

# Auto-EPU

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# Prompt Template - Policy Category

You are one of the experienced {country} {role} who reads "economic newspaper" extensively. Please response only in {language}, and no need of English translation.

Your task is to list {n\_keywords} common keywords that frequently appear in "policy-related" {country} news articles and satisfy the following 2 requirements.

1. each keyword must be a "simple word", and thus exclude the composite word, especially various policy categories
2. do not include "economic" keyword

# input variables

- ▶ country
  - ▶ Taiwan
  - ▶ US
  - ▶ China
  - ▶ Australia
  - ▶ Japan
  - ▶ South Korean
- ▶ role
  - ▶ newspaper reader
  - ▶ newspaper editor
  - ▶ economist
- ▶ language: depends on country
- ▶ n\_keywords: 20

# Workflow Of Constructing Policy Category Keyword Set

- ▶ in each paradigm of role:
  1. query 5 times to get 5 subset of warmup keywords
  2. segment all warmup keywords to a single word
  3. calculate the frequency across subsets of each word
  4. select word which survives major voting based on frequency
  5. restore composite word if necessary
- ▶ conduct major voting among different keyword set to construct the final keyword set

# Taiwan Warmup Keyword Subset

Policy Category, As A Newspaper Reader

(1) query 1	(2) quer 2	(3) quer 3	(4) quer 4	(5) quer 5
政府	政府	政府	政府	政府
政策	政策	政策	政策	政策
稅收	稅收	稅收	稅收	稅收
社會福利	財政	預算	社會福利	社會福利
教育	預算	財政	財政	健康保險
健康保健	社會福利	社會福利	預算	教育
環境保護	公共支出	福利改革	公共服務	勞工權益
能源	社會保障	公共支出	貸款	環境保護
醫療	法規	國家發展	能源	能源政策
社會安全	立法	政黨	基礎建設	國防
交通	政黨	政治	環境保護	財政
公共服務	政治人物	行政	教育	公共交通
勞工	選舉	立法	勞工	移民政策
土地利用	政治改革	政府部門	醫療保健	土地利用
社會服務	政治風險	政治改革	退休金	社會安全網
基礎建設	公共服務	政治制度	社會安全	司法改革
公共財政	政府部門	公民權利	都市計畫	治安
文化	政策制定	法律	土地政策	資訊安全
科技	政府決策	民主	市場監管	國際關係
住房	政治氣候	政治體制	國家發展	文化政策

# Taiwan Keyword Set Under Different Paradigm

(1) newspaper reader	(2) newspaper editor	(3) economist	(4) vote
政府	政府	政策	政府
政策	政策	政府	政策
稅收	財政	國家	稅收
社會福利	稅收	政黨	社會福利
教育	預算	預算	財政
環境保護	福利	稅收	預算
公共服務	支出	政治	政治
財政	法律	福利	福利
預算	政治	法律	法律
		財政	
		社會福利	

# Keywords For Policy Category Across Countries

results from major voting

(1) Taiwan	(2) China	(3) Japan	(4) South Korean	(5) US	(6) Australia
政府	政策	政府	정부	legislation	government
政策	政府	改革	규제	regulation	legislation
稅收	发展	法律	지원	reform	regulation
社會福利	改革	財政	예산	tax	healthcare
財政	增长	予算	세금	education	education
預算	投资	地方自治体	성장	immigration	infrastructure
政治	财政	教育	투자	security	environment
福利	稳定	医療	산업	environment	immigration
法律	社会	福祉	정책	infrastructure	welfare
	消费	雇用	재정	defense	housing
	市场	税金	법안	foreign	indigenous
	就业	環境	조세	social	energy
		政策	고용	justice	security
		労働		welfare	climate
		社会保障		healthcare	employment
				trade	trade
				energy	technology
				policy	transport
				housing	tax
				technology	

# LLM Coverage Compared to Human Export

- ▶ Taiwan:  $\frac{3}{35}$ , 8.57%
- ▶ China:  $\frac{4}{31}$ , 12.90%
- ▶ Japan:  $\frac{2}{32}$ , 6.25%
- ▶ South Korea:  $\frac{4}{23}$ , 17.39%
- ▶ US:  $\frac{2}{8}$ , 0.25%
- ▶ Australia:  $\frac{3}{13}$ , 23.08%



# EPU Contruction Workflow

In the following sections, I use the same workflow to construct the Economic and Uncertainty categories, and further apply on other contries.

# Keywords For Uncertainty Category, Taiwan

## Prompt Under Newspaper Reader Paradigm

You are one of the experienced Taiwanese newspaper reader who reads "economic newspaper" extensively. Please response only in Traditional Chinese, and no need of English translation.

