu3)1               0.286225   0.480288  0.5959  0.551327
```

```
## as.factor(edu3)2                0.356427   0.416180  0.8564  0.391938
## wk                              0.261587   0.332724  0.7862  0.431910
## mar                             1.095082   0.423409  2.5863  0.009819 **
## cld                             0.955410   0.449210  2.1269  0.033639 *
## as.factor(g_ctax_N)1:ide_iss_2 -0.428827   0.431407 -0.9940  0.320418
## as.factor(g_ctax_N)2:ide_iss_2 -0.457889   0.450956 -1.0154  0.310136
## as.factor(g_ctax_N)3:ide_iss_2 -0.749961   0.475794 -1.5762  0.115242
## as.factor(g_ctax_N)4:ide_iss_2 -0.205452   0.428453 -0.4795  0.631658
## as.factor(g_ctax_N)5:ide_iss_2 -0.708833   0.485183 -1.4610  0.144294
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBb_1 <- mx_ctax1
mx_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N)*ide_iss_2,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                                 Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                   10.3198113  1.0267943 10.0505 < 2.2e-16 ***
## as.factor(g_ctax_N)1          -0.0896464  0.6405444 -0.1400  0.888721
## as.factor(g_ctax_N)2          -0.0097155  0.6525209 -0.0149  0.988123
## as.factor(g_ctax_N)3           0.7683775  0.6181184  1.2431  0.214082
## as.factor(g_ctax_N)4          -0.2410663  0.5728402 -0.4208  0.673959
## as.factor(g_ctax_N)5           0.5962319  0.6270454  0.9509  0.341871
## ide_iss_2                     -0.1587507  0.4318542 -0.3676  0.713236
## fem                           -1.1214827  0.4063088 -2.7602  0.005867 **
## age                           -0.0284275  0.0196207 -1.4488  0.147646
## lvlen                          0.4149395  0.1509608  2.7487  0.006076 **
## ownh                           0.2725785  0.4178348  0.6524  0.514297
## as.factor(edu3)1               0.1428194  0.5979770  0.2388  0.811273
## as.factor(edu3)2               1.0202680  0.5412136  1.8851  0.059656 .
## wk                            -0.0365124  0.4418940 -0.0826  0.934162
## mar                            1.3659783  0.5264052  2.5949  0.009579 **
## cld                            0.7429317  0.5596832  1.3274  0.184629
## as.factor(g_ctax_N)1:ide_iss_2 -1.2181704  0.6495823 -1.8753  0.060997 .
## as.factor(g_ctax_N)2:ide_iss_2 -1.6093916  0.6303283 -2.5533  0.010797 *
## as.factor(g_ctax_N)3:ide_iss_2 -1.4576473  0.6014771 -2.4234  0.015524 *
## as.factor(g_ctax_N)4:ide_iss_2 -0.9556593  0.5553794 -1.7207  0.085562 .
```

```
## as.factor(g_ctax_N)5:ide_iss_2 -0.9108038  0.6539940 -1.3927  0.163980
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBb_2 <- mx_ctax2

# 仮説 1 の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
mBb1_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2+1.50),ctl), data=d

mBb1r_h10_1 <- coeftest(mBb1_h10_1, vcov.=vcovHC(mBb1_h10_1,"HC2"))
mBb1r_h10_2 <- coeftest(mBb1_h10_2, vcov.=vcovHC(mBb1_h10_2,"HC2"))
mBb1r_h11_1 <- coeftest(mBb1_h11_1, vcov.=vcovHC(mBb1_h11_1,"HC2"))
mBb1r_h11_2 <- coeftest(mBb1_h11_2, vcov.=vcovHC(mBb1_h11_2,"HC2"))
mBb1r_h12_1 <- coeftest(mBb1_h12_1, vcov.=vcovHC(mBb1_h12_1,"HC2"))
mBb1r_h12_2 <- coeftest(mBb1_h12_2, vcov.=vcovHC(mBb1_h12_2,"HC2"))
mBb1r_h13_1 <- coeftest(mBb1_h13_1, vcov.=vcovHC(mBb1_h13_1,"HC2"))
mBb1r_h13_2 <- coeftest(mBb1_h13_2, vcov.=vcovHC(mBb1_h13_2,"HC2"))

mBb2_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2-1.48),ctl), data=d

mBb2r_h10_1 <- coeftest(mBb2_h10_1, vcov.=vcovHC(mBb2_h10_1,"HC2"))
mBb2r_h10_2 <- coeftest(mBb2_h10_2, vcov.=vcovHC(mBb2_h10_2,"HC2"))
mBb2r_h11_1 <- coeftest(mBb2_h11_1, vcov.=vcovHC(mBb2_h11_1,"HC2"))
mBb2r_h11_2 <- coeftest(mBb2_h11_2, vcov.=vcovHC(mBb2_h11_2,"HC2"))
mBb2r_h12_1 <- coeftest(mBb2_h12_1, vcov.=vcovHC(mBb2_h12_1,"HC2"))
```

```
mBb2r_h12_2 <- coeftest(mBb2_h12_2, vcov.=vcovHC(mBb2_h12_2,"HC2"))
mBb2r_h13_1 <- coeftest(mBb2_h13_1, vcov.=vcovHC(mBb2_h13_1,"HC2"))
mBb2r_h13_2 <- coeftest(mBb2_h13_2, vcov.=vcovHC(mBb2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
mBb1_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2+1.50),ctl), data=d
mBb1_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2+1.50),ctl), data=d

mBb1r_h20_1 <- coeftest(mBb1_h20_1, vcov.=vcovHC(mBb1_h20_1,"HC2"))
mBb1r_h20_2 <- coeftest(mBb1_h20_2, vcov.=vcovHC(mBb1_h20_2,"HC2"))
mBb1r_h21_1 <- coeftest(mBb1_h21_1, vcov.=vcovHC(mBb1_h21_1,"HC2"))
mBb1r_h21_2 <- coeftest(mBb1_h21_2, vcov.=vcovHC(mBb1_h21_2,"HC2"))
mBb1r_h22_1 <- coeftest(mBb1_h22_1, vcov.=vcovHC(mBb1_h22_1,"HC2"))
mBb1r_h22_2 <- coeftest(mBb1_h22_2, vcov.=vcovHC(mBb1_h22_2,"HC2"))

mBb2_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2-1.48),ctl), data=d
mBb2_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2-1.48),ctl), data=d

mBb2r_h20_1 <- coeftest(mBb2_h20_1, vcov.=vcovHC(mBb2_h20_1,"HC2"))
mBb2r_h20_2 <- coeftest(mBb2_h20_2, vcov.=vcovHC(mBb2_h20_2,"HC2"))
mBb2r_h21_1 <- coeftest(mBb2_h21_1, vcov.=vcovHC(mBb2_h21_1,"HC2"))
mBb2r_h21_2 <- coeftest(mBb2_h21_2, vcov.=vcovHC(mBb2_h21_2,"HC2"))
mBb2r_h22_1 <- coeftest(mBb2_h22_1, vcov.=vcovHC(mBb2_h22_1,"HC2"))
mBb2r_h22_2 <- coeftest(mBb2_h22_2, vcov.=vcovHC(mBb2_h22_2,"HC2"))
```

政党支持イデオロギー条件付け

```
mx_ctax1 <- lm(update(tax1_opi ~ as.factor(g_ctax_N)*ide_psup,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                    9.286105   0.798768 11.6255 < 2.2e-16 ***
## as.factor(g_ctax_N)1          -0.724426   0.530734 -1.3650   0.17253
## as.factor(g_ctax_N)2          -0.409086   0.528241 -0.7744   0.43883
## as.factor(g_ctax_N)3           0.627042   0.610989  1.0263   0.30497
## as.factor(g_ctax_N)4          -0.810052   0.500817 -1.6175   0.10605
## as.factor(g_ctax_N)5           0.125139   0.517349  0.2419   0.80891
## ide_psup                       0.726309   0.459256  1.5815   0.11404
## fem                           -0.155161   0.307936 -0.5039   0.61444
## age                           -0.078284   0.015162 -5.1632 2.848e-07 ***
## lvlen                          0.226368   0.123977  1.8259   0.06812 .
## ownh                           0.150779   0.331129  0.4553   0.64894
## as.factor(edu3)1               0.270542   0.479771  0.5639   0.57293
## as.factor(edu3)2               0.391618   0.413292  0.9476   0.34355
## wk                             0.264463   0.323392  0.8178   0.41365
## mar                            0.982051   0.431469  2.2761   0.02302 *
## cld                            0.958463   0.462792  2.0710   0.03857 *
## as.factor(g_ctax_N)1:ide_psup -0.430617   0.696541 -0.6182   0.53655
## as.factor(g_ctax_N)2:ide_psup  0.251943   0.688378  0.3660   0.71444
## as.factor(g_ctax_N)3:ide_psup -0.232685   0.850145 -0.2737   0.78436
## as.factor(g_ctax_N)4:ide_psup -0.367264   0.705091 -0.5209   0.60255
## as.factor(g_ctax_N)5:ide_psup  0.894360   0.709026  1.2614   0.20742
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBc_1 <- mx_ctax1
mx_ctax2 <- lm(update(tax2_opi ~ as.factor(g_ctax_N)*ide_psup,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                   10.637764   1.006677 10.5672 < 2.2e-16 ***
## as.factor(g_ctax_N)1           0.134736   0.658317  0.2047  0.837868
## as.factor(g_ctax_N)2           0.221879   0.695396  0.3191  0.749731
## as.factor(g_ctax_N)3           1.142764   0.718203  1.5911  0.111846
```

```
## as.factor(g_ctax_N)4           0.115006   0.597482  0.1925  0.847396
## as.factor(g_ctax_N)5           0.837177   0.624535  1.3405  0.180348
## ide_psup                       1.665989   0.572469  2.9102  0.003680 **
## fem                           -0.279213   0.411179 -0.6791  0.497237
## age                           -0.052118   0.019026 -2.7394  0.006249 **
## lvlen                          0.360790   0.155320  2.3229  0.020355 *
## ownh                           0.135141   0.428586  0.3153  0.752575
## as.factor(edu3)1               0.113541   0.604722  0.1878  0.851100
## as.factor(edu3)2               1.117177   0.546235  2.0452  0.041054 *
## wk                            -0.027781   0.439670 -0.0632  0.949630
## mar                            1.104568   0.540531  2.0435  0.041227 *
## cld                            0.871292   0.572958  1.5207  0.128606
## as.factor(g_ctax_N)1:ide_psup -1.211811   0.882802 -1.3727  0.170111
## as.factor(g_ctax_N)2:ide_psup -0.578192   0.954188 -0.6060  0.544664
## as.factor(g_ctax_N)3:ide_psup -1.219751   1.060119 -1.1506  0.250139
## as.factor(g_ctax_N)4:ide_psup -1.223857   0.848676 -1.4421  0.149547
## as.factor(g_ctax_N)5:ide_psup  0.302356   0.893908  0.3382  0.735242
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBc_2 <- mx_ctax2

# 仮説 1 の検証（4 種類）
# 統制群 vs 実験群 2 &実験群 3vs 実験群 2 &実験群 1vs 実験群 4 &実験群 5vs 実験群 4
mBc1_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup+1),ctl), data=dtmp)

mBc1r_h10_1 <- coeftest(mBc1_h10_1, vcov.=vcovHC(mBc1_h10_1,"HC2"))
mBc1r_h10_2 <- coeftest(mBc1_h10_2, vcov.=vcovHC(mBc1_h10_2,"HC2"))
mBc1r_h11_1 <- coeftest(mBc1_h11_1, vcov.=vcovHC(mBc1_h11_1,"HC2"))
mBc1r_h11_2 <- coeftest(mBc1_h11_2, vcov.=vcovHC(mBc1_h11_2,"HC2"))
mBc1r_h12_1 <- coeftest(mBc1_h12_1, vcov.=vcovHC(mBc1_h12_1,"HC2"))
mBc1r_h12_2 <- coeftest(mBc1_h12_2, vcov.=vcovHC(mBc1_h12_2,"HC2"))
mBc1r_h13_1 <- coeftest(mBc1_h13_1, vcov.=vcovHC(mBc1_h13_1,"HC2"))
```

```
mBc1r_h13_2 <- coeftest(mBc1_h13_2, vcov.=vcovHC(mBc1_h13_2,"HC2"))

mBc2_h10_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h10_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h11_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h11_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h12_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h12_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h13_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h13_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup-1),ctl), data=dtmp)

mBc2r_h10_1 <- coeftest(mBc2_h10_1, vcov.=vcovHC(mBc2_h10_1,"HC2"))
mBc2r_h10_2 <- coeftest(mBc2_h10_2, vcov.=vcovHC(mBc2_h10_2,"HC2"))
mBc2r_h11_1 <- coeftest(mBc2_h11_1, vcov.=vcovHC(mBc2_h11_1,"HC2"))
mBc2r_h11_2 <- coeftest(mBc2_h11_2, vcov.=vcovHC(mBc2_h11_2,"HC2"))
mBc2r_h12_1 <- coeftest(mBc2_h12_1, vcov.=vcovHC(mBc2_h12_1,"HC2"))
mBc2r_h12_2 <- coeftest(mBc2_h12_2, vcov.=vcovHC(mBc2_h12_2,"HC2"))
mBc2r_h13_1 <- coeftest(mBc2_h13_1, vcov.=vcovHC(mBc2_h13_1,"HC2"))
mBc2r_h13_2 <- coeftest(mBc2_h13_2, vcov.=vcovHC(mBc2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 &実験群 2vs 実験群 4 & 実験群 3vs 実験群 5
mBc1_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup+1),ctl), data=dtmp)
mBc1_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup+1),ctl), data=dtmp)

mBc1r_h20_1 <- coeftest(mBc1_h20_1, vcov.=vcovHC(mBc1_h20_1,"HC2"))
mBc1r_h20_2 <- coeftest(mBc1_h20_2, vcov.=vcovHC(mBc1_h20_2,"HC2"))
mBc1r_h21_1 <- coeftest(mBc1_h21_1, vcov.=vcovHC(mBc1_h21_1,"HC2"))
mBc1r_h21_2 <- coeftest(mBc1_h21_2, vcov.=vcovHC(mBc1_h21_2,"HC2"))
mBc1r_h22_1 <- coeftest(mBc1_h22_1, vcov.=vcovHC(mBc1_h22_1,"HC2"))
mBc1r_h22_2 <- coeftest(mBc1_h22_2, vcov.=vcovHC(mBc1_h22_2,"HC2"))

mBc2_h20_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h20_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h21_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup-1),ctl), data=dtmp)
```

```
mBc2_h21_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h22_1 <- lm(update(tax1_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup-1),ctl), data=dtmp)
mBc2_h22_2 <- lm(update(tax2_opi ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup-1),ctl), data=dtmp)

mBc2r_h20_1 <- coeftest(mBc2_h20_1, vcov.=vcovHC(mBc2_h20_1,"HC2"))
mBc2r_h20_2 <- coeftest(mBc2_h20_2, vcov.=vcovHC(mBc2_h20_2,"HC2"))
mBc2r_h21_1 <- coeftest(mBc2_h21_1, vcov.=vcovHC(mBc2_h21_1,"HC2"))
mBc2r_h21_2 <- coeftest(mBc2_h21_2, vcov.=vcovHC(mBc2_h21_2,"HC2"))
mBc2r_h22_1 <- coeftest(mBc2_h22_1, vcov.=vcovHC(mBc2_h22_1,"HC2"))
mBc2r_h22_2 <- coeftest(mBc2_h22_2, vcov.=vcovHC(mBc2_h22_2,"HC2"))
```

交差項による仮説検証

```
htest0 <- data.frame(int = rep(c("世帯収入", "自己申告イデオロギー",
                                 "外交安全保障イデオロギー",
                                 "権利機会平等イデオロギー",
                                 "政党支持イデオロギー"
), each=14),
dv = rep(c("生活必需品","その他すべて"), each=7),
h = rep(c("H1A/B","H1A/B",
          "H1A/B","H1A/B",
          "H2A/B","H2A/B",
          "H2A/B"),2*5),
cp = rep(c("2. 普遍 - 0. 統制",
           "2. 普遍 - 3. 選別",
           "4. 逆進 + 普遍 - 1. 逆進",
           "4. 逆進 + 普遍 - 5. 逆進 + 選別",
           "1. 逆進 - 0. 統制",
           "4. 普遍 + 逆進 - 2. 普遍",
           "5. 選別 + 逆進 - 3. 選別"),2*5),
rbind(mA1r_h10_1[17,],mA1r_h11_1[17,],mA1r_h12_1[17,],mA1r_h13_1[17,],
      mA1r_h20_1[17,],mA1r_h21_1[17,],mA1r_h22_1[17,],
      mA1r_h10_2[17,],mA1r_h11_2[17,],mA1r_h12_2[17,],mA1r_h13_2[17,],
      mA1r_h20_2[17,],mA1r_h21_2[17,],mA1r_h22_2[17,],
      mB1r_h10_1[17,],mB1r_h11_1[17,],mB1r_h12_1[17,],mB1r_h13_1[17,],
      mB1r_h20_1[17,],mA1r_h21_1[17,],mB1r_h22_1[17,],
      mB1r_h10_2[17,],mB1r_h11_2[17,],mB1r_h12_2[17,],mB1r_h13_2[17,],
      mB1r_h20_2[17,],mB1r_h21_2[17,],mB1r_h22_2[17,],
```

```
      mBa1r_h10_1[17,],mBa1r_h11_1[17,],mBa1r_h12_1[17,],mBa1r_h13_1[17,],
      mBa1r_h20_1[17,],mBa1r_h21_1[17,],mBa1r_h22_1[17,],
      mBa1r_h10_2[17,],mBa1r_h11_2[17,],mBa1r_h12_2[17,],mBa1r_h13_2[17,],
      mBa1r_h20_2[17,],mBa1r_h21_2[17,],mBa1r_h22_2[17,],
      mBb1r_h10_1[17,],mBb1r_h11_1[17,],mBb1r_h12_1[17,],mBb1r_h13_1[17,],
      mBb1r_h20_1[17,],mBb1r_h21_1[17,],mBb1r_h22_1[17,],
      mBb1r_h10_2[17,],mBb1r_h11_2[17,],mBb1r_h12_2[17,],mBb1r_h13_2[17,],
      mBb1r_h20_2[17,],mBb1r_h21_2[17,],mBb1r_h22_2[17,],
      mBc1r_h10_1[17,],mBc1r_h11_1[17,],mBc1r_h12_1[17,],mBc1r_h13_1[17,],
      mBc1r_h20_1[17,],mBc1r_h21_1[17,],mBc1r_h22_1[17,],
      mBc1r_h10_2[17,],mBc1r_h11_2[17,],mBc1r_h12_2[17,],mBc1r_h13_2[17,],
      mBc1r_h20_2[17,],mBc1r_h21_2[17,],mBc1r_h22_2[17,]))
htest0$int <- factor(htest0$int, levels=unique(htest0$int))
htest0$dv <- factor(htest0$dv, levels=unique(htest0$dv))
htest0$cp <- factor(htest0$cp, levels=rev(unique(htest0$cp)))
htest0$lo95 <- htest0$Estimate - qnorm(0.975)*htest0$Std..Error
htest0$up95 <- htest0$Estimate + qnorm(0.975)*htest0$Std..Error
htest0$lo90 <- htest0$Estimate - qnorm(0.95)*htest0$Std..Error
htest0$up90 <- htest0$Estimate + qnorm(0.95)*htest0$Std..Error
```

実験情報刺激効果と収入・イデオロギーの交差項係数による仮説検証（その他のイデオロギー指標を含む）（図A13）

