

# The effect of changing news frames

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# Motivation



# Media effects - maximal or minimal? I

Maximal paradigm also follows from classic work:

- attitude instability (Converse 1962; Zaller 1992)
- agenda-setting (McCombs and Shaw 1972)
- framing (Nelson, Clawson, and Oxley 1997)

# Media effects - maximal or minimal? II

Minimal effects assumption with increasing media diversity (Bennett and Iyengar 2008):

- media environment more polarised and more diverse,
- viewers more likely to reject news conflicting with their views,
- viewers can opt for other sources.

→ strong effects unlikely

# Empirical evidence I

## Evidence for large effects

- Framing effects found in experimental data (Busby, Flynn, and Druckman 2019; Leeper and Slothuus 2020).
- Newspaper slant affects attitudes (Foos and Bischof 2020).
- Salience and tonality of migration news affects attitudes (Boomgaarden and Vliegenthart 2009).

## Evidence for no/weak effects

- Newspaper slant has no effect on attitudes (Gentzkow, Shapiro, and Sinkinson 2011; Guess et al. 2021; Štětka, Mihelj, and Tóth 2020).
- Newspaper takeovers have no effect on attitudes (Durante and Knight 2012; Spirig 2020).

# Synthesis

**When** can we expect strong media effects?

- Many current approaches test media effects of different outlets (Gentzkow, Shapiro, and Sinkinson 2011; Guess et al. 2021).
- However, **news consumers discount bias and take cues from outlets.**
  - Baum and Gussin (2008) show that consumers take heuristics about content bias from outlet brands.
  - Chiang and Knight (2011) show that outlet bias moderates the effect of candidate endorsements.

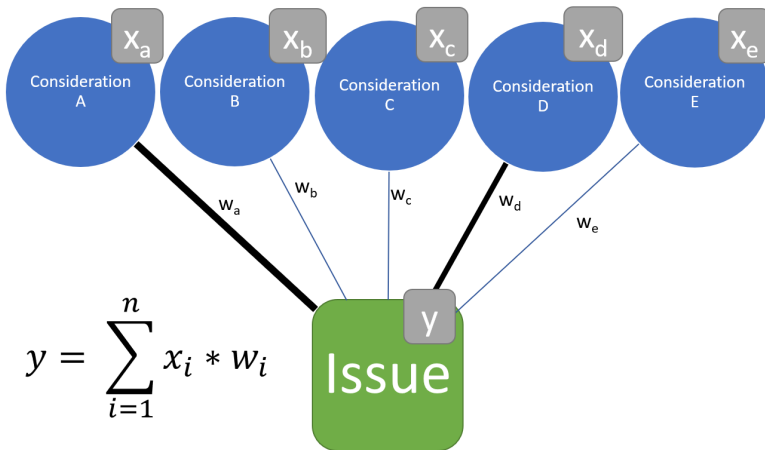
→ **within-outlet changes** in content most likely cases to observe media effects.

# Emphasis framing I

## What kind of changes should matter?

- I draw on literature on
  - the **value-expectancy** framework (Ajzen and Fishbein 2000).
  - and **emphasis framing** (Leeper and Slothuus 2020; Nelson, Clawson, and Oxley 1997).
- Argues that issue attitudes are a product of **associated considerations**.

# Emphasis framing II





# The case: Germany 2017

- First election after 2015 refugee movements.
- Radical-right challenger party enters parliament, center loses.
- Migration top of the agenda.

→ constantly strong attention to migration,

→ good case to study effects of framing.

# Design

- Collect 2.5M articles from major German newspapers.
- Classify according to migration content.
- Identify emphasis frames.
- Correlate changes in framing with changes in attitudes.

