

My document

First Extract the Data from the World Bank API using an R Script.

Extract

```
source("load_worldbank.R")
```

```
Installing package into '/usr/local/lib/R/site-library'  
(as 'lib' is unspecified)  
Installing package into '/usr/local/lib/R/site-library'  
(as 'lib' is unspecified)
```

Attaching package: 'dplyr'

The following objects are masked from 'package:stats':

```
filter, lag
```

The following objects are masked from 'package:base':

```
intersect, setdiff, setequal, union
```

```
[1] "Script is pulling 10 countries:  FRA, DEU, HUN, ITA, POL, ESP, SWE, NLD, NOR, DNK"  
[1] "Script is pulling 4 World Bank Indicators:  SL.UEM.TOTL.ZS, SI.POV.GINI, NY.GDP.PCAP.PP  
[1] "There are 10 Countries in the wb_data.csv:  Denmark, France, Germany, Hungary, Italy, N  
[1] "All Years in the wb_data.csv  1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969"
```

Transform

Use Python for Data Engineering and Data Cleaning.

```
exec(open("transform_merge_data_.py").read())
```

Status:Merged Together World Bank and EVS data

Here are the Country and Year Values we will be studying: [['Denmark', 'France', 'Germany',

Last Dataset, Manifesto Project will be merged with World Bank and EVS Data

Status: Merged Manifesto Project with World Bank and EVS Data

These are the countries and years in the final merged_dataframe [['Denmark', 'France', 'Germ

Saving Final Merged Dataframe to csv: merged_mpd.csv

<string>:12: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide

<string>:15: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide

<string>:55: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide

<string>:56: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide

```
merged_mpd <- read.csv("merged_mpd.csv")
```

Country and Partynames,

Country	New Radical Right Party
Denmark	Danish People's Party
France	National Front
Germany	Alternative for Germany
Hungary	Fidesz
Italy	Brothers of Italy
Italy	Northern League

Country	New Radical Right Party
Norway	Progress Party
Poland	Law and Justice Party
Sweden	Sweden Democrats

Create Dummy Variables for each New Radical Right Party.

```
## Dummy Variable for National Front, France's NRR Party.
merged_mpd$nf_dummy <- ifelse(merged_mpd$partyname == "National Front", 1, 0)

## Dummy Variable for Alternative for Germany, Germany's NRR Party.
merged_mpd$afd <- ifelse(merged_mpd$partyname == "Alternative for Germany", 1, 0)

## Dummy Variable for Voice(Vox), Spain's NRR Party.
merged_mpd$spain_dummy <- ifelse(merged_mpd$partyname == "Voice", 1, 0)

## Dummy Variable for Danish People's Party, Denmark's NRR Party.
merged_mpd$dk_dummy <- ifelse(merged_mpd$partyname == "Danish People's Party", 1, 0)

## Dummy Variable for Sweden Democrats, Sweden's NRR Party.
merged_mpd$sd_dummy <- ifelse(merged_mpd$partyname == "Sweden Democrats", 1, 0)

## Dummy Variable for Law and Justice, Poland's NRR Party.
merged_mpd$pd_dummy <- ifelse(merged_mpd$partyname == "Law and Justice", 1, 0)

## Dummy Variable for Progress Party, Norway's NRR Party.
merged_mpd$pp_dummy <- ifelse(merged_mpd$partyname == "Progress Party", 1, 0)

## Italy has Two New Radical Right Parties, Brothers of Italy is the Party of the current
merged_mpd$brothers_of_italy <- ifelse(merged_mpd$partyname == "Brothers of Italy", 1, 0)
merged_mpd$nord_league <- ifelse(merged_mpd$partyname == "Northern League", 1, 0)

## Fidesz has had multiple Coalitions with different Parties, so a dummy value for Each Coa
merged_mpd$fidesz_cdp <- ifelse(merged_mpd$partyname == "Alliance of Federation of Young D
merged_mpd$fidesz_hdfo <- ifelse(merged_mpd$partyname == "Federation of Young Democrats -
merged_mpd$fidesz_ <- ifelse(merged_mpd$partyname == "Federation of Young Democrats", 1, 0)
```

```
library(lme4)
```

Loading required package: Matrix

Running a Regression Model for each NRR Party. ##Hypothesis 1 Hypothesis 1:NRR Parties shift their Economic positions during rates of higher unemployment or to match European sentiments.

First lets look at the welfare positions of all NRR parties The welfare variable measures how pro-welfare, a political party is based on their manifestos. The higher the number, the more pro-welfare the party is. The lower the number, the more anti-welfare the party is.

