

The effect of changing news frames

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Oct 14th, 2021



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.

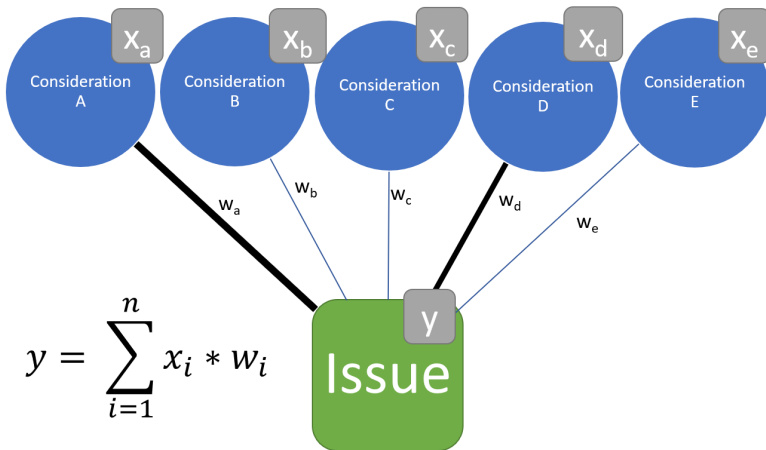
→ **within-outlet changes** in content most likely cases to observe media effects.

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, immigration and integration attitudes, as well as party preference.
- Dependent variables:
 - Immigration attitude (7-point scale).
 - Integration attitude (7-point scale).
 - Attitude toward AfD (11-point scale).

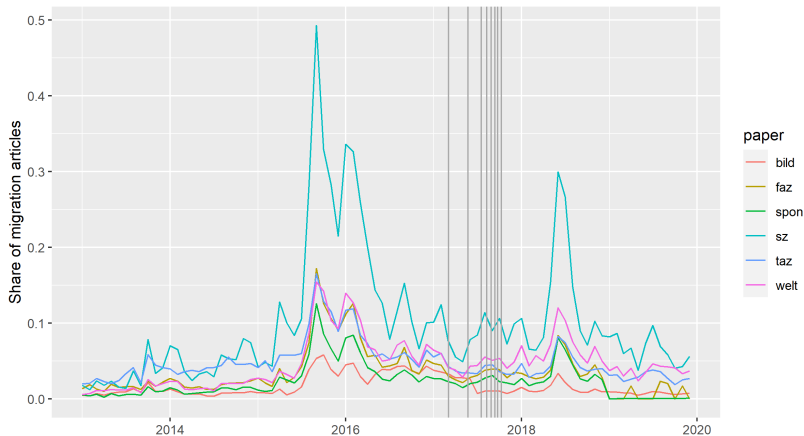
Migration content I

- 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.

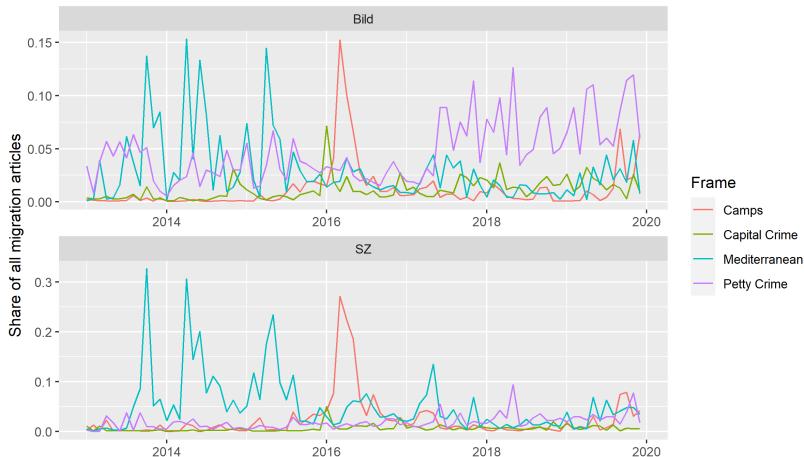
Migration framing II

Topics:

- Capital/sexual crime committed by refugees,
- general 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

Migration framing in different newspapers



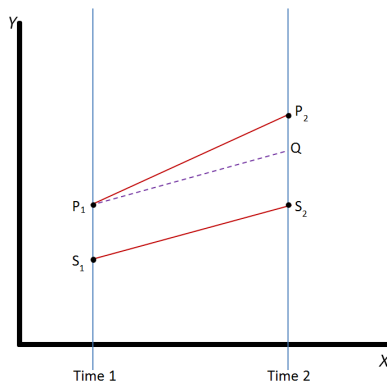
Estimation

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.

