# 8 Appendix

# 8.1 Examples of How Linguistic Complexity Can Signal Anchoring-Flexibility Trade-off

The two examples are referred to as

- (1) "The Committee will set the rate at 0.25 percent until inflation reaches 2 percent and unemployment falls below 5 percent. We expect these conditions to be met by mid-2026."
- (2) "The Committee anticipates that maintaining the current policy rate may be appropriate as long as inflation trends toward 2 percent and labor market indicators improve. These conditions could potentially be met by mid-2026, although considerable uncertainty remains"

Intuitively, example (1) is much clearer than example (2), offering significantly less room for interpretive flexibility.

In terms of linguistic complexity measurements, we report the following metrics (for readability, and because many of them function similarly, we randomly select three for demonstration purposes without compromising interpretations):

#### 1. For example (1):

- Readability: Flesch-Kincaid Grade Level = 8.37; Coleman-Liau Index = 10.74; LIX = 45.53
- Abstractness: 3.17
- Informativeness: 0.64
- Disunity: 0.32

#### 2. For example (2):

- Readability: Flesch-Kincaid Grade Level = 13.63; Coleman-Liau Index = 18.51; LIX = 61.74.
- Abstractness: 3.41
- Informativeness: 0.77
- Disunity: 0.42

The readability differences are straightforward. To allow for more flexible expectations, additional content is introduced to express this layer of freedom, which increases the average sentence length and the likelihood of longer words (e.g., appropriate, potentially).

Regarding abstractness, modal words such as may and potentially introduce abstract elements that express flexibility while reducing clarity. Moreover, the avoidance of specific thresholds—such as replacing the unemployment rate with the more vague phrase labor market indicators—further decreases concreteness, thereby increasing overall abstractness.

In terms of informativeness, the effort to avoid rigid commitments and express expectations in a more nuanced way requires additional information and more diverse language. This is reflected in phrases like "although considerable uncertainty remains", along with the use of modal verbs and adverbs that help dilute the assertiveness. However, in the same example, the phrase "although considerable uncertainty remains" adds informational content about the economic outlook, even as it introduces hedging language—demonstrating how this feature of complexity can simultaneously dilute commitment and enrich interpretation.

Finally, although less visible, sentence transitions become less coherent. The flexible goals expressed in the first sentence of example (2) result in a longer and less direct formulation, making the referent "these conditions" in the second sentence less immediately clear. Additionally, modal verbs and uncertainty-related expressions tend to be less semantically linked to concrete economic terms, which often reduces the overall coherence between sentences.

In general, these metrics should be viewed as statistical tools. They are not always definitive (e.g., higher abstractness does not imply greater complexity in every instance), but they tend to hold true on average. Similarly, higher textual complexity typically signals an intention to preserve flexibility or strategic ambiguity in central bank communication but not always.

# 8.2 Detailed Differences Between Types of "Recession Indicators"

First, Figure 2 illustrates the differences among four types of 3D recession indicators for the United States. Notably, the NBER indicator applies a more stringent threshold for defining recessions, identifying fewer periods compared to the OECD-based measures.

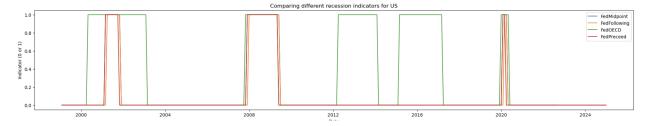


Figure 2: Four types of recession indicators for the United States

Second, to highlight the differences between the quantile recession indicators and the 3D recession indicators, at the aggregate level across all countries, Figure 3 presents a bar graph comparing their respective counts

According to the graph, one of the most puzzling observations arises during the post-pandemic phase, which—based on conventional expectations—should have marked the onset of an expansionary cycle rather than a recession. Yet, the 10th percentile indicates relatively low growth in 2024, albeit only for a few countries. Meanwhile, the 25th percentile appears overly inclusive and may fail to adequately capture deep recessions. This anomaly is observed in aggregate across multiple countries, not merely within the jurisdictions of the Federal Reserve (FED) or the European Central Bank (ECB), which might otherwise have explained the deviation.

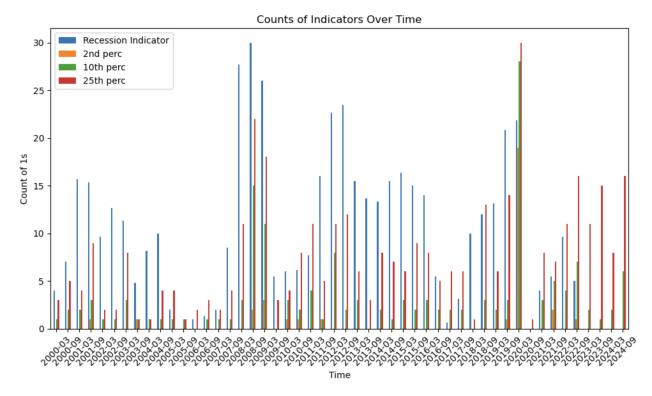


Figure 3: Total counts of 1s - recessions - across all countries

When examining countries individually, the quantile-based recession indicator tends to be a stricter measure than the 3D approach, which incorporates depth, diffusion, and duration. Notably, most exceptions to this pattern emerge during the post-pandemic period, echoing trends seen in the aggregate data. Instances where the quantile indicator—particularly at the 5th/10th percentile rather than the more extreme 2nd percentile—fails to align with the three major recessions are relatively frequent and span across all countries. Moreover, quantile-based recession signals can appear even when the 3D framework does not register a downturn. In essence, the quantile-based and 3D-based approaches capture distinct dimensions of economic contractions. Neither is a subset of the other; each reveals unique recessionary signals that may be overlooked by the alternative method.

#### More on Conventional Recession Indicators:

The National Bureau of Economic Research (NBER) defines a recession as a significant decline in economic activity that is both widespread across the economy and sustained for more than a few months. According to the NBER committee, a recession must exhibit three key characteristics—depth, diffusion, and duration—each of which must be present to some degree. However, exceptionally severe conditions in one dimension can partially offset weaker signals in the others. A notable example cited in their Q&A illustrates this principle: "A notable example is the February 2020 peak in economic activity. Despite the brief duration of the subsequent downturn, the committee determined that the magnitude and breadth of the decline were sufficient to classify it as a recession. The trough was later identified as occurring in April 2020, just two months after

the peak."

In contrast, an expansion is defined as any period during which the economy is not in recession. Expansion is considered the economy's default state, and recessions are typically short-lived. Nonetheless, the time required for economic activity to return to its previous peak can be substantially longer, reflecting the uneven pace of recovery.

#### More on OECD Recession Criteria:

The OECD's recession methodology has historically mirrored that of the NBER, albeit with somewhat looser criteria. This distinction becomes evident when comparing the OECD's recession indicators for the United States with those of the NBER, which tend to apply more stringent thresholds.

According to archived definitions, the OECD identifies recession periods using a framework based on **Composite Leading Indicators** (CLIs) and **reference turning points**. These indicators track economic activity across multiple sectors to detect peaks and troughs in the business cycle. A recession is defined as the interval between a peak and the subsequent trough, with turning points determined on a monthly basis—though exact dates within the month are not specified. For practical applications, recession periods are often visualized as spanning from the 15th of the peak month to the 15th of the trough month in daily data representations.

This methodology aligns with classical business cycle analysis, emphasizing broad-based economic contractions rather than focusing solely on GDP declines. The OECD's approach underscores the importance of diffusion, depth, and duration—consistent with international standards—while allowing for expert judgment in identifying economic turning points.

Thus, we infer that the primary differences between conventional recession indicators and quantile-based GDP growth measures lie in their treatment of diffusion and duration. Quantile indicators of real GDP growth capture only the depth of economic contractions, whereas conventional frameworks—such as those employed by institutions like the OECD—implicitly incorporate diffusion (the extent to which the downturn spans across sectors) and duration (the length of the downturn). While diffusion is inherently difficult to observe directly, duration is more readily measurable.

If significant discrepancies emerge between the results of these two recession indicators, it suggests that recessions of similar depth can convey markedly different signals depending on their persistence and sectoral reach. These differences influence not only how economic conditions are interpreted but also the diversity and nuance of language required to communicate them effectively.

There are several intuitions regarding the informativeness during recession:

- Extended duration may imply that the economic environment remains largely unchanged over time, leading to repetitive policy communications (e.g., "The situation continues; therefore, the policy stance remains unchanged"). Such repetition can diminish the novelty and informational value of each statement.
- Broad diffusion across industries may prompt the use of more generalized language in policy discourse, thereby reducing sector-specific insights and limiting linguistic diversity.