# Issue attitudes and news consumption I

- Panel data from the German Longitudinal Election Study (GLES 2019).
- Contains questions on news consumption and immigration and integration attitudes.
- 6 waves in 2017, containing both items.
- Immigration attitude measured on a 7-point Likert scale:
  - *“Immigration should be made easier (-3) or restricted (3).”*

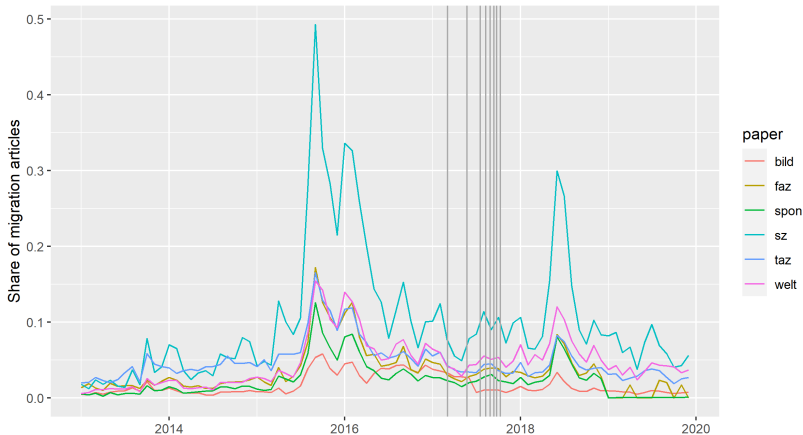
# Migration content I

- Pre-assign likelihoods for migration content using extended migration dictionary.
- Draw stratified sample of 1,800 articles, hand-code.
- Fine-tune German BERT deep-learning classifier.
- Performs very well: F1: 0.94, recall: 0.93, precision: 0.95.
- 13.5k out of 400k articles in 2017 about migration (3.5%)

# Migration content II

## Migration salience in different newspapers

Gray lines indicate survey waves



# Migration framing I

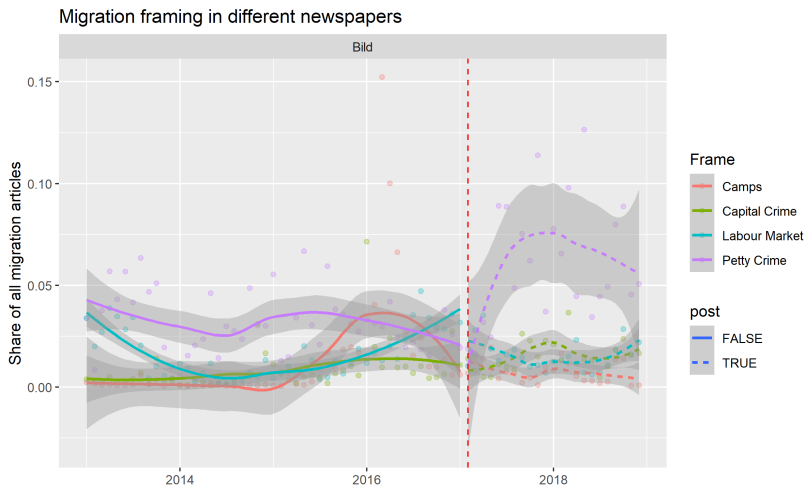
- Estimate 60-topic structural topic model (Roberts et al. 2014), using date and paper as covariates.
- Annotate.
- Select relevant frames with clear expectations regarding attitudinal effects.

# Migration framing II

## Topics:

- Capital crime (sexual assault/rape/murder) committed by refugees,
- illegal entry and petty crime,
- refugee numbers,
- labour market needs for and job market integration of refugees,
- deportations,
- internment camps (e.g. Moria),
- drownings in the Mediterranean.

# Migration framing III





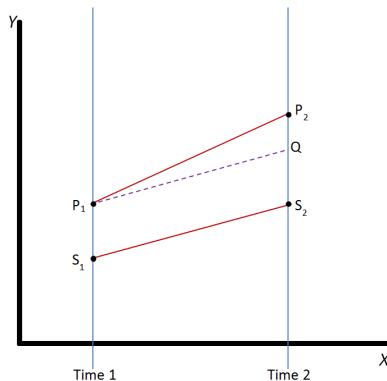
# Estimation

*Two models:*

- OLS of aggregate Difference-in-Differences (DiDs).
- Individual-level model with 2-way fixed effects.