```
p <- ggplot(subset(htest0, int%in%c("世帯収入","自己申告イデオロギー")),
            aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95, color=int, alpha=int),
                width=0.25, position = position_dodge(width=-0.7)) +
  geom_errorbar(aes(ymin=lo90,ymax=up90, color=int, alpha=int),
                width=0, size=1.5, position = position_dodge(width=-0.7)) +
  geom_point(aes(color=int, shape=int, alpha=int), size=3,
             position = position_dodge(width=-0.7)) +
  facet_grid(h~dv, scales = "free_y", space = "free_y") +
  coord_flip() +
  scale_color_manual(name="収入・イデオロギー", values=rep("black",2)) +
  # scale_color_brewer(name="収入・イデオロギー", type="qual", palette=2) +
  scale_shape_discrete(name="収入・イデオロギー") +
  scale_alpha_manual(name = "収入・イデオロギー", values=c(1,rep(0.3,1))) +
  labs(x=NULL, y="実験群比較変数と収入・イデオロギーの交差項係数¥n（従属変数は理想消費税率）",
```

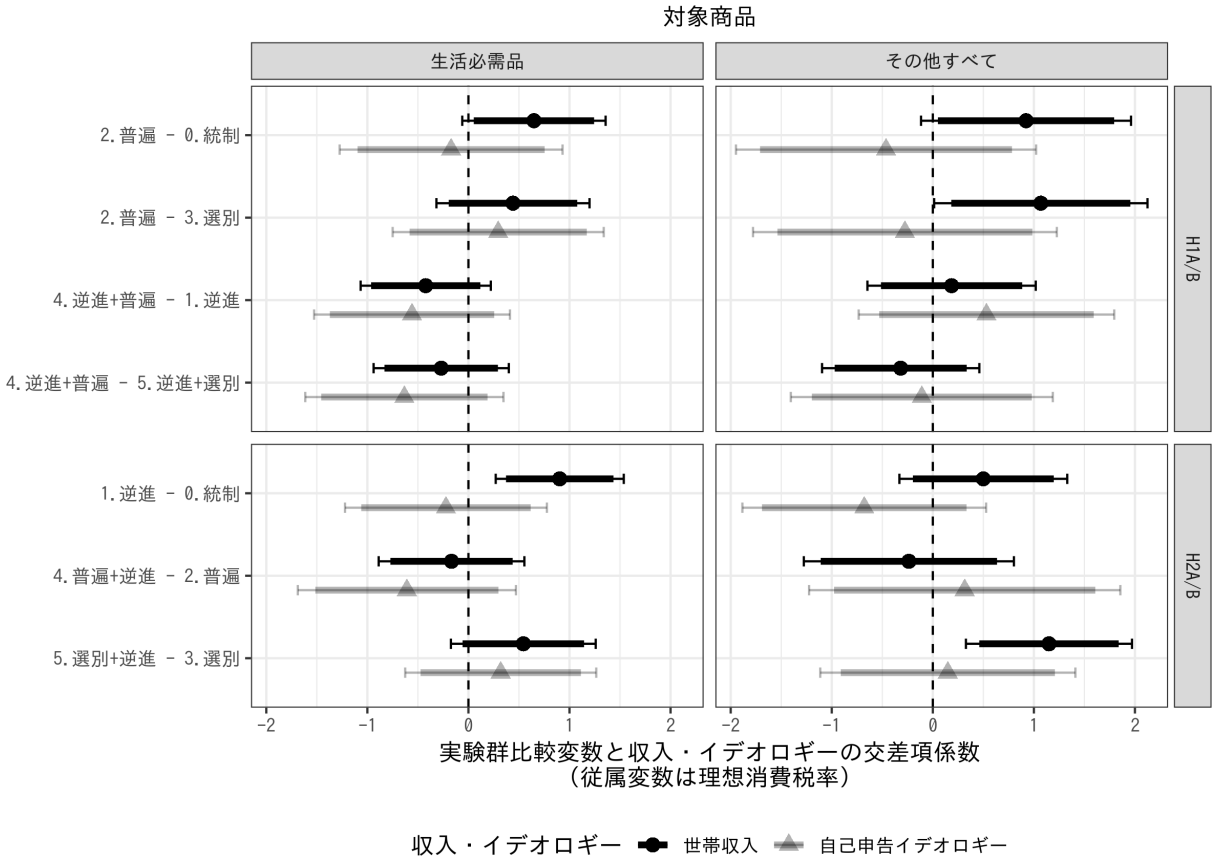
```
       caption="分析の詳細は回帰表を参照。太線は90%信頼区間、細線は95%信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() + theme(legend.position="bottom",
                     plot.subtitle = element_text(hjust=0.5),
                     strip.placement = "outside")
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

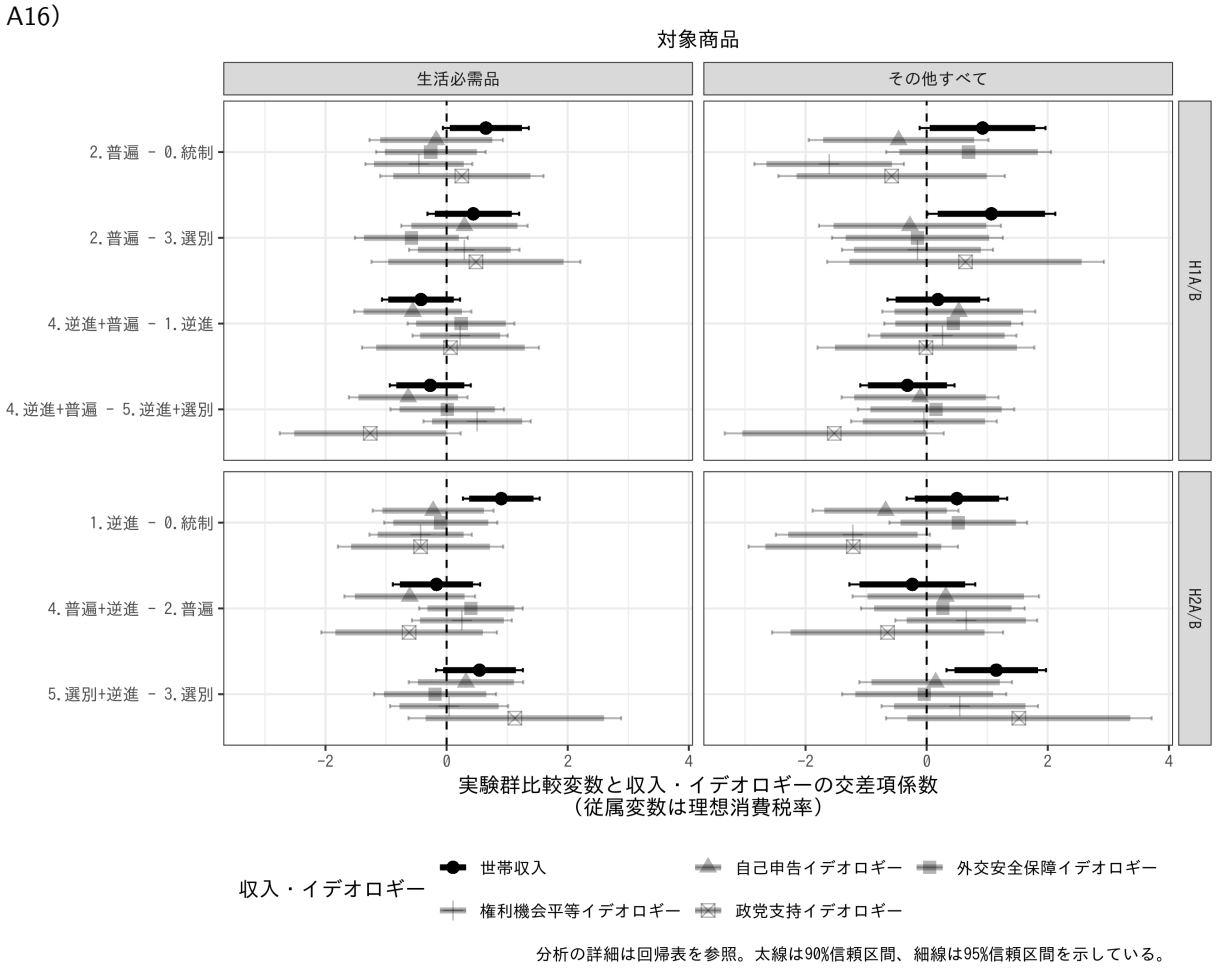
```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```




```
# ggsave("htest0_v1_originalscale_wokn.png", p, width=8, height=6)
```

実験情報刺激効果と収入・イデオロギーの交差項係数による仮説検証（その他のイデオロギー指標を含む）（図A16）



分析の詳細は回帰表を参照。太線は90%信頼区間、細線は95%信頼区間を示している。

```
ggsave("htest0_v2_originalscale_wokn.png", p, width=9, height=7)
```

表のエクスポート

直接効果

```
texreg(list(m0_1,m0_2),
       override.se = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,2],
                          coeftest(m0_2,vcovHC(m0_2,"HC2"))[,2]),
       override.pvalues = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,4],
                               coeftest(m0_2,vcovHC(m0_2,"HC2"))[,4]),
       symbol = "+",
       single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
       custom.coef.map = vnmap,
```

```
       custom.model.names = c("1: 生活必需品","2: その他すべて"),
       caption = "理想消費税率に実験情報刺激が与える効果（重回帰分析）",
       caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
       label="basetab_os_wokn", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
       custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ¥begin{table}[ht!]
## ¥caption{理想消費税率に実験情報刺激が与える効果（重回帰分析）}
## ¥begin{center}
## ¥begin{scriptsize}
## ¥begin{tabular}{l D{)}{)}{11)3} D{)}{)}{11)3}}
## ¥toprule
##  & ¥multicolumn{1}{c}{1:生活必需品} & ¥multicolumn{1}{c}{2:その他すべて} ¥¥
## ¥midrule
## （定数項）          & 9.476 ¥; (0.806)^{***}  & 11.072 ¥; (1.021)^{***} ¥¥
## 1.逆進性          & -0.828 ¥; (0.500)^{+}   & -0.159 ¥; (0.644)       ¥¥
## 2.社会保障普遍性      & -0.315 ¥; (0.509)       & 0.112 ¥; (0.676)        ¥¥
## 3.社会保障選別性      & 0.596 ¥; (0.513)        & 0.860 ¥; (0.632)        ¥¥
## 4.逆進性＆社会保障普遍性 & -0.927 ¥; (0.480)^{+}   & -0.219 ¥; (0.581)       ¥¥
## 5.逆進性＆社会保障選別性 & 0.205 ¥; (0.520)        & 0.739 ¥; (0.635)        ¥¥
## 性別（女性）          & -0.261 ¥; (0.303)       & -0.428 ¥; (0.405)       ¥¥
## 年齢              & -0.080 ¥; (0.015)^{***} & -0.054 ¥; (0.019)^{**}  ¥¥
## 居住年数            & 0.247 ¥; (0.123)^{*}    & 0.379 ¥; (0.153)^{*}    ¥¥
## 持ち家             & 0.185 ¥; (0.330)        & 0.189 ¥; (0.427)        ¥¥
## 教育：短大／高専／専門学校 & 0.227 ¥; (0.481)        & 0.049 ¥; (0.607)        ¥¥
## 教育：大卒以上        & 0.387 ¥; (0.418)        & 1.086 ¥; (0.551)^{*}    ¥¥
## 就労              & 0.318 ¥; (0.331)        & 0.054 ¥; (0.446)        ¥¥
## 婚姻              & 1.027 ¥; (0.431)^{*}    & 1.175 ¥; (0.540)^{*}    ¥¥
## 子ども             & 0.970 ¥; (0.454)^{*}    & 0.860 ¥; (0.570)        ¥¥
## ¥midrule
## R$^2$          & 0.051                   & 0.032                   ¥¥
## Adj. R$^2$     & 0.040                   & 0.020                   ¥¥
## Num. obs.      & 1197                    & 1197                    ¥¥
## ¥bottomrule
## ¥multicolumn{3}{l}{¥tiny{$^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$; $^{+}p<0.1$. 最小二乗法による重
## ¥end{tabular}
## ¥end{scriptsize}
## ¥label{basetab_os_wokn}
```

```
## ¥end{center}
## ¥end{table}
```

```
# texreg(list(m0_1,m0_2),
#        override.se = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,2],
#                           coeftest(m0_2,vcovHC(m0_2,"HC2"))[,2]),
#        override.pvalues = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,4],
#                                coeftest(m0_2,vcovHC(m0_2,"HC2"))[,4]),
#        # file = "../out_v4/basetab_originalscale_wokn.html", symbol = "&dagger;",
#        file = "../out_v4/basetab_originalscale_wokn.tex", symbol = "¥¥dagger",
#        single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap,
#        custom.model.names = c("1: 生活必需品","2: その他すべて"),
#        caption = "理想消費税率に実験情報刺激が与える効果（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="basetab_os_wokn", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("../out_v4/basetab_originalscale_wokn.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "../out_v4/basetab_originalscale_wokn.tex", useBytes = TRUE)
```

収入・自己申告イデオロギーによる条件付け（表 A4）

```
## Full Table
screenreg(list(mA_1,mA_2,mB_1,mB_2),
          override.se = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,2],
                             coeftest(mA_2,vcovHC(mA_2,"HC2"))[,2],
                             coeftest(mB_1,vcovHC(mB_1,"HC2"))[,2],
                             coeftest(mB_2,vcovHC(mB_2,"HC2"))[,2]),
          override.pvalues = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,4],
                                  coeftest(mA_2,vcovHC(mA_2,"HC2"))[,4],
                                  coeftest(mB_1,vcovHC(mB_1,"HC2"))[,4],
                                  coeftest(mB_2,vcovHC(mB_2,"HC2"))[,4]),
          symbol = "+",
          single.row=FALSE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmap,
          custom.model.names = c("1: 生活必需品","2: その他すべて",
                                 "3: 生活必需品","4: その他すべて"),
          custom.header = list("世帯収入" = 1:2, "自己申告イデオロギー" = 3:4),
          caption = "理想消費税率に実験情報刺激が与える効果と収入・イデオロギー（重回帰分析）",
```

```
        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
        label="maintab_full_os_wokn", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ==========================================================================
##                                 世帯収入                      自己申告イデオロギー
##                     -------------------------  -------------------------
##                     1:生活必需品       2:その他すべて      3:生活必需品       4:その他すべて
## --------------------------------------------------------------------------
## （定数項）                 10.817 ***    12.425 ***     9.442 ***    11.037 ***
##                       (1.154)       (1.411)       (0.827)       (1.036)
## 1.逆進性                -3.751 ***    -1.771        -0.777        -0.043
##                       (1.094)       (1.475)       (0.528)       (0.667)
## 2.社会保障普遍性            -2.382 *      -2.829 +      -0.283         0.117
##                       (1.201)       (1.694)       (0.535)       (0.698)
## 3.社会保障選別性            -0.089         1.269         0.684         0.885
##                       (1.295)       (1.585)       (0.540)       (0.642)
## 4.逆進性＆社会保障普遍性        -2.465 *      -2.381 +      -0.809        -0.206
##                       (1.174)       (1.422)       (0.511)       (0.601)
## 5.逆進性＆社会保障選別性        -2.212 *      -2.501 +       0.237         0.735
##                       (1.126)       (1.382)       (0.540)       (0.648)
## 収入／イデオロギー            -0.363        -0.312         0.127        -0.051
##                       (0.251)       (0.307)       (0.383)       (0.439)
## 収入／イデオロギー×1.逆進        0.904 **      0.500        -0.222        -0.678
##                       (0.323)       (0.424)       (0.510)       (0.615)
## 収入／イデオロギー×2.普遍        0.648 +       0.922 +      -0.171        -0.463
##                       (0.362)       (0.530)       (0.563)       (0.758)
## 収入／イデオロギー×3.選別        0.207        -0.146        -0.466        -0.187
##                       (0.376)       (0.443)       (0.507)       (0.629)
## 収入／イデオロギー×4.逆進＆普遍     0.481         0.685        -0.780        -0.148
##                       (0.355)       (0.426)       (0.525)       (0.649)
## 収入／イデオロギー×5.逆進＆選別     0.751 *       1.003 *      -0.147        -0.039
##                       (0.338)       (0.398)       (0.514)       (0.632)
## 性別（女性）                -0.280        -0.535        -0.327        -0.495
##                       (0.304)       (0.405)       (0.307)       (0.407)
## 年齢                   -0.077 ***    -0.050 *      -0.081 ***    -0.053 **
##                       (0.015)       (0.019)       (0.015)       (0.019)
## 居住年数                  0.214 +       0.324 *       0.251 *       0.382 *
```

```
##                          (0.124)       (0.154)       (0.123)       (0.154)
## 持ち家                    0.128         0.112         0.205         0.240
##                          (0.334)       (0.437)       (0.332)       (0.429)
## 教育：短大／高専／専門学校  0.183        -0.064         0.210         0.062
##                          (0.483)       (0.614)       (0.480)       (0.606)
## 教育：大卒以上             0.314         0.966 +       0.357         1.097 *
##                          (0.418)       (0.552)       (0.418)       (0.554)
## 就労                      0.248        -0.058         0.346         0.024
##                          (0.329)       (0.446)       (0.333)       (0.447)
## 婚姻                      0.799 +       0.882         1.101 *       1.202 *
##                          (0.444)       (0.561)       (0.435)       (0.547)
## 子ども                    1.016 *       0.916         0.953 *       0.866
##                          (0.454)       (0.581)       (0.456)       (0.575)
## ------------------------------------------------------------------------------
## R^2                       0.061         0.043         0.055         0.036
## Adj. R^2                  0.045         0.027         0.039         0.019
## Num. obs.              1197          1197          1197          1197
## ==============================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(mA_1,mA_2,mB_1,mB_2),
#        override.se = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,2],
#                           coeftest(mA_2,vcovHC(mA_2,"HC2"))[,2],
#                           coeftest(mB_1,vcovHC(mB_1,"HC2"))[,2],
#                           coeftest(mB_2,vcovHC(mB_2,"HC2"))[,2]),
#        override.pvalues = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,4],
#                                coeftest(mA_2,vcovHC(mA_2,"HC2"))[,4],
#                                coeftest(mB_1,vcovHC(mB_1,"HC2"))[,4],
#                                coeftest(mB_2,vcovHC(mB_2,"HC2"))[,4]),
#        # file = "maintab_full_originalscale_wokn.html", symbol = "&dagger;",
#        file = "maintab_full_originalscale_wokn.tex", symbol = "¥¥dagger",
#        single.row=FALSE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap,
#        custom.model.names = c("1: 生活必需品","2: その他すべて",
#                               "3: 生活必需品","4: その他すべて"),
#        custom.header = list("世帯収入" = 1:2, "自己申告イデオロギー" = 3:4),
#        caption = "理想消費税率に実験情報刺激が与える効果と収入・イデオロギー（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="maintab_full_os_wokn", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
# tmp <- readLines("maintab_full_originalscale_wokn.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "maintab_full_originalscale_wokn.tex", useBytes = TRUE)
```

その他のイデオロギーによる条件付け

