

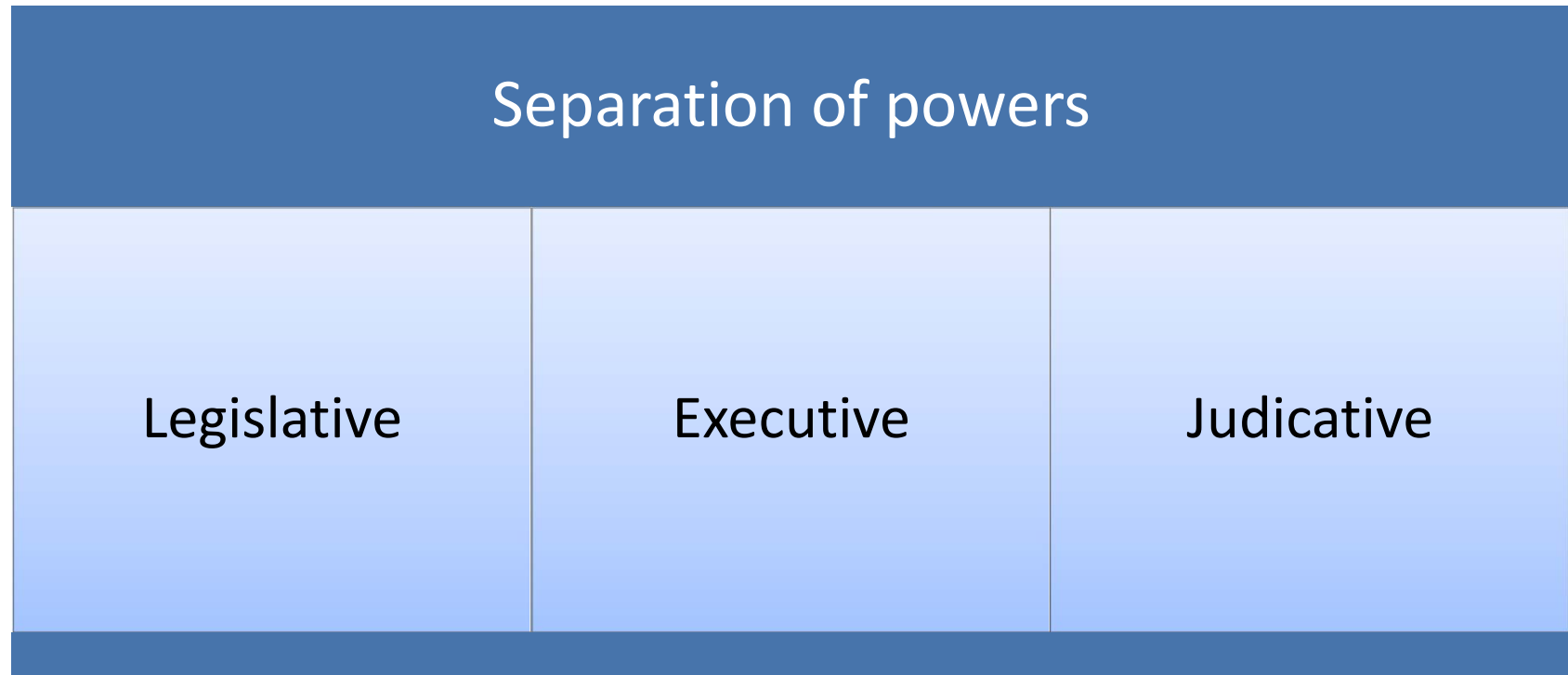
# Agenda-Setting about wasteful public spending: Germany