However, this interpretation warrants caution. If a recession affects a wide range of industries, aggregate real GDP growth would typically be extremely low—consistent with signals from extreme quantile indicators. Yet, it remains plausible that even amid widespread stagnation, certain sectors may perform relatively well. This mirrors phenomena such as the resilience of inferior goods during downturns or shifts in consumer preferences that benefit specific industries.

Accordingly, I propose treating these as two distinct categories of recession indicators: quantile recession indicators and 3D recession indicators, with "3D" referring to depth, diffusion, and duration. Within the context of this analysis, duration emerges as a particularly salient differentiator. It is reasonable to assume that monetary policy councils face considerable challenges in forecasting the duration of a recession with confidence at the time of decision-making—if such foresight were possible, policy interventions would likely be more immediate and targeted.

Furthermore, the accurate identification of 3D recession indicators often depends on multiple rounds of data revision, which are typically unavailable to policymakers in real time. Despite these limitations, 3D indicators offer a more comprehensive and expert-validated framework, making them especially valuable for retrospective analysis and historical interpretation.

# 8.3 Detailed Descriptions of Readability Measurements

• Gunning-Fog is a readability index originally developed for English writing, but works for any language. The index estimates the years of formal education needed to understand the text on a first reading. A Gunning-Fog index of 12 requires the reading level of a U.S. high school senior (around 18 years old). The formula for calculating the index is:

$$Gradelevel = 0.4 \times (ASL + PHW)$$

Where ASL is the average sentence length (total words / total sentences), and PHW is the percentage of hard words (words with three or more syllables).

• **SMOG** or Simple Measure of Gobbledygook, is a readability formula that estimates the years of education required to understand a piece of writing. It primarily focuses on the complexity of words, using the number of polysyllabic words in the text. The formula is:

$$SMOGIndex = 1.043\sqrt{30(hard\_words/n\_sentences))} + 3.1291$$

• Flesch reading ease is a readability score that indicates how easy a text is to read. Higher scores indicate easier reading, while lower scores indicate more difficult reading. The score is calculated using the following formula:

$$FleschReadingEase = 206.835 - (1.015ASL) - (84.6ASW)$$

Where ASL is the average sentence length and ASW is the average number of syllables per

word.

• Flesch-Kincaid grade is a readability metric that estimates the grade level needed to comprehend a text. It is based on the average sentence length and average number of syllables per word. The formula is:

$$Flesch - KincaidGrade = 0.39(ASL) + 11.8(ASW) - 15.59$$

• Automated readability index is a readability test that calculates an approximate U.S. grade level needed to understand a text. It is based on the average number of characters per word and the average sentence length. The formula is:

$$ARI = 4.71(n\_chars/n\_words) + 0.5(n\_words/n\_sentences) - 21.43$$

• Coleman-Liau index is a readability test that estimates the U.S. grade level needed to understand a text. It is based on the average number of letters per 100 words and the average number of sentences per 100 words. The original formula is:

$$CLI = 0.0588L - 0.296S - 15.8$$

Where L is the average number of characters per 100 words and S is the average number of sentences per 100 words. In our implementation we average over the entire text instead of just 100 words.

• Lix is a readability measure that calculates a readability score based on the average sentence length and the percentage of long words (more than six characters) in the text. The formula is:

$$Lix = (n\_words/n\_sentences) + (n\_long\_words * 100)/n\_words$$

• **Rix** is a readability measure that estimates the difficulty of a text based on the proportion of long words (more than six characters) in the text. The formula is:

$$Rix = (n\_long\_words/n\_sentences)$$

## 8.4 Topic Modeling

#### 8.4.1 Detailed Text Preprocessing

• **Tokenization**: The text is segmented into individual words and converted to lowercase. Special characters such as commas and periods are retained to avoid misprocessing contractions (e.g., preserving "don't" rather than converting it to "dont").

- Lemmatization: Tokens are reduced to their base or dictionary form. For example, "changed" becomes "change", and "was" becomes "be".
- Inclusion of n-grams: Phrases ranging from bigrams to four-grams (2–4 word sequences) are incorporated. To ensure relevance, only phrases that appear at least 50 times across the corpus and rank within the top 25 percent of the log-likelihood ratio of appearance are retained.
- Stop word and punctuation removal: Common stop words and punctuation marks are removed to reduce noise and improve topic extraction.

#### 8.4.2 LDA Process

- Initialization: Each word in every document is randomly assigned to one of K predefined topics. This initial assignment serves as a starting point for the iterative refinement. For this study, K = 15 is selected—a reasonable number given the number of countries in the dataset and the potential for later aggregation into broader thematic categories.
- Iterative Refinement (Gibbs Sampling Loop): For each word in each document, the algorithm performs the following steps:
  - Temporarily removes the current topic assignment for the word.
  - Calculates the probability of assigning the word to each of the K topics, based on two key factors: (i) the likelihood of the word appearing in a given topic (based on its frequency across all documents), and (ii) the likelihood of the topic appearing in the current document (based on how many words in the document are assigned to that topic).
- Reassignment: The word is then re-assigned to a topic based on the calculated probabilities. This step incorporates Dirichlet priors— $\alpha$  for the document-topic distribution and  $\beta$  for the topic-word distribution—which serve as smoothing parameters. In this study, both priors are set to 1/K, promoting balanced topic representation.
- Convergence: The process repeats for a fixed number of iterations or until topic assignments stabilize. Over time, words that frequently co-occur tend to cluster within the same topics, and documents with similar thematic content exhibit higher probabilities for those shared topics.

It is important to note that the initial topic modeling results can be relatively difficult to interpret. Common terms such as increase and decrease, as well as quantity indicators like millions and billions, tend to appear frequently across documents but offer limited insight into the thematic content of a topic. These high-frequency, low-specificity terms are therefore excluded during the final stages of text preprocessing to enhance interpretability.

Table 11: Central bank statements availability

Country	Central Bank Name	Date Available	Number of Statements
Armenia	Central Bank of Armenia	2009-2024	144
Australia	Reserve Bank of Australia	2000-2024	207
Canada	Bank of Canada	2000-2024	198
$\mathbf{Chile}$	Banco Central de Chile	2000-2024	266
Colombia	Banco de la República	2015-2024	87
European Union	European Central Bank	2000-2024	256
Hungary	Magyar Nemzeti Bank	2002-2024	273
Iceland	Central Bank of Iceland	2009-2024	123
Indonesia	Bank Indonesia	2005-2024	214
Japan	Bank of Japan	2000-2024	318
South Korea	Bank of Korea	2000-2024	270
New Zealand	Reserve Bank of New Zealand	2000-2024	100
Norway	Norges Bank	2000-2024	199
Peru	Banco Central de Reserva del Perú	2001-2024	288
Philippines	Bangko Sentral ng Pilipinas	2001-2024	217
Poland	Narodowy Bank Polski	2001-2024	273
Thailand	Bank of Thailand	2002-2024	177
United States	Federal Reserve System	2000-2024	199

# 8.5 Tables and Graphs

Table 12: Quality check for Central Bank statements

Country	Passed	m .	m	m -	symbol/w	m	m	m -
		$n_{stopw}$	$m_{wlength}$	$n_{words}$		$p_{ellipsis}$	$p_{bullet points}$	$m_{dupstat}$
Armenia	0.99	135.46	4.75	353.31	0.00	0.00	0.00	0.01
Australia	1.00	259.30	4.68	626.06	0.00	0.00	0.00	0.00
Canada	1.00	184.52	4.67	471.03	0.00	0.00	0.00	0.01
$\mathbf{Chile}$	1.00	135.72	4.79	361.98	0.00	0.00	0.00	0.00
Colombia	0.79	178.24	4.58	479.05	0.00	0.00	0.00	0.04
$\mathbf{ECB}$	0.57	605.31	4.82	1568.06	0.00	0.00	0.00	0.08
$\mathbf{Fed}$	0.93	153.32	4.87	461.94	0.00	0.00	0.00	0.02
Hungary	0.82	343.55	4.78	941.93	0.00	0.00	0.01	0.03
Iceland	0.98	157.71	4.58	414.77	0.00	0.00	0.00	0.01
Indonesia	0.86	497.07	4.88	1639.27	0.00	0.00	0.00	0.03
Japan	0.75	167.47	4.55	450.07	0.00	0.00	0.00	0.04
Korea	0.98	154.40	4.87	410.36	0.00	0.00	0.00	0.01
NewZealand	0.99	156.53	4.83	404.98	0.00	0.00	0.00	0.00
Norway	0.84	194.68	4.59	513.88	0.00	0.00	0.01	0.03
Peru	0.94	158.18	4.64	449.63	0.00	0.00	0.00	0.03
Philippines	1.00	129.95	4.90	384.57	0.00	0.00	0.00	0.00
Poland	0.85	290.67	4.61	794.50	0.00	0.00	0.00	0.03
Thailand	0.92	154.80	5.01	427.93	0.00	0.00	0.00	0.02