```
## 他のイデオロギー（生活必需品）
screenreg(list(mBc_1,mBa_1,mBb_1),
          override.se = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,2],
                             coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,2],
                             coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,2]),
          override.pvalues = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,4],
                                  coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,4],
                                  coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,4]),
          symbol="+",
          single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmap2,
          custom.model.names = c("政党支持","外交安全保障","権利機会平等"),
          caption = "生活必需品の理想消費税率に実験情報刺激が与える効果とイデオロギー（重回帰分析）",
          caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
          label="idetab1_os_wokn", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
          custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ==============================================================================
##                 政党支持                  外交安全保障                 権利機会平等
## ------------------------------------------------------------------------------
##  （定数項）              9.286 (0.799) ***     9.444 (0.816) ***     9.140 (0.818) ***
## 1.逆進性             -0.724 (0.531)        -0.831 (0.501) +      -0.801 (0.498)
## 2.社会保障普遍性         -0.409 (0.528)        -0.257 (0.516)        -0.366 (0.505)
## 3.社会保障選別性          0.627 (0.611)         0.593 (0.513)         0.542 (0.511)
## 4.逆進性＆社会保障普遍性     -0.810 (0.501)        -0.938 (0.479) +      -0.934 (0.480) +
## 5.逆進性＆社会保障選別性      0.125 (0.517)         0.212 (0.534)         0.084 (0.511)
## イデオロギー              0.726 (0.459)        -0.049 (0.326)        -0.178 (0.332)
## イデオロギー×1.逆進        -0.431 (0.697)        -0.096 (0.477)        -0.429 (0.431)
## イデオロギー×2.普遍         0.252 (0.688)        -0.260 (0.462)        -0.458 (0.451)
## イデオロギー×3.選別        -0.233 (0.850)         0.322 (0.474)        -0.750 (0.476)
## イデオロギー×4.逆進＆普遍    -0.367 (0.705)         0.141 (0.435)        -0.205 (0.428)
## イデオロギー×5.逆進＆選別     0.894 (0.709)         0.131 (0.504)        -0.709 (0.485)
```

```
## 性別（女性）              -0.155 (0.308)       -0.248 (0.313)       -0.603 (0.317) +
## 年齢                   -0.078 (0.015) ***   -0.080 (0.015) ***   -0.069 (0.015) ***
## 居住年数                  0.226 (0.124) +      0.245 (0.124) *      0.268 (0.123) *
## 持ち家                   0.151 (0.331)        0.204 (0.331)        0.241 (0.326)
## 教育：短大／高専／専門学校       0.271 (0.480)        0.241 (0.484)        0.286 (0.480)
## 教育：大卒以上              0.392 (0.413)        0.400 (0.423)        0.356 (0.416)
## 就労                     0.264 (0.323)        0.320 (0.333)        0.262 (0.333)
## 婚姻                     0.982 (0.431) *      1.033 (0.432) *      1.095 (0.423) **
## 子ども                    0.958 (0.463) *      0.951 (0.456) *      0.955 (0.449) *
## ------------------------------------------------------------------------------
## R^2                 0.064                0.053                0.069
## Adj. R^2            0.048                0.037                0.053
## Num. obs.        1197                 1197                 1197
## ==============================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(mBc_1,mBa_1,mBb_1),
#        override.se = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,2],
#                           coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,2],
#                           coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,2]),
#        override.pvalues = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,4],
#                                coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,4],
#                                coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,4]),
#        # file = "idetab1_originalscale_wokn.html", symbol = "&dagger;",
#        file = "idetab1_originalscale_wokn.tex", symbol = "¥¥dagger",
#        single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap2,
#        custom.model.names = c("政党支持","外交安全保障","権利機会平等"),
#        caption = "生活必需品の理想消費税率に実験情報刺激が与える効果とイデオロギー（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="idetab1_os_wokn", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("idetab1_originalscale_wokn.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "idetab1_originalscale_wokn.tex", useBytes = TRUE)

## 他のイデオロギー（その他の商品）
screenreg(list(mBc_2,mBa_2,mBb_2),
          override.se = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,2],
                             coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,2],
```

```r
                          coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,2]),
        override.pvalues = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,4],
                                coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,4],
                                coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,4]),
        symbol = "+",
        single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
        custom.coef.map = vnmap2,
        custom.model.names = c("政党支持","外交安全保障","権利機会平等"),
        caption = "その他全ての商品の理想消費税率に実験情報刺激が与える効果とイデオロギー（重回帰分析）",
        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
        label="idetab2_os_wokn", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ==============================================================================
##                 政党支持                  外交安全保障                 権利機会平等
## ------------------------------------------------------------------------------
##  （定数項）              10.638 (1.007) ***    10.855 (1.008) ***    10.320 (1.027) ***
## 1.逆進性                0.135 (0.658)        -0.154 (0.645)        -0.090 (0.641)
## 2.社会保障普遍性          0.222 (0.695)         0.046 (0.680)        -0.010 (0.653)
## 3.社会保障選別性          1.143 (0.718)         0.867 (0.632)         0.768 (0.618)
## 4.逆進性＆社会保障普遍性      0.115 (0.597)        -0.299 (0.579)        -0.241 (0.573)
## 5.逆進性＆社会保障選別性      0.837 (0.625)         0.812 (0.656)         0.596 (0.627)
## イデオロギー              1.666 (0.572) **     -0.246 (0.402)        -0.159 (0.432)
## イデオロギー×1.逆進       -1.212 (0.883)         0.521 (0.580)        -1.218 (0.650) +
## イデオロギー×2.普遍       -0.578 (0.954)         0.692 (0.695)        -1.609 (0.630) *
## イデオロギー×3.選別       -1.220 (1.060)         0.845 (0.598)        -1.458 (0.601) *
## イデオロギー×4.逆進＆普遍    -1.224 (0.849)         0.960 (0.565) +      -0.956 (0.555) +
## イデオロギー×5.逆進＆選別     0.302 (0.894)         0.804 (0.667)        -0.911 (0.654)
## 性別（女性）             -0.279 (0.411)        -0.232 (0.421)        -1.121 (0.406) **
## 年齢                 -0.052 (0.019) **     -0.050 (0.019) **     -0.028 (0.020)
## 居住年数                0.361 (0.155) *       0.354 (0.155) *       0.415 (0.151) **
## 持ち家                 0.135 (0.429)         0.202 (0.427)         0.273 (0.418)
## 教育：短大／高専／専門学校      0.114 (0.605)         0.107 (0.605)         0.143 (0.598)
## 教育：大卒以上            1.117 (0.546) *       1.179 (0.547) *       1.020 (0.541) +
## 就労                 -0.028 (0.440)         0.011 (0.448)        -0.037 (0.442)
## 婚姻                  1.105 (0.541) *       1.117 (0.542) *       1.366 (0.526) **
## 子ども                 0.871 (0.573)         0.819 (0.567)         0.743 (0.560)
## ------------------------------------------------------------------------------
```

```
## R^2                0.046                0.039                0.076
## Adj. R^2           0.030                0.022                0.060
## Num. obs.       1197                 1197                 1197
## ============================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(mBc_2,mBa_2,mBb_2),
#        override.se = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,2],
#                           coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,2],
#                           coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,2]),
#        override.pvalues = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,4],
#                                coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,4],
#                                coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,4]),
#        # file = "idetab2_originalscale_wokn.html", symbol = "&dagger;",
#        file = "idetab2_originalscale_wokn.tex", symbol = "¥¥dagger",
#        single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap2,
#        custom.model.names = c(" 政党支持"," 外交安全保障"," 権利機会平等"),
#        caption = " その他全ての商品の理想消費税率に実験情報刺激が与える効果とイデオロギー（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="idetab2_os_wokn", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("idetab2_originalscale_wokn.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "idetab2_originalscale_wokn.tex", useBytes = TRUE)
```

実験群比較（平方根）

準備

```
# 統制変数
ctl <- formula( ~ .+ knall + fem + age + lvlen + ownh +
                  as.factor(edu3) + wk + mar + cld)

# 限界効果予測値計算用データ
preddata <- data.frame(g_ctax_N = seq(0,5,1))
preddata$knall = median(dtmp$knall,na.rm=TRUE)
preddata$fem = median(dtmp$fem, na.rm=TRUE)
preddata$age = median(dtmp$age, na.rm=TRUE)
preddata$lvlen = median(dtmp$lvlen, na.rm=TRUE)
```

```
preddata$ownh = median(dtmp$ownh, na.rm=TRUE)
preddata$edu3 = median(as.numeric(dtmp$edu3)-1, na.rm=TRUE)
preddata$wk = median(dtmp$wk, na.rm=TRUE)
preddata$mar = median(dtmp$mar, na.rm=TRUE)
preddata$cld = median(dtmp$cld, na.rm=TRUE)[1]
```

実験刺激の直接効果

```
m_ctax1 <- lm(update(sqrt(tax1_opi) ~ as.factor(g_ctax_N),ctl), data=dtmp)
m0_1 <- m_ctax1
m_ctax2 <- lm(update(sqrt(tax2_opi) ~ as.factor(g_ctax_N),ctl), data=dtmp)
m0_2 <- m_ctax2

coeftest(m_ctax1, vcov.=vcovHC(m_ctax1,"HC2"))
```

```
##
## t test of coefficients:
##
##                         Estimate Std. Error t value  Pr(>|t|)
## (Intercept)            3.1304524  0.1913815 16.3571 < 2.2e-16 ***
## as.factor(g_ctax_N)1 -0.2229154  0.1157985 -1.9250   0.05447 .
## as.factor(g_ctax_N)2 -0.1080015  0.1141871 -0.9458   0.34443
## as.factor(g_ctax_N)3  0.0892716  0.1095602  0.8148   0.41534
## as.factor(g_ctax_N)4 -0.2661707  0.1089321 -2.4435   0.01469 *
## as.factor(g_ctax_N)5 -0.0321496  0.1129040 -0.2848   0.77588
## knall                -0.2058767  0.1390873 -1.4802   0.13909
## fem                   0.0364840  0.0693949  0.5257   0.59916
## age                  -0.0188924  0.0034443 -5.4851 5.051e-08 ***
## lvlen                 0.0363624  0.0272826  1.3328   0.18285
## ownh                  0.0502788  0.0728734  0.6899   0.49036
## as.factor(edu3)1      0.0740293  0.1126503  0.6572   0.51121
## as.factor(edu3)2      0.0935134  0.0983616  0.9507   0.34195
## wk                    0.0194519  0.0794860  0.2447   0.80671
## mar                   0.2014413  0.0951376  2.1174   0.03444 *
## cld                   0.2071558  0.0979561  2.1148   0.03466 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
coeftest(m_ctax2, vcov.=vcovHC(m_ctax2,"HC2"))
```

```
##
## t test of coefficients:
##
##                          Estimate Std. Error t value  Pr(>|t|)
## (Intercept)            3.1984205  0.1795141 17.8171 < 2.2e-16 ***
## as.factor(g_ctax_N)1 -0.0573808  0.1096497 -0.5233  0.600856
## as.factor(g_ctax_N)2 -0.0398029  0.1116277 -0.3566  0.721478
## as.factor(g_ctax_N)3  0.1237063  0.1038057  1.1917  0.233614
## as.factor(g_ctax_N)4 -0.0738013  0.1029471 -0.7169  0.473587
## as.factor(g_ctax_N)5  0.0585624  0.1105572  0.5297  0.596418
## knall                -0.0047798  0.1269947 -0.0376  0.969983
## fem                   0.0132956  0.0677097  0.1964  0.844361
## age                  -0.0094756  0.0032003 -2.9609  0.003129 **
## lvlen                 0.0596421  0.0261269  2.2828  0.022620 *
## ownh                  0.0032585  0.0698414  0.0467  0.962796
## as.factor(edu3)1      0.0460133  0.1062641  0.4330  0.665087
## as.factor(edu3)2      0.1704841  0.0936449  1.8205  0.068930 .
## wk                   -0.0193426  0.0751659 -0.2573  0.796967
## mar                   0.1800740  0.0939086  1.9175  0.055410 .
## cld                   0.1573288  0.0944652  1.6655  0.096085 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

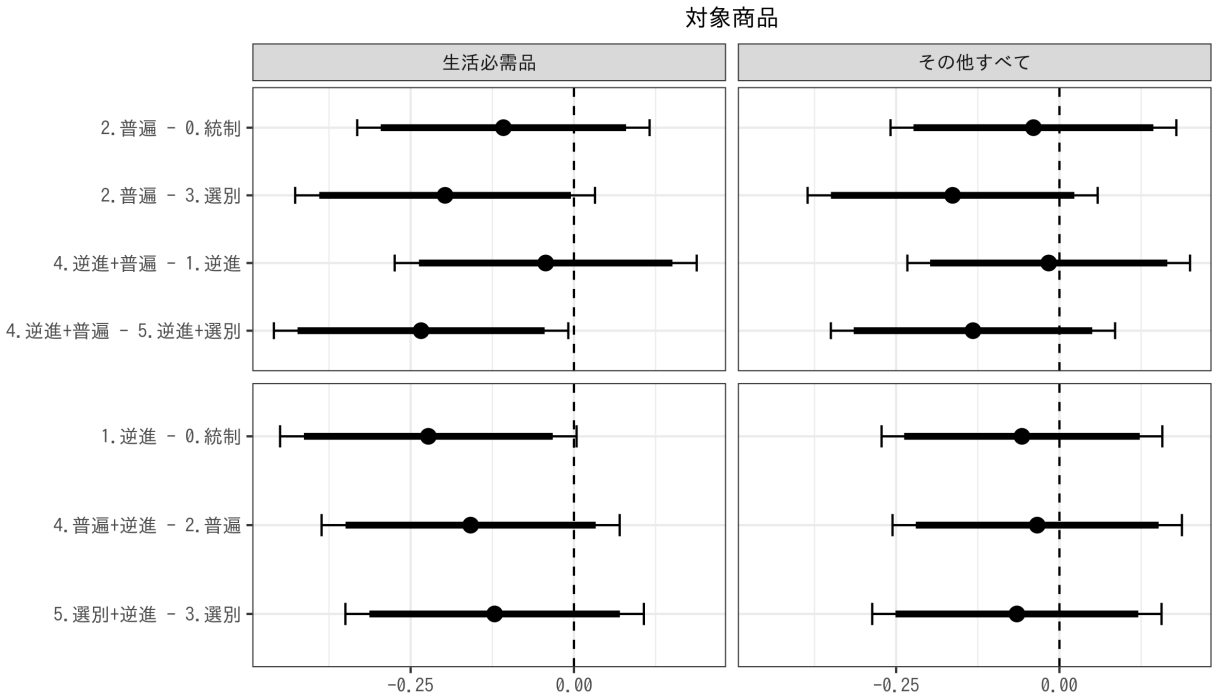
```
# 普遍性刺激効果の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
m0_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5)),ctl), data=dtmp)
m0_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5)),ctl), data=dtmp)
m0_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5)),ctl), data=dtmp)
m0_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5)),ctl), data=dtmp)
m0_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5)),ctl), data=dtmp)
m0_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5)),ctl), data=dtmp)
m0_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3)),ctl), data=dtmp)
m0_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3)),ctl), data=dtmp)

m0r_h10_1 <- coeftest(m0_h10_1, vcov.=vcovHC(m0_h10_1,"HC2"))
m0r_h10_2 <- coeftest(m0_h10_2, vcov.=vcovHC(m0_h10_2,"HC2"))
m0r_h11_1 <- coeftest(m0_h11_1, vcov.=vcovHC(m0_h11_1,"HC2"))
m0r_h11_2 <- coeftest(m0_h11_2, vcov.=vcovHC(m0_h11_2,"HC2"))
```

```
m0r_h12_1 <- coeftest(m0_h12_1, vcov.=vcovHC(m0_h12_1,"HC2"))
m0r_h12_2 <- coeftest(m0_h12_2, vcov.=vcovHC(m0_h12_2,"HC2"))
m0r_h13_1 <- coeftest(m0_h13_1, vcov.=vcovHC(m0_h13_1,"HC2"))
m0r_h13_2 <- coeftest(m0_h13_2, vcov.=vcovHC(m0_h13_2,"HC2"))

# 逆進性刺激効果の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
m0_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5)),ctl), data=dtmp)
m0_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5)),ctl), data=dtmp)
m0_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5)),ctl), data=dtmp)
m0_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5)),ctl), data=dtmp)
m0_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4)),ctl), data=dtmp)
m0_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4)),ctl), data=dtmp)

m0r_h20_1 <- coeftest(m0_h20_1, vcov.=vcovHC(m0_h20_1,"HC2"))
m0r_h20_2 <- coeftest(m0_h20_2, vcov.=vcovHC(m0_h20_2,"HC2"))
m0r_h21_1 <- coeftest(m0_h21_1, vcov.=vcovHC(m0_h21_1,"HC2"))
m0r_h21_2 <- coeftest(m0_h21_2, vcov.=vcovHC(m0_h21_2,"HC2"))
m0r_h22_1 <- coeftest(m0_h22_1, vcov.=vcovHC(m0_h22_1,"HC2"))
m0r_h22_2 <- coeftest(m0_h22_2, vcov.=vcovHC(m0_h22_2,"HC2"))
```