October 2012

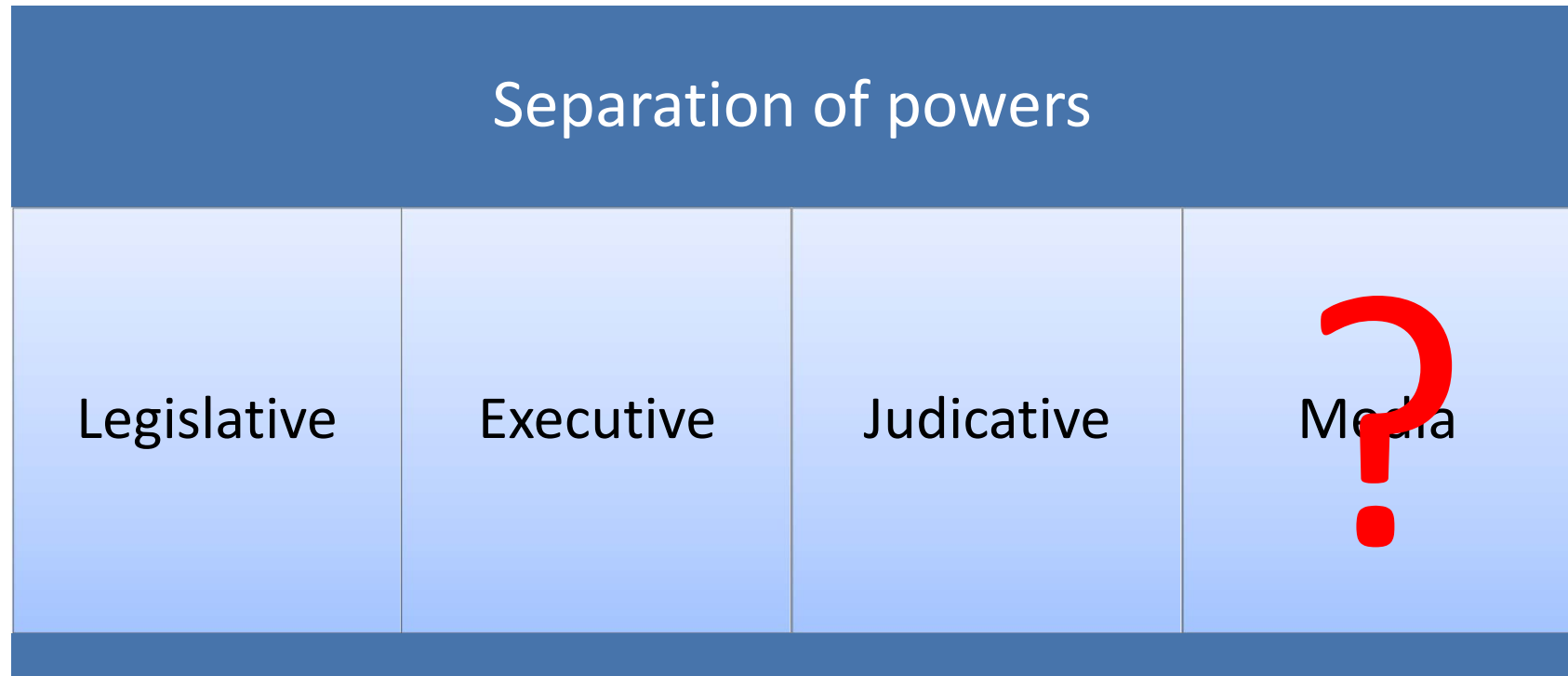
Matthias Heinz

Goethe University Frankfurt

# Most democratic states: Three branches

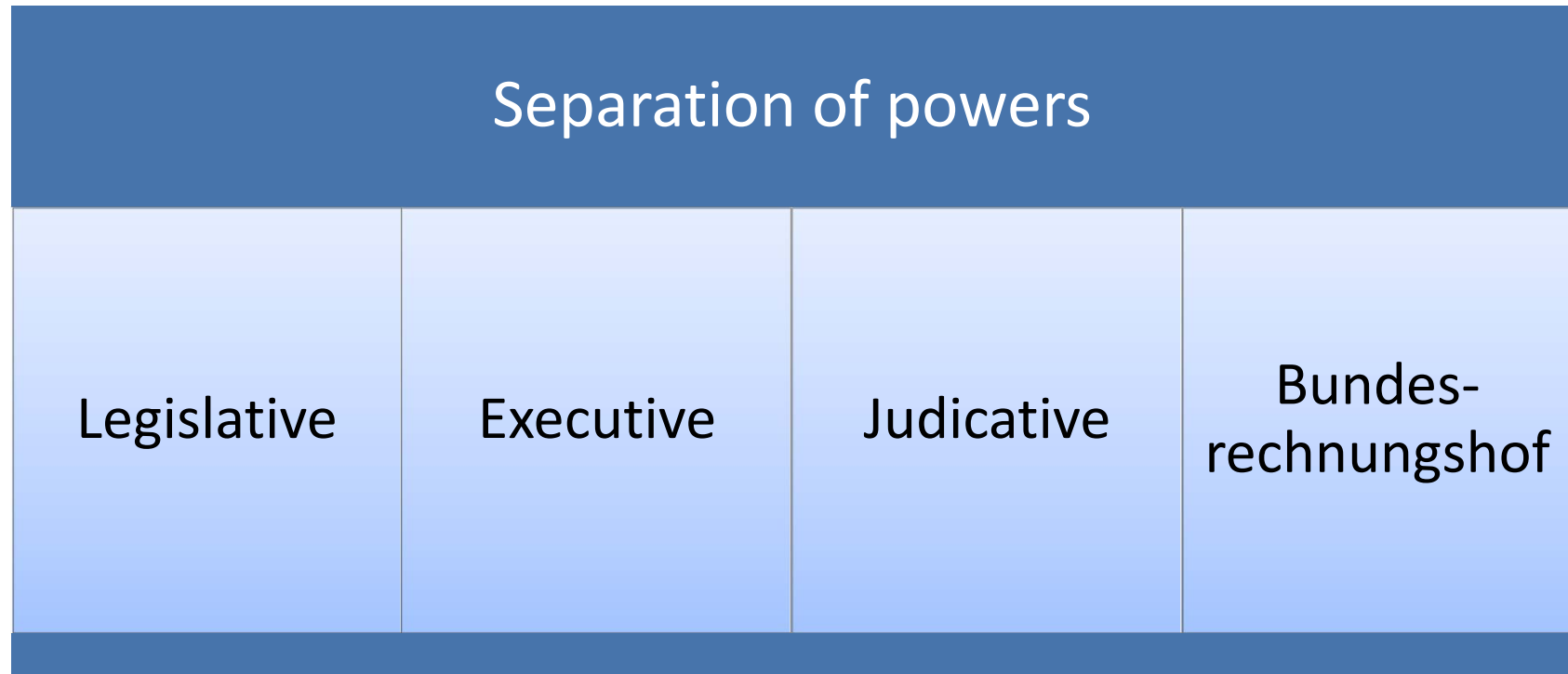


# Most democratic states: Four branches (?)



- Mullainathan/Shleifer (2006) argue: Media slant their reporting towards the beliefs of the people.
- Empirical support from a number of papers, e.g. Gentzkow/Shapiro (2010), Friebel/Heinz (2012).

# Germany: Four branches!



- *Bundesrechnungshof* (BRH, “Federal Audit Office”): Politically independent, public institution, which enjoys a high reputation for quality of work.
- Job: Audit federal institutions, report about wasteful public spending.

# Wasteful public spending and the *Bundesrechnungshof (BRH)*

- Role of the state: Provision of public goods.
- People care that the state provides public goods in an efficient way.
- Inefficiencies do not only result in a “direct” loss of public money, but also affects the attitudes of people, e.g. on tax morale (Barone/Mocetti, 2011).
- Nevertheless, wasteful public spending is not unusual; e.g. Bandiera et al. (2009) estimate for Italy that 1.6% - 2.1% of GDP is wasted by public institutions.
- As suggested by Egorov et al. (2009), in particular, two institutions can lower wasteful public spending:
  1. Monitoring/control agencies.  
→ Like, in Germany, the *BRH*.
  2. Media, who put pressure on the state to avoid wasteful public spending.

# Goal of the paper: Question, identification

- Research question: How do German media report about cases of wasteful public spending published by the *BRH*?