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Table 13: Fixed effect models for 5 and 10 bottom percentile (part 1)

	A	11		Geogra	phy				guage	
	Model 1	Model 2	Wes Model 1	tern Model 2	Eas Model 1	tern Model 2	English Model 1	speaking Model 2	Non-Englis Model 1	h speaking Model 2
					A. Rea	dability				
$\Delta i_t$	-0.011 $(0.099)$	-0.014 (0.107)	-0.021 (0.110)	-0.028 (0.118)	0.669* (0.377)	0.631 $(0.403)$	0.241 (0.170)	0.180 (0.190)	-0.099 $(0.113)$	-0.103 $(0.125)$
$g_{y_t}^{5p}$ $g_{y_{t-1}}^{5p}$	0.624*** (0.210) 0.662***		$0.742^{***}$ $(0.239)$ $0.646^{***}$		0.371 $(0.462)$ $0.647$		$0.780^{**}$ $(0.330)$ $0.680$		$0.656^{**}  (0.301)  0.595^{**}$	
$g_{y_t}^{10p}$	(0.160)	0.350** (0.139)	(0.180)	0.376** (0.147)	(0.495)	$0.150 \\ (0.275)$	(0.462)	0.314 $(0.225)$	(0.248)	0.432** (0.214)
$g_{y_{t-1}}^{10p}$ $\pi_t$	0.004	$0.287^{**}$ $(0.144)$ $-0.000$	0.075	0.139 $(0.117)$ $0.072$	-0.013	0.604 $(0.517)$ $-0.006$	-0.011	0.102 $(0.158)$ $-0.047$	0.033	0.315 $(0.231)$ $0.034$
$\pi_{t-1}$ $u_t$	(0.062) $-0.057$ $(0.046)$ $-0.020$	(0.065) $-0.055$ $(0.047)$ $-0.000$	$ \begin{array}{c} (0.071) \\ -0.070 \\ (0.048) \\ 0.072 \end{array} $	$ \begin{array}{c} (0.079) \\ -0.068 \\ (0.047) \\ 0.117 \end{array} $	$ \begin{array}{c} (0.136) \\ 0.109 \\ (0.204) \\ 0.123**** \end{array} $	$ \begin{array}{c} (0.147) \\ 0.106 \\ (0.210) \\ 0.137^{***} \end{array} $	$\begin{array}{c} (0.156) \\ -0.065 \\ (0.113) \\ 0.019 \end{array}$	$ \begin{array}{c} (0.151) \\ -0.034 \\ (0.108) \\ 0.110 \end{array} $	$\begin{array}{c} (0.061) \\ -0.054 \\ (0.052) \\ -0.025 \end{array}$	$\begin{array}{c} (0.066) \\ -0.057 \\ (0.056) \\ -0.023 \end{array}$
$u_{t-1}$	(0.069) $0.108$ $(0.080)$	(0.075) $0.089$ $(0.080)$	$(0.063) \\ 0.190^* \\ (0.105)$	(0.077) $0.146$ $(0.108)$	(0.045) $0.039$ $(0.027)$	(0.041) $0.028$ $(0.037)$	(0.103) $0.354**$ $(0.163)$	$\begin{array}{c} (0.111) \\ 0.265^{**} \\ (0.118) \end{array}$	$(0.078) \\ 0.056 \\ (0.093)$	$(0.083) \\ 0.054 \\ (0.094)$
$_{ m N}^{2}$	0.02 1323	0.02 1323	0.11 1043	0.1 1043	0.06 280 B. Abst	0.06 280	0.1 479	0.09 479	0.01 844	0.01 844
$\Delta i_t$	-0.298***	-0.289***	-0.259***	-0.255***	-1.119	-1.147	-0.574***	-0.579***	-0.256***	-0.254**
$g_{y_t}^{5p}$	(0.095) $0.236$ $(0.210)$	(0.094)	$   \begin{array}{c}     (0.082) \\     0.167 \\     (0.221)   \end{array} $	(0.081)	$   \begin{array}{c}     (0.911) \\     0.596 \\     (0.723)   \end{array} $	(0.960)	$ \begin{array}{c} (0.111) \\ -0.232 \\ (0.426) \end{array} $	(0.121)	$   \begin{array}{c}     (0.093) \\     0.417 \\     (0.263)   \end{array} $	(0.099)
$g_{y_{t-1}}^{5p}$	0.234 $(0.157)$		0.098 $(0.164)$		$1.033^*$ $(0.594)$		$0.106 \\ (0.164)$		$0.296 \\ (0.257)$	
$g_{y_t}^{10p}$ $g_{y_{t-1}}^{10p}$		0.288** (0.146) 0.217		0.194 $(0.157)$ $0.055$		$0.765^{**}$ $(0.352)$ $1.072^{***}$		-0.176 $(0.238)$ $0.092$		$0.477^{**} \ (0.193) \ 0.263$
$\pi_t$	$0.045 \\ (0.044)$	$(0.154) \\ 0.042 \\ (0.047)$	0.035 $(0.049)$	$     \begin{array}{r}       (0.147) \\       0.032 \\       (0.051)     \end{array} $	0.197 $(0.143)$	$(0.339) \\ 0.231 \\ (0.153)$	-0.032 $(0.060)$	(0.163) $-0.029$ $(0.053)$	0.053 $(0.049)$	$ \begin{pmatrix} 0.241 \\ 0.050 \\ (0.054) \end{pmatrix} $
$\pi_{t-1}$ $u_t$	$ \begin{array}{c} 0.088 \\ (0.054) \\ 0.095 \end{array} $	$0.088^*$ $(0.054)$ $0.084$	$ \begin{array}{c} 0.064 \\ (0.044) \\ 0.102 \end{array} $	0.065 $(0.045)$ $0.096$	0.247 $(0.179)$ $-0.042$	0.222 $(0.172)$ $-0.042$	$ \begin{array}{c} 0.117^{**} \\ (0.052) \\ 0.084 \end{array} $	$ \begin{array}{c} 0.115^* \\ (0.059) \\ 0.079 \end{array} $	0.097 $(0.067)$ $0.083$	0.096 $(0.066)$ $0.069$
$u_{t-1}$	(0.060) $0.073$ $(0.068)$	(0.060) $0.084$ $(0.067)$	$     \begin{array}{r}       0.068 \\       0.076 \\       \hline       (0.088)     \end{array} $	(0.063) $0.082$ $(0.083)$	(0.223) $-0.076$ $(0.134)$	(0.214) $-0.072$ $(0.139)$	$ \begin{array}{c} (0.140) \\ 0.044 \\ (0.121) \end{array} $	$ \begin{array}{c} (0.134) \\ 0.049 \\ (0.093) \end{array} $	(0.053) $0.086$ $(0.078)$	(0.059) $0.100$ $(0.080)$
$_{\rm N}^{2}$	$0.1 \\ 1332$	$0.1 \\ 1332$	0.11 1043	0.11 1043	$0.09 \\ 289$	0.11 289	0.04 479	0.04 479	0.12 853	0.13 853

Table 14: Fixed effect models for 5 and 10 bottom percentile (part 2)

