A CLOSER LOOK AT 2017 ELECTION

Freie Demokraten

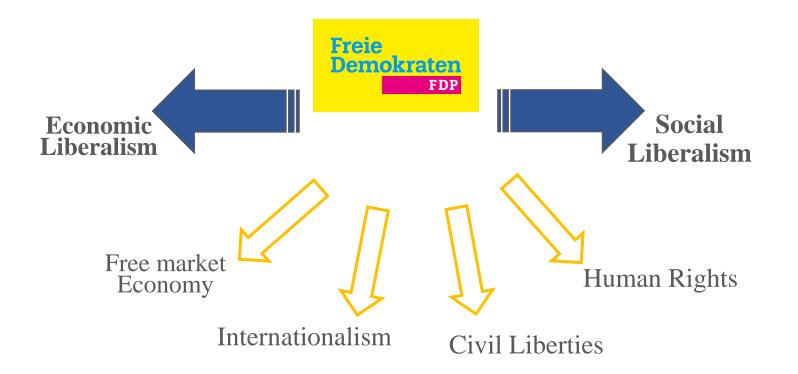
Karthik Kannepalli

November 2019

FDP



Fact sheet



Founded: 12 December 1948

Chairman: Christian Lindner



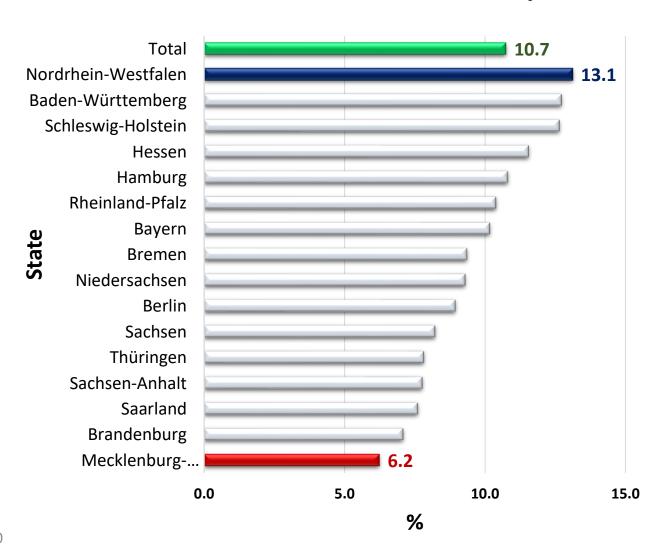


Education Digitalization

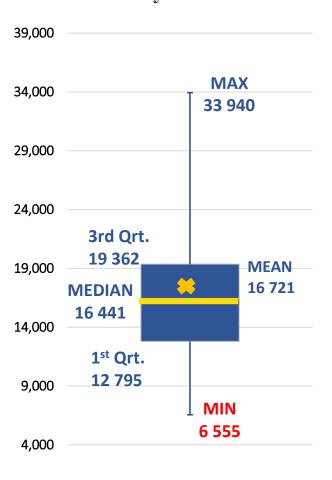


Descriptive statistical information

Share of votes for FDP out of valid votes by state



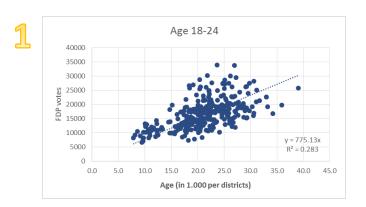
Distribution of the FDP votes by districts

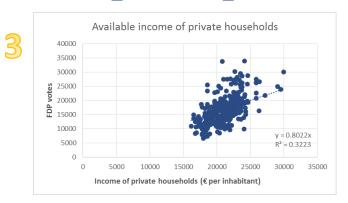


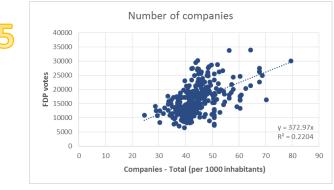
FDP

Die Liberalen

Statics Breakdown: scatterplots, parameters correlation







Age 18-24 vs. FDP voters

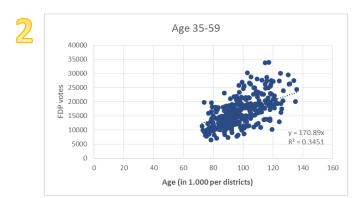
| Сс | rrelation | 0.58 |
|----|-----------|----------|
| | P-value | 1.96E-28 |

