

CFI Redistribution

ESRI

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Introduction

Promises in the proposal:

- ESS measure on the role of the government in reducing inequality [...] could be used to examine people's opinion on this over time (from 2002 to 2020) and compared to other EU countries
- ESS special welfare module was included in 2008 and 2016 of the ESS. This could be used to highlight some of the key changes in welfare attitudes across this eight-year period
- With additional resources [...] conduct an experiment on re-distribution preferences

Key points

- Over time, there is an overall stable support for government's role in reducing differences in income levels (Figure 2.1) and for wealth redistribution (Figure 2.2).
- ESS respondents from lower social classes and in worse financial situation are more likely to agree that the government should reduce differences in income levels (Table 2.2).
- From 2008 to 2016, there was a significant reduction on the average agreement that social benefits place too great strain on economy (Figure 3.3)
- Respondents in worse financial situation (subjective self-reported) tend to disagree more with the perspective that social benefits are disincentives for work, economy and social cooperation (Table 3.1)
- There is a trajectory of increasing support for redistribution across skilled and unskilled workers since round 8 (2016). However, for lower-grade service class and small business owners, there seems to be a break in this trajectory captured in the latest wave (Figure 4.2)

1 Data

1.1 Voter Survey



Figure 1.1: European Elections Studies

[EES Website](#)

We rely on public opinion data from Voter Surveys conducted immediately after the European elections. Data from the latest three surveys (2014, 2019, 2024) were analysed here. These surveys are part of the European Elections Studies (EES), which also features political elite surveys, media studies, and the Euromanifestos project that codes Party Manifestos. Before 1994, the voter survey questions 3 part of the Eurobarometer surveys. Since the 1999 elections, EES surveys have been conducted independently of the Eurobarometer.

1.1.1 Response variable

Here is the main response variable used in this project:

i Question wording

[...] We would like to ask you to position yourself on a scale from 0 to 10, where ‘0’ means that you “fully agree with the statement at the top” and ‘10’ means that you “fully agree with the statement at the bottom”. [...]

Redistribution of wealth

0 - You fully favour redistribution from the rich to the poor in Ireland

10 You fully oppose redistribution of wealth from the rich to the poor in Ireland

⚠ Warning

The original scale of this variable was inverted for this analysis. So, in the results presented here, higher values indicate more in favour of redistribution.

1.1.2 Relevant variables

Here are relevant variables from the latest three waves that were also included in the analysis.

- Country of birth
- Age
- Gender
- Educational attainment

1.2 European Social Survey



Figure 1.2: European Social Survey

[ESS Website](#)

The main data source for this project is the European Social Survey (ESS). Most of the analysis is based on a core question that was asked across all 11 rounds since 2002. In addition, we also explore several questions from the module on welfare attitudes that was fielded in 2008 and 2016.

1.2.1 Response variable

Here is the main response variable from the European Social Survey that was administered across all 11 rounds:

Question wording

Using this card, please say to what extent you agree or disagree with each of the following statements. **The government should take measures to reduce differences in income levels**

- 1 Agree strongly
- 2 Agree
- 3 Neither agree nor disagree
- 4 Disagree
- 5 Disagree strongly

Warning

The original scale of this variable was inverted for this analysis. So, in the results presented here, higher values denote stronger agreement with government reducing income differences.

Some recent studies have raised concerns in relation to the reliability of this question as a measurement of support for redistribution. Margalit and Raviv (2024) argues that reduction in income differences is too abstract and respondents in general do not link it to redistributive measures. Similarly, it has been suggested that this question only captures a diffuse inclination to equality and that is why responses are inconsistent with voting preferences across countries Dallinger (2022). However, Breznau et al. (2025) argue that the absence of a relationship between this measurement and other expected correlates (voting preferences / support for concrete policies) is due to the omission of views on government (trust and perceptions of corruption) as a moderating variable.

1.2.2 Relevant variables

Here are relevant variables from the latest three waves that were also included in the analysis.

- Placement on left right scale
- Citizen of country
- Born in country
- Gender
- Year of birth

- Highest level of education
- Feeling about household's income nowadays

In addition, based on the class scheme developed by Oesch (2006), a “social class” variable was constructed based on occupational variables and following Tawfik and Oesch (2020) script.

2 Redistribution

Reading the European Social Survey (ESS) and Voter Study (VS) processed files from the sub-directory “data”.

```
library(tidyverse)
library(haven)
library(gt)
library(gtsummary)
library(plotly)

# Function to get the name of the latest file
get_latest <- function(file_pattern){
  file_list <- list.files(path = "./data", pattern = file_pattern)
  latest_file <- tail(sort(file_list), n = 1)
  return(latest_file)
}

# Read file in the root of sub-folder "data" with name containing "ESS"
df_ess <- read_dta(paste0("data/", get_latest("ESS")))

# Read file in the root of sub-folder "data" with name containing "VS"
df_vs <- read_dta(paste0("data/", get_latest("VS")))

# Read country with cross country data
df_eu <- read_dta("./data/ess/ess_eu.dta")
```

2.1 Over time

The Figure [2.1](#) below shows the mean values for ‘Government should reduce income differences’ by round. Overall there is a stable agreement (mean = 3.8). Rounds 5-7 (2010-2014) as well as 10-11(2022-2024) show a slightly higher agreement compared to other rounds.

```

(df_eu |>
  group_by(round = as_factor(essround), cntry) |>
  mutate(gincdif_inv = 6 - gincdif) |>
  summarise(
    mean = weighted.mean(gincdif_inv, w = pspwght, na.rm = T),
    se = sd(gincdif_inv, na.rm = T)/sqrt(length((gincdif_inv)))) |>
  mutate(Country = if_else(cntry == "IE", "Ireland", "Other EU")) |>
  ggplot(aes(x = round, y = mean, group = cntry, color = Country)) +
  geom_line(aes(group = cntry), size = 0.4, data = ~subset(., Country != "Ireland"))+
  geom_point(data = ~subset(., Country == "Ireland")) +
  geom_line(aes(group = cntry), size = 0.8, data = ~subset(., Country == "Ireland"))+
  scale_color_manual(values = c("darkgreen", "grey85"))+
  ylim(1,5) +
  theme_classic() +
  theme(legend.position = "bottom")) |>
  ggplotly() |>
  layout(legend = list(orientation = "h", x = 0.4, y = -0.2))

```

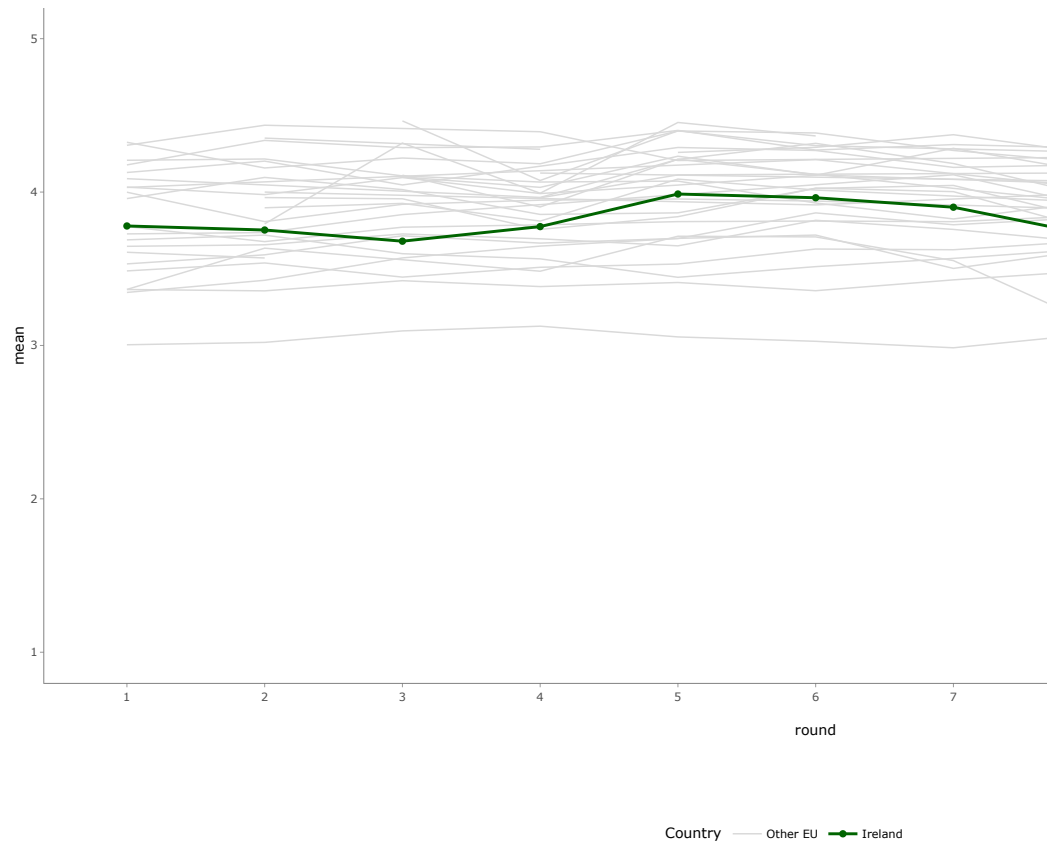


Figure 2.1: Mean values for 'Government should reduce income differences' by round