仮説に関係する実験群比較に関連する直接効果（図 A11）

```
htest <- data.frame(dv = rep(c("生活必需品","その他すべて"), each=7),
                    h = rep(c("社会保障普遍性","社会保障普遍性",
                              "社会保障普遍性","社会保障普遍性",
                              "消費税逆進性","消費税逆進性",
                              "消費税逆進性"),2),
                    cp = rep(c("2. 普遍 - 0. 統制",
                               "2. 普遍 - 3. 選別",
                               "4. 逆進＋普遍 - 1. 逆進",
                               "4. 逆進＋普遍 - 5. 逆進＋選別",
                               "1. 逆進 - 0. 統制",
                               "4. 普遍＋逆進 - 2. 普遍",
                               "5. 選別＋逆進 - 3. 選別"),2),
                    rbind(m0r_h10_1[2,],m0r_h11_1[2,],m0r_h12_1[2,],m0r_h13_1[2,],
                          m0r_h20_1[2,],m0r_h21_1[2,],m0r_h22_1[2,],
                          m0r_h10_2[2,],m0r_h11_2[2,],m0r_h12_2[2,],m0r_h13_2[2,],
                          m0r_h20_2[2,],m0r_h21_2[2,],m0r_h22_2[2,]))
```

```
htest$dv <- factor(htest$dv, levels=unique(htest$dv))
htest$cp <- factor(htest$cp, levels=rev(unique(htest$cp)))
htest$h <- factor(htest$h, levels=unique(htest$h))
htest$lo95 <- htest$Estimate - qnorm(0.975)*htest$Std..Error
htest$up95 <- htest$Estimate + qnorm(0.975)*htest$Std..Error
htest$lo90 <- htest$Estimate - qnorm(0.95)*htest$Std..Error
htest$up90 <- htest$Estimate + qnorm(0.95)*htest$Std..Error

p <- ggplot(htest, aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95), width=0.25) +
  geom_errorbar(aes(ymin=lo90,ymax=up90), width=0, size=1.5) +
  geom_point(size=3) +
  facet_grid(h~dv, scale="free_y", switch="y") +
  coord_flip() +
  # scale_color_brewer(name="対象商品", type="qual", palette=2) +
  labs(x=NULL, y="実験刺激効果（従属変数は理想消費税率の平方根）",
       caption="分析の詳細は回帰表を参照。統制変数有。太線は90%信頼区間、細線は95%信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() +
  theme(plot.subtitle = element_text(hjust=0.5),
        strip.background.y = element_blank(),
        strip.text.y = element_blank(),
        strip.placement = "outside")
```




```
# ggsave("htest_m0.png", p, width=8, height=5)
```

世帯収入条件付け

```
mx_ctax1 <- lm(update(sqrt(tax1_opi) ~ as.factor(g_ctax_N)*inc,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                            Estimate Std. Error t value  Pr(>|t|)
## (Intercept)               3.4982818  0.2565776 13.6344 < 2.2e-16 ***
## as.factor(g_ctax_N)1     -0.9613475  0.2663027 -3.6100 0.0003191 ***
## as.factor(g_ctax_N)2     -0.6924268  0.2617838 -2.6450 0.0082772 **
## as.factor(g_ctax_N)3     -0.2220792  0.2715036 -0.8180 0.4135455
## as.factor(g_ctax_N)4     -0.7224657  0.2688114 -2.6876 0.0072978 **
## as.factor(g_ctax_N)5     -0.5648974  0.2648257 -2.1331 0.0331240 *
## inc                      -0.1019014  0.0551542 -1.8476 0.0649154 .
## knall                    -0.2123915  0.1392954 -1.5248 0.1275891
## fem                       0.0356581  0.0702875  0.5073 0.6120273
## age                      -0.0180907  0.0034974 -5.1726 2.713e-07 ***
```

```
## lvlen                     0.0299436  0.0274523  1.0908 0.2756064
## ownh                      0.0360097  0.0732883  0.4913 0.6232753
## as.factor(edu3)1          0.0687568  0.1126536  0.6103 0.5417560
## as.factor(edu3)2          0.0779241  0.0979953  0.7952 0.4266683
## wk                        0.0031750  0.0794004  0.0400 0.9681105
## mar                       0.1469220  0.0968229  1.5174 0.1294270
## cld                       0.2120667  0.0976216  2.1723 0.0300299 *
## as.factor(g_ctax_N)1:inc  0.2284691  0.0749792  3.0471 0.0023622 **
## as.factor(g_ctax_N)2:inc  0.1833133  0.0724521  2.5301 0.0115317 *
## as.factor(g_ctax_N)3:inc  0.0970508  0.0779001  1.2458 0.2130727
## as.factor(g_ctax_N)4:inc  0.1431116  0.0797015  1.7956 0.0728158 .
## as.factor(g_ctax_N)5:inc  0.1659080  0.0757120  2.1913 0.0286256 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mA_1 <- mx_ctax1
mx_ctax2 <- lm(update(sqrt(tax2_opi) ~ as.factor(g_ctax_N)*inc,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                            Estimate Std. Error t value  Pr(>|t|)
## (Intercept)               3.4721431  0.2423361 14.3278 < 2.2e-16 ***
## as.factor(g_ctax_N)1     -0.4001674  0.2696910 -1.4838  0.138130
## as.factor(g_ctax_N)2     -0.5823390  0.2733904 -2.1301  0.033374 *
## as.factor(g_ctax_N)3      0.0766862  0.2498429  0.3069  0.758945
## as.factor(g_ctax_N)4     -0.5247754  0.2643944 -1.9848  0.047397 *
## as.factor(g_ctax_N)5     -0.5218548  0.2470554 -2.1123  0.034871 *
## inc                      -0.0647668  0.0556310 -1.1642  0.244571
## knall                    -0.0189598  0.1276303 -0.1486  0.881932
## fem                      -0.0035512  0.0684263 -0.0519  0.958619
## age                      -0.0086383  0.0032394 -2.6667  0.007766 **
## lvlen                     0.0508265  0.0261931  1.9405  0.052564 .
## ownh                     -0.0121413  0.0710346 -0.1709  0.864316
## as.factor(edu3)1          0.0286218  0.1065618  0.2686  0.788290
## as.factor(edu3)2          0.1489993  0.0933732  1.5957  0.110816
## wk                       -0.0394031  0.0755710 -0.5214  0.602183
## mar                       0.1254735  0.0967405  1.2970  0.194882
## cld                       0.1628533  0.0956913  1.7019  0.089046 .
```

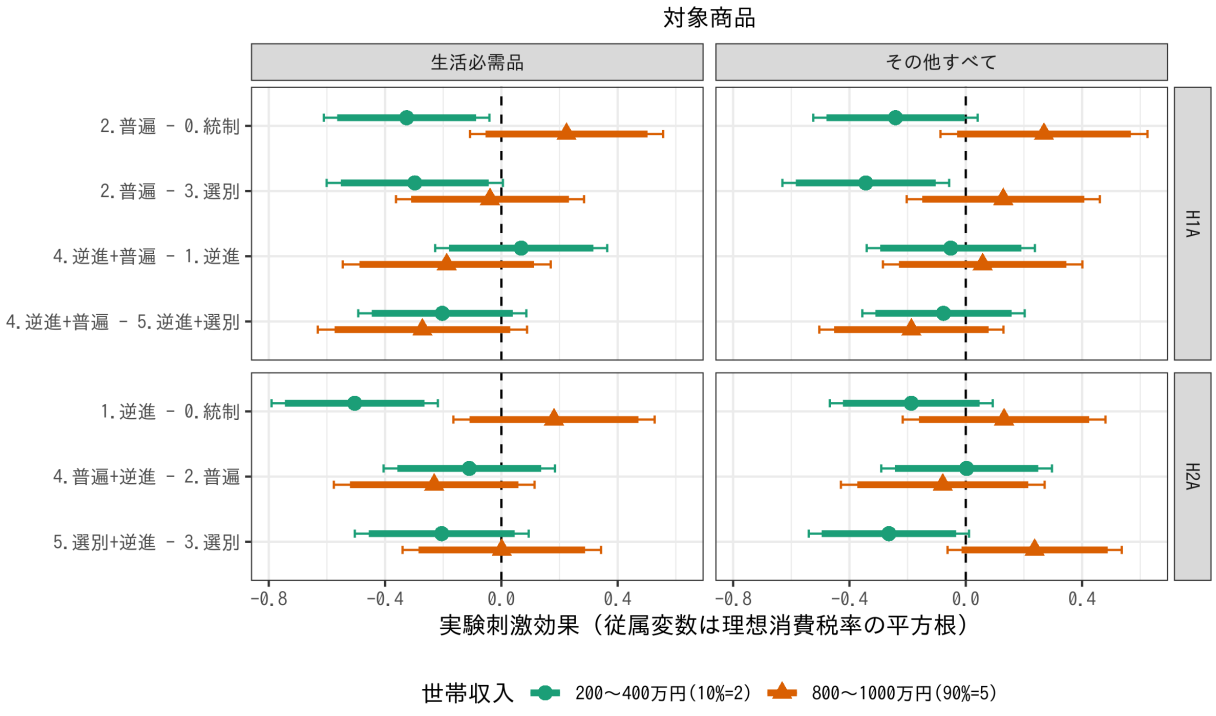
```
## as.factor(g_ctax_N)1:inc  0.1063886  0.0773296  1.3758  0.169151
## as.factor(g_ctax_N)2:inc  0.1702579  0.0787753  2.1613  0.030873 *
## as.factor(g_ctax_N)3:inc  0.0126674  0.0720967  0.1757  0.860560
## as.factor(g_ctax_N)4:inc  0.1429258  0.0776934  1.8396  0.066077 .
## as.factor(g_ctax_N)5:inc  0.1797532  0.0689339  2.6076  0.009233 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mA_2 <- mx_ctax2

# 仮説 1 の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
mA1_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-2),ctl), data=dtmp)
mA1_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-2),ctl), data=dtmp)

mA1r_h10_1 <- coeftest(mA1_h10_1, vcov.=vcovHC(mA1_h10_1,"HC2"))
mA1r_h10_2 <- coeftest(mA1_h10_2, vcov.=vcovHC(mA1_h10_2,"HC2"))
mA1r_h11_1 <- coeftest(mA1_h11_1, vcov.=vcovHC(mA1_h11_1,"HC2"))
mA1r_h11_2 <- coeftest(mA1_h11_2, vcov.=vcovHC(mA1_h11_2,"HC2"))
mA1r_h12_1 <- coeftest(mA1_h12_1, vcov.=vcovHC(mA1_h12_1,"HC2"))
mA1r_h12_2 <- coeftest(mA1_h12_2, vcov.=vcovHC(mA1_h12_2,"HC2"))
mA1r_h13_1 <- coeftest(mA1_h13_1, vcov.=vcovHC(mA1_h13_1,"HC2"))
mA1r_h13_2 <- coeftest(mA1_h13_2, vcov.=vcovHC(mA1_h13_2,"HC2"))

mA2_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-5),ctl), data=dtmp)
mA2_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(inc-5),ctl), data=dtmp)

mA2r_h10_1 <- coeftest(mA2_h10_1, vcov.=vcovHC(mA2_h10_1,"HC2"))
```

```
mA2r_h10_2 <- coeftest(mA2_h10_2, vcov.=vcovHC(mA2_h10_2,"HC2"))
mA2r_h11_1 <- coeftest(mA2_h11_1, vcov.=vcovHC(mA2_h11_1,"HC2"))
mA2r_h11_2 <- coeftest(mA2_h11_2, vcov.=vcovHC(mA2_h11_2,"HC2"))
mA2r_h12_1 <- coeftest(mA2_h12_1, vcov.=vcovHC(mA2_h12_1,"HC2"))
mA2r_h12_2 <- coeftest(mA2_h12_2, vcov.=vcovHC(mA2_h12_2,"HC2"))
mA2r_h13_1 <- coeftest(mA2_h13_1, vcov.=vcovHC(mA2_h13_1,"HC2"))
mA2r_h13_2 <- coeftest(mA2_h13_2, vcov.=vcovHC(mA2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 &実験群 2vs 実験群 4 & 実験群 3vs 実験群 5
mA1_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-2),ctl), data=dtmp)
mA1_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-2),ctl), data=dtmp)
mA1_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-2),ctl), data=dtmp)
mA1_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-2),ctl), data=dtmp)

mA1r_h20_1 <- coeftest(mA1_h20_1, vcov.=vcovHC(mA1_h20_1,"HC2"))
mA1r_h20_2 <- coeftest(mA1_h20_2, vcov.=vcovHC(mA1_h20_2,"HC2"))
mA1r_h21_1 <- coeftest(mA1_h21_1, vcov.=vcovHC(mA1_h21_1,"HC2"))
mA1r_h21_2 <- coeftest(mA1_h21_2, vcov.=vcovHC(mA1_h21_2,"HC2"))
mA1r_h22_1 <- coeftest(mA1_h22_1, vcov.=vcovHC(mA1_h22_1,"HC2"))
mA1r_h22_2 <- coeftest(mA1_h22_2, vcov.=vcovHC(mA1_h22_2,"HC2"))

mA2_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(inc-5),ctl), data=dtmp)
mA2_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(inc-5),ctl), data=dtmp)
mA2_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-5),ctl), data=dtmp)
mA2_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(inc-5),ctl), data=dtmp)

mA2r_h20_1 <- coeftest(mA2_h20_1, vcov.=vcovHC(mA2_h20_1,"HC2"))
mA2r_h20_2 <- coeftest(mA2_h20_2, vcov.=vcovHC(mA2_h20_2,"HC2"))
mA2r_h21_1 <- coeftest(mA2_h21_1, vcov.=vcovHC(mA2_h21_1,"HC2"))
mA2r_h21_2 <- coeftest(mA2_h21_2, vcov.=vcovHC(mA2_h21_2,"HC2"))
mA2r_h22_1 <- coeftest(mA2_h22_1, vcov.=vcovHC(mA2_h22_1,"HC2"))
mA2r_h22_2 <- coeftest(mA2_h22_2, vcov.=vcovHC(mA2_h22_2,"HC2"))
```

世帯収入に条件付けされた実験情報刺激の効果係数を用いた仮説検証

```
htest <- data.frame(int = rep(c("200～400 万円 (10%=2)","800～1000 万円 (90%=5)"), each=14),
                    dv = rep(c(" 生活必需品"," その他すべて"), each=7),
                    h = rep(c("H1A","H1A",
                              "H1A","H1A",
                              "H2A","H2A",
                              "H2A"),4),
                    cp = rep(c("2. 普遍 - 0. 統制",
                               "2. 普遍 - 3. 選別",
                               "4. 逆進 + 普遍 - 1. 逆進",
                               "4. 逆進 + 普遍 - 5. 逆進 + 選別",
                               "1. 逆進 - 0. 統制",
                               "4. 普遍 + 逆進 - 2. 普遍",
                               "5. 選別 + 逆進 - 3. 選別"),4),
                    rbind(mA1r_h10_1[2,],mA1r_h11_1[2,],mA1r_h12_1[2,],mA1r_h13_1[2,],
                          mA1r_h20_1[2,],mA1r_h21_1[2,],mA1r_h22_1[2,],
                          mA1r_h10_2[2,],mA1r_h11_2[2,],mA1r_h12_2[2,],mA1r_h13_2[2,],
                          mA1r_h20_2[2,],mA1r_h21_2[2,],mA1r_h22_2[2,],
                          mA2r_h10_1[2,],mA2r_h11_1[2,],mA2r_h12_1[2,],mA2r_h13_1[2,],
                          mA2r_h20_1[2,],mA2r_h21_1[2,],mA2r_h22_1[2,],
                          mA2r_h10_2[2,],mA2r_h11_2[2,],mA2r_h12_2[2,],mA2r_h13_2[2,],
                          mA2r_h20_2[2,],mA2r_h21_2[2,],mA2r_h22_2[2,]))
htest$dv <- factor(htest$dv, levels=unique(htest$dv))
htest$cp <- factor(htest$cp, levels=rev(unique(htest$cp)))
htest$lo95 <- htest$Estimate - qnorm(0.975)*htest$Std..Error
htest$up95 <- htest$Estimate + qnorm(0.975)*htest$Std..Error
htest$lo90 <- htest$Estimate - qnorm(0.95)*htest$Std..Error
htest$up90 <- htest$Estimate + qnorm(0.95)*htest$Std..Error
```



分析の詳細は回帰表を参照。太線は90%信頼区間、細線は95%信頼区間を示している。

```
ggsave("htest_mA.png", p, width=8, height=6)
```

世帯収入に条件付けされた実験情報刺激の限界効果を用いた仮説検証（図 A10）

```
### Data for Simulation
prdt1 <- data.frame(preddata[rep(1,14),], inc=rep(c(2,5),each=7), tax1_opi=0, tax2_opi=0)
prdt1$g_ctax_N <- c(0,3,1,5,0,2,3)
prdt2 <- data.frame(preddata[rep(1,14),], inc=rep(c(2,5),each=7), tax1_opi=0, tax2_opi=0)
prdt2$g_ctax_N <- c(2,2,4,4,1,4,5)

### Set random number seed
set.seed(500)
### Draw Coefficients 1000 times
require(MASS)
m <- mA_1
betadraw <- mvrnorm(1000, m$coefficients, vcovHC(m, "HC2"))
### Prepare Storage of Output
hmargin_1<-matrix(NA,nrow=nrow(prdt1),ncol=7)
colnames(hmargin_1)<-c("Mean","Median","SE","lCI95","lCI90","uCI90","uCI95")
### Simulation
for(i in 1:nrow(prdt1)){
```

```
  ## 1st Profile (treated)
  xfix1 <- model.matrix(m, data=prdt1)[i,]
  ## 2nd Profile (control)
  xfix2 <- model.matrix(m, data=prdt2)[i,]
  ## Predicted Probabilities
  pred1 <- (betadraw%*%xfix1)^2 ## for 1st profile
  pred2 <- (betadraw%*%xfix2)^2 ## for 2nd profile
  ## Difference in Predicted Values
  predstore <- pred2 - pred1
  ## Store Stats
  hmargin_1[i,]<-c(mean(predstore),median(predstore),sd(predstore),
                   quantile(predstore, probs=c(0.025,0.05,0.95,0.975))) # 95% CI
  ## Print progress
  if (i==1) tmpper <- -1
  if (round(i/nrow(prdt1)*100)>tmpper) {
    tmpper <- round(i/nrow(prdt1)*100)
    cat(paste0(tmpper,"% "))
    Sys.sleep(0.01)
  }
}
```