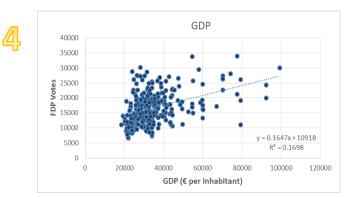


| Correlation | 0.63 |
|-------------|----------|
| P-value | 1.87E-34 |



| _ | - 1 | |
|---|-------------|----------|
| | Correlation | 0.47 |
| | P-value | 4.24E-18 |





| | | Unem | oloym | ent Rat | e total | | |
|------------------------------------|----|--------|-------|---------|---------|----------------|------------|
| 40000 | | | | | | | |
| 35000 | | | | | | | 11.5x + 20 |
| 30000 | | | | • • | | R ² | = 0.0884 |
| 2 25000 | | | | • | | | |
| 25000 2 0000 2 15000 | 00 | No. of | | | | • | |
| 15000 | | | | | | • | _ |
| 10000 | | 30 | | | | | • |
| 5000 | | | | • | | | |
| 0 | | | | | | | |
| 0 | 2 | 4 | 6 | 8 | 10 | 12 | 14 |

Age 35-59 vs. FDP voters

| 7186 33 33 13 | TIDI VOCCIS |
|---------------|-------------|
| Correlation | 0.61 |
| P-value | 1.7E-31 |



| Correlation | 0.41 | | |
|-------------|----------|--|--|
| P-value | 1.03E-13 | | |



| Correlation | -0.3 | | |
|-------------|---------|----------|--|
| | P-value | 1.55E-07 | |

5/28/2020 4



Multi-regression Analysis

Regression Analysis: Number of votes versus Age (35-59), Income, Migration

Model Summary

Multiple R R-sq (adj) Standard error 61.8% 61.3% 3255.5

Coefficients

| Term | Coefficient | Standard error Coef. | T-Stat | P-value |
|--|-------------|----------------------|--------|---------|
| Intercept | -27255.7 | 2780 | -9.8 | 0.000 |
| Age - 35-59 | 119.68 | 17.4 | 6.86 | 0.000 |
| Income of private households (€ per inh-t) | 1.21 | 0.11 | 10.9 | 0.000 |
| Age 18-25 | 211.8 | 44.8 | 4.72 | 0.006 |
| Unemployment rate | 341.6 | 102.1 | 3.35 | 0.000 |



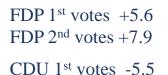
Regression Equation

FDP votes = -27255.6 +1.21*Income + 119.8 *Age (35-39) + 211.8 Age + 341.8*Unemployment

FDP

Die Liberalen

A closer look at the results



CDU 2nd votes -7.1

1st populated

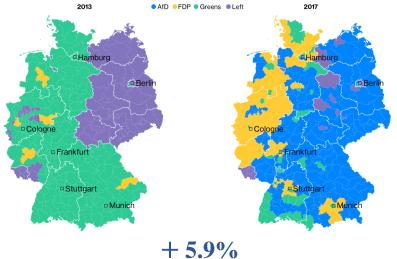
1st youngest (18.24, 35-59)

1st available income

1st sum of companies

1st sum of employed

1st rate of unemployment



• 38.6% university qualification

- 27.4% employed in industries
- 28.2% employed in services and others ******
- Population growth upon immigrations: 14,800
- Foreigner population: 11.8% ******
- Unemployment rate7.6%
- Recipients of unemployment benefit II and of social allowance: 96,100
- Foreigners receiving social benefit allowance: 33%

FDP 1st votes +5.7 FDP 2nd votes +6.5

CDU 1st votes -11.8 CDU 2nd votes -11.3

3rd populated

3rd youngest (18.24, 35-59)

3rd available income

3rd sum of companies

3rd sum of employed

3rd rate of unemployment

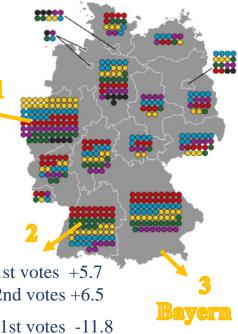
• 35.9% employed in industries • 24.0% employed in services and others ******

• Population growth upon immigrations: 15,700

• Foreigner population: 13.9%

• 29.4% university qualification

- Unemployment rate 3.7%
- Recipients of unemployment benefit II and of social allowance: 43,400
- Foreigners receiving social benefit allowance: 39.1%



List Seat Results