Figure 2.2 shows the density of responses for the scale on support for redistribution of wealth. The mean values are similar for 2014, 2019 and 2024. However, the distribution seems is less skewed in 2024 compared to 2014.

```
df_vs |>
  ggplot(aes(x = redist_inv)) +
  geom_density(fill = "lightblue") +
  geom_vline(data = df_vs |> group_by(study) |> summarise(mean = weighted.mean(redist_inv,
  facet_wrap(~study, nrow = 3) +
  theme_classic()
```

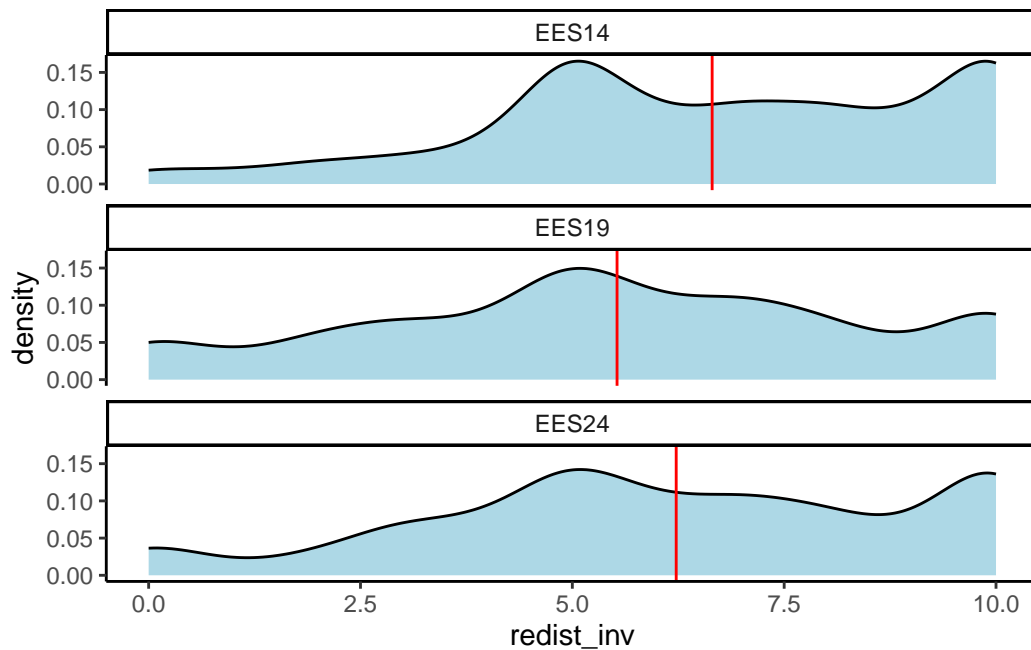


Figure 2.2: Density plot for ‘in favour of redistribution of wealth’ by survey year

2.2 Gender

The Table 2.1 shows the mean values for the main response variable in each study in 2024 by gender.

```
df_ess |>
  filter(essround == 11) |>
  group_by(Gender = as_factor(gndr)) |>
```

Table 2.1: Mean values by gender and study in 2024

Gender	ESS	VS
Male	4.0	6.3
Female	3.9	6.1

```

summarise(ESS = weighted.mean(gincdif_inv, w = pspwght, na.rm = T)) |>
left_join(
  df_vs |>
  filter(study == "EES24") |>
  group_by(Gender = as_factor(gndr)) |>
  summarise(VS = weighted.mean(redist_inv, w = weight, na.rm = T))
) |>
gt() |>
fmt_number(everything(), decimals = 1)

```

2.3 Age

The relationship between age and the response variable seems to change across rounds. As shown in Figure 2.3, early rounds suggest that older respondents support more the government reducing income differences, whereas the latest round (11) and round 8 seem to indicate the opposite.

2.3.1 ESS

```

df_ess |>
  group_by(essround, agea) |>
  summarise(mean = weighted.mean(gincdif_inv, w = pspwght, na.rm = T)) |>
  ggplot(aes(x = agea, y = mean)) +
  geom_point() +
  geom_smooth(method = 'lm') +
  ylim(3,5) +
  facet_wrap(~essround)

```

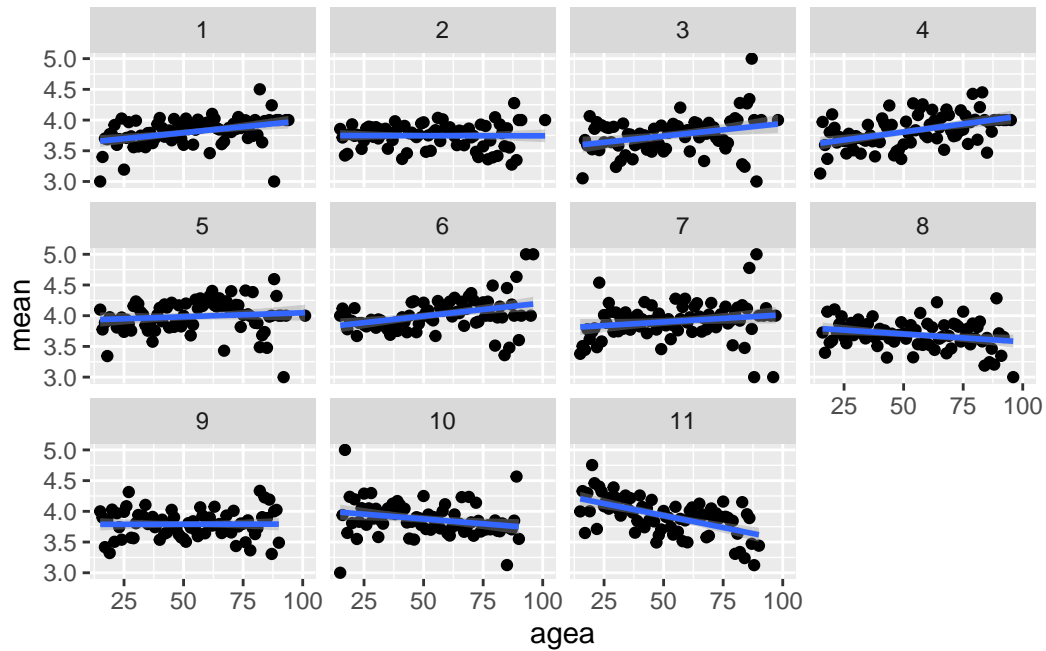


Figure 2.3: Scatter plot for 'Government should reduce income differences' by age and round

2.3.2 VS

```
df_vs |>
  group_by(study, agea) |>
  summarise(mean = weighted.mean(redist_inv, w = weight, na.rm = T)) |>
  ggplot(aes(x = agea, y = mean)) +
  geom_point() +
  geom_smooth(method = 'lm') +
  facet_wrap(~study)
```