##Welfare

```
library(stargazer)
```

Please cite as:

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

R package version 5.2.3. <https://CRAN.R-project.org/package=stargazer>

```
nrr_welfare <- (lm(welfare ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy + pd_dummy
party_names <- c("National Front", "Alternative for Germany", "Voice", "Danish People's Pa
               "Sweden Democrats", "Law and Justice", "Progress Party", "Brothers of Ita
               "Northern League", "Fidesz - HDFa")
stargazer(nrr_welfare, type = "text", title = "Welfare Regression",
          covariate.labels = party_names)
```

Welfare Regression

```
=====
Dependent variable:
-----
welfare
-----
National Front      -6.826***
                   (0.129)
```

Alternative for Germany	-5.623*** (0.202)
Voice	-0.363 (3.524)
Danish People's Party	2.360 (1.884)
Sweden Democrats	8.499*** (0.220)
Law and Justice	0.961 (2.035)
Progress Party	-5.093*** (1.063)
Brothers of Italy	-1.368*** (0.209)
Northern League	-6.165*** (0.092)
Fidesz - HDFa	-1.470 (3.524)
Constant	11.808*** (0.016)

Observations	108,629
R2	0.081
Adjusted R2	0.081
Residual Std. Error	4.984 (df = 108618)
F Statistic	952.063*** (df = 10; 108618)

Note: *p<0.1; **p<0.05; ***p<0.01

It appears that only as a whole many NRR parties have an inverse relationship with Pro-Welfare policies. National Front for example has tried to shift towards a Welfare Chauvinist position but overall they seem anti-welfare.

Let's try one multi-level regression to see if varies accross coderyear and add unemployment rates to see if there is a relationship between High Unemployment and welfare positions. The Coderyear refers to the year the manifesto was coded.

```
nrr_welfare_unemployment_multi_level <- lmer(welfare ~ nf_dummy + afd + spain_dummy + dk_d
summary(nrr_welfare_unemployment_multi_level)
```

Linear mixed model fit by REML ['lmerMod']

Formula: welfare ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy +
pd_dummy + pp_dummy + brothers_of_italy + nord_league + fidesz_hdfa +
SL.UEM.TOTL.ZS + (1 | coderyear)

Data: merged_mpd

REML criterion at convergence: 619708.9

Scaled residuals:

Min	1Q	Median	3Q	Max
-5.5282	-0.3345	0.1130	0.3488	7.1314

Random effects:

Groups	Name	Variance	Std.Dev.
coderyear	(Intercept)	13.75	3.708
	Residual	18.05	4.249

Number of obs: 108114, groups: coderyear, 28

Fixed effects:

	Estimate	Std. Error	t value
(Intercept)	20.656246	0.726581	28.429
nf_dummy	-9.862372	0.114125	-86.417
afd	-14.239216	0.179872	-79.163
spain_dummy	-2.645278	3.055708	-0.866
dk_dummy	-2.718631	1.636607	-1.661
sd_dummy	2.337130	0.194279	12.030
pd_dummy	-3.028304	1.776713	-1.704
pp_dummy	-6.836495	1.222491	-5.592
brothers_of_italy	-0.736334	0.185950	-3.960
nord_league	-3.921430	0.080786	-48.541
fidesz_hdfa	-3.789455	3.083544	-1.229
SL.UEM.TOTL.ZS	-0.823818	0.009242	-89.142

Correlation of Fixed Effects:

(Intr)	nf_dmm	afd	spn_dm	dk_dmm	sd_dmm	pd_dmm	pp_dmm	brth__
--------	--------	-----	--------	--------	--------	--------	--------	--------

```

nf_dummy      -0.028
afd           -0.012  0.019
spain_dummy   -0.004 -0.004 -0.001
dk_dummy      -0.025  0.004  0.002  0.009
sd_dummy      0.007 -0.015  0.071  0.001 -0.001
pd_dummy      -0.023  0.000  0.000  0.020  0.014  0.001
pp_dummy      -0.033  0.006  0.002  0.000  0.020 -0.002  0.007
brthrs_f_tl   -0.001  0.000  0.000  0.000  0.002  0.000  0.000  0.001
nord_league   -0.001  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
fidesz_hdfa   -0.018  0.003  0.001  0.000  0.008 -0.001  0.008  0.006  0.000
SL.UEM.TOTL   -0.119  0.230  0.083 -0.018  0.018 -0.064 -0.001  0.025 -0.001
              nrd_lg fdsz_h
nf_dummy
afd
spain_dummy
dk_dummy
sd_dummy
pd_dummy
pp_dummy
brthrs_f_tl
nord_league
fidesz_hdfa  0.000
SL.UEM.TOTL  0.000  0.011

```

As a whole it also, seems that there actually is a Inverse relationship of unemployment and Political parties becoming more pro-welfare. So, we can overall reject that NRR parties become more pro-welfare during a crisis.