	A	.11			graphy				Language			
	Model 1	Model 2	Wes Model 1	tern Model 2	East Model 1	ern Model 2	English Model 1	speaking Model 2	Non-Engl Model 1	ish speaking Model 2		
						mativeness						
$\Delta i_t$	0.090	0.093	0.076	0.078	0.175*	0.165	0.132*	0.115**	0.012	0.015		
	(0.081)	(0.081)	(0.082)	(0.082)	(0.103)	(0.114)	(0.076)	(0.053)	(0.043)	(0.043)		
$g_{y_t}^{5p}$	0.097		0.076		$0.203^*$		0.362		0.029			
$g_{y_{t-1}}^{5p}$	(0.103) $0.058$		(0.126) $0.038$		(0.114) $0.168***$		(0.252) $-0.030$		$(0.107) \\ -0.001$			
	(0.088)		(0.111)		(0.052)		(0.260)		(0.098)			
$g_{y_t}^{10p}$		$0.088^*$ $(0.048)$		0.057 $(0.059)$		$0.176^{***} \ (0.057)$		$0.167^{***} (0.054)$		$0.057 \\ (0.048)$		
$g_{y_{t-1}}^{10p}$		$0.079^*$		0.042		0.192***		-0.098**		0.076		
	-0.015	(0.042)	0.000	$(0.049) \\ -0.010$	0.020	$(0.063) \\ -0.023$	0.082*	$(0.050) \\ 0.072^{**}$	0.002	(0.049)		
$\pi_t$	-0.013 $(0.031)$	-0.016 $(0.031)$	-0.008 $(0.033)$	(0.033)	-0.029 $(0.041)$	-0.023 $(0.038)$	(0.047)	(0.035)	$0.003 \\ (0.027)$	(0.001)		
$\pi_{t-1}$	-0.001 $(0.013)$	-0.000 $(0.013)$	0.002 $(0.012)$	0.003 $(0.012)$	-0.020 $(0.028)$	-0.024 $(0.028)$	$0.032^{**}$ $(0.015)$	0.042** (0.017)	0.008 $(0.014)$	0.009 $(0.015)$		
$u_t$	0.014	0.012	-0.006	-0.007	-0.024**	-0.021**	0.152***	0.178**	-0.029	-0.031		
$u_{t-1}$	$\begin{pmatrix} 0.046 \\ 0.047 * \end{pmatrix}$	$(0.047) \\ 0.049**$	$(0.054) \\ 0.072**$	$(0.056) \\ 0.073***$	(0.012) $-0.039***$	(0.010) $-0.041***$	(0.040) $0.216***$	(0.076) $0.190***$	$(0.032) \\ 0.033$	$(0.034) \\ 0.036$		
	(0.025)	(0.024)	(0.028)	(0.027)	(0.004)	(0.005)	(0.077)	(0.043)	(0.042)	(0.042)		
$_{ m N}^{2}$	$0.04 \\ 1332$	$0.04 \\ 1332$	$0.04 \\ 1043$	$0.04 \\ 1043$	$0.17 \\ 289$	$0.18 \\ 289$	$0.41 \\ 479$	$0.41 \\ 479$	$\begin{array}{c} 0.0 \\ 853 \end{array}$	$0.0 \\ 853$		
					D. C	ohesion						
$\Delta i_t$	0.029	0.021	0.048	0.042	-0.199	-0.170	0.066	0.050	-0.028	-0.033		
	(0.082)	(0.083)	(0.083)	(0.085)	(0.450)	(0.447)	(0.094)	(0.094)	(0.096)	(0.097)		
$g_{y_t}^{5p}$	0.211 $(0.134)$		$0.371^{**} (0.147)$		-0.280 (0.181)		0.119 $(0.116)$		0.243 $(0.183)$			
$g_{y_{t-1}}^{5p}$	0.033		0.151		-0.173		0.092		-0.113			
$g_{y_t}^{10p}$	(0.109)	0.067	(0.107)	0.176**	(0.130)	0.170	(0.132)	0.169	(0.146)	0.010		
		0.067 $(0.111)$		(0.087)		-0.178 $(0.283)$		0.162 $(0.100)$		$0.010 \\ (0.163)$		
$g_{y_{t-1}}^{10p}$		-0.106		-0.055		-0.051		-0.174**		-0.182		
$\pi_t$	0.056	$(0.077) \\ 0.056$	0.050*	$(0.062) \\ 0.049$	0.148	$(0.170) \\ 0.147$	0.004	$(0.083) \\ -0.004$	0.099**	$(0.112) \\ 0.100**$		
	(0.037)	(0.037)	(0.029)	(0.031)	(0.101)	(0.094)	(0.052)	(0.054)	(0.045)	(0.045)		
$\pi_{t-1}$	-0.038 $(0.030)$	-0.037 $(0.031)$	-0.063** (0.030)	$-0.062^{**}$ $(0.031)$	0.153 $(0.094)$	0.155 $(0.098)$	-0.028 $(0.031)$	-0.021 $(0.031)$	-0.041 $(0.037)$	$-0.04\dot{1}$ $(0.037)$		
$u_t$	-0.021 $(0.048)$	-0.006 $(0.047)$	-0.035 $(0.066)$	-0.010 $(0.063)$	0.018 $(0.042)$	0.016 $(0.042)$	$0.124^{***}$ $(0.023)$	0.143*** (0.040)	-0.086 $(0.054)$	-0.070 $(0.053)$		
$u_{t-1}$	$0.071^{*}$	$0.057^*$	0.104**	`0.079*	-0.027	-0.027	$0.073^{**}$	$0.057^{**}$	0.100	0.084		
$R^2$	$(0.040) \\ 0.02$	$(0.033) \\ 0.02$	$(0.051) \\ 0.04$	$(0.045) \\ 0.03$	$(0.037) \\ 0.17$	(0.034) $0.17$	$(0.030) \\ 0.23$	(0.024) $0.24$	$(0.064) \\ 0.02$	$(0.057) \\ 0.02$		
Ň	1323	1323	1043	1043	280	280	479	479	844	844		

Table 15: Fixed effect models for policy inertia (part 1)

	A	.11		Geog	raphy			Lar	nguage	
	Model 1	Model 2	Wes Model 1	tern Model 2	Eas Model 1	tern Model 2	English Model 1	speaking Model 2	Non-Engl Model 1	ish speaking Model 2
	1,10 (101 1	1,10 (101 2	1,100011	1,10 del 2			11104011	1,10 (101 2	1,10 del 1	1110401 2
					A. Re	eadability				
$\Delta i_t = 0$	$0.060 \\ (0.234)$	0.111 $(0.253)$	0.136 $(0.224)$	$0.106 \\ (0.202)$	-0.377 $(0.279)$	-0.273 $(0.298)$	0.183 $(0.312)$	0.169 $(0.275)$	-0.138 $(0.251)$	-0.023 $(0.320)$
$g_{y_t}^{2p}$	1.305***	,	1.534***	, ,	0.480	,	1.136**	, ,	1.309**	
	(0.390)		(0.446)		(1.051)		(0.514)		(0.589)	
$g_{y_{t-1}}^{2p}$	0.611** (0.299)		$0.703^{**} \ (0.356)$		0.054 $(0.893)$		0.748 $(0.811)$		0.471 $(0.314)$	
$RI_t$	(0.233)	-0.032	(0.550)	-0.338	(0.033)	0.205	(0.011)	-0.588	(0.314)	0.228
DI		(0.320)		(0.354)		(0.327)		(0.585)		(0.354)
$RI_{t-1}$		0.234 $(0.275)$		-0.162 $(0.344)$		$0.31\dot{1}$ $(0.201)$		-0.788 $(0.531)$		$0.574^{**}$ $(0.230)$
$\pi_t$	-0.002	-0.053	0.080	0.015	0.018	-0.009	-0.027	-0.274	0.006	0.003
	(0.064)	(0.081)	(0.067)	(0.111)	(0.137)	(0.093)	(0.167)	(0.183)	(0.064)	(0.083)
$\pi_{t-1}$	-0.060	-0.006	-0.064	0.010	0.059	0.070	-0.012	0.250***	-0.049	-0.034
$u_t$	$(0.047) \\ -0.046$	$(0.073) \\ 0.046$	$(0.056) \\ 0.043$	$(0.073) \\ 0.228^*$	$(0.185) \\ 0.084$	$(0.147) \\ 0.110$	$(0.091) \\ 0.064$	$(0.089) \\ 0.322**$	$(0.049) \\ -0.066$	$(0.084) \\ -0.007$
$\alpha_t$	(0.069)	(0.097)	(0.071)	(0.118)	(0.088)	(0.076)	(0.114)	(0.158)	(0.074)	(0.088)
$u_{t-1}$	$0.131^{*}$	0.041	0.218**	0.029	0.093	` 0.070	$0.308^{*}$	0.077	0.094	0.049
<b>D</b> 2	(0.078)	(0.089)	(0.103)	(0.144)	(0.069)	(0.061)	(0.173)	(0.218)	(0.095)	(0.086)
$_{ m N}^{2}$	$0.02 \\ 1365$	$0.01 \\ 1234$	$0.11 \\ 1052$	$0.11 \\ 952$	$0.05 \\ 313$	$0.05 \\ 282$	$0.1 \\ 479$	$0.14 \\ 423$	$0.01 \\ 886$	$0.02 \\ 811$
11	1000	1201	1002	002		stractness		120	000	011
					D. At	stractness				
$\Delta i_t = 0$	0.262 $(0.315)$	0.311 $(0.385)$	-0.106 $(0.158)$	-0.188 $(0.161)$	$1.454^{**}$ $(0.715)$	$1.563^*$ $(0.841)$	-0.213 $(0.256)$	-0.290 $(0.273)$	$0.465 \\ (0.408)$	0.597 $(0.510)$
$g_{y_t}^{2p}$	0.763	(0.363)	0.138) $0.379$	(0.101)	3.071	(0.641)	0.230) $0.072$	(0.213)	1.212	(0.510)
$g_{y_t}$	(0.524)		(0.423)		(1.962)		(0.429)		(0.759)	
$g_{y_{t-1}}^{2p}$	0.274		0.051		2.662***		0.050		0.404	
$gy_{t-1}$	(0.291)		(0.295)		(1.013)		(0.254)		(0.406)	
$RI_t$	,	0.080	,	0.006	,	0.309***	,	0.164	,	0.061
DI		(0.138)		(0.157)		$(0.114) \\ 1.447**$		(0.149)		(0.181)
$RI_{t-1}$		0.389 $(0.294)$		-0.046 (0.118)		(0.712)		0.012 $(0.083)$		0.625 $(0.423)$
$\pi_t$	0.005	0.003	-0.041	-0.057	0.244***	$0.177^*$	-0.075	-0.098**	0.033	0.053
<b>7</b>	$(0.064) \\ 0.197**$	$(0.069) \\ 0.275**$	$(0.057) \\ 0.124**$	$(0.077)$ $0.172^{***}$	$(0.086) \\ 0.576**$	$(0.099) \\ 0.623**$	$(0.050) \\ 0.094^*$	(0.045) $0.214***$	$(0.078) \\ 0.208**$	$(0.089) \\ 0.272^*$
$\pi_{t-1}$	(0.093)	(0.128)	(0.058)	(0.058)	(0.257)	(0.286)	(0.057)	(0.082)	(0.105)	(0.140)
$u_t$	$0.123^{**}$	0.146**	$0.119^*$	$0.163^{***}$	-0.133	-0.049	0.128	0.113	0.071	$0.115^*$
$u_{t-1}$	$(0.059) \\ 0.076$	$(0.058) \\ 0.060$	$(0.068) \\ 0.064$	$(0.063) \\ 0.034$	$(0.249) \\ -0.173$	$(0.194) \\ -0.203$	$(0.139) \\ 0.001$	$(0.104) \\ 0.041$	$\begin{pmatrix} 0.064 \\ 0.129 \end{pmatrix}$	$ \begin{pmatrix} 0.062 \\ 0.093 \end{pmatrix} $
	(0.078)	(0.059)	(0.098)	(0.070)	(0.173)	(0.191)	(0.092)	(0.061)	(0.102)	(0.077)
$R^2$	0.11	0.14	0.11	0.13	0.24	0.29	0.03	0.04	$0.1\dot{5}$	0.18
N	1376	1244	1052	952	324	292	479	423	897	821