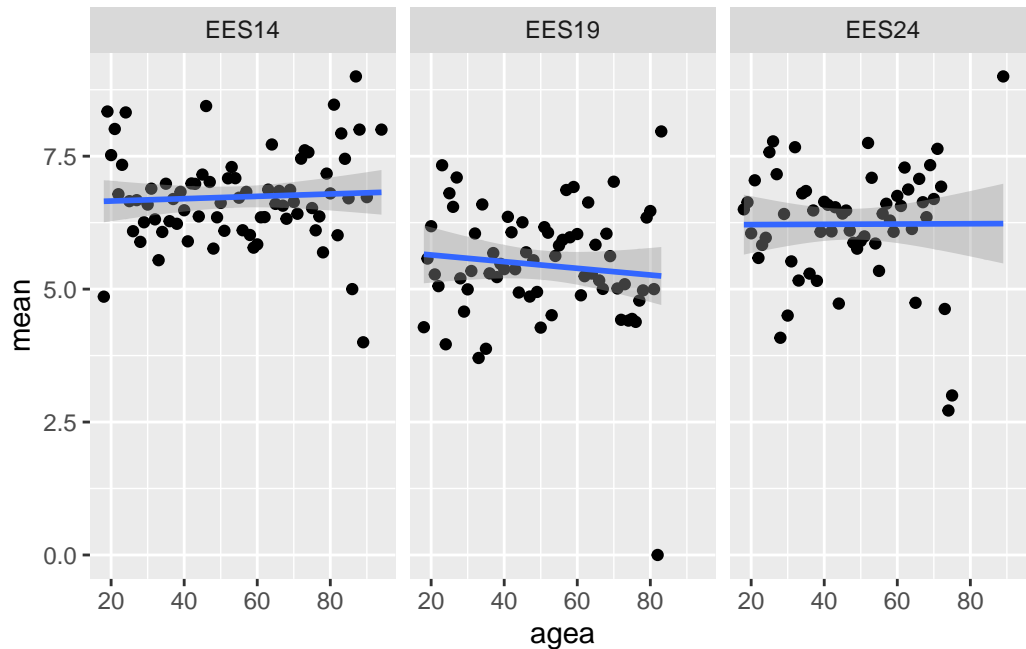


Figure 2.4: Scatter plot for ‘wealth redistribution’ by age and study

2.4 Social class

Figure 2.5 suggests a negative relationship between social class and the main ESS response variable. The higher the social class, the lower the support for the government to reduce income differences.

2.4.1 5 groups

```
df_ess |>
  mutate(class_inv = 6 - class5) |>
  group_by(essround, class = class_inv) |>
  summarise(mean = weighted.mean(gincdif_inv, w = pspwght, na.rm = T)) |>
  ggplot(aes(x = class, y = mean)) +
  geom_point() +
  geom_smooth(method = 'lm') +
  facet_wrap(~essround)
```

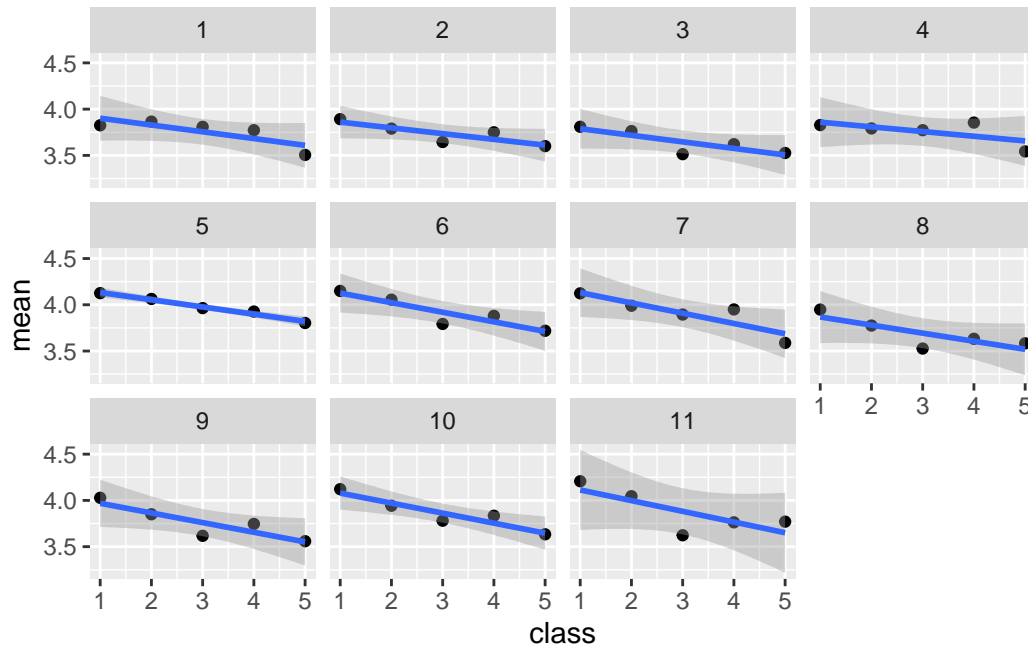


Figure 2.5: Scatter plot for ‘income differences’ by social class (5 groups) and round

2.4.2 16 groups

```
df_ess |>
  mutate(class_inv = 17 - class16) |>
  group_by(essround, class = class_inv) |>
  summarise(mean = weighted.mean(gincdif_inv, w = pspwght, na.rm = T)) |>
  ggplot(aes(x = class, y = mean)) +
  geom_point() +
  geom_smooth(method = 'lm') +
  facet_wrap(~essround)
```

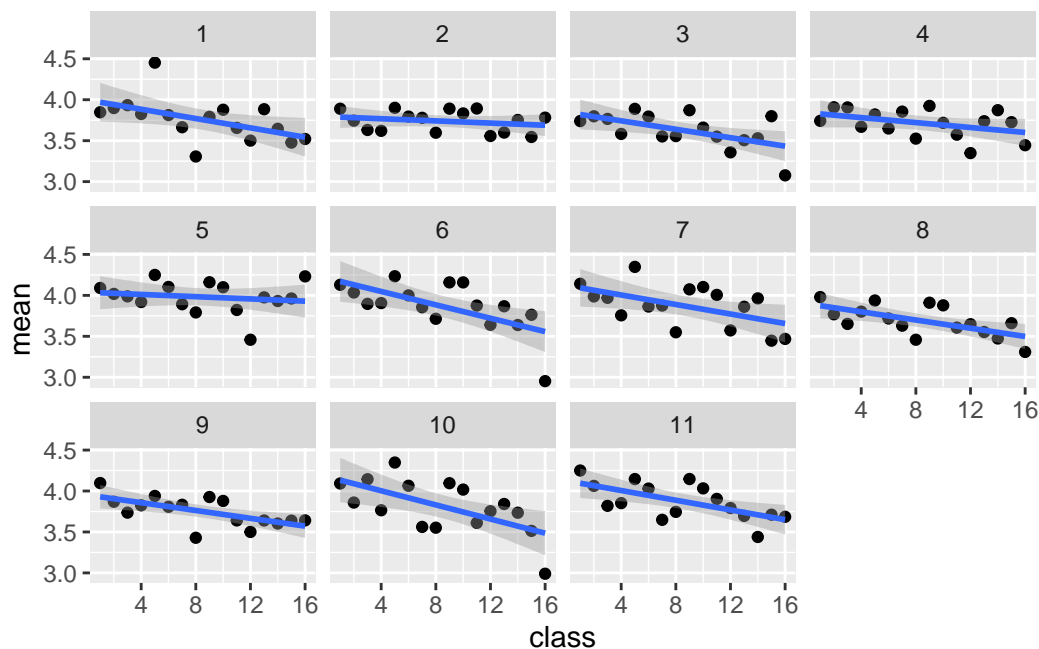



Figure 2.6: Scatter plot for ‘income differences’ by social class (16 groups) and round

2.5 Multivariate

The Table 2.2 below shows the coefficients of an OLS regression model on the support for government reducing differences in income levels. The overall explanatory power of the model is low. The effect of age seems to be neglectable. Both the social class and subjective income suggest that respondents in more precarious economic situation tend to be more favourable of the government reducing income differences.

```
lm(gincdif_inv ~ factor(essround) + agea + as_factor(gndr) + as_factor(class5) + as_factor(hincfel))
tbl_regression(
  include = c("agea", "as_factor(gndr)", "as_factor(class5)", "as_factor(hincfel)",
) |>
bold_p(t = 0.05, q = FALSE) |>
add_glance_source_note() |>
as_gt() |>
gt::tab_source_note("Time fixed effects (ESS Round) omitted from the table but included :
tab_options(table.width = pct(70))
```

Table 2.2: OLS regression coefficients for ‘income differences’

Characteristic	Beta	95% CI ¹	p-value
Age of respondent, calculated	0.00	0.00, 0.00	< 0.001
Gender			
Male	—	—	
Female	0.05	0.03, 0.08	< 0.001
No answer	0.05	-0.39, 0.49	0.8
Final Oesch class position - 5 classes			
Higher-grade service class	—	—	
Lower-grade service class	0.14	0.09, 0.18	< 0.001
Small business owners	0.05	0.00, 0.10	0.037
Skilled workers	0.21	0.18, 0.25	< 0.001
Unskilled workers	0.30	0.26, 0.35	< 0.001
Feeling about household’s income nowadays			
Living comfortably on present income	—	—	
Coping on present income	0.16	0.13, 0.19	< 0.001
Difficult on present income	0.25	0.21, 0.30	< 0.001
Very difficult on present income	0.45	0.38, 0.51	< 0.001
No answer	0.33	0.02, 0.63	0.035
Refusal	-0.12	-0.44, 0.19	0.4
Don’t know	0.02	-0.16, 0.20	0.9