Among Individual parties, National Front and AfD have a positive correlation with welfare policies during higher unemployment rates. However, their t-value is overall negative. The only NRR party with a positive t-value is the sd_dmm which is the Swedish Democrats.

##Market Economy

This regression below tests support for Market Economy with markeco variable. I have also added a E036 variable which is a pro-free-market variable from EVS, measuring European survey support Privatization

```

markeco_evs<- lmer(markeco ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy + pd_dummy
summary(markeco_evs)

```

Linear mixed model fit by REML ['lmerMod']

Formula: markeco ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy +

```

pd_dummy + pp_dummy + brothers_of_italy + nord_league + fidesz_hdfa +
SL.UEM.TOTL.ZS + (1 | coderyear)
Data: merged_mpd

```

REML criterion at convergence: 568763.7

Scaled residuals:

Min	1Q	Median	3Q	Max
-3.7113	-0.8775	-0.2115	0.2497	8.8903

Random effects:

Groups	Name	Variance	Std.Dev.
	coderyear (Intercept)	9.03	3.005
	Residual	11.27	3.357

Number of obs: 108114, groups: coderyear, 28

Fixed effects:

	Estimate	Std. Error	t value
(Intercept)	10.090819	0.587880	17.165
nf_dummy	2.798116	0.090167	31.033
afd	2.895708	0.142110	20.376
spain_dummy	5.722052	2.414249	2.370
dk_dummy	-3.470342	1.293106	-2.684
sd_dummy	-0.110240	0.153493	-0.718
pd_dummy	-0.853364	1.403877	-0.608
pp_dummy	8.577981	0.965931	8.881
brothers_of_italy	-1.532633	0.146913	-10.432
nord_league	1.021109	0.063826	15.998
fidesz_hdfa	-2.447553	2.436449	-1.005
SL.UEM.TOTL.ZS	-0.720533	0.007302	-98.678

Correlation of Fixed Effects:

	(Intr)	nf_dmm	afd	spn_dm	dk_dmm	sd_dmm	pd_dmm	pp_dmm	brth__
nf_dummy	-0.027								
afd	-0.012	0.019							
spain_dummy	-0.004	-0.004	-0.001						
dk_dummy	-0.024	0.004	0.002	0.009					
sd_dummy	0.006	-0.015	0.071	0.001	-0.001				
pd_dummy	-0.023	0.000	0.000	0.020	0.014	0.001			
pp_dummy	-0.033	0.006	0.002	0.000	0.020	-0.002	0.007		
brthrs_f_tl	-0.001	0.000	0.000	0.000	0.002	0.000	0.000	0.001	
nord_league	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
fidesz_hdfa	-0.018	0.003	0.001	0.000	0.008	-0.001	0.008	0.006	0.000


```

SL.UEM.TOTL -0.116  0.230  0.083 -0.018  0.018 -0.064 -0.001  0.025 -0.001
              nrd_lg fdsz_h
nf_dummy
afd
spain_dummy
dk_dummy
sd_dummy
pd_dummy
pp_dummy
brthrs_f_tl
nord_league
fidesz_hdfa  0.000
SL.UEM.TOTL  0.000  0.011

```

The T values of most parties except for dk_dummy(Denmark), sd_dummy(Sweden) and pp_dummy(Nirway), are postive , showing that most NRR parties are extremely pro-free_market.

The correlation of Fixed Effects, shows that Afd and National Front both have higher correlations of supporting more free-market policies during higher rates of unemployment. This is interesting as both parties have tried to shift towards a more pro-welfare position.

For the Scandinavian countries, Denmark,Sweden and Norway, only Sweden is shown to have a negative Cross-level interaction with unemployment and support for free-market policies. Overall it seems that NRR parties do not shift their economic positions to the center during increased time_periods of unemployment. It even seems that for NRR parties, increased unemployment means more support for free-market policies, more privatization to address the issue.

