

Regulatory Compliance with Limited Enforceability: Evidence from Privacy Policies

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Download the paper at <https://ssrn.com/abstract=4600876>.

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Can your data be used to show ads tailored for you?

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NO, SHOW ADS THAT ARE IRRELEVANT

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DIGITS

Privacy Policies More Readable, But Still Hard to Understand

By Elizabeth Dwoskin | [Follow](#)

Updated from AOL, 2013-03-22 10:45 AM ET

HOME SEARCH

The New York Times

Opinion | [THE PRIVACY PROJECT](#)

We Read 150 Privacy Policies. They Were an Incomprehensible Disaster.

By Kevin Litman-Navarro

Internet

This article is more than **9 years old**

I read all the small print on the internet and it made me want to die

GDPR: An Update of EU Data Regulation

- In 2018, the GDPR (General Data Protection Regulation) fundamentally transformed the legal requirements of privacy policies
- One of the (many) goals (going back to earlier consumer protection agenda):
 - Enhance **transparency** and accountability
- **The goal:** give users accessible information on a firm's use of their data

1. **Art. 13–14 GDPR:** Disclose what data is collected, how, by whom
2. **Art. 12(1) GDPR:** *“concise, transparent, intelligible and easily accessible form, using clear and plain language”*

This Paper Asks:

How do firms respond to the GDPR's transparency principle and its **asymmetric enforceability**.

How does the stringency of enforcement of the rules affect their compliance decisions?

- We expect budget-constrained regulators to focus on the “easy rules”
 - objective disclosure
 - not vague/subjective readability
- Rational firms respond by complying with more disclosure, not with better readability
- Paper: A theory model with three predictions for a firm’s GDPR response

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Longer privacy policies that are not necessarily more readable.

Firms expecting more attention from the regulator (scrutiny) draft more readable privacy policies compared to firms that do not; but disclosure is not affected.

Firms with better-funded regulators draft more readable privacy policies than firms with more constrained regulators; under sufficiently high compliance costs, firms may lower disclosure.

Data: Privacy Policies Matched with Firm-Level Information

- Privacy policies of **German** firms with at least one observation in ...
 - *before* GDPR: 2014–Q2 2018
 - *after* GDPR: Q2 2018–2021
- Unbalanced quarterly panel:
 - **585,329 privacy policies**
 - posted by **75,683 firms**
- From the ...



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 - **585,329 privacy policies**
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- From the ...
- **Firm-level** information
 - Mannheim Enterprise Panel
 - Firm size + industry information
- **UK enforcement data**
 - Information Commissioner's Office
 - 3-digit industry level (2012 through Q2 2018)
- **State** government websites
 - Budget and staffing information for German state data protection authorities
 - Scaled by state-level # of firms



How Do We Measure Regulatory Compliance?

Disclosure

standard NLP approach

- disclosure volume
- words in paragraphs that are likely to contain Art. 13/14 specific content
→ **topic-weighted word count**
- Measure is more disclosure-focused than a simple word count

How Do We Measure Regulatory Compliance?

Disclosure

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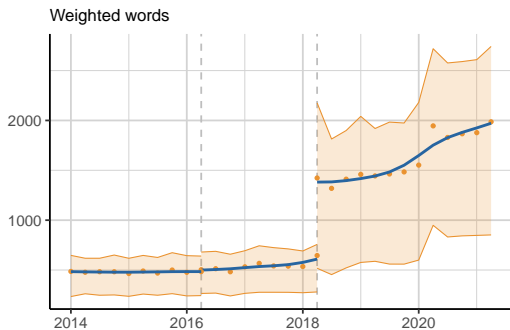
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Readability

linguists' toolbox

- German version of the **Flesch Reading Ease Score**
 - Amstad (1978)
 - because of its **regulatory history**
- **Läsbarhetsindex (LIW)**
 - Björnsson (1968)
 - because it **best predicts** 4,000 pairwise text comparisons

Compliance: Just the Data

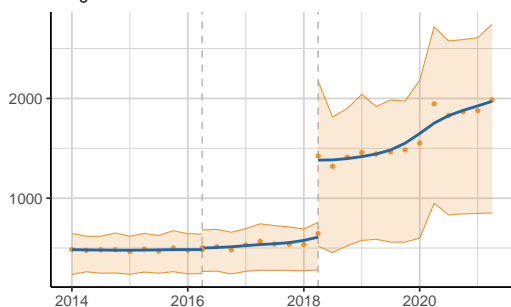


disclosure increases by 80%

(incl. year FE, firm FE, additional controls)

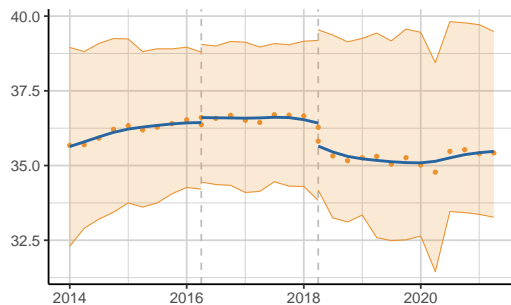
Compliance: Just the Data

Weighted words



disclosure increases by 80%
(incl. year FE, firm FE, additional controls)

German FRE



readability decreases by 4%
(incl. year FE, firm FE, additional controls)

very sensitive to the used metric though!