¹CI = Confidence Interval

R² = 0.044; Adjusted R² = 0.043; Sigma = 0.949; Statistic = 41.5; p-value = <0.001; df = 23; Log-likelihood = -30,207; AIC = 60,463; BIC = 60,662; Deviance = 18,708; Residual df = 20,772; No. Obs. = 20,796

Time fixed effects (ESS Round) omitted from the table but included in the model

3 Welfare

```
library(tidyverse)
library(haven)
library(gt)
library(gtsummary)
library(plotly)

# Function to get the name of the latest file
get_latest <- function(file_pattern){
  file_list <- list.files(path = "./data", pattern = file_pattern)
  latest_file <- tail(sort(file_list), n = 1)
  return(latest_file)
}

# Read file in the root of sub-folder "data" with name containing "ESS"
df_ess <- read_dta(paste0("data/", get_latest("ESS")))
```

The data analysed in this chapter refers to a special module from the European Social Survey on welfare attitudes that was fielded in 2008 (Round 4) and repeated in 2016 (Round 8) (see Meuleman et al. (2018) for more on this module).

3.1 Large differences acceptable

In this question, respondents were asked to what extent they agree with the following statement:

i Question wording

‘Large differences in people’s incomes are acceptable to properly reward differences in talents and efforts’

The distribution appears to be similar for 2008 and 2016, with a slight reduction in the proportion of those who “agree” or “agree strongly”.

```
df_ess |>
  filter(!is.na(dfincac)) |>
  group_by(essround) |>
  count(Acceptable = as_factor(dfincac)) |>
  mutate(Proportion = round(prop.table(n)*100,1)) |>
  ggplot(aes(x = Acceptable, y = Proportion)) +
  geom_bar(stat = "identity", fill = "lightblue")+
  geom_label(aes(label = Proportion)) +
  theme_classic()+
  theme(axis.text.x = element_text(angle = 45, hjust = 1),
        legend.position = "bottom")+
  facet_wrap(~essround)
```

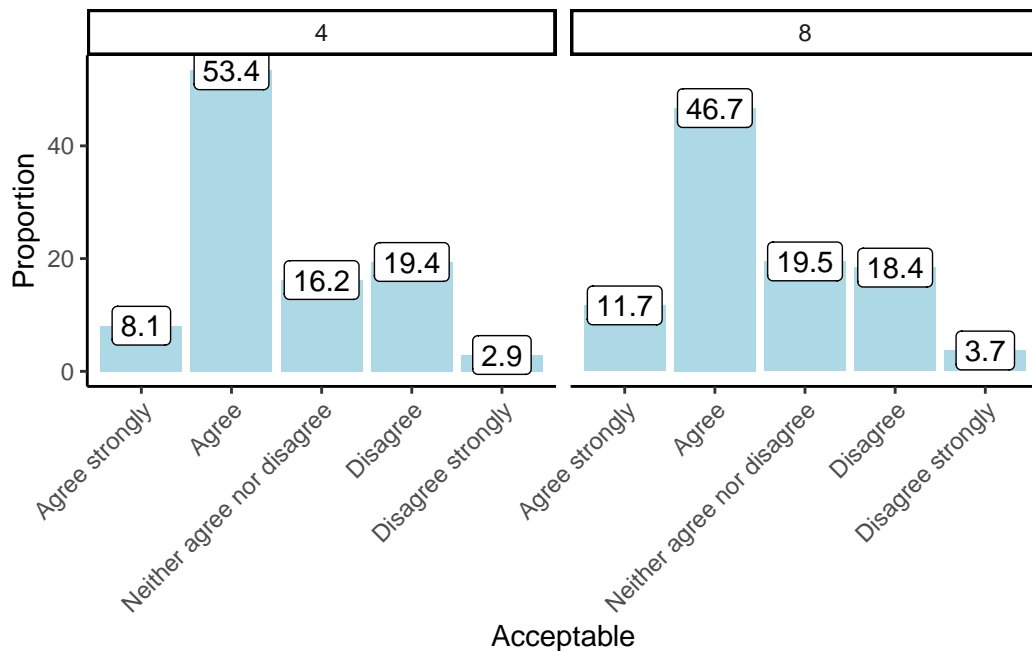


Figure 3.1: Distribution of ‘Large differences acceptable’ (2008 and 2016)

A multivariate analysis with the same explanatory variables from the model in Table 2.2 suggests that gender and class are not statistically significant predictors. However, respondents with worse financial situation tend to disagree more with this statement.

3.2 Deservingness

In this question, respondents were asked how much responsibility the government should have in relation to the following groups:

i Question wording

People have different views on what the responsibilities of governments should or should not be. For each of the tasks I read out please tell me on a score of 0-10 how much responsibility you think governments should have. 0 means it should not be governments' responsibility at all and 10 means it should be entirely governments' responsibility

“... ensure sufficient child care services for working parents”

“... ensure a reasonable standard of living for the old”

“...ensure a reasonable standard of living for the unemployed”

In the Figure 3.2, higher values denote higher government responsibility. On average respondents believe that the government should be more responsible for the old compared to working parents and unemployed. However, there was a reduction in this prioritisation for governments' responsibility in relation to older citizens and unemployed and increase in the average prioritisation for working parents.

```
df_ess |>
  filter(essround %in% c(4, 8)) |>
  group_by(round = as_factor(essround)) |>
  summarise(across(c("gvclcdr", "gvslvol", "gvslvue"), ~ weighted.mean(.x, w = pspwght, na
  pivot_longer(cols = -round, names_to = "Group", values_to = "mean") |>
  mutate(Group = case_match(Group, "gvclcdr" ~ "working parents", "gvslvol" ~ "old", "gvsl
  ggplot(aes(x = round, y = mean, group = Group, color = Group)) +
  geom_point() +
  geom_line() +
  geom_label(aes(label = round(mean, 1)))+
  theme_classic() +
  theme(legend.position="bottom")
```

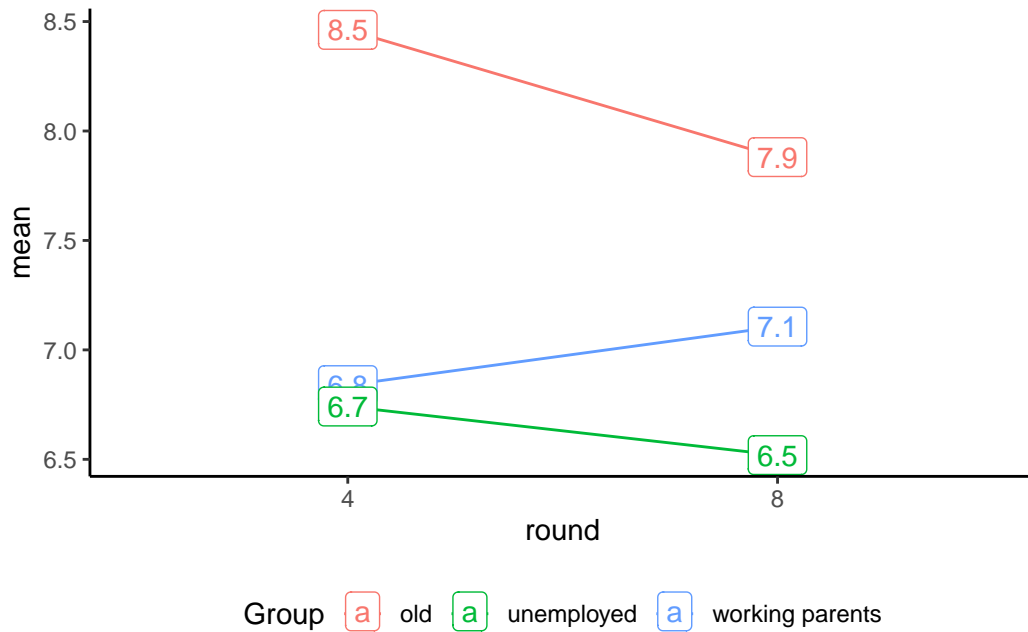


Figure 3.2: Mean values for deservingness of government support by group and round

3.3 Beliefs about social benefits

The module also included questions in relation to beliefs about the consequences of social benefits and services:

i Question wording

Using this card please tell me to what extent you agree or disagree that social benefits and services in [country]...