##European Values Survey

Now I want to see if NRR parties shift their positions to match European sentiments. I will use the E036 variable from the European Values Survey, which measures support for privatization. The higher the number, the more support for privatization.

```
markeco_evs<- lmer(markeco ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy + pd_dummy
```

fixed-effect model matrix is rank deficient so dropping 5 columns / coefficients

```
summary(markeco_evs)
```

```

Linear mixed model fit by REML ['lmerMod']
Formula: markeco ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy +
          pd_dummy + pp_dummy + brothers_of_italy + nord_league + fidesz_hdfa +
          E036 + (1 | coderyear)
Data: merged_mpd

```

REML criterion at convergence: 573586.6

Scaled residuals:

Min	1Q	Median	3Q	Max
-1.6244	-0.4876	-0.3980	0.2536	3.1684

Random effects:

Groups	Name	Variance	Std.Dev.
	coderyear (Intercept)	1.579	1.257
	Residual	12.211	3.494

Number of obs: 107399, groups: coderyear, 5

Fixed effects:

	Estimate	Std. Error	t value
(Intercept)	2.358811	0.562376	4.194
nf_dummy	4.857273	0.091480	53.096
afd	4.043232	0.147709	27.373
sd_dummy	-1.077579	0.159823	-6.742
brothers_of_italy	-1.539758	0.152967	-10.066
nord_league	1.025260	0.066493	15.419
E036	0.009058	0.003908	2.318

Correlation of Fixed Effects:

	(Intr)	nf_dmm	afd	sd_dmm	brth__	nrd_lg
nf_dummy	-0.001					
afd	-0.004	0.000				
sd_dummy	-0.004	0.000	0.078			
brthrs_f_tl	-0.005	0.000	0.000	0.000		
nord_league	-0.002	0.000	0.000	0.000	0.000	
E036	-0.019	0.005	-0.005	0.004	0.000	0.000

fit warnings:

fixed-effect model matrix is rank deficient so dropping 5 columns / coefficients

There seems to be an overall weak relationship European support for privatization and NRR parties. The Cross Correlation among individual NRR parties shows very weak levels of correlation.

Now let's try looking at the EVS Value for welfare, E037, the higher the number , the more a survey respondent supports Government providing welfare assistance.

```
welfare_evs<- lmer(welfare ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy + pd_dummy
```

fixed-effect model matrix is rank deficient so dropping 5 columns / coefficients

```
summary(welfare_evs)
```

Linear mixed model fit by REML ['lmerMod']

Formula: welfare ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy +
pd_dummy + pp_dummy + brothers_of_italy + nord_league + fidesz_hdfa +
E037 + (1 | coderyear)

Data: merged_mpd

REML criterion at convergence: 621990

Scaled residuals:

Min	1Q	Median	3Q	Max
-2.6922	-0.4563	0.0753	0.2513	3.8054

Random effects:

Groups	Name	Variance	Std.Dev.
coderyear	(Intercept)	15.72	3.965
	Residual	19.16	4.378

Number of obs: 107399, groups: coderyear, 5

Fixed effects:

	Estimate	Std. Error	t value
(Intercept)	12.590982	1.773388	7.100
nf_dummy	-7.541325	0.114614	-65.797
afd	-12.941148	0.185050	-69.933
sd_dummy	1.174483	0.200223	5.866
brothers_of_italy	-0.712060	0.191634	-3.716
nord_league	-3.913562	0.083299	-46.982
E037	-0.043332	0.004895	-8.853

Correlation of Fixed Effects:

	(Intr)	nf_dmm	afd	sd_dmm	brth__	nrd_lg
nf_dummy	-0.001					

```

afd          -0.002  0.000
sd_dummy     -0.002  0.000  0.078
brthrs_f_t1 -0.002  0.000  0.000  0.000
nord_league -0.001  0.000  0.000  0.000  0.000
E037         -0.014  0.016 -0.009  0.007  0.000  0.000
fit warnings:
fixed-effect model matrix is rank deficient so dropping 5 columns / coefficients

```

Overall, there is a Negative Correlation in Political Parties becoming more pro-welfare and Europeans being more Pro-welfare at the same time. It's an inverse relationship.

Hypothesis 2: NRR parties shift their stance on immigration during higher migration rates. They also adopt anti-multicultural policies due to European sentiments.

```

immigration<- lmer(per601_2 ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy + pd_dummy

```

```

fixed-effect model matrix is rank deficient so dropping 2 columns / coefficients

```

```

summary(immigration)

```

```

Linear mixed model fit by REML ['lmerMod']
Formula: per601_2 ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy +
  pd_dummy + pp_dummy + brothers_of_italy + nord_league + fidesz_hdafa +
  SM.POP.NETM + (1 | coderyear)
Data: merged_mpd

```

```

REML criterion at convergence: 35390.3

```

```

Scaled residuals:
    Min      1Q  Median      3Q      Max
-3.847 -0.622 -0.024  0.005 33.516