  - Do they slant their reporting towards the popularity of the government, in line with Mullainathan/Shleifer (2006)?
  - Or do they report “neutral”, in line with the idea of a “watchdog”?
- Identification: To deal with endogeneity concerns, I use the annual report of the *BRH*, which reports about wasteful public spending by Federal institutions.

# Identification strategy: Annual reports (1995-2011)

- Each year in autumn, the *BRH* publishes one annual report and informs about cases of wasteful public spending detected in the previous year.
- Annual report contains details information about
  - on average 55.2 (SD: 18.5) cases of wasteful public spending by Federal institutions.
  - In terms of wasted budget, cases are relatively small. Median amount of money being wasted (estimated by the *BRH* in 40% of the cases):  
€7.8 Mio (90%-confidence interval: 178.2€; 0.76€).
- Good examples for a cases (which is also one of the cases media report most on):  
Purchase of too much shoe polish by the German army.
- In total, my dataset includes 955 cases of wasteful public spending.

# Institutions where the wasteful public spending occurred

- The 955 cases of wasteful public spending can be classified in two groups. Cases occurring in
  - Ministries (n=735)
  - Other institutions (n=220): Institutions, which are formally independent from the government (e.g. German central bank (n=71)) or the tax offices (n=149), which are joint institutions between federal and state administration.
- Distinction is crucial, as
  - Ministries are under control of the government party.
  - Other institutions are not under (direct) control of the government party.