“...lead to a more equal society?”

“... make people lazy?”

“...make people less willing care for one another?”

“...prevent widespread poverty”

“...place too great strain on economy”

The average level of agreement remains similar comparing 2008 and 2016. The only exception is the average for “social benefits place too great strain on economy”, which observed a significant reduction in the level of agreement, as shown in Figure 3.3.

```

believe_vars <- c("sbeqsoc", "sblazy", "sblwcoa", "sbprvpv", "sbstrec")

df_ess <- df_ess |> mutate(across(all_of(believe_vars), ~ 6 - .x, .names = "{.col}_inv"))

believe_vars_inv <- c("sbeqsoc_inv", "sblazy_inv", "sblwcoa_inv", "sbprvpv_inv", "sbstrec_inv")

(df_ess |>
  filter(essround %in% c(4, 8)) |>
  group_by(round = as_factor(essround)) |>
  summarise(across(all_of(believe_vars_inv), ~ weighted.mean(.x, w = pspwght, na.rm = T)))
  pivot_longer(cols = -round, names_to = "Question", values_to = "mean") |>
  mutate(Question = case_match(
    Question,
    "sbeqsoc_inv" ~ "Lead to equal society",
    "sblazy_inv" ~ "Make people lazy",
    "sblwcoa_inv" ~ "Make people less willing to care",
    "sbstrec_inv" ~ "Put strain on economy",
    "sbprvpv_inv" ~ "Prevent poverty"
  )) |>
  ggplot(aes(x = round, y = mean, group = Question, color = Question)) +
  geom_point() +
  geom_line() +
  # geom_label(aes(label = round(mean, 1)))+
  theme_classic()) |>
  ggplotly()

```

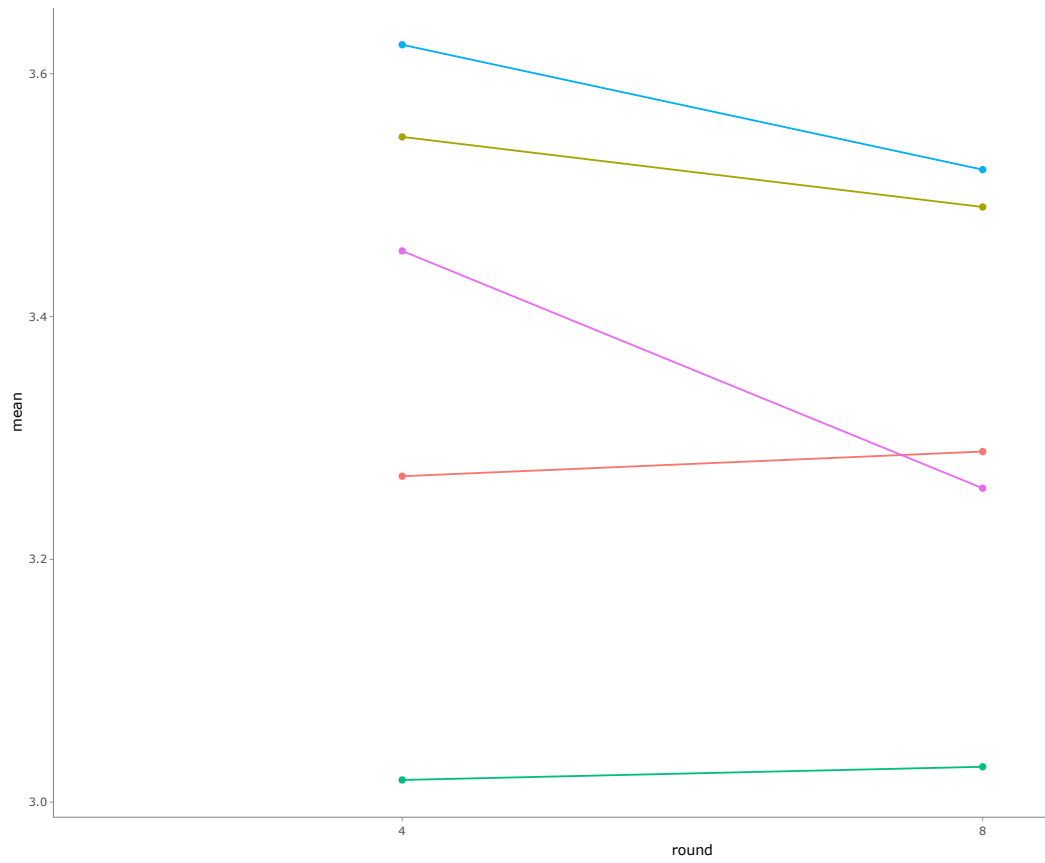


Figure 3.3: Mean values for beliefs in relation to social benefits by round

3.3.1 PCA

A Principal Components Analysis indicate that these five variables can be reduced to the following two latent dimensions named arbitrarily:

- **Protective** (PC1): “Lead to equal society” and “Prevent poverty”;
- **Disincentive** (PC2): “Make people lazy” and “Make people less willing to care”, and “Put strain on economy”.

The variables were aggregated within each dimension using the mean value of the non-missing answers. The Table 3.1 below shows the coefficients of two OLS explanatory models for these two dimensions.

The first model indicates that female respondents tend to provide a slightly lower score on the protective dimension of beliefs about social benefits. None of the other predictors included in the model are statistically significant.

The second model suggests that the group of “small business owners” and “skilled workers” have higher scores compared to respondents of other social classes. In addition, respondents with worse self-reported financial situation tend to disagree more with beliefs related to disincentive dimension of social beliefs.

```
vars_protect <- c("sbeqsoc_inv", "sbprvpv_inv")
vars_disinctv <- c("sblazy_inv", "sblwcoa_inv", "sbstrec_inv")

df_ess$protective <- rowMeans(select(df_ess, all_of(vars_protect)), na.rm = T)
df_ess$disincentive <- rowMeans(select(df_ess, all_of(vars_disinctv)), na.rm = T)

model_belief <- function(DV){
  model <- as.formula(paste0(DV, "~ factor(essround) + agea + as_factor(gndr) + as_factor(class5)"))
  lm(model, weights = pspwght, data = df_ess) |>
  tbl_regression(include = c("agea", "as_factor(gndr)", "as_factor(class5)", "as_factor(class6)"),
    bold_p(t = 0.05, q = FALSE)
}

tbl_merge(
  tbls = map(c("protective", "disincentive"), model_belief),
  tab_spanner = c("**Protective**", "**Disincentive**")) |>
  as_gt() |>
  gt::tab_source_note("Time fixed effects (ESS Round) omitted from the table but included in the model")
  tab_options(table.width = pct(80))
```

Table 3.1: OLS regression coefficients for ‘beliefs about social benefits’

Characteristic	Protective			Disincentive	
	Beta	95% CI ¹	p-value	Beta	95% CI ¹
Age of respondent, calculated	0.00	0.00, 0.00	< 0.001	0.00	0.00, 0.00
as_factor(gndr)					
Male	—	—		—	—
Female	-0.07	-0.12, -0.03	0.002	0.03	-0.02, 0.08
Final Oesch class position - 5 classes					
Higher-grade service class	—	—		—	—
Lower-grade service class	-0.03	-0.12, 0.05	0.4	0.09	0.00, 0.17
Small business owners	-0.05	-0.14, 0.04	0.3	0.12	0.03, 0.21
Skilled workers	-0.01	-0.08, 0.07	0.9	0.09	0.01, 0.16
Unskilled workers	0.00	-0.07, 0.08	>0.9	0.08	0.00, 0.16
as_factor(hincfel)					
Living comfortably on present income	—	—		—	—
Coping on present income	-0.03	-0.08, 0.02	0.3	-0.03	-0.08, 0.03
Difficult on present income	-0.07	-0.15, 0.00	0.067	-0.22	-0.30, -0.14
Very difficult on present income	-0.06	-0.18, 0.05	0.3	-0.48	-0.61, -0.30
Refusal	-0.20	-1.3, 0.87	0.7	-0.46	-1.6, 0.65
Don't know	0.84	0.39, 1.3	< 0.001	-0.53	-1.0, -0.05

¹CI = Confidence Interval

Time fixed effects (ESS Round) omitted from the table but included in the model

4 Covid19

```
library(tidyverse)
library(haven)
library(gt)
library(gtsummary)
library(plotly)

# Function to get the name of the latest file
get_latest <- function(file_pattern){
  file_list <- list.files(path = "./data", pattern = file_pattern)
  latest_file <- tail(sort(file_list), n = 1)
  return(latest_file)
}

# Read file in the root of sub-folder "data" with name containing "ESS"
df_ess <- read_dta(paste0("data/", get_latest("ESS")))
```

As shown in Figure 2.1, the ESS data indicates a slightly higher average support for redistribution after the 2008 economic crisis and after the 2022 Covid19 pandemic. Evidence from a survey experiment in the USA show that participants are more willing to prioritize society's problems when exposed to issues related to the pandemic (Cappelen et al. 2021). Van Hootehem and Laenen (2023) show that the increase in support for a universal basic income increased with the pandemic but it was short lived.