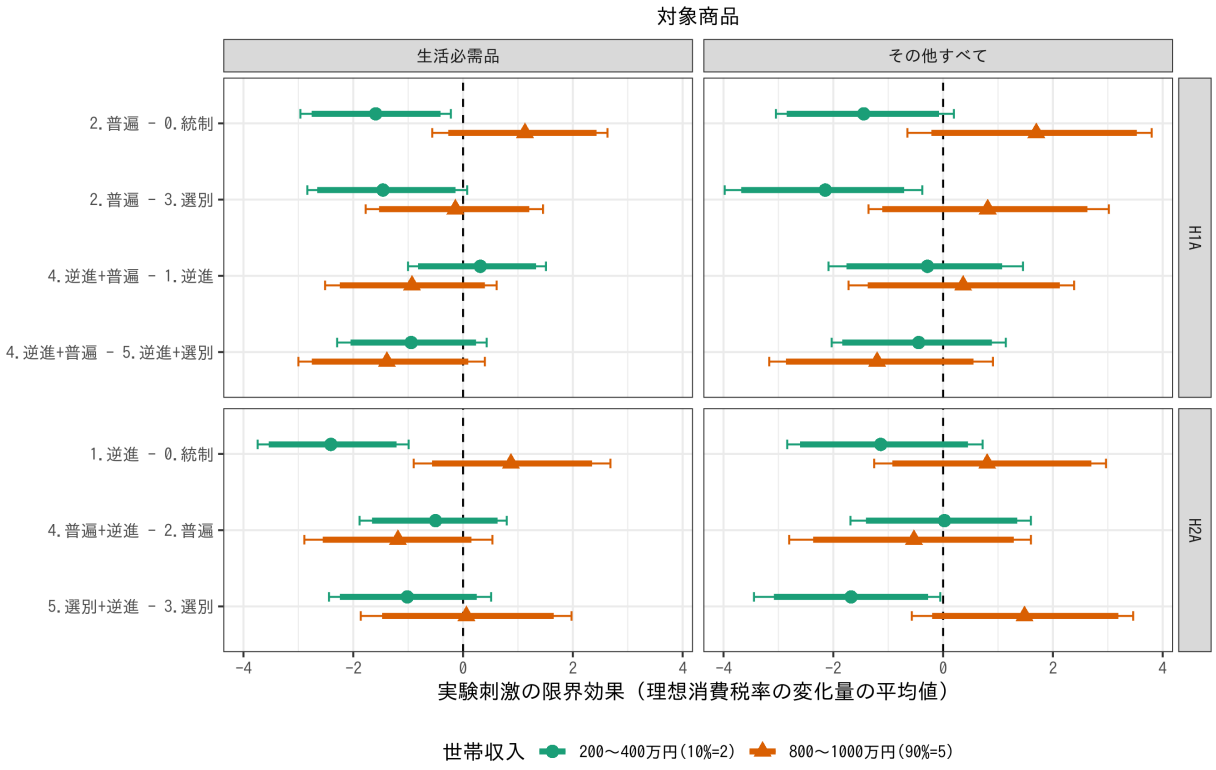
```
## 7% 14% 21% 29% 36% 43% 50% 57% 64% 71% 79% 86% 93% 100%
```

```
### Set random number seed
set.seed(500)
### Draw Coefficients 1000 times
require(MASS)
m <- mA_2
betadraw <- mvrnorm(1000, m$coefficients, vcovHC(m, "HC2"))
### Prepare Storage of Output
hmargin_2<-matrix(NA,nrow=nrow(prdt1),ncol=7)
colnames(hmargin_2)<-c("Mean","Median","SE","lCI95","lCI90","uCI90","uCI95")
### Simulation
for(i in 1:nrow(prdt1)){
  ## 1st Profile (Female without Kid)
  xfix1 <- model.matrix(m, data=prdt1)[i,]
  ## 2nd Profile (Female with Kid)
  xfix2 <- model.matrix(m, data=prdt2)[i,]
  ## Predicted Probabilities
  pred1 <- (betadraw%*%xfix1)^2 ## for 1st profile
```

```
  pred2 <- (betadraw%*%xfix2)^2 ## for 2nd profile
  ## Difference in Predicted Values
  predstore <- pred2 - pred1
  ## Store Stats
  hmargin_2[i,]<-c(mean(predstore),median(predstore),sd(predstore),
                   quantile(predstore, probs=c(0.025,0.05,0.95,0.975))) # 95% CI
  ## Print progress
  if (i==1) tmpper <- -1
  if (round(i/nrow(prdt1)*100)>tmpper) {
    tmpper <- round(i/nrow(prdt1)*100)
    cat(paste0(tmpper,"% "))
    Sys.sleep(0.01)
  }
}
```

```
## 7% 14% 21% 29% 36% 43% 50% 57% 64% 71% 79% 86% 93% 100%
```

```
### Combine All the Information
hmargin <- cbind(rbind(hmargin_1, hmargin_2), htest[c(1:7,15:21,8:14,22:28),c(1:4)])

p <- ggplot(hmargin, aes(x=cp, y=Mean)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lCI95,ymax=uCI95, color=int), width=0.25, position = position_dodge(width=-0.5)) +
  geom_errorbar(aes(ymin=lCI90,ymax=uCI90, color=int), width=0, size=1.5, position = position_dodge(width
  geom_point(aes(color=int, shape=int), size=3, position = position_dodge(width=-0.5)) +
  facet_grid(h~dv, scales = "free_y", space = "free_y") +
  coord_flip() +
  scale_color_brewer(name="世帯収入", type="qual", palette=2) +
  scale_shape_discrete(name="世帯収入") +
  labs(x=NULL, y="実験刺激の限界効果（理想消費税率の変化量の平均値）",
       caption="分析の詳細は回帰表を参照。太線は90%、細線は95%信頼区間を示している。統制変数を中央値で固定し、
       subtitle = "対象商品") +
  theme_bw() + theme(legend.position="bottom",
                     plot.subtitle = element_text(hjust=0.5),
                     strip.placement = "outside")
```



分析の詳細は回帰表を参照。太線は90%、細線は95%信頼区間を示している。統制変数を中央値で固定し、モンテカルロ・シミュレーションで推定。

```
# ggsave("hmargin_mA.png", p, width=9, height=6)
```

自己申告イデオロギー条件付け

```
mx_ctax1 <- lm(update(sqrt(tax1_opi) ~ as.factor(g_ctax_N)*ide_self,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                   3.1213007  0.1936548 16.1179 < 2.2e-16 ***
## as.factor(g_ctax_N)1         -0.2085560  0.1203205 -1.7333   0.08330 .
## as.factor(g_ctax_N)2         -0.0989696  0.1183469 -0.8363   0.40317
## as.factor(g_ctax_N)3          0.1117146  0.1138194  0.9815   0.32654
## as.factor(g_ctax_N)4         -0.2398356  0.1137623 -2.1082   0.03522 *
## as.factor(g_ctax_N)5         -0.0186165  0.1162399 -0.1602   0.87279
## ide_self                      0.0444103  0.0958804  0.4632   0.64332
## knall                        -0.1957549  0.1396307 -1.4019   0.16120
## fem                           0.0279274  0.0702017  0.3978   0.69084
```

```
## age                           -0.0191611  0.0034909 -5.4888 4.954e-08 ***
## lvlen                          0.0378860  0.0274424  1.3806   0.16768
## ownh                           0.0520173  0.0733469  0.7092   0.47834
## as.factor(edu3)1               0.0678968  0.1123306  0.6044   0.54567
## as.factor(edu3)2               0.0833444  0.0980980  0.8496   0.39572
## wk                             0.0273305  0.0802806  0.3404   0.73359
## mar                            0.2107059  0.0957719  2.2001   0.02800 *
## cld                            0.2049488  0.0980043  2.0912   0.03672 *
## as.factor(g_ctax_N)1:ide_self -0.0573858  0.1269512 -0.4520   0.65133
## as.factor(g_ctax_N)2:ide_self  0.0103727  0.1320171  0.0786   0.93739
## as.factor(g_ctax_N)3:ide_self -0.1089625  0.1211170 -0.8996   0.36849
## as.factor(g_ctax_N)4:ide_self -0.1508706  0.1290312 -1.1693   0.24254
## as.factor(g_ctax_N)5:ide_self -0.0583084  0.1255842 -0.4643   0.64252
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mB_1 <- mx_ctax1
mx_ctax2 <- lm(update(sqrt(tax2_opi) ~ as.factor(g_ctax_N)*ide_self,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                               Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                  3.2065011  0.1791419 17.8992 < 2.2e-16 ***
## as.factor(g_ctax_N)1        -0.0527353  0.1108423 -0.4758  0.634328
## as.factor(g_ctax_N)2        -0.0526659  0.1124217 -0.4685  0.639537
## as.factor(g_ctax_N)3         0.1140937  0.1043979  1.0929  0.274674
## as.factor(g_ctax_N)4        -0.0840244  0.1037480 -0.8099  0.418168
## as.factor(g_ctax_N)5         0.0466629  0.1108988  0.4208  0.674000
## ide_self                    -0.0444712  0.0879786 -0.5055  0.613318
## knall                        0.0035753  0.1269424  0.0282  0.977535
## fem                          0.0054442  0.0686771  0.0793  0.936829
## age                         -0.0093686  0.0032386 -2.8928  0.003889 **
## lvlen                        0.0598435  0.0264184  2.2652  0.023681 *
## ownh                         0.0095740  0.0698691  0.1370  0.891033
## as.factor(edu3)1             0.0452077  0.1057481  0.4275  0.669091
## as.factor(edu3)2             0.1694226  0.0935121  1.8118  0.070277 .
## wk                          -0.0246542  0.0755695 -0.3262  0.744297
## mar                          0.1815938  0.0953847  1.9038  0.057180 .
```

```
## cld                            0.1581457  0.0950209  1.6643  0.096314 .
## as.factor(g_ctax_N)1:ide_self -0.0553453  0.1160533 -0.4769  0.633525
## as.factor(g_ctax_N)2:ide_self  0.0317849  0.1265431  0.2512  0.801720
## as.factor(g_ctax_N)3:ide_self  0.0222964  0.1142060  0.1952  0.845247
## as.factor(g_ctax_N)4:ide_self  0.0246736  0.1234285  0.1999  0.841592
## as.factor(g_ctax_N)5:ide_self  0.0381545  0.1203761  0.3170  0.751329
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mB_2 <- mx_ctax2

# 仮説 1 の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
mB1_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self+1),ctl), data=
mB1_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self+1),ctl), data=
mB1_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self+1),ctl), data=
mB1_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self+1),ctl), data=
mB1_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self+1),ctl), data=
mB1_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self+1),ctl), data=
mB1_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self+1),ctl), data=
mB1_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self+1),ctl), data=

mB1r_h10_1 <- coeftest(mB1_h10_1, vcov.=vcovHC(mB1_h10_1,"HC2"))
mB1r_h10_2 <- coeftest(mB1_h10_2, vcov.=vcovHC(mB1_h10_2,"HC2"))
mB1r_h11_1 <- coeftest(mB1_h11_1, vcov.=vcovHC(mB1_h11_1,"HC2"))
mB1r_h11_2 <- coeftest(mB1_h11_2, vcov.=vcovHC(mB1_h11_2,"HC2"))
mB1r_h12_1 <- coeftest(mB1_h12_1, vcov.=vcovHC(mB1_h12_1,"HC2"))
mB1r_h12_2 <- coeftest(mB1_h12_2, vcov.=vcovHC(mB1_h12_2,"HC2"))
mB1r_h13_1 <- coeftest(mB1_h13_1, vcov.=vcovHC(mB1_h13_1,"HC2"))
mB1r_h13_2 <- coeftest(mB1_h13_2, vcov.=vcovHC(mB1_h13_2,"HC2"))

mB2_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self-1),ctl), data=
mB2_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_self-1),ctl), data=
mB2_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self-1),ctl), data=
mB2_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_self-1),ctl), data=
mB2_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self-1),ctl), data=
mB2_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_self-1),ctl), data=
mB2_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self-1),ctl), data=
mB2_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_self-1),ctl), data=
```

```
mB2r_h10_1 <- coeftest(mB2_h10_1, vcov.=vcovHC(mB2_h10_1,"HC2"))
mB2r_h10_2 <- coeftest(mB2_h10_2, vcov.=vcovHC(mB2_h10_2,"HC2"))
mB2r_h11_1 <- coeftest(mB2_h11_1, vcov.=vcovHC(mB2_h11_1,"HC2"))
mB2r_h11_2 <- coeftest(mB2_h11_2, vcov.=vcovHC(mB2_h11_2,"HC2"))
mB2r_h12_1 <- coeftest(mB2_h12_1, vcov.=vcovHC(mB2_h12_1,"HC2"))
mB2r_h12_2 <- coeftest(mB2_h12_2, vcov.=vcovHC(mB2_h12_2,"HC2"))
mB2r_h13_1 <- coeftest(mB2_h13_1, vcov.=vcovHC(mB2_h13_1,"HC2"))
mB2r_h13_2 <- coeftest(mB2_h13_2, vcov.=vcovHC(mB2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 &実験群 2vs 実験群 4 & 実験群 3vs 実験群 5
mB1_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self+1),ctl), data=
mB1_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self+1),ctl), data=
mB1_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self+1),ctl), data=
mB1_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self+1),ctl), data=
mB1_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self+1),ctl), data=
mB1_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self+1),ctl), data=

mB1r_h20_1 <- coeftest(mB1_h20_1, vcov.=vcovHC(mB1_h20_1,"HC2"))
mB1r_h20_2 <- coeftest(mB1_h20_2, vcov.=vcovHC(mB1_h20_2,"HC2"))
mB1r_h21_1 <- coeftest(mB1_h21_1, vcov.=vcovHC(mB1_h21_1,"HC2"))
mB1r_h21_2 <- coeftest(mB1_h21_2, vcov.=vcovHC(mB1_h21_2,"HC2"))
mB1r_h22_1 <- coeftest(mB1_h22_1, vcov.=vcovHC(mB1_h22_1,"HC2"))
mB1r_h22_2 <- coeftest(mB1_h22_2, vcov.=vcovHC(mB1_h22_2,"HC2"))

mB2_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self-1),ctl), data=
mB2_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_self-1),ctl), data=
mB2_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self-1),ctl), data=
mB2_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_self-1),ctl), data=
mB2_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self-1),ctl), data=
mB2_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_self-1),ctl), data=

mB2r_h20_1 <- coeftest(mB2_h20_1, vcov.=vcovHC(mB2_h20_1,"HC2"))
mB2r_h20_2 <- coeftest(mB2_h20_2, vcov.=vcovHC(mB2_h20_2,"HC2"))
mB2r_h21_1 <- coeftest(mB2_h21_1, vcov.=vcovHC(mB2_h21_1,"HC2"))
mB2r_h21_2 <- coeftest(mB2_h21_2, vcov.=vcovHC(mB2_h21_2,"HC2"))
mB2r_h22_1 <- coeftest(mB2_h22_1, vcov.=vcovHC(mB2_h22_1,"HC2"))
mB2r_h22_2 <- coeftest(mB2_h22_2, vcov.=vcovHC(mB2_h22_2,"HC2"))
```

争点態度イデオロギー条件付け

外交安全保障

```
mx_ctax1 <- lm(update(sqrt(tax1_opi) ~ as.factor(g_ctax_N)*ide_iss_1,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                   3.1216292  0.1913692 16.3121 < 2.2e-16 ***
## as.factor(g_ctax_N)1         -0.2231363  0.1159500 -1.9244   0.05454 .
## as.factor(g_ctax_N)2         -0.0992287  0.1152070 -0.8613   0.38924
## as.factor(g_ctax_N)3          0.0885289  0.1093545  0.8096   0.41836
## as.factor(g_ctax_N)4         -0.2690942  0.1089238 -2.4705   0.01363 *
## as.factor(g_ctax_N)5         -0.0392507  0.1155197 -0.3398   0.73409
## ide_iss_1                    -0.0436154  0.0831185 -0.5247   0.59986
## knall                        -0.2092236  0.1408177 -1.4858   0.13761
## fem                           0.0386010  0.0710212  0.5435   0.58688
## age                          -0.0187884  0.0034539 -5.4397 6.488e-08 ***
## lvlen                         0.0359711  0.0276122  1.3027   0.19292
## ownh                          0.0563632  0.0734568  0.7673   0.44306
## as.factor(edu3)1              0.0807753  0.1134043  0.7123   0.47643
## as.factor(edu3)2              0.1013761  0.0995867  1.0180   0.30890
## wk                            0.0151621  0.0795232  0.1907   0.84882
## mar                           0.2010192  0.0955941  2.1028   0.03569 *
## cld                           0.2076708  0.0983565  2.1114   0.03495 *
## as.factor(g_ctax_N)1:ide_iss_1  0.0541559  0.1277809  0.4238   0.67178
## as.factor(g_ctax_N)2:ide_iss_1 -0.0027697  0.1137179 -0.0244   0.98057
## as.factor(g_ctax_N)3:ide_iss_1  0.1435344  0.1168100  1.2288   0.21940
## as.factor(g_ctax_N)4:ide_iss_1  0.0653509  0.1101746  0.5932   0.55319
## as.factor(g_ctax_N)5:ide_iss_1 -0.0104547  0.1287986 -0.0812   0.93532
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBa_1 <- mx_ctax1
mx_ctax2 <- lm(update(sqrt(tax2_opi) ~ as.factor(g_ctax_N)*ide_iss_1,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                   3.1666489  0.1766241 17.9287 < 2.2e-16 ***
## as.factor(g_ctax_N)1         -0.0558652  0.1090641 -0.5122  0.608591
## as.factor(g_ctax_N)2         -0.0541834  0.1126223 -0.4811  0.630530
## as.factor(g_ctax_N)3          0.1249568  0.1032798  1.2099  0.226566
## as.factor(g_ctax_N)4         -0.0892625  0.1031438 -0.8654  0.386986
## as.factor(g_ctax_N)5          0.0599755  0.1142450  0.5250  0.599701
## ide_iss_1                    -0.0766523  0.0815102 -0.9404  0.347205
## knall                        -0.0196747  0.1272709 -0.1546  0.877172
## fem                           0.0446677  0.0705675  0.6330  0.526871
## age                          -0.0087157  0.0031772 -2.7432  0.006177 **
## lvlen                         0.0548712  0.0267318  2.0527  0.040327 *
## ownh                          0.0078786  0.0704301  0.1119  0.910951
## as.factor(edu3)1              0.0596383  0.1058131  0.5636  0.573121
## as.factor(edu3)2              0.1924675  0.0932132  2.0648  0.039160 *
## wk                           -0.0322728  0.0752870 -0.4287  0.668247
## mar                           0.1685805  0.0936949  1.7992  0.072236 .
## cld                           0.1569054  0.0932247  1.6831  0.092624 .
## as.factor(g_ctax_N)1:ide_iss_1  0.1910015  0.1220845  1.5645  0.117969
## as.factor(g_ctax_N)2:ide_iss_1  0.1712290  0.1182277  1.4483  0.147800
## as.factor(g_ctax_N)3:ide_iss_1  0.2042044  0.1088236  1.8765  0.060838 .
## as.factor(g_ctax_N)4:ide_iss_1  0.2091425  0.1091362  1.9163  0.055564 .
## as.factor(g_ctax_N)5:ide_iss_1  0.0816332  0.1370991  0.5954  0.551669
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBa_2 <- mx_ctax2

# 仮説１の検証（４種類）
# 統制群 vs 実験群２＆実験群 3vs 実験群２＆実験群 1vs 実験群４＆実験群 5vs 実験群４
mBa1_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1+1.35),ctl),
mBa1_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1+1.35),ctl),
mBa1_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1+1.35),ctl),
mBa1_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1+1.35),ctl),
mBa1_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1+1.35),ctl),
mBa1_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1+1.35),ctl),
mBa1_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1+1.35),ctl),
```

```
mBa1_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1+1.35),ctl),

mBa1r_h10_1 <- coeftest(mBa1_h10_1, vcov.=vcovHC(mBa1_h10_1,"HC2"))
mBa1r_h10_2 <- coeftest(mBa1_h10_2, vcov.=vcovHC(mBa1_h10_2,"HC2"))
mBa1r_h11_1 <- coeftest(mBa1_h11_1, vcov.=vcovHC(mBa1_h11_1,"HC2"))
mBa1r_h11_2 <- coeftest(mBa1_h11_2, vcov.=vcovHC(mBa1_h11_2,"HC2"))
mBa1r_h12_1 <- coeftest(mBa1_h12_1, vcov.=vcovHC(mBa1_h12_1,"HC2"))
mBa1r_h12_2 <- coeftest(mBa1_h12_2, vcov.=vcovHC(mBa1_h12_2,"HC2"))
mBa1r_h13_1 <- coeftest(mBa1_h13_1, vcov.=vcovHC(mBa1_h13_1,"HC2"))
mBa1r_h13_2 <- coeftest(mBa1_h13_2, vcov.=vcovHC(mBa1_h13_2,"HC2"))

mBa2_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1-1.53),ctl),
mBa2_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_1-1.53),ctl),
mBa2_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1-1.53),ctl),
mBa2_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_1-1.53),ctl),
mBa2_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1-1.53),ctl),
mBa2_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_1-1.53),ctl),
mBa2_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1-1.53),ctl),
mBa2_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_1-1.53),ctl),

mBa2r_h10_1 <- coeftest(mBa2_h10_1, vcov.=vcovHC(mBa2_h10_1,"HC2"))
mBa2r_h10_2 <- coeftest(mBa2_h10_2, vcov.=vcovHC(mBa2_h10_2,"HC2"))
mBa2r_h11_1 <- coeftest(mBa2_h11_1, vcov.=vcovHC(mBa2_h11_1,"HC2"))
mBa2r_h11_2 <- coeftest(mBa2_h11_2, vcov.=vcovHC(mBa2_h11_2,"HC2"))
mBa2r_h12_1 <- coeftest(mBa2_h12_1, vcov.=vcovHC(mBa2_h12_1,"HC2"))
mBa2r_h12_2 <- coeftest(mBa2_h12_2, vcov.=vcovHC(mBa2_h12_2,"HC2"))
mBa2r_h13_1 <- coeftest(mBa2_h13_1, vcov.=vcovHC(mBa2_h13_1,"HC2"))
mBa2r_h13_2 <- coeftest(mBa2_h13_2, vcov.=vcovHC(mBa2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
mBa1_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1+1.35),ctl),
mBa1_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1+1.35),ctl),
mBa1_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1+1.35),ctl),
mBa1_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1+1.35),ctl),
mBa1_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1+1.35),ctl),
mBa1_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1+1.35),ctl),

mBa1r_h20_1 <- coeftest(mBa1_h20_1, vcov.=vcovHC(mBa1_h20_1,"HC2"))
```

```
mBa1r_h20_2 <- coeftest(mBa1_h20_2, vcov.=vcovHC(mBa1_h20_2,"HC2"))
mBa1r_h21_1 <- coeftest(mBa1_h21_1, vcov.=vcovHC(mBa1_h21_1,"HC2"))
mBa1r_h21_2 <- coeftest(mBa1_h21_2, vcov.=vcovHC(mBa1_h21_2,"HC2"))
mBa1r_h22_1 <- coeftest(mBa1_h22_1, vcov.=vcovHC(mBa1_h22_1,"HC2"))
mBa1r_h22_2 <- coeftest(mBa1_h22_2, vcov.=vcovHC(mBa1_h22_2,"HC2"))

mBa2_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1-1.53),ctl),
mBa2_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_1-1.53),ctl),
mBa2_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1-1.53),ctl),
mBa2_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_1-1.53),ctl),
mBa2_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1-1.53),ctl),
mBa2_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_1-1.53),ctl),

mBa2r_h20_1 <- coeftest(mBa2_h20_1, vcov.=vcovHC(mBa2_h20_1,"HC2"))
mBa2r_h20_2 <- coeftest(mBa2_h20_2, vcov.=vcovHC(mBa2_h20_2,"HC2"))
mBa2r_h21_1 <- coeftest(mBa2_h21_1, vcov.=vcovHC(mBa2_h21_1,"HC2"))
mBa2r_h21_2 <- coeftest(mBa2_h21_2, vcov.=vcovHC(mBa2_h21_2,"HC2"))
mBa2r_h22_1 <- coeftest(mBa2_h22_1, vcov.=vcovHC(mBa2_h22_1,"HC2"))
mBa2r_h22_2 <- coeftest(mBa2_h22_2, vcov.=vcovHC(mBa2_h22_2,"HC2"))
```