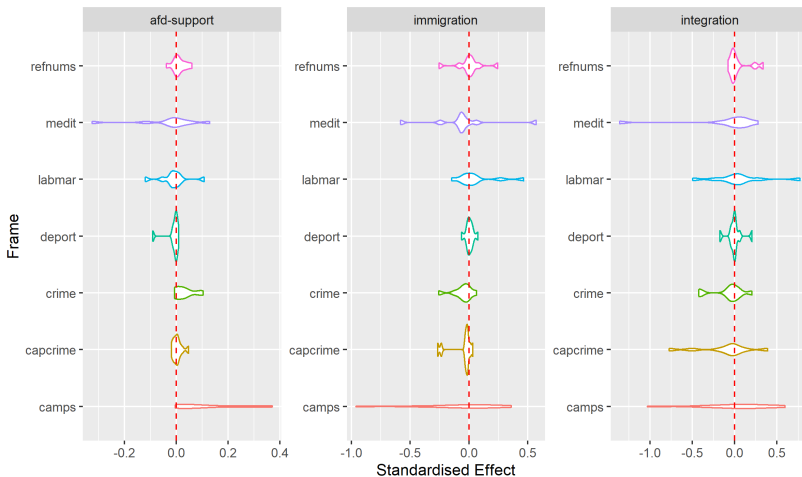
Preliminary results

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.

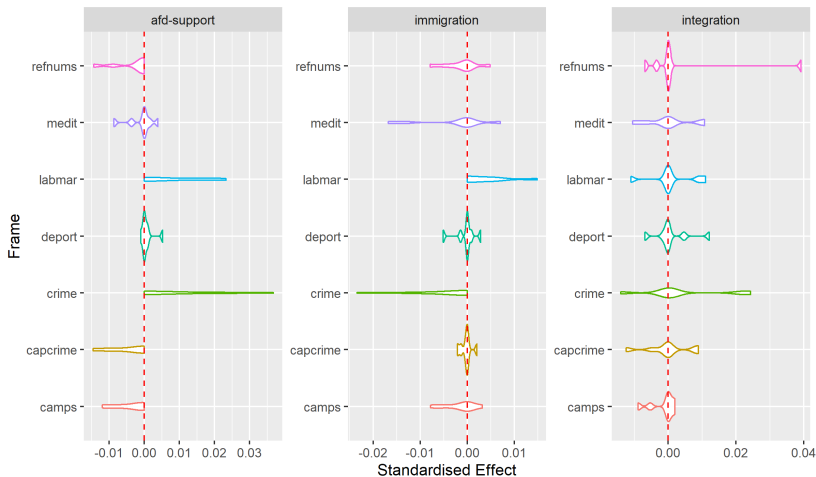
Difference-in-Difference model I

Framing effects in DiD-models across specifications



Fixed-effect model

Framing effects in 2-way FE-models across specifications



Preliminary conclusion I

No effects of media framing even when considering within-outlet changes.

Preliminary conclusion II

However, other possible explanations:

- Issue-sorting in 2015, subsequent “digging in,”
- Measurement issues (esp. news exposure).

→ further work necessary. . .

Next steps (possibly paper #2)

Theoretical additions:

- Test if readers respond by **stopping to read newspaper** (Arceneaux and Johnson 2013; Chiang and Knight 2011).
- Assess **issue sorting** (Carmines and Stimson 1986) across time.

Empirical additions:

- (Alternative measure of association: diachronic embeddings? embedding topic model?)
- (Back to natural experiment?)
- (More cases?)