In this section we explore further the potential impact of the pandemic on support for redistribution.

4.1 Time series

Table 2.2 suggests that both social class and feeling about household income are significant predictors of support for redistribution. Figure 4.1 shows that the difference between subjective income groups remains stable over time, with all groups responding similar to 2008 crisis and the pandemic.

```

get_series <- function(myvar){

(df_ess |>
  filter(!is.na(get(myvar))) |>
  group_by(round = as_factor(essround), class = as_factor(get(myvar))) |>
  mutate(gincdif_inv = 6 - gincdif) |>
  summarise(
    mean = weighted.mean(gincdif_inv, w = pspwght, na.rm = T),
    se = sd(gincdif_inv, na.rm = T)/sqrt(length((gincdif_inv)))) |>
  ggplot(aes(x = round, y = mean, ymin = mean - 1.96*se, ymax = mean + 1.96*se, group = class)) +
  geom_pointrange() +
  geom_line()+
  ylim(3,4.5)+
  theme_classic()) |>
  ggplotly() |>
  layout(legend = list(orientation = "h", x = 0.4, y = -0.2))
}

get_series("hincfel")

```

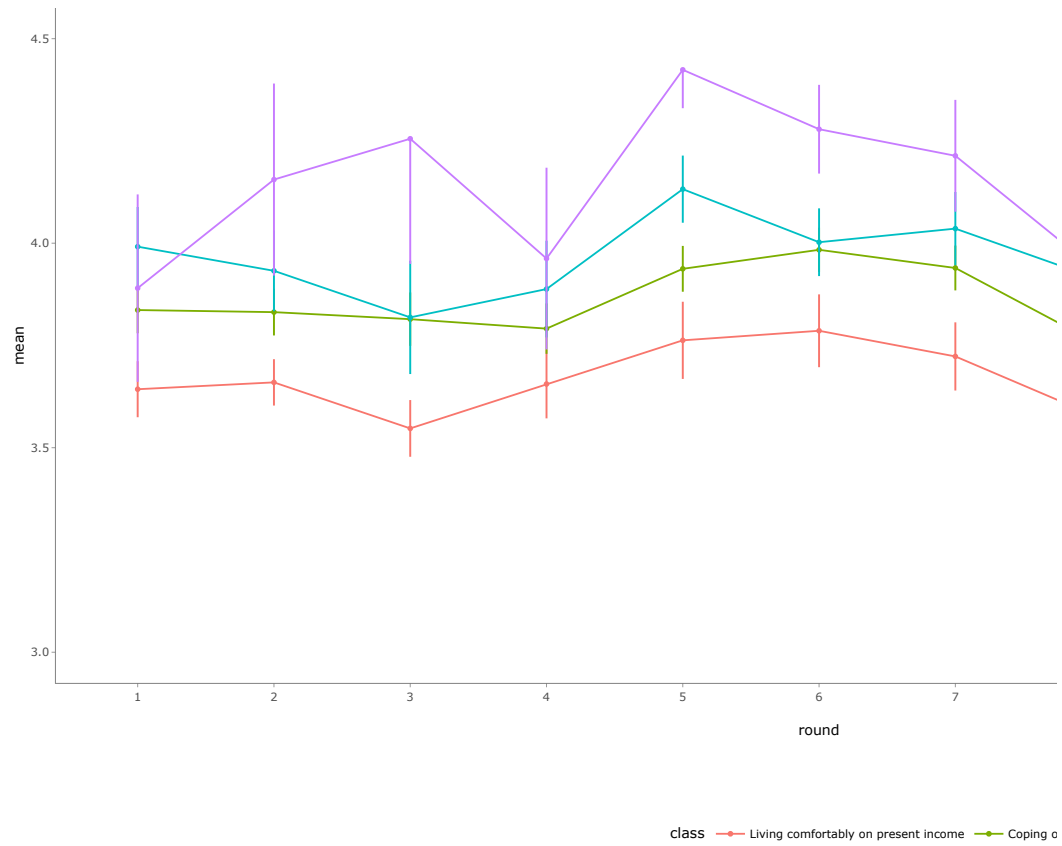


Figure 4.1: Average support for redistribution by financial situation (2002-2022)

Conversely, the Figure 4.2 suggests that there is a slightly different pattern in response to the pandemic. There is a trajectory of increasing support for redistribution across skilled and unskilled workers since round 8 (2016). However, for lower-grade service class and small business owners, there seems to be a break in this trajectory captured in the latest wave.

```
get_series("class5")
```

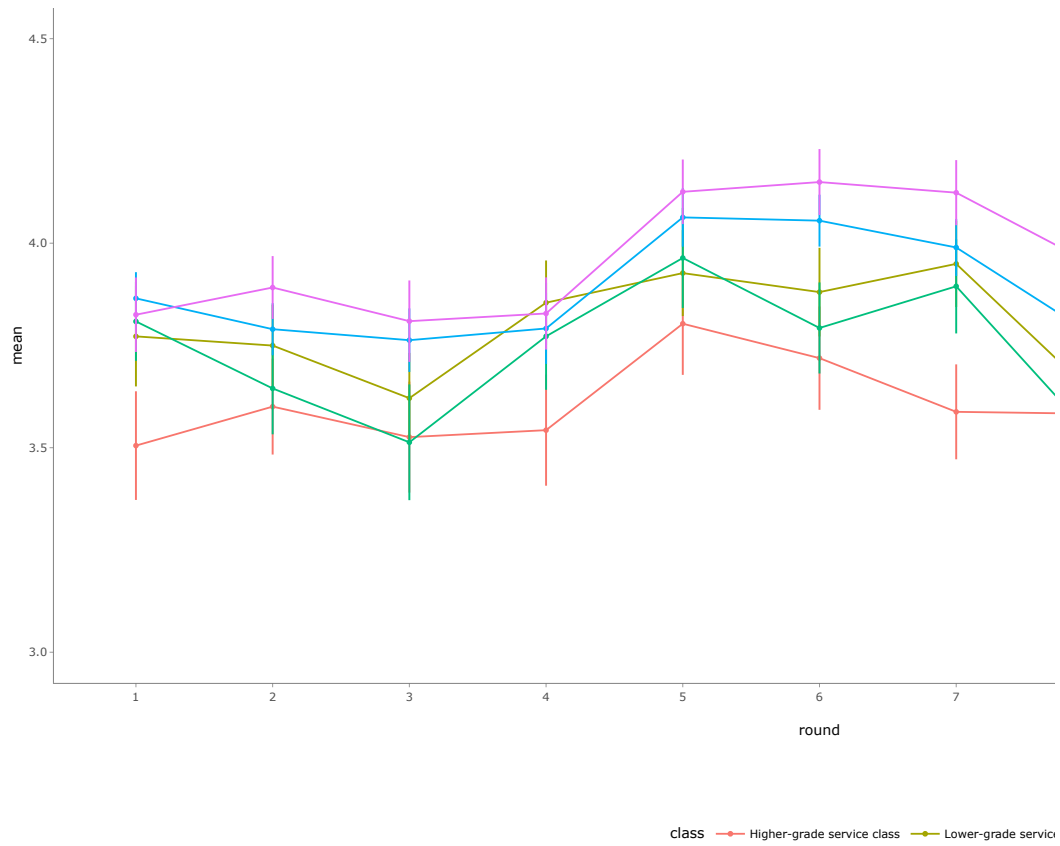


Figure 4.2: Average support for redistribution by social class (2002-2022)