# DiD-model I

$$y = \beta_1 * W + \beta_2 * R + \beta_3 * W * R$$



# DiD-model II

- Estimate change in newspaper framing and attitudes among readers from one wave to another, controlling for shifts in other newspapers/reader groups.
- Regress opinion shift among readership on shift in newspaper attention to different frames.
- Better identified (exact change *beyond* general trend),
- but framing not individually matched.

## 2-way FE model I

- Individual estimate of frame attention for each respondent, according to newspaper read.
- Regress opinion on exposure to each frame,
- controlling for wave and individual fixed-effects.

## 2-way FE model II

- Individual estimates,
- but explains *all* variation beyond
  - time-independent individual factors and
  - general trends across time,
  - including random individual deviations.

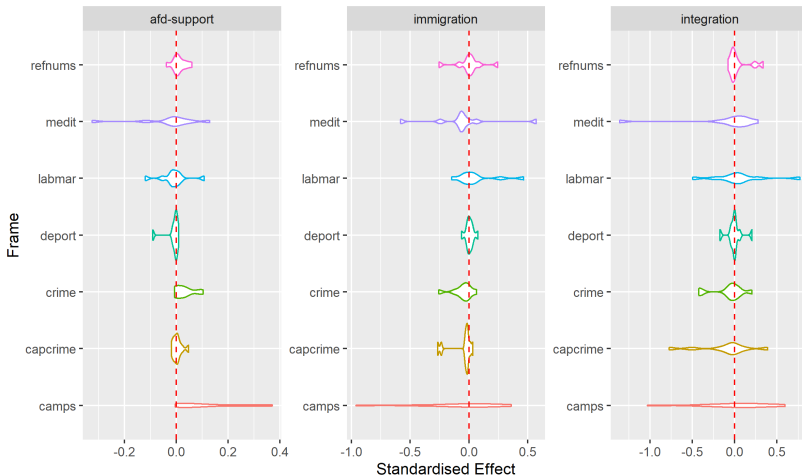
# Preliminary results

Different specifications:

- all readers/exclusive readers of one newspaper,
- different lags to measure exposure (1 day, 1 week, 1 month, half a year),
- immigration and integration attitude as dependent variable.

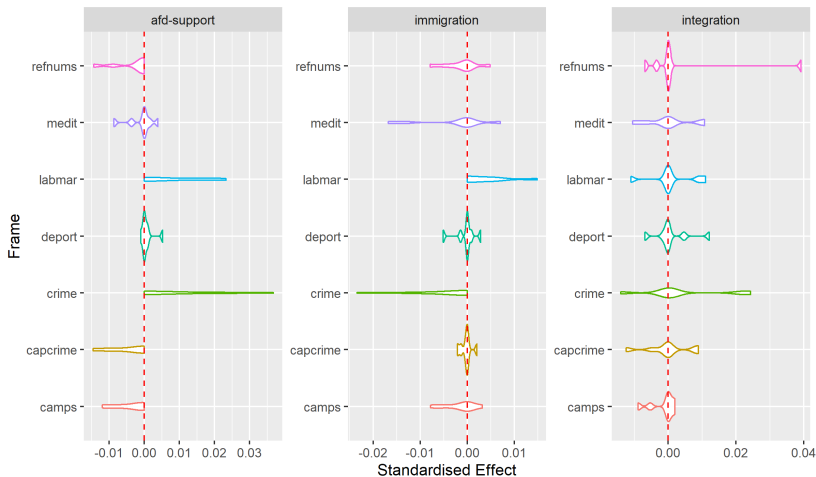
# Difference-in-Difference model I

Framing effects in DiD-models across specifications



# Fixed-effect model

Framing effects in 2-way FE-models across specifications





# Preliminary conclusion

- No effects of media framing even in most-likely case.
- *However*, many possible explanations:
  - Measurement issues,
  - Issue-sorting in 2015, subsequent “digging in,”
  - too little variation in dependent.