Motivation
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Literature and Theory
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Empirical strategy
oooooooooooo

Preliminary results
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Appendix
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Resources
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Fin

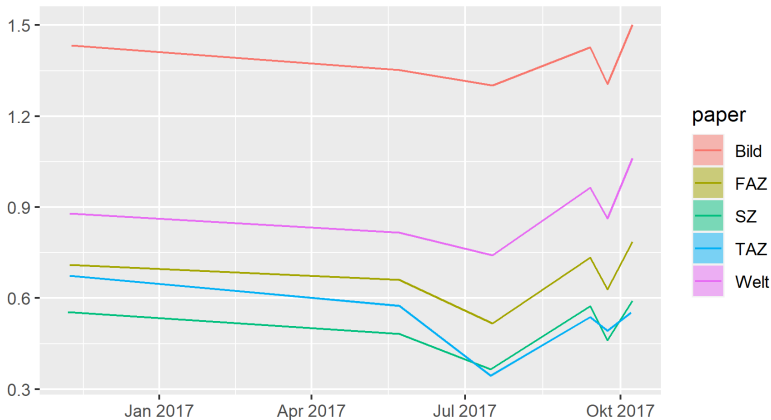
Thank you!

Variation dependent variable I

Immigration attitude among newspaper-readers

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

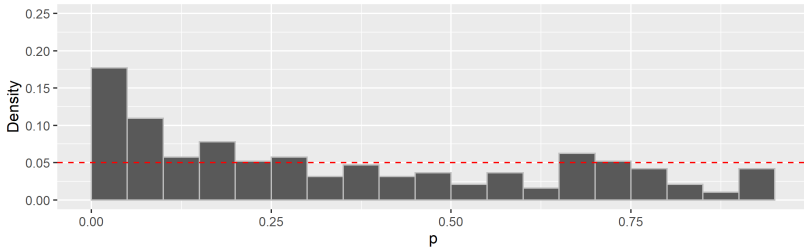
Data: GLES Panel; waves 1, 3, 4, 6, 7, 8



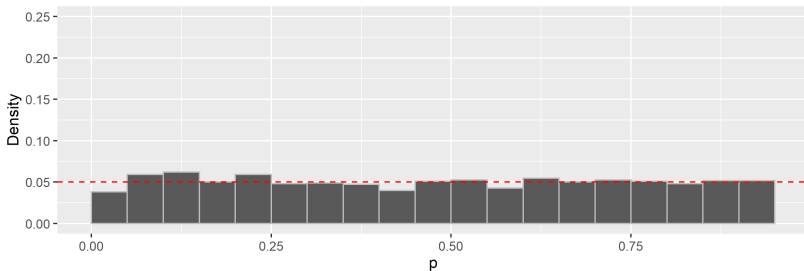
Variation dependent variable II

P-values from 192 fixed-effect DiD-models

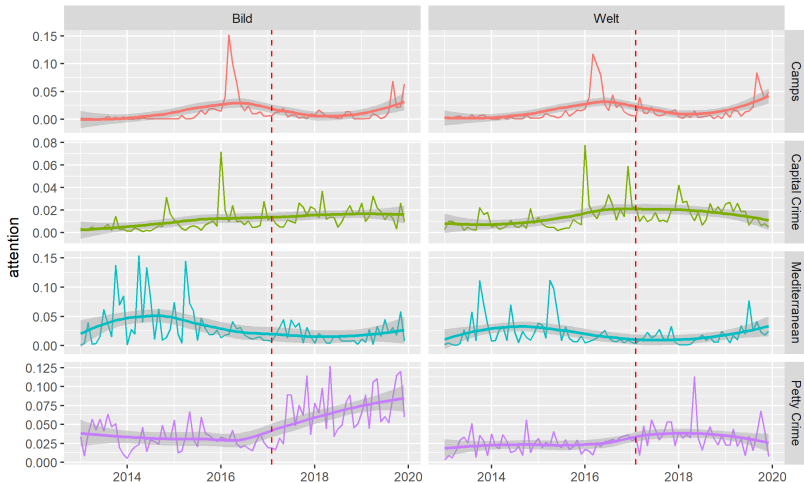
Treatment = wave, condition = media outlet consumption