4.2 Job loss

```
df_ess |>
  filter(!is.na(class5) & !is.na(hapnoc19)) |>
  mutate(
    impact = case_when(
      hapljc19 == 1 | hapfoc19 == 1 | hapfuc19 == 1 ~ "Lost job/unpaid leave/Forl.",
      hapirc19 == 1 | hapwrc19 == 1 ~ "Income / hours reduced",
      hapnoc19 == 1 ~ "Nothing",
      is.na(hapnoc19) ~ NA_character_,
      .default = "Other"
    )
  ) |>
  group_by(impact, class = as_factor(class5)) |>
  summarise(
    mean = weighted.mean(gincdif_inv, w = pspwght, na.rm = T),
    se = sd(gincdif_inv, na.rm = T)/sqrt(length((gincdif_inv)))) |>
  ggplot(aes(x = class, y = impact, fill = mean))+
  geom_tile() +
  scale_fill_distiller(palette = "RdBu", direction=1) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))

# ggplot(aes(x = class, y = mean, ymin = mean - 1.96*se, ymax = mean + 1.96*se)) +
# geom_pointrange() +
# coord_flip()+
# facet_wrap(~impact, nrow =1)
```

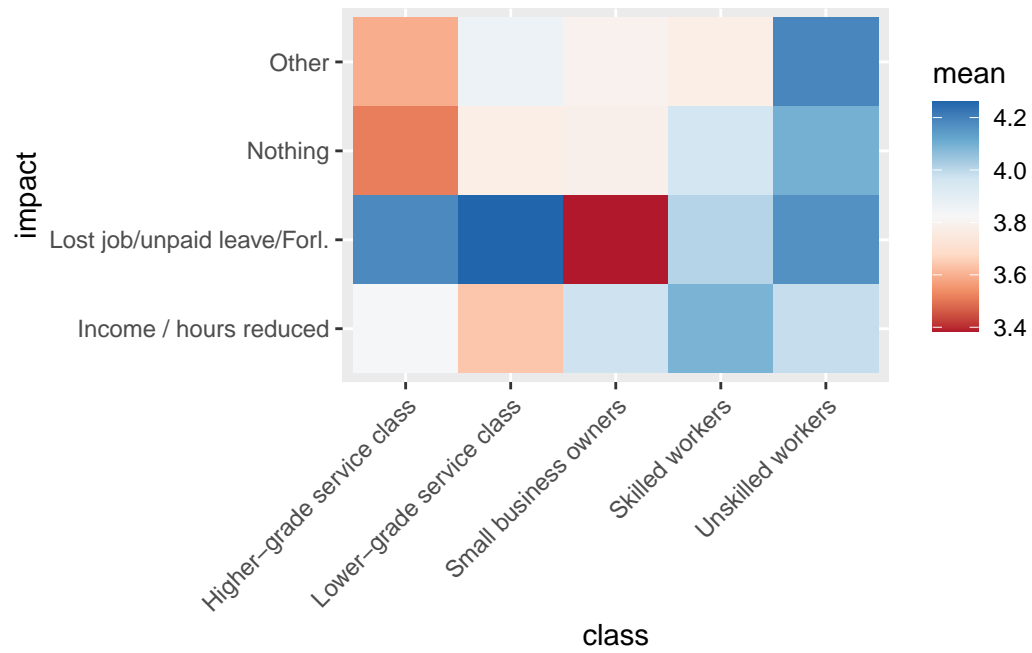



Figure 4.3: Average support for redistribution by social class (2002-2022)

5 Trust

In this section, we explore the hypothesis of the moderating role of trust in government and politicians (Breznau et al. (2025)).

```
library(tidyverse)
library(haven)
library(gt)
library(gtsummary)
library(plotly)

# Function to get the name of the latest file
get_latest <- function(file_pattern){
  file_list <- list.files(path = "./data", pattern = file_pattern)
  latest_file <- tail(sort(file_list), n = 1)
  return(latest_file)
}

# Read file in the root of sub-folder "data" with name containing "ESS"
df_ess <- read_dta(paste0("data/", get_latest("ESS")))
```

5.1 Trust in politicians

i Question wording

Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly... ..politicians?

```
get_series <- function(mygroup, myvar){
  (df_ess |>
    filter(!is.na(get(myvar)) & !is.na(get(mygroup))) |>
```

```

group_by(round = as_factor(essround), group = as_factor(get(mygroup))) |>
summarise(
  mean = weighted.mean(get(myvar), w = pspwght, na.rm = T),
  se = sd(get(myvar), na.rm = T)/sqrt(length((get(myvar))))) |>
ggplot(aes(x = round, y = mean, ymin = mean - 1.96*se, ymax = mean + 1.96*se, group = gr
geom_point() +
geom_line()+
ylim(0,9)+
theme_classic()) |>
ggplotly() |>
layout(legend = list(orientation = "h", x = 0.4, y = -0.2))
}

get_series("hincfel", "trstplt")

```

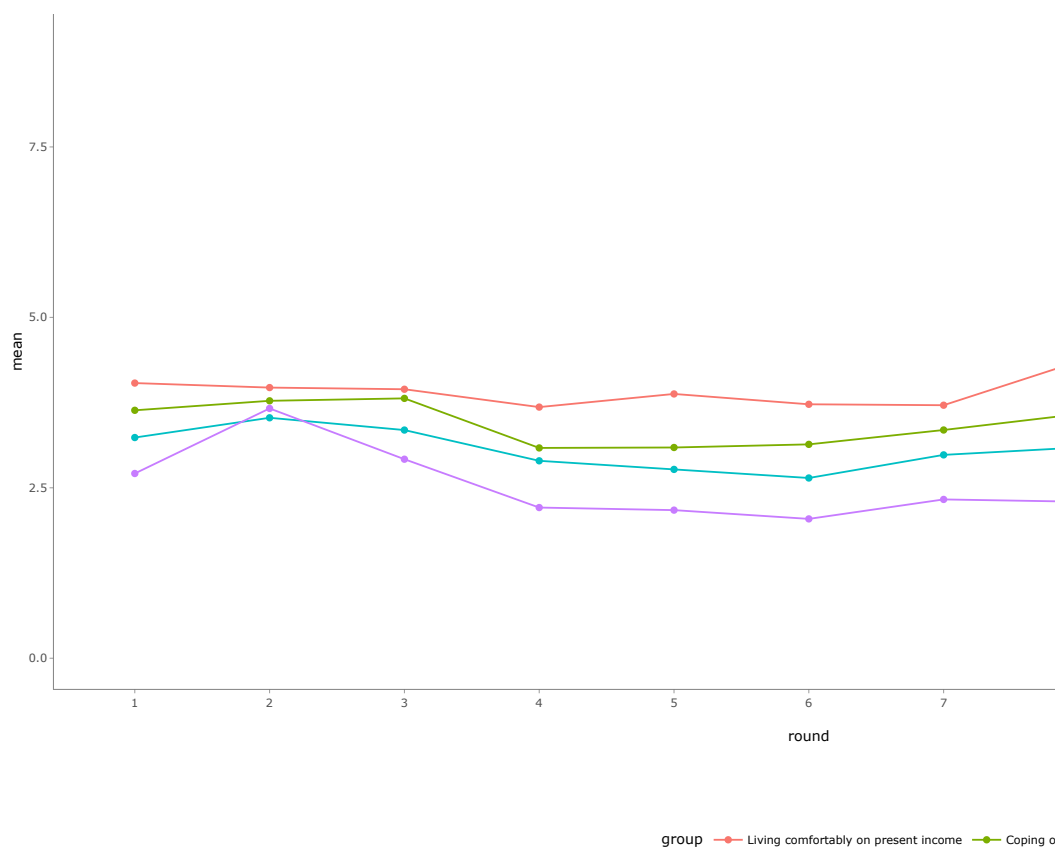


Figure 5.1: Average trust in politicians by subjective income group (2002-2022)

5.2 Satisfied with government

i Question wording

Now thinking about the [country] government, how satisfied are you with the way it is doing its job?