```

```

Random effects:
 Groups      Name      Variance Std.Dev.
coderyear (Intercept) 0.2369   0.4868
Residual                0.6981   0.8355
Number of obs: 14256, groups:  coderyear, 7

```

```

Fixed effects:
              Estimate Std. Error t value
(Intercept)    2.430e-01  1.994e-01   1.219

```

nf_dummy	3.825e+00	8.357e-01	4.577
afd	7.533e+00	3.699e-02	203.655
spain_dummy	3.686e+00	6.009e-01	6.134
dk_dummy	1.496e+01	5.934e-01	25.203
sd_dummy	3.475e+00	3.929e-02	88.447
pd_dummy	-8.450e-01	6.009e-01	-1.406
pp_dummy	1.567e+00	6.055e-01	2.589
brothers_of_italy	8.907e-01	3.657e-02	24.356
SM.POP.NETM	1.172e-06	5.844e-08	20.054

Correlation of Fixed Effects:

	(Intr)	nf_dmm	afd	spn_dm	dk_dmm	sd_dmm	pd_dmm	pp_dmm	brth__
nf_dummy	-0.001								
afd	0.005	-0.001							
spain_dummy	-0.016	0.000	0.003						
dk_dummy	-0.009	0.000	-0.001	0.017					
sd_dummy	-0.010	0.007	0.000	-0.002	0.001				
pd_dummy	-0.017	0.000	-0.003	0.033	0.017	0.003			
pp_dummy	-0.047	0.000	0.000	0.001	0.000	0.000	0.001		
brthrs_f_tl	-0.003	0.000	0.000	0.000	0.003	0.000	0.000	0.003	
SM.POP.NETM	-0.032	0.016	-0.300	-0.010	0.004	0.237	0.010	0.001	0.000

fit warnings:

fixed-effect model matrix is rank deficient so dropping 2 columns / coefficients
Some predictor variables are on very different scales: consider rescaling

Swedish Democrats seem to be the only NRR party that really has a Positive Correlation of Anti-Immigrant policy and Immigration Statisitcs. National Front has a positive weak correlation between migration rates and anit-Immigrant policy.

Now one last model to see if NRR parties adopt anti-multicultural policies during higher migration rates, and if it has relations with European sentiment, by adding the EVS variable G043, measuring anti-multiculturalism attitudes among europeans.

```
anti_multicultural_model<- lmer(per607_2 ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_d
```

fixed-effect model matrix is rank deficient so dropping 7 columns / coefficients

```
summary(anti_multicultural_model)
```

Linear mixed model fit by REML ['lmerMod']

Formula: per607_2 ~ nf_dummy + afd + spain_dummy + dk_dummy + sd_dummy +

```
pd_dummy + pp_dummy + brothers_of_italy + nord_league + fidesz_hdfa +
SM.POP.NETM + G043 + (1 | coderyear)
Data: merged_mpd
```

REML criterion at convergence: 30189.8

Scaled residuals:

Min	1Q	Median	3Q	Max
-1.3052	-0.7428	-0.4951	0.5253	2.7002

Random effects:

Groups	Name	Variance	Std.Dev.
	coderyear (Intercept)	0.004368	0.06609
	Residual	0.495935	0.70423

Number of obs: 14100, groups: coderyear, 2

Fixed effects:

	Estimate	Std. Error	t value
(Intercept)	3.115e-01	4.911e-02	6.344
afd	-2.016e+00	3.121e-02	-64.602
sd_dummy	-6.684e-01	3.313e-02	-20.176
brothers_of_italy	-3.487e-01	3.082e-02	-11.316
SM.POP.NETM	3.850e-06	4.917e-08	78.296
G043	-4.575e-06	2.100e-03	-0.002

Correlation of Fixed Effects:

	(Intr)	afd	sd_dmm	brth__	SM.POP
afd		0.015			
sd_dummy	-0.054	0.000			
brthrs_f_tl	-0.029	0.000	0.002		
SM.POP.NETM	-0.139	-0.301	0.235	0.003	
G043	-0.245	0.000	0.000	0.000	0.031

fit warnings:

fixed-effect model matrix is rank deficient so dropping 7 columns / coefficients
Some predictor variables are on very different scales: consider rescaling

The model overall shows a inverse relationship that Europeans are not as anti-multicultural overall as NRR parties and there is no correlation between NRR parties becoming more anti-multicultural and Europeans becoming more anti-multicultural. Although there is a small slight correlation between European becoming more anti-multicultural as migration rates increase.