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



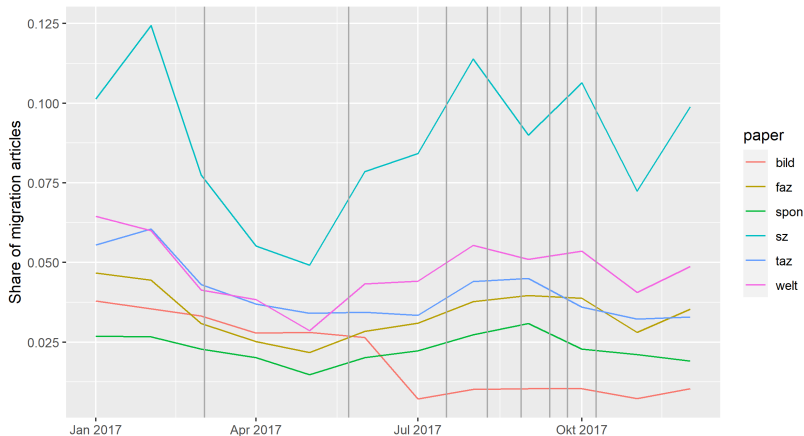
Potential natural experiment



Salience I

Migration salience in different newspapers

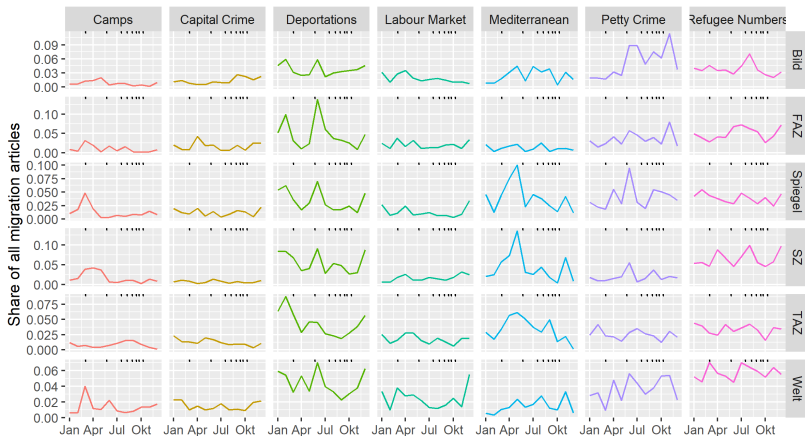
Gray lines indicate survey waves



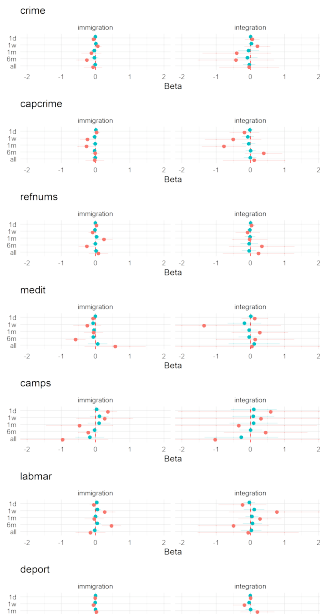
Framing attention I

Migration frames in different newspapers 2017

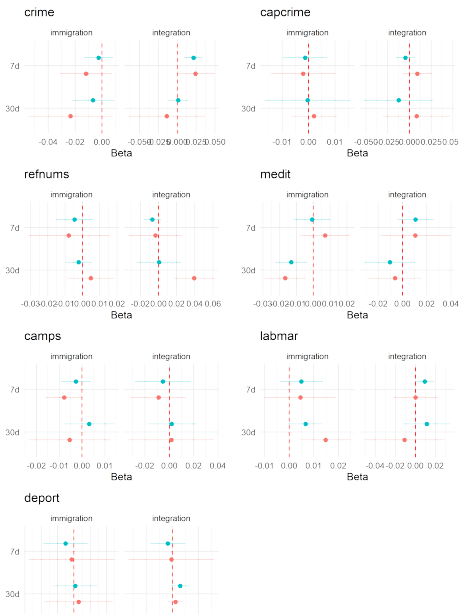
Black ticks indicate survey waves



Specifications DiD



Specifications 2-way FE



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Resources II

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

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Resources VII

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