Is readability compliance dead?

Is readability compliance dead?

No!

- **Exposure** to the regulation
- **Scrutiny** by the regulator
- **Capacity** of the regulator

Exposed Firms → Better Readability Compliance

Approach:

- Firms with lower pre-GDPR disclosure or readability are more exposed
- → treatment-intensity diff-in-diff

Result:

- More exposure induces better readability compliance
- Low-readability firms: increase; high-readability firms: decrease

	Disclosure	Readability
Dep. variable (in log):	Weighted words	German FRE
High disclosure	0.4507*** (0.0075)	
Low disclosure	1.144*** (0.0092)	
High readability		-0.1095*** (0.0021)
Low readability		0.0196*** (0.0021)
# Firm FE	64,609	64,606
R ²	0.805	0.645
Observations	409,527	409,433

Targeted Firms → Better Readability Compliance

Approach:

- Pre-GDPR enforcement actions of UK data regulator
- Industry-level enforcement index

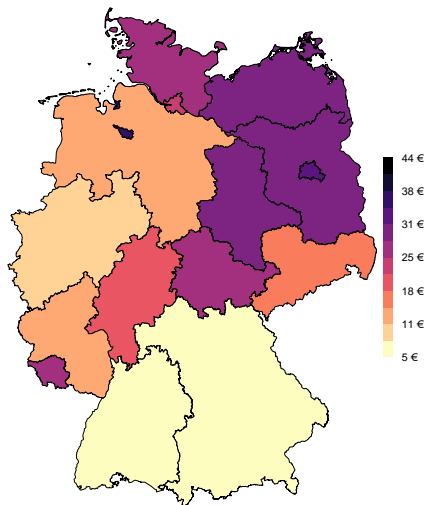
Result:

- More scrutiny induces better readability compliance
- Smaller decrease in readability in high-enforcement industries
- Minimal effect on disclosure (as expected)

	Disclosure	Readability
Dep. variable (in log):	Weighted words	German FRE
No enforcement	0.7918*** (0.0189)	-0.0450*** (0.0047)
Low enforcement	0.7964*** (0.0096)	-0.0428*** (0.0025)
Medium enforcement	0.7504*** (0.0105)	-0.0481*** (0.0027)
High enforcement	0.7767*** (0.0117)	-0.0321*** (0.0028)
# Firm FE	63,749	63,746
R ²	0.782	0.624
Observations	403,452	403,358

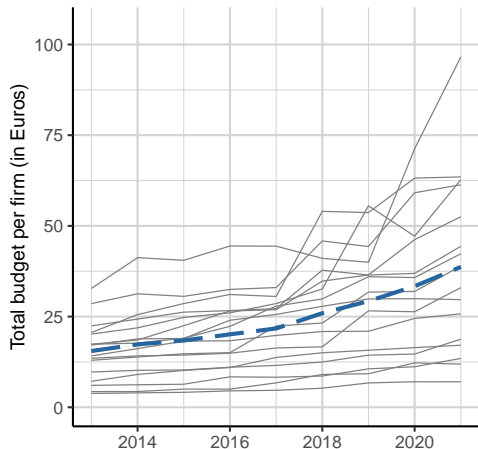
Funding for Data Regulators

- In Germany, 16 (+2) state data protection authorities regulate firms in their respective jurisdictions
- **Same rules, different enforcers**
- Each state regulator has its own budget
 - variation across states



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 - variation across states
 - variation over time



More Funding → Better Readability Compliance

Approach:

- State-level regulator budget
- state-level variation of enforcement capacity

Result:

- Better readability compliance in better-funded states
- Higher budget → weaker decrease/larger increase in readability
- Minimal (negative?) effect on disclosure (as expected)

	Disclosure	Readability
Dep. variable (in log):	Weighted words	German FRE
Panel (a): Total Budget Per Firm		
× Budget (lagged)	-0.0006 (0.0005)	0.0002* (0.0001)
Panel (b): Employees Per Firm		
× Staff (lagged)	-0.0575 (0.0428)	0.0219* (0.0112)

Summary

- Firms write a lot more and also disclose more of the things they are supposed to
- Privacy policies are (on average) just as incomprehensive as before

Summary

- Firms write a lot more and also disclose more of the things they are supposed to
- Privacy policies are (on average) just as incomprehensive as before
- **BUT**: the rules are **effective**
 - those behind caught up
 - firms did respond to more stringent regulation
 - regulators' funding matters, too

... the readability requirement is here to stay!

- GDPR (2018)
 - *“concise, transparent, intelligible and easily accessible form, using clear and plain language”*
- Platform-to-Business Regulation (2019)
 - *“plain and intelligible language”*
- Digital Services Act (2022)
 - *“clear, plain, intelligible, user-friendly and unambiguous language”*
- Platform Workers Directive (proposal version) (2023)
 - *“concise, transparent, intelligible and easily accessible form, using clear and plain language”*
- ... and a growing list of U.S. states introducing new legislation

Thank you!

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