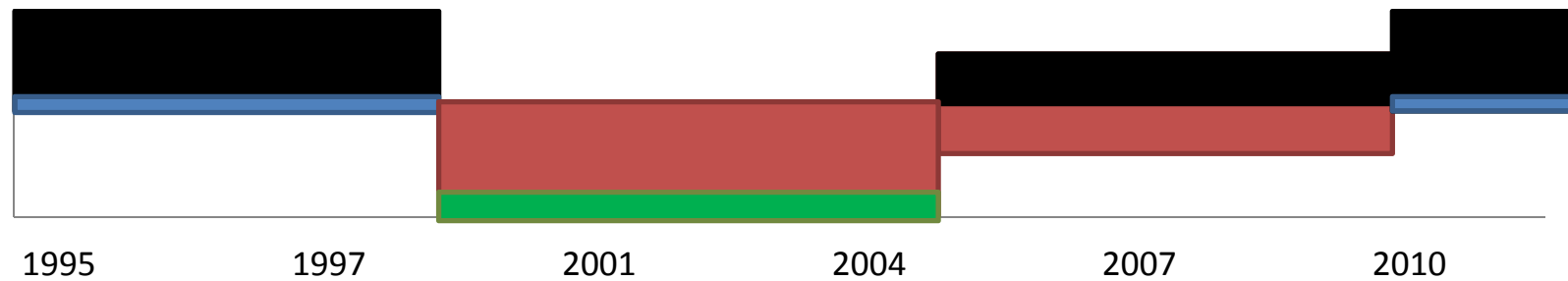


# Main findings

- Left-of-the-center newspapers
  - report less on wasteful public spending in ministries if the government party is popular.
  - This effect is weaker for right-wing governments.
  - Reporting on wasteful public spending in other institutions does not depend on the popularity of the government party.
- Right-of-the-center and left-wing newspapers do not slant their reporting towards the popularity of the government party.

# Wasteful public spending in ministries (n=735 cases): Responsible parties

- Governments in Germany (1995-2012):



- **Christian-Democrats** (CDU, in government: 1995-1998, since 2005): 297 cases.
- **Social-Democrats** (SPD, in government: 1998-2009): 391 cases.
- Junior coalition partners:
  - **Liberals** (1995-1998 and since 2009): 27 cases.
  - **Greens** (1998-2005): 20 cases.
- 2005-2009: Grand coalition of CDU and SPD

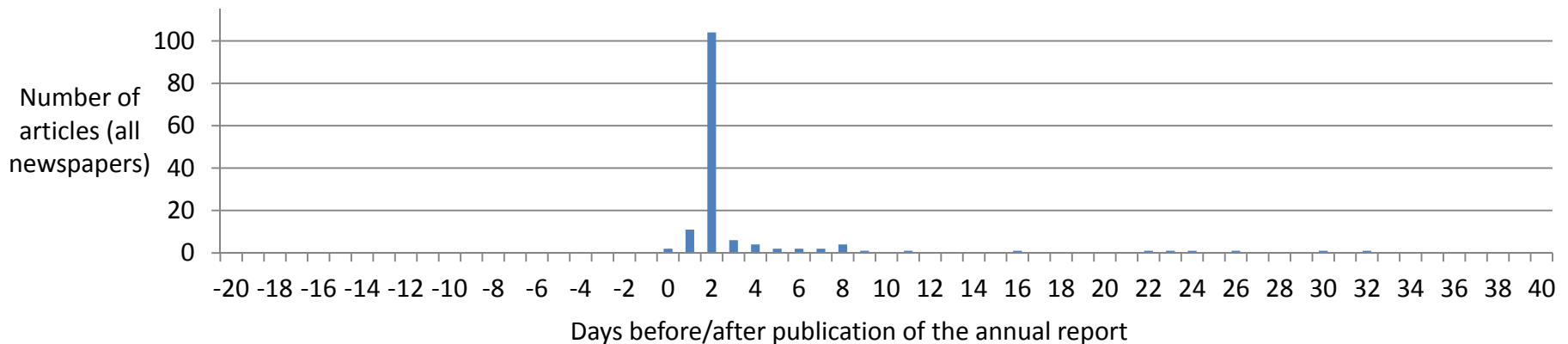
# Assumption: Quantity/quality of the cases in the annual report are exogenous

Why should this be the case?