Table 16: Fixed effect models for policy inertia (part 2)

	A	All		Geog	graphy			Lang	guage	
	Model 1	Model 2	Wes Model 1		Eas Model 1	tern Model 2	English Model 1	speaking Model 2	Non-Engl Model 1	ish speaking Model 2
					C. Info	rmativeness				
$\Delta i_t = 0$	$0.169^* \\ (0.087)$	$0.139 \\ (0.104)$	$0.162 \\ (0.103)$	$0.139 \\ (0.121)$	$0.194^* \ (0.115)$	$0.153 \\ (0.135)$	-0.072 $(0.107)$	-0.071 (0.113)	$0.145 \\ (0.090)$	0.083 $(0.113)$
$g_{y_t}^{2p}$	0.300**  (0.133)		$0.289^*$ $(0.150)$		0.484 $(0.301)$		0.430 $(0.286)$		0.282 $(0.179)$	
$g_{y_{t-1}}^{2p}$	0.119 $(0.092)$	0.040	0.116 $(0.112)$	0.007	$0.281^*$ $(0.146)$	0.000***	0.158 $(0.337)$	0.150	0.099 $(0.137)$	0.110
$RI_t$ $RI_{t-1}$		-0.040 $(0.085)$ $-0.027$		$0.007 \ (0.113) \ -0.103$		$-0.088^{***}$ $(0.019)$ $0.169$		$0.150 \\ (0.156) \\ -0.223***$		$     \begin{array}{r}       -0.119 \\       (0.078) \\       -0.037     \end{array} $
$\pi_t$	0.012 $(0.019)$	(0.085) $0.064$ $(0.039)$	0.017 $(0.019)$	(0.093) $0.072$ $(0.045)$	-0.005 $(0.035)$	$ \begin{pmatrix} 0.118 \\ 0.012 \\ (0.019) $	0.097** (0.040)	$     \begin{pmatrix}     0.059 \\     0.121^* \\     (0.065)   $	0.013 $(0.019)$	$     \begin{array}{r}       (0.123) \\       0.054 \\       (0.041)     \end{array} $
$\pi_{t-1}$	-0.009 $(0.019)$ $-0.004$	$-0.112^{**}$ $(0.050)$ $0.040$	$ \begin{array}{c} -0.011 \\ (0.021) \\ -0.023 \end{array} $	$-0.124^{**}$ $(0.062)$ $0.039$	$0.001$ $(0.020)$ $-0.061^{**}$	$-0.052^{*}$ $(0.029)$ $-0.030$	0.028 $(0.027)$ $0.131**$	-0.057 $(0.046)$ $0.198*$	0.010 $(0.014)$ $-0.045$	$-0.066^{**}$ $(0.034)$ $-0.010$
$u_t$ $u_{t-1}$	$(0.045) \\ 0.063**$	$(0.044) \\ 0.030^*$	$(0.057) \\ 0.087^{***}$	$(0.056) \\ 0.031$	(0.027) $-0.029****$	(0.019) $-0.028***$	(0.061) $0.239****$	$(0.107) \\ 0.170^{***}$	$(0.037) \\ 0.051$	$(0.020) \\ 0.024$
$_{\rm N}^{2}$	$(0.027) \\ 0.05 \\ 1376$	(0.016) $0.08$ $1244$	$(0.033) \\ 0.05 \\ 1052$	$     \begin{array}{r}       (0.024) \\       0.08 \\       952     \end{array} $	$(0.008) \\ 0.19 \\ 324$	$(0.009) \\ 0.17 \\ 292$	(0.062) $0.41$ $479$	(0.037) $0.42$ $423$	$(0.046) \\ 0.02 \\ 897$	(0.035) $0.03$ $821$
					D. (	Cohesion				
$\Delta i_t = 0$	-0.140 $(0.163)$	-0.135 $(0.180)$	$0.016 \\ (0.097)$	$0.018 \ (0.097)$	-0.698 $(0.475)$	-0.732 (0.531)	$-0.172^{***}$ $(0.041)$	$-0.155^{***}$ $(0.046)$	-0.239 $(0.257)$	-0.228 $(0.284)$
$g_{y_t}^{2p}$	$0.422^*$ $(0.221)$		$0.704^{***}$ $(0.207)$		$-0.730^*$ $(0.424)$		$0.392^*$ $(0.227)$		0.401 $(0.331)$	
$g_{y_{t-1}}^{2p}$	-0.018 $(0.145)$	0.005	0.128 $(0.138)$	0.100	-0.400 $(0.347)$	0.074	-0.126 $(0.249)$	0.100	$0.000 \\ (0.208)$	0.076
$RI_t$ $RI_{t-1}$		0.085 $(0.188)$ $0.084$		0.100 $(0.201)$ $0.123$		$ \begin{array}{r} -0.074 \\ (0.345) \\ -0.217 \end{array} $		0.123 $(0.091)$ $0.008$		$0.076 \ (0.277) \ 0.065$
$\pi_t$	0.063** (0.031)	$(0.148)$ $0.088^{**}$ $(0.043)$	0.072** (0.033)	(0.133) $0.108**$ $(0.052)$	$0.072 \\ (0.050)$	$   \begin{array}{c}     (0.158) \\     0.091 \\     (0.068)   \end{array} $	0.019 $(0.052)$	$ \begin{array}{c} (0.033) \\ -0.021 \\ (0.050) \end{array} $	0.082** (0.035)	$(0.206) \\ 0.120^{**} \\ (0.050)$
$\pi_{t-1}$ $u_t$	$-0.056^{*}$ $(0.033)$ $-0.043$	$-0.100^{\circ}$ $(0.056)$ $-0.012$	$-0.078^{**}$ $(0.037)$ $-0.062$	$-0.149^{**}$ $(0.062)$ $-0.009$	$ \begin{array}{c} 0.084 \\ (0.072) \\ 0.089 \end{array} $	0.094* (0.056) 0.045	$-0.049^{*}$ $(0.025)$ $0.086^{***}$	-0.045 $(0.042)$ $0.096***$	-0.045 $(0.039)$ $-0.098$	-0.088 $(0.069)$ $-0.066$
$u_{t-1}$	(0.048) 0.093** (0.041)	$ \begin{array}{c} (0.048) \\ 0.070^{***} \\ (0.026) \end{array} $	$(0.066)$ $0.129^{**}$ $(0.052)$	(0.062) 0.081** (0.040)	(0.055) $-0.017$ $(0.052)$	(0.042) $-0.004$ $(0.053)$	(0.026) $0.116***$ $(0.039)$	(0.024) 0.098** (0.041)	(0.060) $0.110*$ $(0.065)$	(0.052) 0.086* (0.047)
${ m R}^2  m N$	0.041 $0.02$ $1365$	0.020 $0.02$ $1234$	0.04 $1052$	0.040 $0.04$ $952$	0.032) $0.13$ $313$	0.033 $0.13$ $282$	0.24 $479$	0.25 $423$	0.003) 0.02 886	0.02 811