0 - Extremely dissatisfied

10 - Extremely satisfied

```
get_series("hincfel", "stfgov")
```

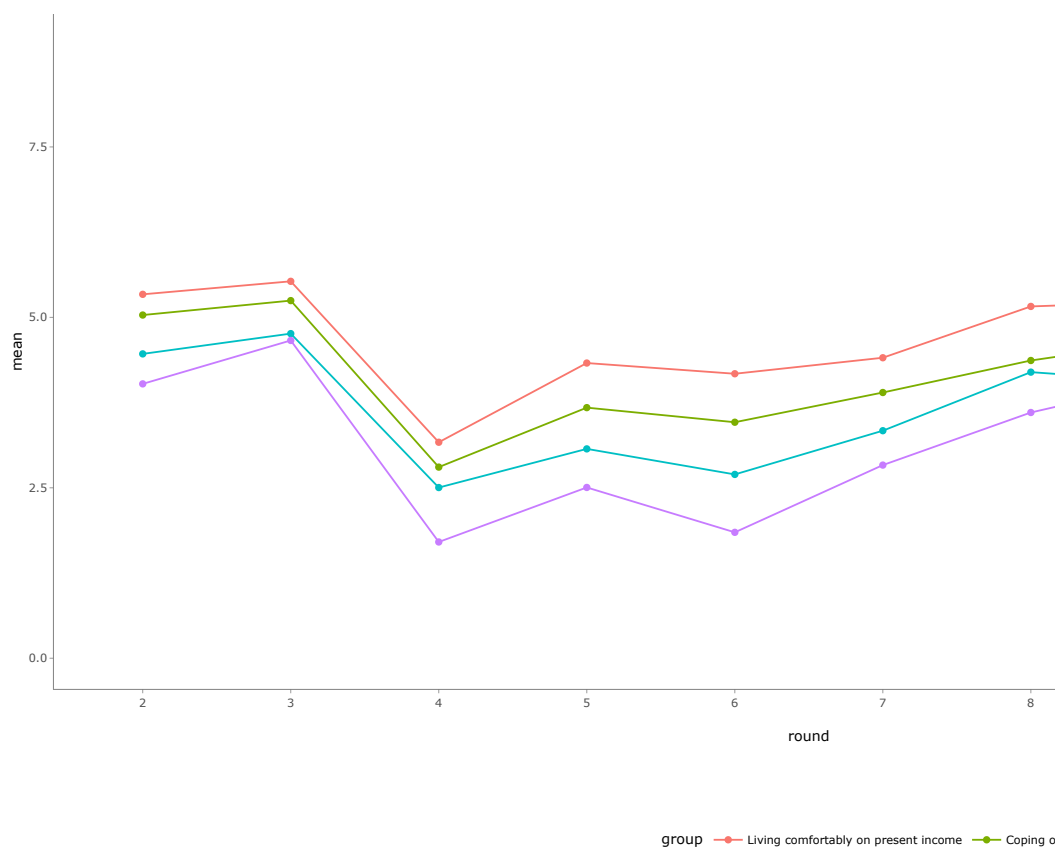


Figure 5.2: Average satisfaction with government by subjective income group (2002-2022)

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Annex: Data processing

European Social Survey (ESS)

Importing

Data downloaded from the European Social Survey [website](#) using the data builder.

The following file contain the cumulative dataset for Ireland across the 11 rounds available. A subset of relevant variables were selected before download.

```
library(tidyverse)
library(haven)

ess_ie <- read_dta("./data/ess/ess_ie.dta")
```

Invert scale of main outcome

Inverting scale of main outcome variable to denote stronger agreement with higher values.

```
ess_ie <- ess_ie |> mutate(gincdif_inv = 6 - gincdif)
```

Year / quarter

Adding column identifying the year and the quarter in which the interview has started.

```
get_quarter <- function(month){
  if_else(is.na(month), NA,
    if_else(month < 4, 1,
      if_else(month > 3 & month < 7, 2,
        if_else(month > 6 & month < 10, 3,
          if_else(month > 9 & month < 13, 4, NA))))))
}
```



```

ess_ie <-
  ess_ie |>
    mutate(
      interv_quarter = case_when(
        essround < 3 ~ paste0(inwyr, get_quarter(inwmm)),
        essround > 2 & essround < 10 ~ paste0(inwyys, get_quarter(inwmms)),
        essround > 9 ~ format(as.Date(inwds), "%Y%QQ")
      ),
      interv_year = case_when(
        essround < 3 ~ inwyr,
        essround > 2 & essround < 10 ~ inwyys,
        essround > 9 ~ as.numeric(format(as.Date(inwds), "%Y"))
      )
    )

```

Social class

Create [Oesch social class schema](#) from relevant columns in the dataset.

```
source("data/ess/Oesch_SocialClass.R")
```

```
[1] "The Oesch class schema has been successfully created."
```

Exporting

Exporting dataset with minimal set of variables.

```

ess_vars <- c(
  "cntry",
  "idno",
  "essround",
  "pspwght",
  "anweight",
  "agea",
  "gndr",
  "gincdif",
  "lrscale",
  "ctzcntr",
  "brncntr",
  "yrbrn",

```

```
"isco08",  
"isco08p",  
"emplrel",  
"emplno",  
"emprelp",  
"iscoco",  
"iscocop",  
"emplnop",  
"mnactic",  
"eduyrs",  
"eisced",  
"edulvla",  
"hincfel",  
"hinctnta",  
"gincdif_inv",  
"interv_quarter",  
"interv_year",  
"class5",  
"class8",  
"class16",  
"brnocnt",  
"stfgov",  
"trstplt",  
"nmnybsc",  
"smdfslv",  
"dfincac",  
"gvclcdr",  
"gvslvol",  
"gvslvue",  
"imsclbn",  
"sbeqsoc",  
"sblazy",  
"sblwcoa",  
"sbprvpv",  
"sbstrec",  
"uemplwk",  
"gvhanc19",  
"respc19",  
"hapljc19",  
"hapfuc19",  
"hapfoc19",  
"hapirc19",
```

```

    "hapwrc19",
    "hapnoc19"
  )

ess_ie <- ess_ie |> select(all_of(ess_vars))

write_dta(ess_ie, paste0("data/ESS_v", format(Sys.Date(), "%m%d"), ".dta"))

```

Voter Study (VS - European Elections Survey)

Importing

Data downloaded from the [GESIS website](#).

```

# Import individual files

vs_14 <- read_dta("./data/vs/ZA5160_v4-1-0.dta")
vs_19 <- read_dta("./data/vs/ZA7581_v2-0-1.dta")
vs_24 <- read_dta("./data/vs/ZA8868_v1-0-0.dta")

```

Combining files

The surveys from 2014, 2019 and 2024 are available in three different files. The following code renames the main columns to

```

vs_vars <- c("cntry", "idno", "agea", "gndr", "redist", "weight", "study")

vs_14 <-
  vs_14 |>
  mutate(
    study = "EES14",
    cntry = b,
    idno = respid,
    agea = vd11,
    gndr = as_factor(d10),
    redist = qpp17_2 - 1, # see coding (0 on quest is = to 1 in dataset)
    weight = wex
  ) |>
  select(all_of(vs_vars))

```

```

vs_19 <-
  vs_19 |>
  mutate(
    study = "EES19",
    agea = 2019 - D4_1,
    cntry = hCountry,
    idno = respid,
    gndr = as_factor(D3),
    redist = Q14_2,
    weight = WGT1

  ) |>
  select(all_of(vs_vars))

vs_24 <-
  vs_24 |>
  mutate(
    study = "EES24",
    cntry = country,
    idno = resp_id,
    agea = d4_age,
    gndr = as_factor(d3),
    redist = q12_2,
    weight = Weight2

  ) |>
  select(all_of(vs_vars))

```

The following code combines these three different files into one cumulative dataset.

```
vs_all <- bind_rows(vs_14, vs_19, vs_24)
```

Missing values for main outcome

Assigning common NA code to all non-valid observations.

```
vs_all$redist <- if_else(vs_all$redist < -1 | vs_all$redist > 11, NA, vs_all$redist)
```

Invert scale of main outcome

Assigning common NA code to all non-valid observations.

```
vs_all$redist_inv <- 10 - vs_all$redist  
vs_all |> count(redist, redist_inv)
```

```
# A tibble: 12 x 3
```

	redist		redist_inv	n
	<dbl+lbl>		<dbl>	<int>
1	0 [0 You fully favour redistribution from the rich to the ~		10	13750
2	1 [1]		9	3974
3	2 [2]		8	6350
4	3 [3]		7	8243
5	4 [4]		6	7058
6	5 [5]		5	15342
7	6 [6]		4	5693
8	7 [7]		3	5899
9	8 [8]		2	4319
10	9 [9]		1	1943
11	10 [10 You fully oppose redistribution of wealth from the r~		0	5500
12	NA		NA	4435

Select Ireland

Creating dataset with observation from Ireland only.

```
vs_ie <- vs_all |> filter(cntry == 8)
```

Exporting

```
write_dta(vs_ie, paste0("data/VS_v", format(Sys.Date(), "%m%d"), ".dta"))
```