- Institutional reasons: *BRH* is independent by law; no indication for any kind of informal political pressure or favoritism.
- Data on parties: Total number of cases/median amount of waste per year
  - are not correlated with popularity of the government party (measured by opinion polls) in the week before the publication of the report.
  - No substantial differences between right- and left-wing governments.
- Data on government quality: Total number of cases/median amount of waste per year
  - are not correlated with Federal budget deficit or other proxies for the quality of the government (e.g. unemployment rate).
- Time: Publication date is roughly fixed (Oct/Nov).

# Media data

- German national media do almost never report about any of the cases from the annual report during the whole year – except for the days after the publication of the report.
- Selection: Five leading German national quality newspapers: *TAZ* (left-wing), *FR*, *SZ* (both *center-left*), *Die Welt*, *FAZ* (both *center-right*)
- Using “Bundesrechnungshof” and “Rechnungshof” as keywords: Identification of all articles reporting about cases of wasteful public spending from the annual report.
- Time span: -20/+40 days around the publication of the annual report; in all newspapers most of the articles appeared in a short time horizon:

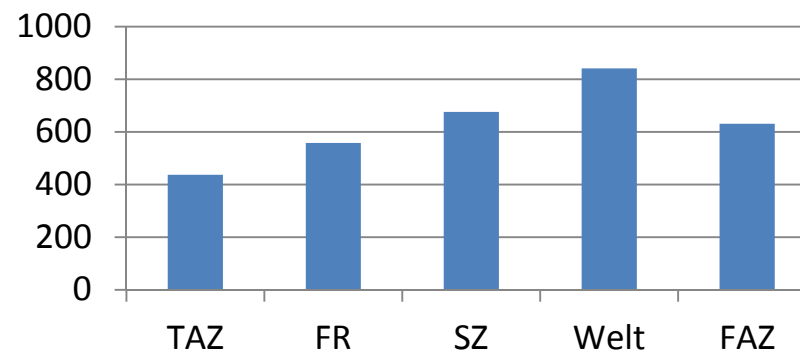


# Descriptive statistics: Articles and words

Mean number of articles per annual report



Mean number of words per annual report



- Total number of words in the entire newspaper on five randomly selected days: TAZ: ~40,000; FR/Welt: ~55,000; SZ: ~75,000; FAZ: ~90,000.
- Controlling for the size: No major differences across newspapers.

# Descriptive statistics: Media reporting on cases

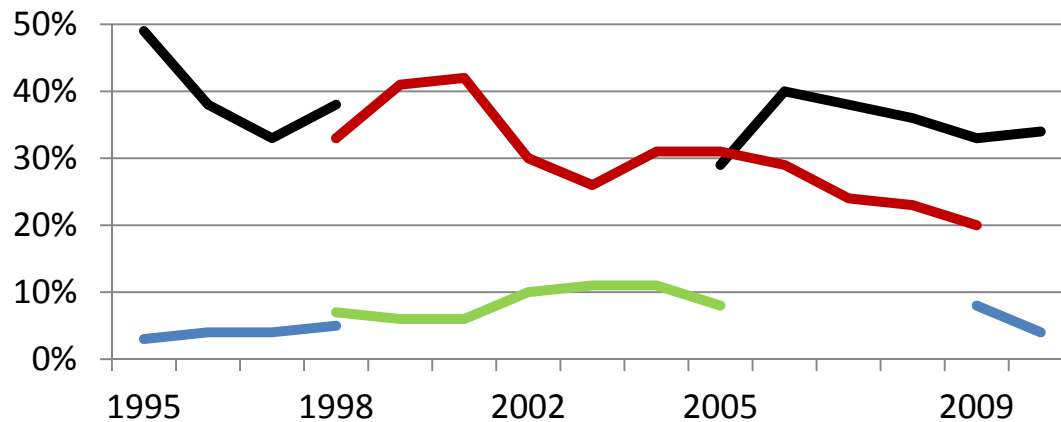
- Percentage number of cases that are reported by the newspapers:

Institution/incumbent	TAZ (left-wing)	FR (center-left)	SZ (center-left)	Die Welt (center-right)	FAZ (center-right)
In total (n=955)	6.2%	7.6%	9.7%	9.5%	10.3%
Right-wing ministries (CDU/Liberals, n=324)	6.5%	9.6%	9.9%	9.9%	11.7%
Left-wing ministries (SPD/Greens, n=411)	6.6%	5.6%	8.3%	10.7%	5.6%
Other institutions (n=220)	5%	8.6%	12.3%	6.8%	16.8%

- Cases occurring in left-wing ministries: *FR* and (surprisingly) *FAZ* report less.
- Other institutions: *Die Welt* reports less, *FAZ* more (in particular about tax offices).