Table 17: Fixed effect models for extreme inflation values (part 1)

		All		Geogra	aphy			Lang	guage	
			Wes	tern	East	tern		speaking	Non-Engl	ish speaking
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
					A. Rea	dability				
$\Delta i_t$	-0.080	-0.063	0.017	-0.054	0.688	0.539	0.025	0.102	-0.133	-0.165
	(0.124)	(0.116)	(0.123)	(0.129)	(0.447)	(0.495)	(0.058)	(0.178)	(0.146)	(0.131)
$\pi_t^{2p}$	-0.094		0.132		-0.936**		-0.181		0.093	
2	(0.398)		(0.492)		(0.417)		(0.811)		(0.408)	
$\pi_{t-1}^{2p}$	-0.281		-0.162		-0.142		0.103		-0.286	
_	(0.292)	0.000	(0.320)	0.100	(0.709)	0.045	(0.373)	0.005	(0.327)	0.050
$\pi_t$		$0.020 \\ (0.068)$		0.100 $(0.080)$		-0.045 $(0.120)$		-0.025 (0.144)		0.059 $(0.066)$
$\pi_{t-1}$		-0.068		$-0.092^*$		0.120		-0.051		-0.072
·· t-1		(0.049)		(0.047)		(0.217)		(0.108)		(0.055)
$g_{y_t}$	-0.030	-0.033	-0.088***	-0.088***	0.044	0.050	-0.081	-0.090	-0.014	-0.015
	(0.042)	(0.044)	(0.025)	(0.030)	(0.039)	(0.034)	(0.051)	(0.064)	(0.040)	(0.042)
$g_{y_{t-1}}$	-0.014	-0.015	$-0.059^{**}$	$-0.059^{**}$	0.020	0.016	-0.053	-0.057	(0.003)	0.003
$u_t$	$(0.038) \\ -0.008$	$(0.040) \\ 0.002$	$(0.024) \\ 0.012$	$(0.028) \\ 0.021$	$(0.051) \\ 0.156**$	(0.034) $0.144***$	$(0.040) \\ 0.043$	$(0.048) \\ 0.034$	$(0.038) \\ -0.010$	$(0.040) \\ -0.006$
$\alpha_t$	(0.093)	(0.091)	(0.101)	(0.099)	(0.072)	(0.044)	(0.121)	(0.167)	(0.104)	(0.101)
$u_{t-1}$	0.097	` 0.09Ó	$0.262^{**}$	$0.252^{*}$	0.037	0.019	0.355***	0.341***	0.040	0.038
	(0.085)	(0.086)	(0.129)	(0.130)	(0.040)	(0.038)	(0.096)	(0.112)	(0.086)	(0.090)
$_{ m N}^{2}$	0.01	0.02	0.11	0.11	0.06	0.06	$0.1_{475}$	$0.1_{475}$	0.0	0.0
IN	1313	1313	1034	1034	279	279	475	475	838	838
					B. Abs	tractness				
$\Delta i_t$	$-0.197^*$	$-0.347^{***}$	$-0.159^*$	$-0.277^{***}$	-0.790	-1.368	$-0.431^{***}$	$-0.577^{***}$	-0.129	$-0.307^{**}$
2n	(0.109)	(0.129)	(0.096)	(0.104)	(0.713)	(1.002)	(0.096)	(0.118)	(0.115)	(0.135)
$\pi_t^{2p}$	0.169		-0.081		1.008**		-0.152		0.393	
$_2p$	(0.275)		(0.310)		(0.417)		(0.258)		(0.354)	
$\pi_{t-1}^{2p}$	-0.069		-0.095 $(0.378)$		-0.063		-0.271		0.159 $(0.419)$	
$\pi_t$	(0.329)	0.052	(0.378)	0.041	(0.424)	$0.174^{*}$	(0.473)	-0.027	(0.419)	0.070
$\kappa_{\iota}$		(0.042)		(0.048)		(0.103)		(0.054)		(0.048)
$\pi_{t-1}$		0.086		0.059		0.254		$0.112^{*}$		0.086
_	0.002	(0.056)	0.019	(0.044)	0.045	(0.203)	0.006	(0.065)	0.002	(0.065)
$g_{y_t}$	-0.003 $(0.019)$	0.006 $(0.021)$	-0.012 (0.016)	-0.003 $(0.019)$	0.045 $(0.076)$	0.028 $(0.056)$	0.006 $(0.028)$	0.022 $(0.031)$	-0.003 $(0.018)$	0.008 $(0.021)$
$g_{y_{t-1}}$	0.023	0.028	0.009	0.016	0.098	$0.057^*$	-0.034**	-0.022	0.032	0.040
<i>□ Jt</i> −1	(0.023)	(0.024)	(0.019)	(0.022)	(0.071)	(0.034)	(0.017)	(0.022)	(0.028)	(0.029)
$u_t$	0.153***	0.133***	0.141***	0.126***	0.038	-0.041	0.089	0.085	0.160***	0.128***
11, 1	$(0.059) \\ 0.021$	$(0.051) \\ 0.035$	$(0.047) \\ 0.031$	$\begin{pmatrix} 0.045 \\ 0.052 \end{pmatrix}$	(0.221) $-0.003$	$(0.198) \\ -0.077$	$(0.099) \\ 0.010$	$\begin{pmatrix} 0.094 \\ 0.045 \end{pmatrix}$	$(0.061) \\ 0.026$	$(0.046) \\ 0.039$
$u_{t-1}$	(0.053)	(0.051)	(0.075)	(0.072)	(0.151)	(0.157)	(0.093)	(0.098)	(0.063)	(0.056)
$R^2$	0.07	0.1	0.09	$0.1\dot{1}$	0.01	0.09	0.04	0.04	0.09	$0.1\dot{2}$
N	1322	1322	1034	1034	288	288	475	475	847	847

Table 18: Fixed effect models for extreme inflation values (part 2)