権利機会平等

```
mx_ctax1 <- lm(update(sqrt(tax1_opi) ~ as.factor(g_ctax_N)*ide_iss_2,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                   3.0566709  0.1940149 15.7548 < 2.2e-16 ***
## as.factor(g_ctax_N)1         -0.2175731  0.1151405 -1.8896   0.05905 .
## as.factor(g_ctax_N)2         -0.1175252  0.1141402 -1.0297   0.30338
## as.factor(g_ctax_N)3          0.0777710  0.1088823  0.7143   0.47520
## as.factor(g_ctax_N)4         -0.2646025  0.1091063 -2.4252   0.01545 *
## as.factor(g_ctax_N)5         -0.0492265  0.1127646 -0.4365   0.66252
## ide_iss_2                    -0.0205993  0.0739069 -0.2787   0.78051
## knall                        -0.1723357  0.1379889 -1.2489   0.21195
## fem                          -0.0235585  0.0726266 -0.3244   0.74571
## age                          -0.0168553  0.0035626 -4.7312 2.503e-06 ***
```

```
## lvlen                           0.0396514  0.0273279  1.4510   0.14706
## ownh                            0.0605760  0.0727329  0.8329   0.40510
## as.factor(edu3)1                0.0820608  0.1124944  0.7295   0.46586
## as.factor(edu3)2                0.0842196  0.0979142  0.8601   0.38989
## wk                              0.0075685  0.0798333  0.0948   0.92449
## mar                             0.2158189  0.0948345  2.2757   0.02304 *
## cld                             0.2046626  0.0986943  2.0737   0.03832 *
## as.factor(g_ctax_N)1:ide_iss_2 -0.0953621  0.1063558 -0.8966   0.37010
## as.factor(g_ctax_N)2:ide_iss_2 -0.1087037  0.1062006 -1.0236   0.30625
## as.factor(g_ctax_N)3:ide_iss_2 -0.1909488  0.1037636 -1.8402   0.06599 .
## as.factor(g_ctax_N)4:ide_iss_2 -0.0311017  0.1015621 -0.3062   0.75948
## as.factor(g_ctax_N)5:ide_iss_2 -0.1188433  0.1013112 -1.1731   0.24101
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBb_1 <- mx_ctax1
mx_ctax2 <- lm(update(sqrt(tax2_opi) ~ as.factor(g_ctax_N)*ide_iss_2,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value Pr(>|t|)
## (Intercept)                   3.0740084  0.1816462 16.9231  < 2e-16 ***
## as.factor(g_ctax_N)1         -0.0507384  0.1077808 -0.4708  0.63790
## as.factor(g_ctax_N)2         -0.0593293  0.1089987 -0.5443  0.58633
## as.factor(g_ctax_N)3          0.1054345  0.1011306  1.0426  0.29737
## as.factor(g_ctax_N)4         -0.0775525  0.1015708 -0.7635  0.44530
## as.factor(g_ctax_N)5          0.0389652  0.1094364  0.3561  0.72186
## ide_iss_2                    -0.0679890  0.0750993 -0.9053  0.36548
## knall                         0.0453753  0.1248525  0.3634  0.71635
## fem                          -0.0896266  0.0683799 -1.3107  0.19021
## age                          -0.0058479  0.0033704 -1.7351  0.08299 .
## lvlen                         0.0641335  0.0258514  2.4809  0.01325 *
## ownh                          0.0162320  0.0690891  0.2349  0.81429
## as.factor(edu3)1              0.0581065  0.1048274  0.5543  0.57947
## as.factor(edu3)2              0.1565441  0.0922243  1.6974  0.08988 .
## wk                           -0.0327151  0.0746970 -0.4380  0.66149
## mar                           0.2068937  0.0929502  2.2259  0.02621 *
## cld                           0.1423781  0.0943686  1.5087  0.13163
```

```
## as.factor(g_ctax_N)1:ide_iss_2 -0.1297924  0.1060082 -1.2244  0.22106
## as.factor(g_ctax_N)2:ide_iss_2 -0.1669472  0.1062128 -1.5718  0.11626
## as.factor(g_ctax_N)3:ide_iss_2 -0.1948963  0.1029860 -1.8925  0.05868 .
## as.factor(g_ctax_N)4:ide_iss_2 -0.0935376  0.1017193 -0.9196  0.35799
## as.factor(g_ctax_N)5:ide_iss_2 -0.0749267  0.1073664 -0.6979  0.48540
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBb_2 <- mx_ctax2

# 仮説 1 の検証（４種類）
# 統制群 vs 実験群 2 ＆実験群 3vs 実験群 2 ＆実験群 1vs 実験群 4 ＆実験群 5vs 実験群 4
mBb1_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2+1.50),ctl),
mBb1_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2+1.50),ctl),
mBb1_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2+1.50),ctl),
mBb1_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2+1.50),ctl),
mBb1_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2+1.50),ctl),
mBb1_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2+1.50),ctl),
mBb1_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2+1.50),ctl),
mBb1_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2+1.50),ctl),

mBb1r_h10_1 <- coeftest(mBb1_h10_1, vcov.=vcovHC(mBb1_h10_1,"HC2"))
mBb1r_h10_2 <- coeftest(mBb1_h10_2, vcov.=vcovHC(mBb1_h10_2,"HC2"))
mBb1r_h11_1 <- coeftest(mBb1_h11_1, vcov.=vcovHC(mBb1_h11_1,"HC2"))
mBb1r_h11_2 <- coeftest(mBb1_h11_2, vcov.=vcovHC(mBb1_h11_2,"HC2"))
mBb1r_h12_1 <- coeftest(mBb1_h12_1, vcov.=vcovHC(mBb1_h12_1,"HC2"))
mBb1r_h12_2 <- coeftest(mBb1_h12_2, vcov.=vcovHC(mBb1_h12_2,"HC2"))
mBb1r_h13_1 <- coeftest(mBb1_h13_1, vcov.=vcovHC(mBb1_h13_1,"HC2"))
mBb1r_h13_2 <- coeftest(mBb1_h13_2, vcov.=vcovHC(mBb1_h13_2,"HC2"))

mBb2_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2-1.48),ctl),
mBb2_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_iss_2-1.48),ctl),
mBb2_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2-1.48),ctl),
mBb2_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_iss_2-1.48),ctl),
mBb2_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2-1.48),ctl),
mBb2_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_iss_2-1.48),ctl),
mBb2_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2-1.48),ctl),
mBb2_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_iss_2-1.48),ctl),

mBb2r_h10_1 <- coeftest(mBb2_h10_1, vcov.=vcovHC(mBb2_h10_1,"HC2"))
```

```
mBb2r_h10_2 <- coeftest(mBb2_h10_2, vcov.=vcovHC(mBb2_h10_2,"HC2"))
mBb2r_h11_1 <- coeftest(mBb2_h11_1, vcov.=vcovHC(mBb2_h11_1,"HC2"))
mBb2r_h11_2 <- coeftest(mBb2_h11_2, vcov.=vcovHC(mBb2_h11_2,"HC2"))
mBb2r_h12_1 <- coeftest(mBb2_h12_1, vcov.=vcovHC(mBb2_h12_1,"HC2"))
mBb2r_h12_2 <- coeftest(mBb2_h12_2, vcov.=vcovHC(mBb2_h12_2,"HC2"))
mBb2r_h13_1 <- coeftest(mBb2_h13_1, vcov.=vcovHC(mBb2_h13_1,"HC2"))
mBb2r_h13_2 <- coeftest(mBb2_h13_2, vcov.=vcovHC(mBb2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
mBb1_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2+1.50),ctl),
mBb1_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2+1.50),ctl),
mBb1_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2+1.50),ctl),
mBb1_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2+1.50),ctl),
mBb1_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2+1.50),ctl),
mBb1_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2+1.50),ctl),

mBb1r_h20_1 <- coeftest(mBb1_h20_1, vcov.=vcovHC(mBb1_h20_1,"HC2"))
mBb1r_h20_2 <- coeftest(mBb1_h20_2, vcov.=vcovHC(mBb1_h20_2,"HC2"))
mBb1r_h21_1 <- coeftest(mBb1_h21_1, vcov.=vcovHC(mBb1_h21_1,"HC2"))
mBb1r_h21_2 <- coeftest(mBb1_h21_2, vcov.=vcovHC(mBb1_h21_2,"HC2"))
mBb1r_h22_1 <- coeftest(mBb1_h22_1, vcov.=vcovHC(mBb1_h22_1,"HC2"))
mBb1r_h22_2 <- coeftest(mBb1_h22_2, vcov.=vcovHC(mBb1_h22_2,"HC2"))

mBb2_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2-1.48),ctl),
mBb2_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_iss_2-1.48),ctl),
mBb2_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2-1.48),ctl),
mBb2_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_iss_2-1.48),ctl),
mBb2_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2-1.48),ctl),
mBb2_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_iss_2-1.48),ctl),

mBb2r_h20_1 <- coeftest(mBb2_h20_1, vcov.=vcovHC(mBb2_h20_1,"HC2"))
mBb2r_h20_2 <- coeftest(mBb2_h20_2, vcov.=vcovHC(mBb2_h20_2,"HC2"))
mBb2r_h21_1 <- coeftest(mBb2_h21_1, vcov.=vcovHC(mBb2_h21_1,"HC2"))
mBb2r_h21_2 <- coeftest(mBb2_h21_2, vcov.=vcovHC(mBb2_h21_2,"HC2"))
mBb2r_h22_1 <- coeftest(mBb2_h22_1, vcov.=vcovHC(mBb2_h22_1,"HC2"))
mBb2r_h22_2 <- coeftest(mBb2_h22_2, vcov.=vcovHC(mBb2_h22_2,"HC2"))
```