# Popularity of the government parties

- Main question: Does the probability that a case of wasteful public spending is reported by a newspaper vary with the popularity of the government party?
- *Forsa* (opinion poll institute) weekly asks ~ 2000 people in Germany “Which party would you vote for if federal elections were held this Sunday?”.
- Popularity of the government parties in the week before the publication of the annual report:



- Christian-Democrats, Social-Democrats, Liberals, Greens

# Estimation strategy: Basic idea

- Linear probability model, one observation = one case of wasteful public spending.
- Two steps
  1. Pooling all newspapers.
  2. Estimating the effect for each newspaper separately.
- Left-hand-side: Dummy, set to one if the case is reported in the newspaper(s).
- Right-hand-side:
  - Popularity of the government party (week before publication of annual report).
  - Interaction term: Popularity and *CDU*-dummy(Christian-Democrats).
  - Interaction term: Popularity and *Other institutions*-dummy.
  - Time (per annual report) and Federal institution fixed effects.



## Estimation strategy: Details

$$news_{i,t,FI} = \beta_0 + \beta_1 * popularity_{i,t,FI} + \beta_2 * popularity_{i,t,FI} * CDU_{i,t} + \beta_4 * popularity_{i,t,FI} * Other\_Institutions_{i,t,FI} + \beta_5 * time_i + \beta_6 * Federal\_Institution_{i,t} + \varepsilon_{i,t,g}$$

$news_{i,t,FI}$

➤ Dummy set to one if a case is reported in newspaper  $i$ .

$popularity_{i,t,FI}$

➤ Popularity (in percentage points) of the incumbent party.

$CDU_{i,t}$

➤ Dummy set to 1 if the case occurred in a ministry where the incumbent is from the CDU.

$Other\_Institutions_{i,t,FI}$

➤ Dummy set to 1 if the case occurred in *Other institutions*.

$time_i$

➤ Dummies for each annual report.

$Federal\_Institution_{i,t}$

➤ Dummies for each federal institution.

# Concerns about estimation strategy

- No CDU fixed effect in estimation (CDU dummy would be a linear-combination of time dummies).
  - CDU fixed effect is captured by time dummies.
- Grand coalition of CDU and SPD between 2006-2009: Which popularity level is crucial for *Other institutions*?
  - Year 2006: No problem; both parties have the same popularity levels.
  - 2007-2009 (n=24): Dropped in baseline regression; including all possible combinations of CDU and SPD popularity levels does not change the results.
- I drop observations from the junior coalition partners (Liberals, Greens; n=47) (due to multicollinearity concerns, lower popularity levels in general)
  - Next step of the project: *Forsa* also asked the people weekly “How satisfied are you with the work of the government?” (Hopefully we will get the data in the next weeks.)

# Results for pooling all newspapers

---

---

Newspapers	All newspapers
Constant	0.279 (0.292)
Popularity	-0.009 (0.007)
Popularity*CDU	0.001 (0.002)
Popularity*Other Institutions	0.008 (0.007)
<hr/>	
R <sup>2</sup>	0.058
Sample Size	872
<hr/>	
Time (Dummies)	Yes
Ministry (Dummies)	Yes

---

---

- Left-hand-side: Dummy, set to one if a case is reported in any newspaper.
- None of the variables is significant.

# Results for left-wing and center-right newspapers

Newspapers	TAZ	FAZ	Die Welt
Constant	-0.209* (0.121)	-0.100 (0.158)	0.345 (0.254)
Popularity	0.005 (0.004)	-0.002 (0.005)	-0.005 (0.006)
Popularity*CDU	-0.001 (0.001)	0.001 (0.002)	-0.001 (0.001)
Popularity*Other Institutions	-0.003 (0.004)	0.003 (0.006)	-0.003 (0.004)
R <sup>2</sup>	0.062	0.050	0.073
Sample Size	872	872	872
Time (Dummies)	Yes	Yes	Yes
Ministry (Dummies)	Yes	Yes	Yes

- LHS: Dummy, set to one if a case is reported in
  - left-wing *TAZ* (column 1) or
  - center-right *FAZ* (column 2) or *Die Welt* (column 3).
- None of the variables is significant.