→ further work necessary. . .

# Further hypotheses

- Motivated reasoning and polarisation (Taber and Lodge 2006).
- Readers respond by changing outlet (Arceneaux and Johnson 2013).
- Mobilisation, not attitudinal change (Gentzkow, Shapiro, and Sinkinson 2011; Štětka, Mihelj, and Tóth 2020).

# To-do's up next

- Clump frames together for holistic picture.
- Estimate effect on readership, attitude polarisation, and AfD-support.
- Natural experiment (again)?

# Fin

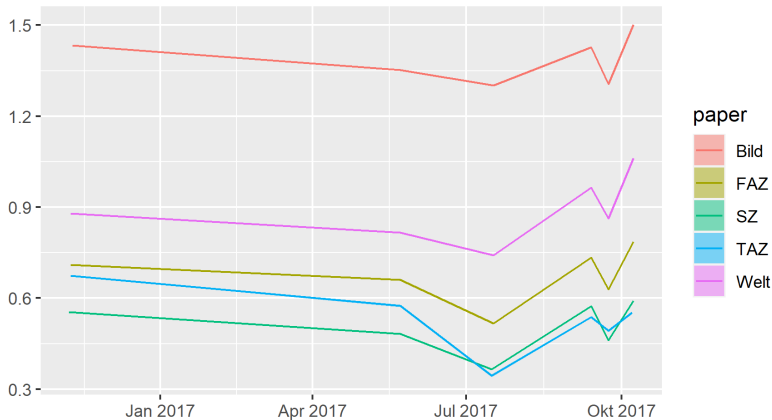
*Thank you!*

# Variation dependent variable I

## Immigration attitude among newspaper-readers

Should immigration of foreigners be made easier (-3) or restricted (3)

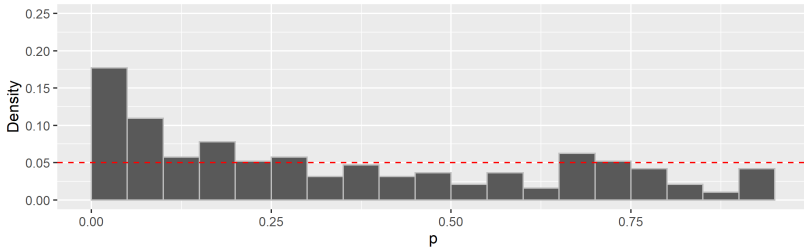
Data: GLES Panel; waves 1, 3, 4, 6, 7, 8