	A	11		Geogr	aphy			Lan	guage	
			Wes	tern	East	tern Model 2		speaking	Non-Engl	ish speaking
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
					C. Inform	nativeness				
$\Delta i_t$	0.078	0.113	0.067	0.093	0.116	0.185	0.166***	0.137***	0.025	0.018
2m	(0.060)	(0.101)	(0.063)	(0.105)	(0.118)	(0.113)	(0.060)	(0.052)	(0.030)	(0.065)
$\pi_t^{2p}$	0.108		0.171**		-0.010		$0.341^{**}$		0.134	
$\pi_{t-1}^{2p}$	$(0.083)$ $0.168^*$		$(0.084)$ $0.185^*$		(0.132) $0.136$		(0.135) $0.402**$		$(0.115) \\ 0.185^*$	
$^{\prime\prime}t-1$	(0.087)		(0.102)		(0.102)		(0.162)		(0.108)	
$\pi_t$	(0.00.)	-0.013	(*****)	-0.006	(**=*=)	-0.027	(**=*=)	0.078**	(0.200)	0.004
<i>—</i>		$(0.032) \\ -0.005$		$(0.034) \\ -0.002$		(0.040) $-0.019$		$(0.038) \\ 0.033**$		$(0.031) \\ 0.006$
$\pi_{t-1}$		-0.003 $(0.015)$		-0.002 $(0.015)$		-0.019 $(0.028)$		(0.015)		(0.015)
$g_{y_t}$	-0.029	-0.031	-0.028	-0.029	$-0.031^*$	$-0.030^{*}$	-0.071**	-0.065**	-0.010	-0.010
	$(0.018) \\ -0.024$	$(0.020) \\ -0.026$	$(0.021) \\ -0.022$	$(0.024) \\ -0.024$	$(0.018) \\ -0.032^*$	$(0.017) \\ -0.028^*$	(0.031) $-0.026$	$(0.033) \\ -0.025$	$(0.006) \\ -0.009$	$(0.007) \\ -0.009$
$g_{y_{t-1}}$	-0.024 $(0.015)$	(0.016)	-0.022 $(0.018)$	-0.024 $(0.020)$	-0.032 $(0.019)$	-0.028 $(0.016)$	-0.020 $(0.016)$	-0.025 $(0.017)$	-0.009 $(0.005)$	-0.009 $(0.006)$
$u_t$	-0.020	-0.018	-0.051	-0.050	-0.037***	-0.028**	0.074	0.104	-0.038	-0.041
21	$(0.036) \\ 0.082**$	$(0.039) \\ 0.080**$	(0.032) $0.121***$	$(0.035) \\ 0.118***$	(0.011) $-0.039****$	(0.014) $-0.030***$	(0.068) $0.258***$	(0.074) $0.257***$	$(0.032) \\ 0.045$	$(0.036) \\ 0.046$
$u_{t-1}$	(0.042)	(0.040)	(0.045)	(0.040)	(0.005)	(0.009)	(0.062)	(0.061)	(0.044)	(0.046)
$_{ m N}^{2}$	0.05	$0.0\acute{5}$	$0.0\dot{5}$	0.05	0.16	0.19	0.4	0.41	0.01	0.01
N	1322	1322	1034	1034	288	288	475	475	847	847
					D. Di	isunity				
$\Delta i_t$	0.083	-0.002	0.091	0.045	0.264	-0.254	-0.047	0.015	0.080	-0.066
2m	(0.083)	(0.093)	(0.082)	(0.090)	(0.435)	(0.496)	(0.074)	(0.101)	(0.097)	(0.108)
$\pi_t^{2p}$	-0.259		-0.127		$-0.690^*$		0.030		-0.300	
$\pi_{t-1}^{2p}$	(0.177) $-0.268$		(0.184) $-0.303$		(0.357) $-0.048$		(0.134) $0.245$		$(0.225)$ $-0.370^*$	
$^{\prime\prime}t-1$	(0.163)		(0.186)		(0.337)		(0.187)		(0.204)	
$\pi_t$	( )	$0.067^*$	()	0.062**	(-1001)	0.135	()	0.012	( /	0.106**
$\pi$ , ,		$(0.037) \\ -0.045$		(0.029) $-0.076**$		$(0.091) \\ 0.158^*$		(0.045) $-0.034$		$(0.045) \\ -0.045$
$\pi_{t-1}$		(0.032)		(0.031)		(0.093)		(0.025)		(0.038)
$g_{y_t}$	-0.019	-0.017	-0.052***	-0.053***	0.070	0.066	-0.018	-0.024	-0.009	-0.004
a.	$(0.024) \\ -0.009$	$(0.026) \\ -0.006$	$(0.014) \\ -0.043**$	(0.015) $-0.043**$	$(0.075) \\ 0.088$	$(0.060) \\ 0.067$	$(0.021) \\ 0.003$	$(0.027) \\ -0.001$	$(0.025) \\ -0.001$	$\begin{pmatrix} 0.026 \\ 0.005 \end{pmatrix}$
$g_{y_{t-1}}$	(0.029)	(0.030)	(0.020)	(0.020)	(0.079)	(0.052)	(0.020)	(0.023)	(0.031)	(0.032)
$u_t$	-0.023	-0.022	-0.096	-0.087	0.081	0.026	0.114***	0.118**	-0.062	-0.073
$u_{t-1}$	$(0.070) \\ 0.075^*$	$(0.066) \\ 0.074*$	$(0.066) \\ 0.170***$	$(0.068) \\ 0.161***$	$(0.056) \\ 0.010$	$(0.026) \\ -0.043$	(0.033) $0.091**$	$(0.050) \\ 0.078*$	$(0.080) \\ 0.083$	$(0.074) \\ 0.086$
	(0.045)	(0.044)	(0.049)	(0.051)	(0.041)	(0.056)	(0.043)	(0.045)	(0.059)	(0.063)
$R^2$	0.02	0.02	0.04	$0.0\dot{5}$	0.06	0.19	0.24	0.24	0.01	0.02
N	1313	1313	1034	1034	279	279	475	475	838	838

Table 19: Fixed effect models for extreme price level (part 1)

	All			Geogra	aphy		Language			
	Model 1	Model 2	Wes Model 1	tern Model 2	Eas Model 1	tern Model 2	English Model 1	speaking Model 2	Non-Engl Model 1	ish speaking Model 2
						adability				
$\Delta i_t$	-0.108 $(0.127)$	0.004 $(0.116)$	0.014 $(0.120)$	0.008 $(0.133)$	0.597 $(0.382)$	0.302 $(0.549)$	-0.020 $(0.249)$	0.110 (0.081)	-0.137 $(0.141)$	-0.091 $(0.121)$
$CPI_t^{2p}$	-0.549 $(0.453)$	,	-0.149 $(0.471)$	, ,	-0.791 $(0.754)$	, ,	-0.824 $(0.859)$	, ,	-0.334 $(0.476)$	,
$CPI_{t-1}^{2p}$	-0.320 $(0.246)$		-0.153 $(0.277)$		-0.252 $(0.812)$		-0.131 (0.481)		-0.164 $(0.339)$	
$CPI_t$	, ,	-0.090 $(0.139)$		0.047 $(0.166)$		0.052 $(0.172)$		-0.140 $(0.263)$	, ,	-0.012 $(0.120)$
$CPI_{t-1}$	-0.030	0.085 $(0.137)$	-0.088***	-0.054 $(0.164)$ $-0.089***$	0.040	-0.029 $(0.164)$ $0.051**$	0.096*	0.137 $(0.262)$ $-0.081$ *	0.014	0.004 $(0.118)$
$g_{y_t}$	-0.030 $(0.042)$ $-0.014$	-0.031 $(0.044)$ $-0.016$	-0.088 $(0.025)$ $-0.059**$	-0.089 $(0.027)$ $-0.060**$	$0.049 \\ (0.038) \\ 0.023$	(0.025) $0.033$	$-0.086^*$ $(0.046)$ $-0.056$	$-0.081$ $(0.044)$ $-0.055^*$	-0.014 $(0.041)$ $0.003$	-0.016 $(0.042)$ $0.001$
$g_{y_{t-1}}$ $u_t$	(0.038) $-0.013$	(0.040) $-0.009$	(0.024) $0.010$	(0.026) $0.008$	(0.052) $0.151**$	(0.051) $0.139****$	(0.038) $0.032$	(0.028) $0.016$	(0.039) $-0.012$	(0.040) $-0.010$
$u_{t-1}$	$(0.095) \\ 0.101$	$(0.096) \\ 0.097$	$(0.102) \\ 0.263^{**}$	$(0.103) \\ 0.258^*$	$(0.075) \\ 0.037$	$(0.051) \\ 0.052$	$(0.143)$ $0.360^{***}$	$(0.169) \\ 0.366^{***}$	$(0.104) \\ 0.042$	(0.103) $0.038$
$R^2$	(0.085) $0.01$ $1313$	$(0.089) \\ 0.02 \\ 1310$	(0.129) $0.11$ $1034$	(0.133) $0.11$ $1032$	$(0.038) \\ 0.05 \\ 279$	$     \begin{array}{r}       (0.042) \\       0.08 \\       278     \end{array} $	(0.106) $0.1$ $475$	(0.110) $0.1$ $473$	(0.084) $0.0$ $838$	(0.090) $0.01$ $837$
						stractness	2.0	-1.0		
$\Delta i_t$	$-0.197^*$ $(0.112)$	-0.328** (0.131)	$-0.169^*$ $(0.100)$	$-0.255^{**}$ $(0.106)$	-0.766 $(0.767)$	-1.471 (1.016)	$-0.551^{***}$ $(0.103)$	$-0.308^{***}$ $(0.088)$	-0.113 (0.118)	-0.286; (0.148)
$CPI_t^{2p}$	0.069 $(0.328)$	,	0.094 $(0.378)$	, ,	-0.106 $(0.640)$	, ,	$-1.051^{***}$ $(0.185)$	, ,	$0.612^{*}$ $(0.338)$	,
$CPI_{t-1}^{2p}$	-0.671 $(0.574)$		-0.335 $(0.260)$		-1.788 (2.484)		$-0.565^*$ $(0.342)$		-0.779 (1.091)	
$CPI_t$		0.129 $(0.102)$	,	0.090 $(0.069)$		$0.542^{**}$ $(0.263)$ $-0.512^{**}$	,	-0.055 $(0.106)$	•	0.125 $(0.119)$
$CPI_{t-1}$ $g_{y_t}$	-0.003	$ \begin{array}{c} -0.122 \\ (0.101) \\ -0.001 \end{array} $	-0.012	-0.086 $(0.067)$ $-0.009$	0.040	-0.512 $(0.249)$ $0.007$	0.001	$ \begin{array}{c} 0.034 \\ (0.113) \\ -0.020 \end{array} $	-0.004	-0.110 $(0.116)$ $0.003$
$g_{y_{t-1}}$	(0.018) $0.022$	(0.018) $0.026$	(0.016) $0.010$	(0.017) $0.012$	(0.073) $0.094$	$(0.053) \\ 0.100*$	$(0.025)$ $-0.038^*$	(0.028) $-0.060***$	(0.017) $0.030$	(0.018) $0.038$
$u_t$	$(0.023) \\ 0.151**$	(0.024) $0.154***$	$(0.019) \\ 0.141***$	$(0.020) \\ 0.147***$	$(0.068) \\ 0.025$	$(0.059) \\ -0.028$	$(0.020) \\ 0.064$	$(0.021) \\ 0.036$	(0.027) $0.161***$	(0.029) $0.155**$
$u_{t-1}$	(0.059) $0.022$	(0.058) $0.022$	(0.049) $0.031$	(0.048) $0.030$	(0.228) $0.005$	(0.211) $0.021$	(0.100) $0.025$	(0.094) $0.024$	(0.061) $0.025$	(0.056) $0.033$
$_{\rm N}^{2}$	$(0.052) \\ 0.07 \\ 1322$	(0.051) $0.08$ $1319$	(0.074) $0.09$ $1034$	(0.072) $0.09$ $1032$	(0.146) $0.02$ $288$	(0.145) $0.06$ $287$	$(0.090) \\ 0.05 \\ 475$	(0.087) $0.07$ $473$	(0.061) $0.09$ $847$	(0.054) $0.12$ $846$