# Results for center-left newspapers

Newspapers	FR	SZ
Constant	0.238 (0.184)	0.226 (0.189)
Popularity	-0.011** (0.005)	-0.011** (0.006)
Popularity*CDU	0.002* (0.001)	0.003* (0.002)
Popularity*Other Institutions	0.010** (0.005)	0.010* (0.006)
R <sup>2</sup>	0.080	0.084
Sample Size	872	872
Time (Dummies)	Yes	Yes
Federal Institution (Dummies)	Yes	Yes

- LHS: Dummy, set to one if a case is reported in center-left *FR* or *SZ*.
- **Same effects in both newspapers:**
  - **1% increase in popularity of the government party decreases the probability that a case is reported by 1.1%.**
  - **Effect is weaker for cases of the Christian-Democrats.**
  - **Popularity of government party: No impact on probability that a cases from other institutions is reported.**

# Discussion of the results

- Possible explanation for the results: center-left, but not center-right newspapers are sensitive to the popularity of the government party:
  - Center-left newspapers are in general more sensitive to the popularity of governmental parties.
  - Wasteful public spending = “dark side” of an inflated state.
    - If the government party is popular: Center-left media report less about the topic.
    - If the government party is unpopular: Government party as a scapegoat for wasteful public spending.
- Reporting about wasteful public spending in other institutions is not sensitive to the popularity of the government party at all.
  - Newspapers differentiate: Wasteful public spending in other institutions is not the (direct) “fault” of the government party.

# What theory on media fits?

- Unpopular government: Less likely to remain in office, benefits for media of maintaining a good relationship is reduced. (Latham, 2011, model based on Besley/Prat, 2006)
  - No systematic differences in time effects in pre- and post-election years.
- If the government party is unpopular among the people, the party might also be unpopular among the journalists. Do journalists bias their reporting (Baron, 2006)?
  - Effects are the same in both left-of-the-center newspapers, which indicates demand-side effects.
- Mullainathan/Shleifer (2006): People believe that the government is bad; media slant their reporting towards the beliefs of the readers.

# Robustness checks

- So far:
  - Exclusion of observations from the years after Federal elections does not change the results.
  - Same is true for the inclusion of a variable measuring the popularity growth in the four weeks before the publication of the annual report.
  - Amount of waste: No effect on newspaper reporting.
- Next steps:
  - Include further data from opinion polls about satisfaction with the work of the government.



## Further results: Closer look on *Federal institutions* dummies

Newspapers	TAZ	FR	SZ	Die Welt	FAZ
Ministry of Defense	0.067* (0.043)	0.104** (0.041)	0.106** (0.051)	0.094** (0.043)	0.109** (0.052)
Ministry of Transport	0.112** (0.047)	0.077** (0.038)	0.069 (0.054)	0.032 (0.039)	0.154*** (0.056)

Newspapers	FAZ	Die Welt
Constant	-0.100 (0.158)	0.345 (0.254)
Popularity	-0.002 (0.005)	-0.005 (0.006)
Popularity*CDU	0.001 (0.002)	-0.001 (0.001)
Popularity*Other	0.003	-0.003
Institutions	(0.006)	(0.004)
R <sup>2</sup>	0.050	0.073
Sample Size	870	870
Time (Dummies)	Yes	Yes
Federal institutions (Dummies)	Yes	Yes

- All newspaper report more about cases in the Army and Ministry of Transport.
- Median amount of waste in those institutions (Army: €12 Mio; Transport: €10.5 Mio) is similar than in other ministries.
- Possible explanation: Cases are often easy to “illustrate” in a newspaper report (e.g. purchase of too much shoe polish or of forklifts that were too wide to cross gates, compared to e.g. tax case).

# Conclusion

- Using annual reports by an independent, public institution, I show that left-of-the-center newspapers
  - report less on wasteful public spending in ministries if the government party is popular.
  - This effect is weaker for right-wing governments.
  - Reporting on wasteful public spending in other institutions that are not under (direct) control of one party is independent from the government parties' popularity.
- No slanting to the popularity of the government party in left-wing or right-of-the-center newspapers.
- Results could query the “watchdog” function of media and could influence the tax morale of the people.