政党支持イデオロギー条件付け

```
mx_ctax1 <- lm(update(sqrt(tax1_opi) ~ as.factor(g_ctax_N)*ide_psup,ctl), data=dtmp)
coeftest(mx_ctax1, vcovHC(mx_ctax1, "HC2"))
```

```
##
## t test of coefficients:
##
##                                Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                   3.0981763  0.1900180 16.3047 < 2.2e-16 ***
## as.factor(g_ctax_N)1         -0.2362015  0.1265994 -1.8657   0.06233 .
## as.factor(g_ctax_N)2         -0.1502630  0.1241265 -1.2106   0.22631
## as.factor(g_ctax_N)3          0.0446726  0.1273135  0.3509   0.72574
## as.factor(g_ctax_N)4         -0.2645169  0.1138327 -2.3237   0.02031 *
## as.factor(g_ctax_N)5         -0.0620453  0.1162357 -0.5338   0.59359
## ide_psup                      0.1104251  0.1060649  1.0411   0.29804
## knall                        -0.2067914  0.1381444 -1.4969   0.13468
## fem                           0.0703844  0.0690407  1.0195   0.30819
## age                          -0.0182941  0.0034479 -5.3059 1.339e-07 ***
## lvlen                         0.0305535  0.0275010  1.1110   0.26680
## ownh                          0.0412851  0.0731390  0.5645   0.57254
## as.factor(edu3)1              0.0779205  0.1123276  0.6937   0.48801
## as.factor(edu3)2              0.0902135  0.0971818  0.9283   0.35344
## wk                            0.0086719  0.0777983  0.1115   0.91127
## mar                           0.1881979  0.0949231  1.9826   0.04764 *
## cld                           0.1995990  0.0989594  2.0170   0.04392 *
## as.factor(g_ctax_N)1:ide_psup  0.0413388  0.1743665  0.2371   0.81264
## as.factor(g_ctax_N)2:ide_psup  0.1394618  0.1696806  0.8219   0.41130
## as.factor(g_ctax_N)3:ide_psup  0.1232152  0.1772814  0.6950   0.48718
## as.factor(g_ctax_N)4:ide_psup  0.0353104  0.1601902  0.2204   0.82558
## as.factor(g_ctax_N)5:ide_psup  0.2493852  0.1694411  1.4718   0.14134
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBc_1 <- mx_ctax1
mx_ctax2 <- lm(update(sqrt(tax2_opi) ~ as.factor(g_ctax_N)*ide_psup,ctl), data=dtmp)
coeftest(mx_ctax2, vcovHC(mx_ctax2, "HC2"))
```

```
##
```

```
## t test of coefficients:
##
##                                  Estimate Std. Error t value  Pr(>|t|)
## (Intercept)                     3.1307635  0.1782241 17.5664 < 2.2e-16 ***
## as.factor(g_ctax_N)1           -0.0380996  0.1218561 -0.3127  0.754594
## as.factor(g_ctax_N)2           -0.0368916  0.1197919 -0.3080  0.758164
## as.factor(g_ctax_N)3            0.1378016  0.1187082  1.1608  0.245941
## as.factor(g_ctax_N)4           -0.0363281  0.1075445 -0.3378  0.735577
## as.factor(g_ctax_N)5            0.0677671  0.1127367  0.6011  0.547883
## ide_psup                        0.2483496  0.1053126  2.3582  0.018526 *
## knall                          -0.0025670  0.1262026 -0.0203  0.983775
## fem                             0.0472845  0.0682274  0.6930  0.488419
## age                            -0.0089991  0.0031950 -2.8166  0.004934 **
## lvlen                           0.0554339  0.0266458  2.0804  0.037705 *
## ownh                           -0.0072228  0.0705260 -0.1024  0.918446
## as.factor(edu3)1                0.0509874  0.1059632  0.4812  0.630478
## as.factor(edu3)2                0.1713419  0.0932805  1.8368  0.066485 .
## wk                             -0.0323966  0.0733442 -0.4417  0.658783
## mar                             0.1646716  0.0938107  1.7554  0.079458 .
## cld                             0.1562629  0.0948312  1.6478  0.099661 .
## as.factor(g_ctax_N)1:ide_psup -0.0915190  0.1615758 -0.5664  0.571220
## as.factor(g_ctax_N)2:ide_psup -0.0373620  0.1692820 -0.2207  0.825358
## as.factor(g_ctax_N)3:ide_psup -0.0920669  0.1689996 -0.5448  0.586011
## as.factor(g_ctax_N)4:ide_psup -0.1131932  0.1536024 -0.7369  0.461316
## as.factor(g_ctax_N)5:ide_psup  0.0822449  0.1686314  0.4877  0.625839
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
mBc_2 <- mx_ctax2


# 仮説１の検証（４種類）
# 統制群 vs 実験群２＆実験群 3vs 実験群２＆実験群 1vs 実験群４＆実験群 5vs 実験群４
mBc1_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup+1),ctl), data
mBc1_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup+1),ctl), data
mBc1_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup+1),ctl), data
mBc1_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup+1),ctl), data
mBc1_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup+1),ctl), data
mBc1_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup+1),ctl), data
mBc1_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup+1),ctl), data
mBc1_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup+1),ctl), data
```

```
mBc1r_h10_1 <- coeftest(mBc1_h10_1, vcov.=vcovHC(mBc1_h10_1,"HC2"))
mBc1r_h10_2 <- coeftest(mBc1_h10_2, vcov.=vcovHC(mBc1_h10_2,"HC2"))
mBc1r_h11_1 <- coeftest(mBc1_h11_1, vcov.=vcovHC(mBc1_h11_1,"HC2"))
mBc1r_h11_2 <- coeftest(mBc1_h11_2, vcov.=vcovHC(mBc1_h11_2,"HC2"))
mBc1r_h12_1 <- coeftest(mBc1_h12_1, vcov.=vcovHC(mBc1_h12_1,"HC2"))
mBc1r_h12_2 <- coeftest(mBc1_h12_2, vcov.=vcovHC(mBc1_h12_2,"HC2"))
mBc1r_h13_1 <- coeftest(mBc1_h13_1, vcov.=vcovHC(mBc1_h13_1,"HC2"))
mBc1r_h13_2 <- coeftest(mBc1_h13_2, vcov.=vcovHC(mBc1_h13_2,"HC2"))

mBc2_h10_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup-1),ctl), data
mBc2_h10_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,2,1,3,4,5))*I(ide_psup-1),ctl), data
mBc2_h11_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup-1),ctl), data
mBc2_h11_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,2,0,1,4,5))*I(ide_psup-1),ctl), data
mBc2_h12_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup-1),ctl), data
mBc2_h12_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(1,4,0,2,3,5))*I(ide_psup-1),ctl), data
mBc2_h13_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup-1),ctl), data
mBc2_h13_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(5,4,0,1,2,3))*I(ide_psup-1),ctl), data

mBc2r_h10_1 <- coeftest(mBc2_h10_1, vcov.=vcovHC(mBc2_h10_1,"HC2"))
mBc2r_h10_2 <- coeftest(mBc2_h10_2, vcov.=vcovHC(mBc2_h10_2,"HC2"))
mBc2r_h11_1 <- coeftest(mBc2_h11_1, vcov.=vcovHC(mBc2_h11_1,"HC2"))
mBc2r_h11_2 <- coeftest(mBc2_h11_2, vcov.=vcovHC(mBc2_h11_2,"HC2"))
mBc2r_h12_1 <- coeftest(mBc2_h12_1, vcov.=vcovHC(mBc2_h12_1,"HC2"))
mBc2r_h12_2 <- coeftest(mBc2_h12_2, vcov.=vcovHC(mBc2_h12_2,"HC2"))
mBc2r_h13_1 <- coeftest(mBc2_h13_1, vcov.=vcovHC(mBc2_h13_1,"HC2"))
mBc2r_h13_2 <- coeftest(mBc2_h13_2, vcov.=vcovHC(mBc2_h13_2,"HC2"))

# 仮説２の検証（３種類）
# 統制群 vs 実験群 1 ＆実験群 2vs 実験群 4 ＆ 実験群 3vs 実験群 5
mBc1_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup+1),ctl), data
mBc1_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup+1),ctl), data
mBc1_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup+1),ctl), data
mBc1_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup+1),ctl), data
mBc1_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup+1),ctl), data
mBc1_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup+1),ctl), data

mBc1r_h20_1 <- coeftest(mBc1_h20_1, vcov.=vcovHC(mBc1_h20_1,"HC2"))
mBc1r_h20_2 <- coeftest(mBc1_h20_2, vcov.=vcovHC(mBc1_h20_2,"HC2"))
mBc1r_h21_1 <- coeftest(mBc1_h21_1, vcov.=vcovHC(mBc1_h21_1,"HC2"))
```

```
mBc1r_h21_2 <- coeftest(mBc1_h21_2, vcov.=vcovHC(mBc1_h21_2,"HC2"))
mBc1r_h22_1 <- coeftest(mBc1_h22_1, vcov.=vcovHC(mBc1_h22_1,"HC2"))
mBc1r_h22_2 <- coeftest(mBc1_h22_2, vcov.=vcovHC(mBc1_h22_2,"HC2"))

mBc2_h20_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup-1),ctl), data
mBc2_h20_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(0,1,2,3,4,5))*I(ide_psup-1),ctl), data
mBc2_h21_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup-1),ctl), data
mBc2_h21_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(2,4,0,1,3,5))*I(ide_psup-1),ctl), data
mBc2_h22_1 <- lm(update(sqrt(tax1_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup-1),ctl), data
mBc2_h22_2 <- lm(update(sqrt(tax2_opi) ~ factor(g_ctax_N, levels=c(3,5,0,1,2,4))*I(ide_psup-1),ctl), data

mBc2r_h20_1 <- coeftest(mBc2_h20_1, vcov.=vcovHC(mBc2_h20_1,"HC2"))
mBc2r_h20_2 <- coeftest(mBc2_h20_2, vcov.=vcovHC(mBc2_h20_2,"HC2"))
mBc2r_h21_1 <- coeftest(mBc2_h21_1, vcov.=vcovHC(mBc2_h21_1,"HC2"))
mBc2r_h21_2 <- coeftest(mBc2_h21_2, vcov.=vcovHC(mBc2_h21_2,"HC2"))
mBc2r_h22_1 <- coeftest(mBc2_h22_1, vcov.=vcovHC(mBc2_h22_1,"HC2"))
mBc2r_h22_2 <- coeftest(mBc2_h22_2, vcov.=vcovHC(mBc2_h22_2,"HC2"))
```

交差項による仮説検証

```
htest0 <- data.frame(int = rep(c("世帯収入", "自己申告イデオロギー",
                                 "外交安全保障イデオロギー",
                                 "権利機会平等イデオロギー",
                                 "政党支持イデオロギー"
), each=14),
dv = rep(c("生活必需品","その他すべて"), each=7),
h = rep(c("H1A/B","H1A/B",
          "H1A/B","H1A/B",
          "H2A/B","H2A/B",
          "H2A/B"),2*5),
cp = rep(c("2. 普遍 - 0. 統制",
           "2. 普遍 - 3. 選別",
           "4. 逆進 + 普遍 - 1. 逆進",
           "4. 逆進 + 普遍 - 5. 逆進 + 選別",
           "1. 逆進 - 0. 統制",
           "4. 普遍 + 逆進 - 2. 普遍",
           "5. 選別 + 逆進 - 3. 選別"),2*5),
rbind(mA1r_h10_1[18,],mA1r_h11_1[18,],mA1r_h12_1[18,],mA1r_h13_1[18,],
```

```
      mA1r_h20_1[18,],mA1r_h21_1[18,],mA1r_h22_1[18,],
      mA1r_h10_2[18,],mA1r_h11_2[18,],mA1r_h12_2[18,],mA1r_h13_2[18,],
      mA1r_h20_2[18,],mA1r_h21_2[18,],mA1r_h22_2[18,],
      mB1r_h10_1[18,],mB1r_h11_1[18,],mB1r_h12_1[18,],mB1r_h13_1[18,],
      mB1r_h20_1[18,],mB1r_h21_1[18,],mB1r_h22_1[18,],
      mB1r_h10_2[18,],mB1r_h11_2[18,],mB1r_h12_2[18,],mB1r_h13_2[18,],
      mB1r_h20_2[18,],mB1r_h21_2[18,],mB1r_h22_2[18,],
      mBa1r_h10_1[18,],mBa1r_h11_1[18,],mBa1r_h12_1[18,],mBa1r_h13_1[18,],
      mBa1r_h20_1[18,],mBa1r_h21_1[18,],mBa1r_h22_1[18,],
      mBa1r_h10_2[18,],mBa1r_h11_2[18,],mBa1r_h12_2[18,],mBa1r_h13_2[18,],
      mBa1r_h20_2[18,],mBa1r_h21_2[18,],mBa1r_h22_2[18,],
      mBb1r_h10_1[18,],mBb1r_h11_1[18,],mBb1r_h12_1[18,],mBb1r_h13_1[18,],
      mBb1r_h20_1[18,],mBb1r_h21_1[18,],mBb1r_h22_1[18,],
      mBb1r_h10_2[18,],mBb1r_h11_2[18,],mBb1r_h12_2[18,],mBb1r_h13_2[18,],
      mBb1r_h20_2[18,],mBb1r_h21_2[18,],mBb1r_h22_2[18,],
      mBc1r_h10_1[18,],mBc1r_h11_1[18,],mBc1r_h12_1[18,],mBc1r_h13_1[18,],
      mBc1r_h20_1[18,],mBc1r_h21_1[18,],mBc1r_h22_1[18,],
      mBc1r_h10_2[18,],mBc1r_h11_2[18,],mBc1r_h12_2[18,],mBc1r_h13_2[18,],
      mBc1r_h20_2[18,],mBc1r_h21_2[18,],mBc1r_h22_2[18,]))
htest0$int <- factor(htest0$int, levels=unique(htest0$int))
htest0$dv <- factor(htest0$dv, levels=unique(htest0$dv))
htest0$cp <- factor(htest0$cp, levels=rev(unique(htest0$cp)))
htest0$lo95 <- htest0$Estimate - qnorm(0.975)*htest0$Std..Error
htest0$up95 <- htest0$Estimate + qnorm(0.975)*htest0$Std..Error
htest0$lo90 <- htest0$Estimate - qnorm(0.95)*htest0$Std..Error
htest0$up90 <- htest0$Estimate + qnorm(0.95)*htest0$Std..Error
```

実験情報刺激効果と収入・イデオロギーの交差項係数による仮説検証（図 A9）

```
p <- ggplot(subset(htest0, int%in%c("世帯収入","自己申告イデオロギー")),
            aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95, color=int, alpha=int),
                width=0.25, position = position_dodge(width=-0.7)) +
  geom_errorbar(aes(ymin=lo90,ymax=up90, color=int, alpha=int),
                width=0, size=1.5, position = position_dodge(width=-0.7)) +
  geom_point(aes(color=int, shape=int, alpha=int), size=3,
             position = position_dodge(width=-0.7)) +
  facet_grid(h~dv, scales = "free_y", space = "free_y") +
```

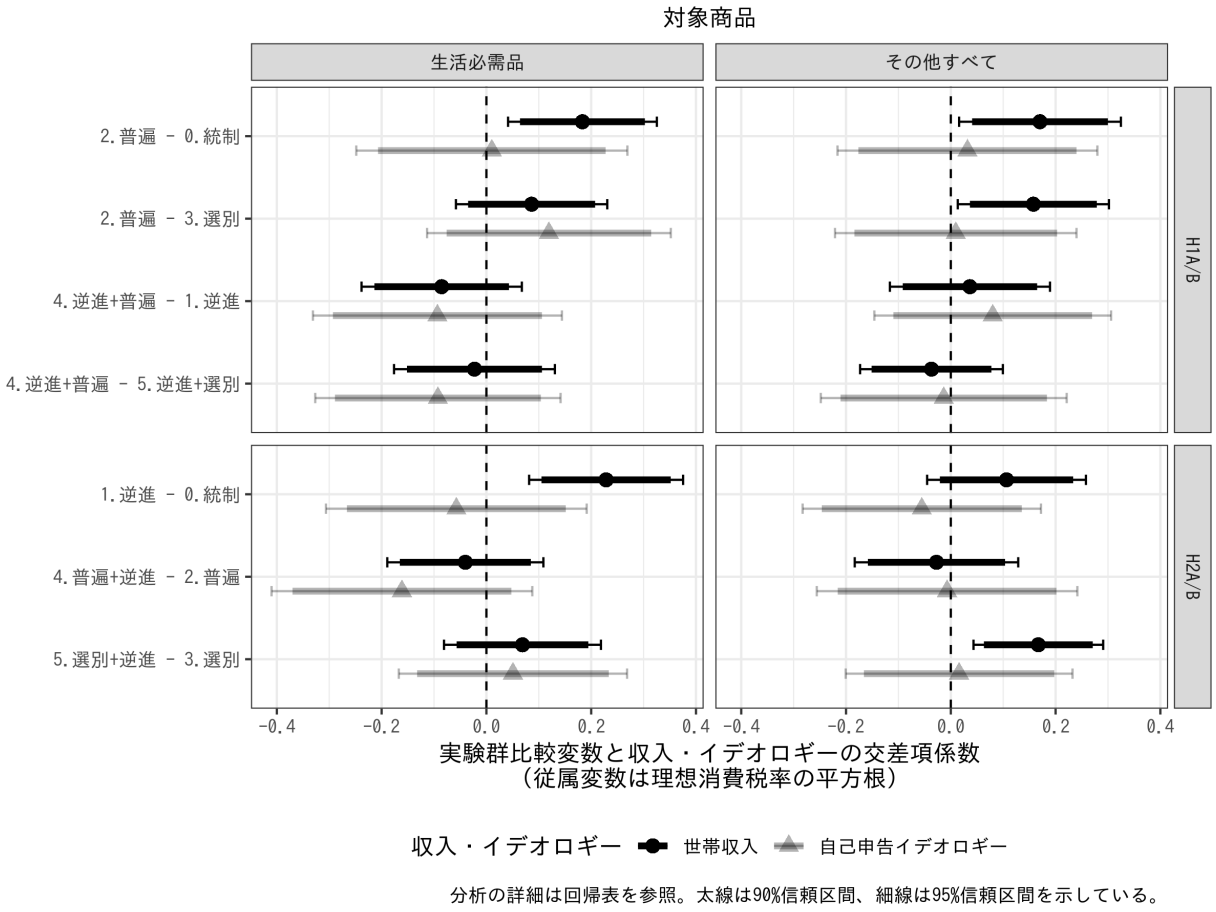
```
  coord_flip() +
  scale_color_manual(name="収入・イデオロギー", values=rep("black",2)) +
  # scale_color_brewer(name="収入・イデオロギー", type="qual", palette=2) +
  scale_shape_discrete(name="収入・イデオロギー") +
  scale_alpha_manual(name = "収入・イデオロギー", values=c(1,rep(0.3,1))) +
  labs(x=NULL, y="実験群比較変数と収入・イデオロギーの交差項係数¥n（従属変数は理想消費税率の平方根）",
       caption="分析の詳細は回帰表を参照。太線は 90% 信頼区間、細線は 95% 信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() + theme(legend.position="bottom",
                     plot.subtitle = element_text(hjust=0.5),
                     strip.placement = "outside")
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```



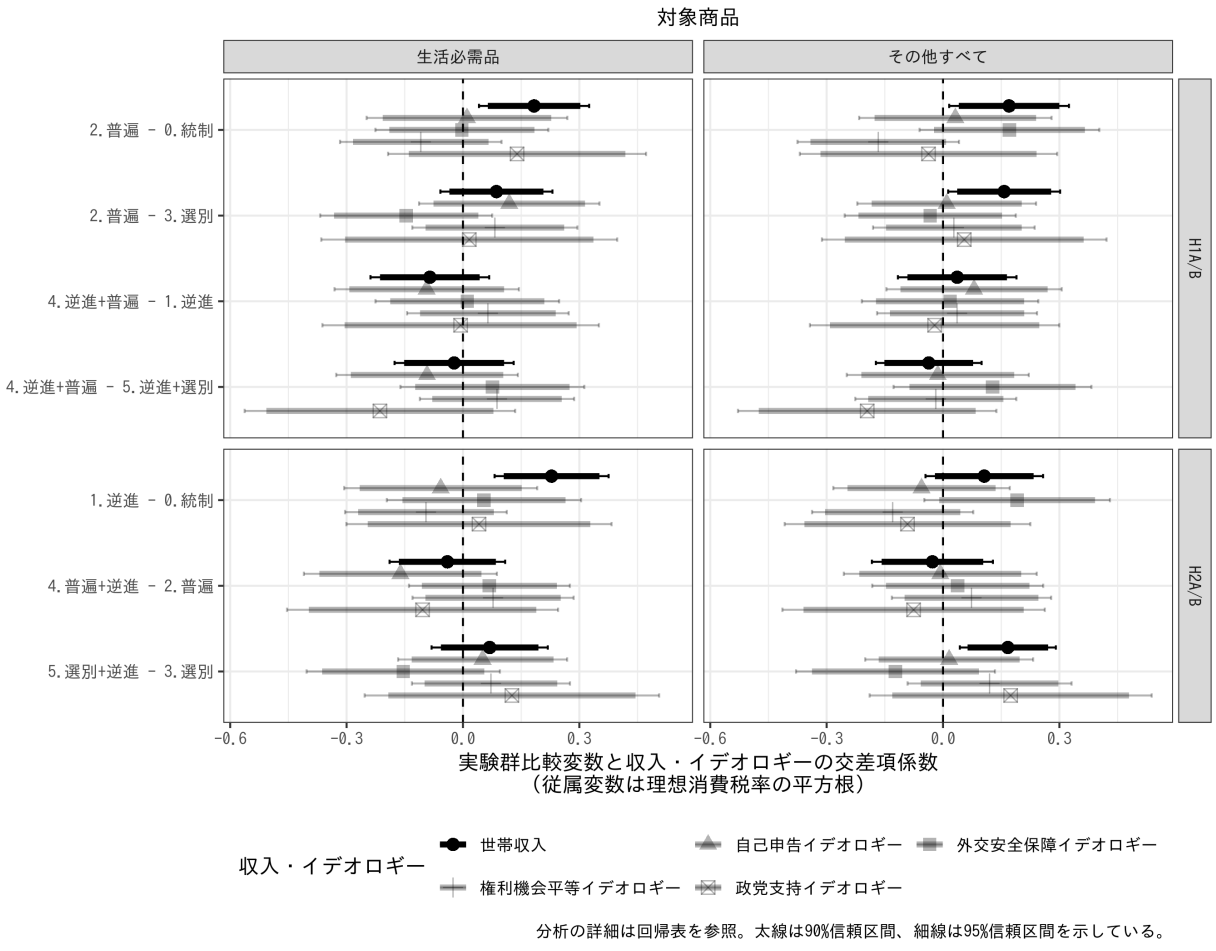
分析の詳細は回帰表を参照。太線は90%信頼区間、細線は95%信頼区間を示している。

```
ggsave("../out_v4/htest0_v1.png", p, width=8, height=6)
```

実験情報刺激効果と収入・イデオロギーの交差項係数による仮説検証（その他のイデオロギー指標を含む）（図A12）

```
p <- ggplot(htest0,
            aes(x=cp, y=Estimate)) +
  geom_hline(aes(yintercept=0), linetype=2) +
  geom_errorbar(aes(ymin=lo95,ymax=up95, color=int, alpha=int),
                width=0.25, position = position_dodge(width=-0.7)) +
  geom_errorbar(aes(ymin=lo90,ymax=up90, color=int, alpha=int),
                width=0, size=1.5, position = position_dodge(width=-0.7)) +
  geom_point(aes(color=int, shape=int, alpha=int), size=3,
             position = position_dodge(width=-0.7)) +
  facet_grid(h~dv, scales = "free_y", space = "free_y") +
  coord_flip() +
  scale_color_manual(name="収入・イデオロギー", values=rep("black",5)) +
```