Table 20: Fixed effect models for extreme price level (part 2)

	A	.11		Geogr	raphy			Lan	guage	
	Model 1	Model 2	Wes Model 1	tern Model 2	Eas <sup>*</sup> Model 1	tern Model 2	English Model 1	speaking Model 2	Non-Engli Model 1	ish speaking Model 2
					C. Inforr	nativeness				
$\Delta i_t$	$0.095 \\ (0.063)$	$0.096 \\ (0.101)$	$0.089 \\ (0.067)$	$0.083 \\ (0.106)$	$0.111 \\ (0.128)$	$0.067 \\ (0.056)$	$0.297^{**} (0.126)$	$0.113^{**} (0.057)$	0.033 $(0.029)$	-0.004 $(0.057)$
$CPI_t^{2p}$ $CPI_{t-1}^{2p}$	0.214 $(0.134)$		0.245 $(0.154)$		0.004 $(0.147)$		$0.500^*$ $(0.289)$		$0.166 \\ (0.166)$	
	0.187 $(0.182)$		0.227 $(0.177)$		0.070 $(0.525)$		0.216 $(0.236)$		0.247 $(0.235)$	
$CPI_t$ $CPI_{t-1}$	, ,	-0.039 $(0.063)$ $0.044$	, ,	-0.025 $(0.065)$ $0.029$	,	-0.049 $(0.041)$ $0.058$	, ,	$0.108 \\ (0.066) \\ -0.095$	, ,	0.017 $(0.047)$ $-0.012$
$g_{y_t}$	-0.029 $(0.018)$	(0.060) $-0.028$ $(0.018)$	-0.028 (0.021)	$(0.062) \\ -0.027 \\ (0.022)$	$-0.032^*$ (0.018)	$(0.047) \\ -0.026^{**} \\ (0.011)$	$-0.072^{**}$ $(0.032)$	$(0.065)$ $-0.060^{**}$ $(0.028)$	-0.010 $(0.006)$	(0.045) $-0.009$ $(0.006)$
$g_{y_{t-1}}$	$-0.025^*$ $(0.015)$ $-0.017$	-0.023 $(0.015)$ $-0.017$	$ \begin{array}{r} (0.021) \\ -0.023 \\ (0.018) \\ -0.047 \end{array} $	$ \begin{array}{r} (0.022) \\ -0.022 \\ (0.019) \\ -0.047 \end{array} $	$-0.032^*$ $(0.019)$ $-0.037^{***}$	$-0.028^{**}$ $(0.013)$ $-0.036^{***}$	$ \begin{array}{c} (0.032) \\ -0.028^* \\ (0.016) \\ 0.089 \end{array} $	$ \begin{array}{c} (0.025) \\ -0.015 \\ (0.018) \\ 0.122 \end{array} $	$-0.009^*$ $(0.005)$ $-0.036$	$ \begin{array}{r} (0.005) \\ -0.007 \\ (0.005) \\ -0.039 \end{array} $
$u_t$ $u_{t-1}$	$(0.036) \\ 0.081**$	$(0.036) \\ 0.084**$	(0.032) $0.118****$	$(0.029)$ $0.121^{***}$	(0.014) $-0.038****$	$(0.010)$ $-0.032^{***}$	(0.073) $0.243****$	$(0.075) \\ 0.235***$	$(0.031) \\ 0.044$	$(0.031) \\ 0.047$
$_{\rm N}^{R^2}$	(0.041) $0.05$ $1322$	(0.041) $0.06$ $1319$	(0.044) $0.05$ $1034$	(0.045) $0.06$ $1032$	(0.004) $0.16$ $288$	$(0.010) \\ 0.23 \\ 287$	$(0.054) \\ 0.4 \\ 475$	$(0.050) \\ 0.43 \\ 473$	$(0.043) \\ 0.01 \\ 847$	$(0.046) \\ 0.03 \\ 846$
					D. Co	ohesion				
$\Delta i_t$	0.058 $(0.086)$	$0.003 \\ (0.096)$	0.071 $(0.084)$	$0.049 \\ (0.097)$	0.220 $(0.390)$	-0.376 $(0.566)$	-0.016 $(0.112)$	$0.026 \\ (0.102)$	0.068 $(0.100)$	-0.072 (0.117)
$CPI_t^{2p}$ $CPI_{t-1}^{2p}$	-0.255 $(0.272)$ $0.141$		-0.186 $(0.304)$ $0.093$		-0.359 $(0.218)$ $0.411$		-0.345 $(0.277)$ $0.110$		-0.160 $(0.374)$ $0.207$	
$CPI_t$	(0.256)	0.102 $(0.075)$	(0.230)	$0.070 \\ (0.056)$	(0.763)	$0.501^*$ $(0.271)$	(0.235)	0.019 $(0.069)$	(0.405)	0.179* (0.094)
$CPI_{t-1}$ $g_{y_t}$	-0.017	-0.107 $(0.076)$ $-0.019$	-0.051***	$-0.078$ $(0.058)$ $-0.053^{***}$	0.073	$-0.483^{\circ}$ $(0.264)$ $0.039$	-0.021	$-0.023$ $(0.073)$ $-0.027^*$	-0.008	$-0.184^{\circ}$ $(0.096)$ $-0.007$
$g_{y_{t-1}}$	(0.024) $-0.007$ $(0.029)$	(0.024) $-0.008$ $(0.030)$	$ \begin{array}{c} (0.014) \\ -0.041^{**} \\ (0.020) \end{array} $	$(0.013)$ $-0.043^{**}$ $(0.020)$	(0.073) $0.090$ $(0.079)$	(0.049) $0.092$ $(0.070)$	$   \begin{array}{c}     (0.021) \\     0.001 \\     (0.020)   \end{array} $	(0.015) $-0.004$ $(0.018)$	(0.025) $0.001$ $(0.031)$	(0.024) $0.003$ $(0.032)$
$u_t$	-0.024 $(0.070)$	-0.026 $(0.070)$	$ \begin{array}{c} (0.020) \\ -0.098 \\ (0.067) \\ 0.172^{***} \end{array} $	$ \begin{array}{c} (0.020) \\ -0.100 \\ (0.068) \\ 0.168^{***} \end{array} $	0.082 $(0.054)$	0.024 $(0.036)$	$0.114^{***}$ $(0.039)$	0.112*** (0.041)	-0.061 $(0.081)$	-0.073 $(0.079)$
$u_{t-1}$ $R^2$ $N$	0.077* (0.046) 0.02 1313	0.074* (0.045) 0.02 1310	$0.172^{-6}$ $(0.049)$ $0.04$ $1034$	$ \begin{array}{c} 0.168^{****} \\ (0.049) \\ 0.06 \\ 1032 \end{array} $	$   \begin{array}{c}     0.009 \\     (0.042) \\     0.06 \\     279   \end{array} $	$ \begin{array}{c} 0.023 \\ (0.042) \\ 0.16 \\ 278 \end{array} $	0.087* (0.047) 0.24 475	0.086* (0.051) 0.24 473	0.083 (0.058) 0.01 838	0.085 (0.060) 0.02 837

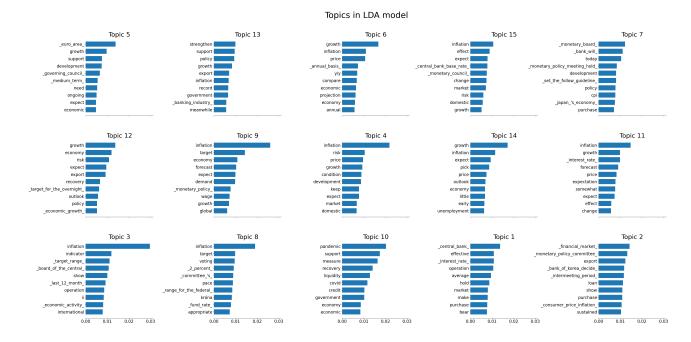


Figure 4: Topics and their keywords

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