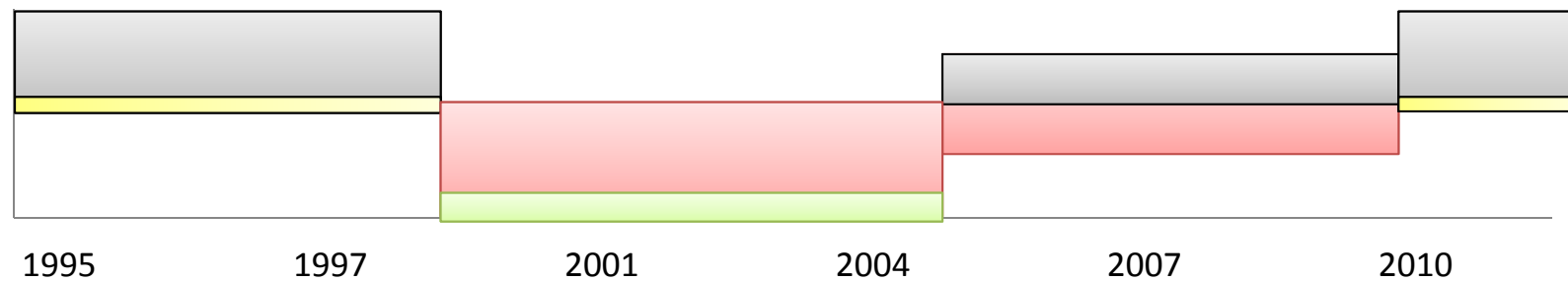
## “Forecast” 😊

- In a few days: Publication of the next annual report by the *BRH*.
- Angela Merkel can be happy: Her party is quite popular in the moment...



# Backup: Wasteful public spending in ministries (n=735 cases): Responsible parties

- Governments in Germany (1995-2012):

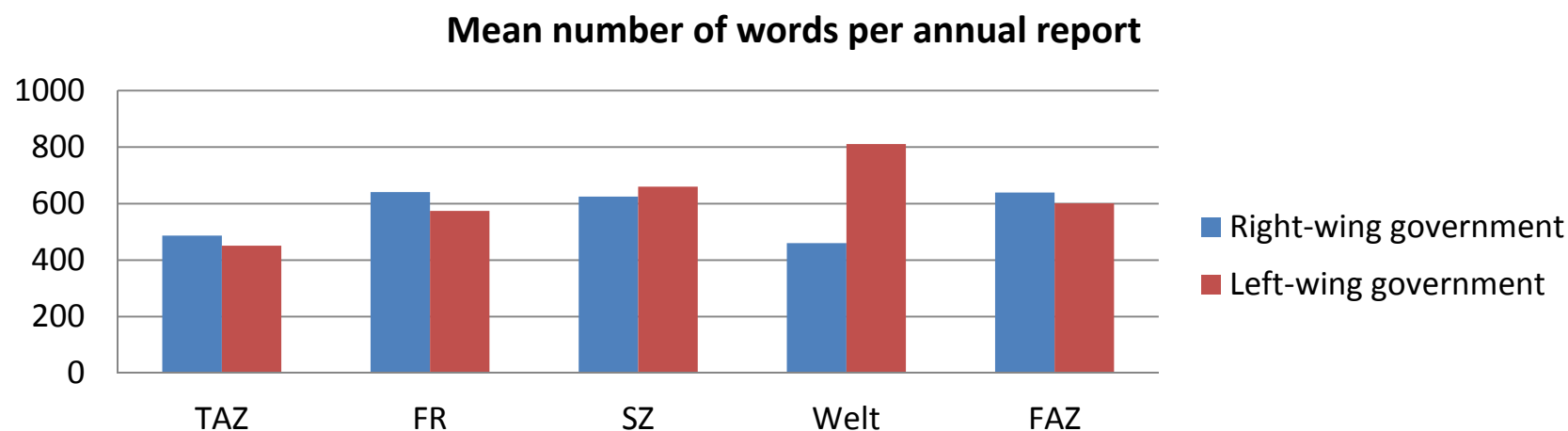


- Christian-Democrats (CDU, in government: 1995-1998, since 2005): 297 cases.
- Social-Democrats (SPD, in government: 1998-2009): 391 cases.
- 2005-2009: Grand coalition of CDU and SPD
- Junior coalition partners:
  - Liberals (1995-1998 and since 2009): 27 cases.
  - Greens (1998-2005): 20 cases.

# Backup: Forsa

- *Forsa* = polling institute
- They weekly asked ~2000 people in Germany "Which party would you vote for if federal elections were held this Sunday?".

## Backup: Descriptive statistics: Coverage about annual reports per year (1995-2011)



- Left-wing *TAZ*, center-left *FR* and center-right *FAZ* report slightly about public spending waste of right-wing governments
  - Center-left *SZ* and center-right *Welt* report more about public spending waste of left-wing governments
- No systematic differences between newspapers on the left and right