```
  # scale_color_brewer(name="収入・イデオロギー", type="qual", palette=2) +
  scale_shape_discrete(name="収入・イデオロギー") +
  scale_alpha_manual(name = "収入・イデオロギー", values=c(1,rep(0.3,4))) +
  labs(x=NULL, y="実験群比較変数と収入・イデオロギーの交差項係数¥n（従属変数は理想消費税率の平方根）",
       caption="分析の詳細は回帰表を参照。太線は90%信頼区間、細線は95%信頼区間を示している。",
       subtitle = "対象商品") +
  theme_bw() + theme(legend.position="bottom",
                     plot.subtitle = element_text(hjust=0.5),
                     strip.placement = "outside") +
  guides(color=guide_legend(nrow=2,byrow=TRUE),
         shape=guide_legend(nrow=2,byrow=TRUE),
         alpha=guide_legend(nrow=2,byrow=TRUE))
```




```
ggsave("htest0_v2.png", p, width=9, height=7)
```

表のエクスポート

直接効果

```
screenreg(list(m0_1,m0_2),
          override.se = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,2],
                             coeftest(m0_2,vcovHC(m0_2,"HC2"))[,2]),
          override.pvalues = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,4],
                                  coeftest(m0_2,vcovHC(m0_2,"HC2"))[,4]),
          symbol = "+",
          single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmap,
          custom.model.names = c("1: 生活必需品","2: その他すべて"),
          caption = " 理想消費税率の平方根に実験情報刺激が与える効果（重回帰分析）",
          caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
          label="basetab", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
          custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ==========================================================
##                 1:生活必需品                2:その他すべて
## ----------------------------------------------------------
##  （定数項）              3.130 (0.191) ***     3.198 (0.180) ***
## 1.逆進性             -0.223 (0.116) +      -0.057 (0.110)
## 2.社会保障普遍性         -0.108 (0.114)        -0.040 (0.112)
## 3.社会保障選別性          0.089 (0.110)         0.124 (0.104)
## 4.逆進性＆社会保障普遍性     -0.266 (0.109) *      -0.074 (0.103)
## 5.逆進性＆社会保障選別性     -0.032 (0.113)         0.059 (0.111)
## 政治知識              -0.206 (0.139)        -0.005 (0.127)
## 性別（女性）              0.036 (0.069)         0.013 (0.068)
## 年齢                -0.019 (0.003) ***    -0.009 (0.003) **
## 居住年数               0.036 (0.027)         0.060 (0.026) *
## 持ち家                0.050 (0.073)         0.003 (0.070)
## 教育：短大／高専／専門学校      0.074 (0.113)         0.046 (0.106)
## 教育：大卒以上            0.094 (0.098)         0.170 (0.094) +
## 就労                 0.019 (0.079)        -0.019 (0.075)
## 婚姻                 0.201 (0.095) *       0.180 (0.094) +
## 子ども                0.207 (0.098) *       0.157 (0.094) +
## ----------------------------------------------------------
```

```
## R^2               0.051                 0.028
## Adj. R^2          0.039                 0.016
## Num. obs.      1197                  1197
## ================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(m0_1,m0_2),
#        override.se = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,2],
#                           coeftest(m0_2,vcovHC(m0_2,"HC2"))[,2]),
#        override.pvalues = list(coeftest(m0_1,vcovHC(m0_1,"HC2"))[,4],
#                                coeftest(m0_2,vcovHC(m0_2,"HC2"))[,4]),
#        # file = "basetab.html", symbol = "&dagger;",
#        file = "basetab.tex", symbol = "¥¥dagger",
#        single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap,
#        custom.model.names = c("1: 生活必需品","2: その他すべて"),
#        caption = "理想消費税率の平方根に実験情報刺激が与える効果（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="basetab", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("basetab.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "basetab.tex", useBytes = TRUE)
```

収入・自己申告イデオロギーによる条件付け（表 A3）

```
## Full Table
screenreg(list(mA_1,mA_2,mB_1,mB_2),
          override.se = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,2],
                             coeftest(mA_2,vcovHC(mA_2,"HC2"))[,2],
                             coeftest(mB_1,vcovHC(mB_1,"HC2"))[,2],
                             coeftest(mB_2,vcovHC(mB_2,"HC2"))[,2]),
          override.pvalues = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,4],
                                  coeftest(mA_2,vcovHC(mA_2,"HC2"))[,4],
                                  coeftest(mB_1,vcovHC(mB_1,"HC2"))[,4],
                                  coeftest(mB_2,vcovHC(mB_2,"HC2"))[,4]),
          symbol = "+",
          single.row=FALSE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmap,
          custom.model.names = c("1: 生活必需品","2: その他すべて",
```

```
                                "3: 生活必需品","4: その他すべて"),
        custom.header = list(" 世帯収入" = 1:2, " 自己申告イデオロギー" = 3:4),
        caption = " 理想消費税率の平方根に実験情報刺激が与える効果と収入・イデオロギー（重回帰分析）",
        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
        label="maintab_full", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ==========================================================================
##                                 世帯収入                    自己申告イデオロギー
##                     -------------------------  -------------------------
##                     1:生活必需品       2:その他すべて      3:生活必需品       4:その他すべて
## --------------------------------------------------------------------------
## （定数項）                  3.498 ***     3.472 ***     3.121 ***     3.207 ***
##                      (0.257)       (0.242)       (0.194)       (0.179)
## 1.逆進性                -0.961 ***    -0.400        -0.209 +      -0.053
##                      (0.266)       (0.270)       (0.120)       (0.111)
## 2.社会保障普遍性            -0.692 **     -0.582 *      -0.099        -0.053
##                      (0.262)       (0.273)       (0.118)       (0.112)
## 3.社会保障選別性            -0.222         0.077         0.112         0.114
##                      (0.272)       (0.250)       (0.114)       (0.104)
## 4.逆進性＆社会保障普遍性        -0.722 **     -0.525 *      -0.240 *      -0.084
##                      (0.269)       (0.264)       (0.114)       (0.104)
## 5.逆進性＆社会保障選別性        -0.565 *      -0.522 *      -0.019         0.047
##                      (0.265)       (0.247)       (0.116)       (0.111)
## 収入／イデオロギー            -0.102 +      -0.065         0.044        -0.044
##                      (0.055)       (0.056)       (0.096)       (0.088)
## 収入／イデオロギー×1.逆進        0.228 **      0.106        -0.057        -0.055
##                      (0.075)       (0.077)       (0.127)       (0.116)
## 収入／イデオロギー×2.普遍        0.183 *       0.170 *       0.010         0.032
##                      (0.072)       (0.079)       (0.132)       (0.127)
## 収入／イデオロギー×3.選別        0.097         0.013        -0.109         0.022
##                      (0.078)       (0.072)       (0.121)       (0.114)
## 収入／イデオロギー×4.逆進＆普遍     0.143 +       0.143 +      -0.151         0.025
##                      (0.080)       (0.078)       (0.129)       (0.123)
## 収入／イデオロギー×5.逆進＆選別     0.166 *       0.180 **     -0.058         0.038
##                      (0.076)       (0.069)       (0.126)       (0.120)
## 政治知識                 -0.212        -0.019        -0.196         0.004
##                      (0.139)       (0.128)       (0.140)       (0.127)
```

```
## 性別（女性）                0.036        -0.004         0.028         0.005
##                        (0.070)       (0.068)       (0.070)       (0.069)
## 年齢                    -0.018 ***    -0.009 **     -0.019 ***    -0.009 **
##                        (0.003)       (0.003)       (0.003)       (0.003)
## 居住年数                 0.030         0.051 +       0.038         0.060 *
##                        (0.027)       (0.026)       (0.027)       (0.026)
## 持ち家                   0.036        -0.012         0.052         0.010
##                        (0.073)       (0.071)       (0.073)       (0.070)
## 教育：短大／高専／専門学校          0.069         0.029         0.068         0.045
##                        (0.113)       (0.107)       (0.112)       (0.106)
## 教育：大卒以上              0.078         0.149         0.083         0.169 +
##                        (0.098)       (0.093)       (0.098)       (0.094)
## 就労                     0.003        -0.039         0.027        -0.025
##                        (0.079)       (0.076)       (0.080)       (0.076)
## 婚姻                     0.147         0.125         0.211 *       0.182 +
##                        (0.097)       (0.097)       (0.096)       (0.095)
## 子ども                   0.212 *       0.163 +       0.205 *       0.158 +
##                        (0.098)       (0.096)       (0.098)       (0.095)
## ------------------------------------------------------------------------
## R^2                     0.063         0.040         0.054         0.030
## Adj. R^2                0.046         0.023         0.037         0.013
## Num. obs.            1197          1197          1197          1197
## ========================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(mA_1,mA_2,mB_1,mB_2),
#        override.se = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,2],
#                           coeftest(mA_2,vcovHC(mA_2,"HC2"))[,2],
#                           coeftest(mB_1,vcovHC(mB_1,"HC2"))[,2],
#                           coeftest(mB_2,vcovHC(mB_2,"HC2"))[,2]),
#        override.pvalues = list(coeftest(mA_1,vcovHC(mA_1,"HC2"))[,4],
#                                coeftest(mA_2,vcovHC(mA_2,"HC2"))[,4],
#                                coeftest(mB_1,vcovHC(mB_1,"HC2"))[,4],
#                                coeftest(mB_2,vcovHC(mB_2,"HC2"))[,4]),
#        # file = "maintab_full.html", symbol = "&dagger;",
#        file = "maintab_full.tex", symbol = "¥¥dagger",
#        single.row=FALSE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap,
#        custom.model.names = c("1: 生活必需品","2: その他すべて",
#                               "3: 生活必需品","4: その他すべて"),
```

```
#        custom.header = list("世帯収入" = 1:2, "自己申告イデオロギー" = 3:4),
#        caption = "理想消費税率の平方根に実験情報刺激が与える効果と収入・イデオロギー（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="maintab_full", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("maintab_full.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "maintab_full.tex", useBytes = TRUE)
```

他のイデオロギーによる条件付け

```
## 他のイデオロギー（生活必需品）
screenreg(list(mBc_1,mBa_1,mBb_1),
          override.se = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,2],
                             coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,2],
                             coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,2]),
          override.pvalues = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,4],
                                  coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,4],
                                  coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,4]),
          symbol = "+",
          single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmap2,
          custom.model.names = c("政党支持","外交安全保障","権利機会平等"),
          caption = "生活必需品の理想消費税率の平方根に実験情報刺激が与える効果とイデオロギー（重回帰分析）",
          caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
          label="idetab1", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
          custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ==============================================================================
##                 政党支持                  外交安全保障                 権利機会平等
## ------------------------------------------------------------------------------
##  （定数項）              3.098 (0.190) ***     3.122 (0.191) ***     3.057 (0.194) ***
## 1.逆進性             -0.236 (0.127) +      -0.223 (0.116) +      -0.218 (0.115) +
## 2.社会保障普遍性         -0.150 (0.124)        -0.099 (0.115)        -0.118 (0.114)
## 3.社会保障選別性          0.045 (0.127)         0.089 (0.109)         0.078 (0.109)
## 4.逆進性＆社会保障普遍性     -0.265 (0.114) *      -0.269 (0.109) *      -0.265 (0.109) *
## 5.逆進性＆社会保障選別性     -0.062 (0.116)        -0.039 (0.116)        -0.049 (0.113)
## イデオロギー              0.110 (0.106)        -0.044 (0.083)        -0.021 (0.074)
```

```
## イデオロギー×1.逆進          0.041 (0.174)          0.054 (0.128)         -0.095 (0.106)
## イデオロギー×2.普遍          0.139 (0.170)         -0.003 (0.114)         -0.109 (0.106)
## イデオロギー×3.選別          0.123 (0.177)          0.144 (0.117)         -0.191 (0.104) +
## イデオロギー×4.逆進＆普遍      0.035 (0.160)          0.065 (0.110)         -0.031 (0.102)
## イデオロギー×5.逆進＆選別      0.249 (0.169)         -0.010 (0.129)         -0.119 (0.101)
## 政治知識                -0.207 (0.138)        -0.209 (0.141)        -0.172 (0.138)
## 性別（女性）               0.070 (0.069)          0.039 (0.071)         -0.024 (0.073)
## 年齢                  -0.018 (0.003) ***    -0.019 (0.003) ***    -0.017 (0.004) ***
## 居住年数                 0.031 (0.028)          0.036 (0.028)          0.040 (0.027)
## 持ち家                  0.041 (0.073)          0.056 (0.073)          0.061 (0.073)
## 教育：短大／高専／専門学校       0.078 (0.112)          0.081 (0.113)          0.082 (0.112)
## 教育：大卒以上              0.090 (0.097)          0.101 (0.100)          0.084 (0.098)
## 就労                   0.009 (0.078)          0.015 (0.080)          0.008 (0.080)
## 婚姻                   0.188 (0.095) *        0.201 (0.096) *        0.216 (0.095) *
## 子ども                  0.200 (0.099) *        0.208 (0.098) *        0.205 (0.099) *
## ------------------------------------------------------------------------------------
## R^2                0.068                 0.054                 0.065
## Adj. R^2           0.052                 0.037                 0.048
## Num. obs.       1197                  1197                  1197
## ====================================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(mBc_1,mBa_1,mBb_1),
#        override.se = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,2],
#                           coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,2],
#                           coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,2]),
#        override.pvalues = list(coeftest(mBc_1,vcovHC(mBc_1,"HC2"))[,4],
#                                coeftest(mBa_1,vcovHC(mBa_1,"HC2"))[,4],
#                                coeftest(mBb_1,vcovHC(mBb_1,"HC2"))[,4]),
#        # file = "idetab1.html", symbol = "&dagger;",
#        file = "idetab1.tex", symbol = "¥¥dagger",
#        single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap2,
#        custom.model.names = c("政党支持","外交安全保障","権利機会平等"),
#        caption = "生活必需品の理想消費税率の平方根に実験情報刺激が与える効果とイデオロギー（重回帰分析）",
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="idetab1", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("idetab1.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
```

```r
# writeLines(tmp, "idetab1.tex", useBytes = TRUE)

## 他のイデオロギー（その他の商品）
screenreg(list(mBc_2,mBa_2,mBb_2),
          override.se = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,2],
                             coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,2],
                             coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,2]),
          override.pvalues = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,4],
                                  coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,4],
                                  coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,4]),
          symbol = "+",
          single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
          custom.coef.map = vnmap2,
          custom.model.names = c("政党支持","外交安全保障","権利機会平等"),
          caption = "その他全ての商品の理想消費税率の平方根に実験情報刺激が与える効果とイデオロギー（重回帰分析
          caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
          label="idetab2", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
          custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
```

```
##
## ==============================================================================
##                 政党支持                    外交安全保障                 権利機会平等
## ------------------------------------------------------------------------------
##  （定数項）              3.131 (0.178) ***     3.167 (0.177) ***     3.074 (0.182) ***
## 1.逆進性              -0.038 (0.122)        -0.056 (0.109)        -0.051 (0.108)
## 2.社会保障普遍性         -0.037 (0.120)        -0.054 (0.113)        -0.059 (0.109)
## 3.社会保障選別性          0.138 (0.119)         0.125 (0.103)         0.105 (0.101)
## 4.逆進性＆社会保障普遍性     -0.036 (0.108)        -0.089 (0.103)        -0.078 (0.102)
## 5.逆進性＆社会保障選別性      0.068 (0.113)         0.060 (0.114)         0.039 (0.109)
## イデオロギー              0.248 (0.105) *      -0.077 (0.082)        -0.068 (0.075)
## イデオロギー×1.逆進        -0.092 (0.162)         0.191 (0.122)        -0.130 (0.106)
## イデオロギー×2.普遍        -0.037 (0.169)         0.171 (0.118)        -0.167 (0.106)
## イデオロギー×3.選別        -0.092 (0.169)         0.204 (0.109) +      -0.195 (0.103) +
## イデオロギー×4.逆進＆普遍     -0.113 (0.154)         0.209 (0.109) +      -0.094 (0.102)
## イデオロギー×5.逆進＆選別      0.082 (0.169)         0.082 (0.137)        -0.075 (0.107)
## 政治知識               -0.003 (0.126)        -0.020 (0.127)         0.045 (0.125)
## 性別（女性）              0.047 (0.068)         0.045 (0.071)        -0.090 (0.068)
## 年齢                 -0.009 (0.003) **     -0.009 (0.003) **     -0.006 (0.003) +
## 居住年数                0.055 (0.027) *       0.055 (0.027) *       0.064 (0.026) *
```

```
## 持ち家                -0.007 (0.071)         0.008 (0.070)         0.016 (0.069)
## 教育：短大／高専／専門学校      0.051 (0.106)         0.060 (0.106)         0.058 (0.105)
## 教育：大卒以上            0.171 (0.093) +       0.192 (0.093) *       0.157 (0.092) +
## 就労                -0.032 (0.073)        -0.032 (0.075)        -0.033 (0.075)
## 婚姻                 0.165 (0.094) +       0.169 (0.094) +       0.207 (0.093) *
## 子ども                0.156 (0.095) +       0.157 (0.093) +       0.142 (0.094)
## ------------------------------------------------------------------------------
## R^2               0.045                 0.038                 0.061
## Adj. R^2          0.028                 0.021                 0.045
## Num. obs.       1197                  1197                  1197
## ==============================================================================
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1. 最小二乗法による重回帰分析、ロバスト標準誤差使用.
```

```
# texreg(list(mBc_2,mBa_2,mBb_2),
#        override.se = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,2],
#                           coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,2],
#                           coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,2]),
#        override.pvalues = list(coeftest(mBc_2,vcovHC(mBc_2,"HC2"))[,4],
#                                coeftest(mBa_2,vcovHC(mBa_2,"HC2"))[,4],
#                                coeftest(mBb_2,vcovHC(mBb_2,"HC2"))[,4]),
#        # file = "idetab2.html", symbol = "&dagger;",
#        file = "idetab2.tex", symbol = "¥¥dagger",
#        single.row=TRUE, digits = 3, stars = c(0.001,0.01,0.05,0.1),
#        custom.coef.map = vnmap2,
#        custom.model.names = c("政党支持","外交安全保障","権利機会平等"),
#        caption = "その他全ての商品の理想消費税率の平方根に実験情報刺激が与える効果とイデオロギー（重回帰分析）
#        caption.above = TRUE, fontsize = "scriptsize", float.pos = "ht!",
#        label="idetab2", dcolumn = TRUE, booktabs = TRUE, use.packages = FALSE,
#        custom.note = "%stars. 最小二乗法による重回帰分析、ロバスト標準誤差使用. ")
# tmp <- readLines("idetab2.tex")
# tmp <- gsub("{dagger}","{¥¥dagger}", tmp, fixed=TRUE)
# writeLines(tmp, "idetab2.tex", useBytes = TRUE)
```