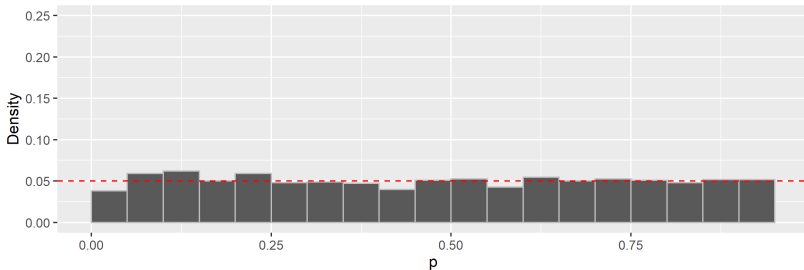
# Variation dependent variable II

## P-values from 192 fixed-effect DiD-models

Treatment = wave, condition = media outlet consumption



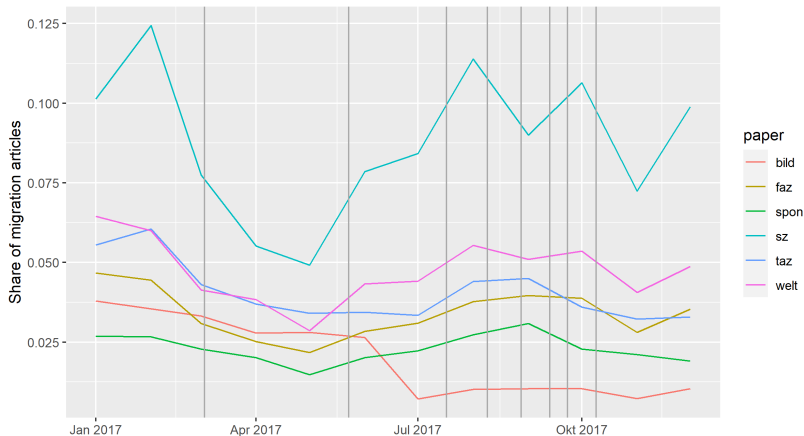
## Theoretical distribution of p-values with no effect of media consumption



# Salience I

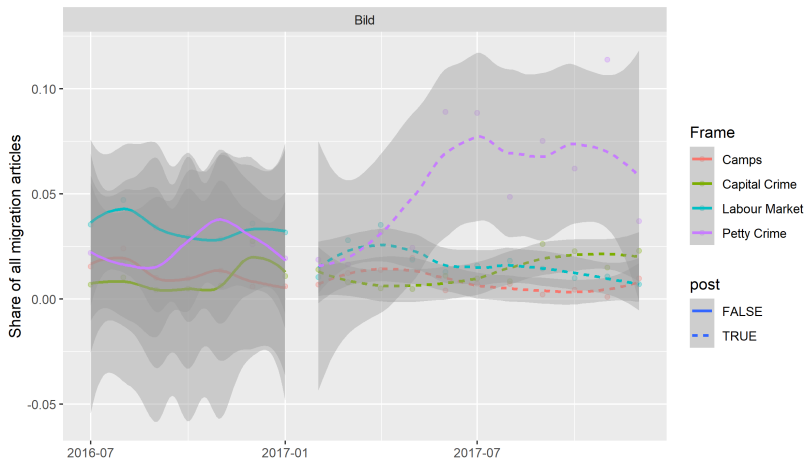
## Migration salience in different newspapers

Gray lines indicate survey waves



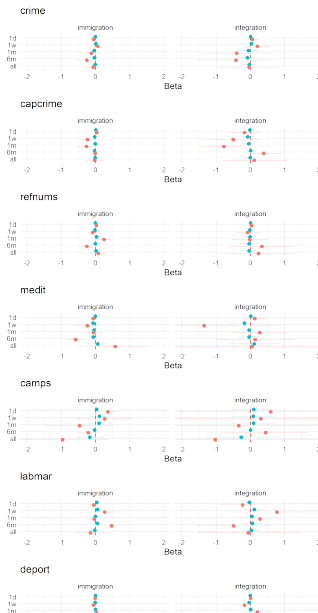
# Framing attention I

Migration framing in different newspapers

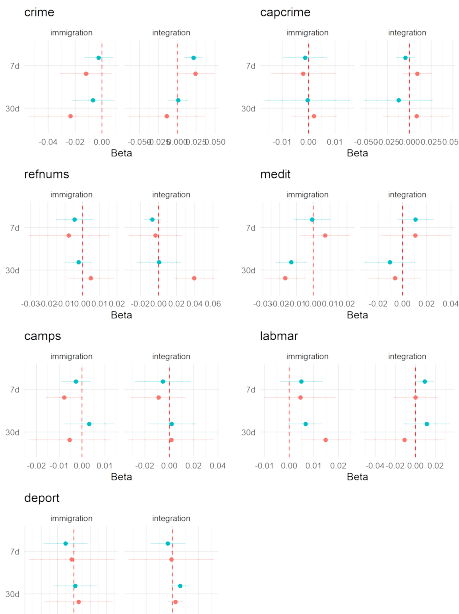




# Specifications DiD



# Specifications 2-way FE



# Resources I

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## Resources IV

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<https://doi.org/10.1093/oxfordhb/9780190860806.013.4>.

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