Your task is to list 20 common keywords that frequently appear in "uncertainty-related" Taiwanese news articles and satisfy the following requirement.

1. each keyword must be a "simple word", and thus exclude the composite word, especially various uncertainty categories

# Keywords For Uncertainty Category, Taiwan

(1) newspaper reader	(2) newspaper editor	(3) economist	(4) vote
不確定性	不確定性	不確定性	不確定性
波動	波動	波動	波動
風險	不穩定	變動	風險
不穩定	風險	衰退	不穩定
不可預測	變動	不穩定	不可預測
挑戰	不可預測	不確定	挑戰
動盪	衰退	不安	動盪
不安	動盪	擔憂	不安
不明朗	不明朗	風險	不明朗
疑慮	不安	不明朗	疑慮
擔憂	挑戰	疑慮	擔憂
	擔憂	挑戰	變化
	不確定因素	動盪	變動
	變化	變化	衰退
	疑慮	波動性	
	不穩	震盪	

# Keywords For Economic Category, Taiwan

## Prompt Under Newspaper Reader Paradigm

You are one of the experienced Taiwanese newspaper reader who reads "economic newspaper" extensively. Please response only in Traditional Chinese, and no need of English translation.

Your task is to list 20 common keywords that frequently appear in "economic-related but not policy-related" Taiwanese news articles and satisfy the following requirement.

1. each keyword must be a "simple word", and thus exclude the composite word, especially various economic categories

# Keywords For Economic Category, Taiwan

(1) newspaper reader	(2) newspaper editor	(3) economist	(4) vote
股市	股市	經濟	股市
經濟	經濟	貿易	經濟
企業	市場	產業	投資
投資	投資	股市	貿易
貿易	消費	投資	就業
就業	貿易	就業	消費
消費	產業	消費	市場
財務	資本	價格	需求
市場	價格	市場	產業
需求	國際	需求	價格
供應	就業	企業	利潤
產業	銀行	收入	
價格	商業	資本	
利潤	競爭	競爭	
金融	公司	利潤	
	營收	風險	
	利潤	股票	
	需求	銀行	
		財務	

# Keywords For Economic Category, US

(1) newspaper reader	(2) newspaper editor	(3) economist	(4) vote
inflation	jobs	jobs	inflation
unemployment	unemployment	inflation	unemployment
unemployment	inflation	GDP	stocks
stocks	GDP	unemployment	technology
technology	stocks	trade	consumer
consumer	market	housing	trade
trade	trade	consumer	housing
housing	consumer spending	retail	market
market	housing market	manufacturing	retail
retail	housing	interest rates	labor
labor	retail	corporate profits	manufacturing
economic	manufacturing	technology	jobs
manufacturing	income	corporate	income
innovation	Gross Domestic Product	market	GDP
jobs	stock market	entrepreneurship	consumer spending
income	technology	stock	housing market
prices	entrepreneurship	spending	Gross Domestic Product
	labor market	labor	stock market
	business	federal reserve	entrepreneurship'
	earnings	Gross Domestic Product	labor market
	labor	business	business
	commodities	housing market	corporate profits
		consumer spending	
		consumer confidence	
		corporate profits	
		labor market	
		stock market	

# Keywords For Policy Category, US

(1) newspaper reader	(2) newspaper editor	(3) economist	(4) vote
legislation	legislation	legislation	legislation
regulation	tax	regulation	regulation
reform	healthcare	tax	reform
tax	education	healthcare	tax
education	immigration	immigration	education
immigration	security	education	immigration
security	environment	infrastructure	security
environment	infrastructure	environment	environment
infrastructure	trade	energy	infrastructure
defense	defense	security	defense
foreign	social	trade	foreign
social	regulation	social	social
justice	foreign	reform	justice
welfare	energy	welfare	welfare
healthcare	housing	justice	healthcare
trade	welfare	housing	trade
energy	justice	defense	energy
policy	technology	technology	policy
housing	transportation	foreign	housing
privacy	policy	budget	technology
	agriculture		

# Keywords For Uncertainty Category, US

(1) newspaper reader	(2) newspaper editor	(3) economist	(4) vote
volatility	risk	risk	volatility
risk	volatility	volatility	risk
fluctuation	fluctuation	unpredictability	fluctuation
ambiguity	unpredictability	fluctuation	ambiguity
unpredictability	instability	ambiguity	unpredictability
instability	ambiguity	instability	instability
tumult	doubt	doubt	doubt
doubt	insecurity	insecurity	insecurity
insecurity	indecision	ambivalence	ambivalence
ambivalence	unsettled	hesitation	indecision
indecision	unease	wavering	hesitation
hesitation	hesitation	indecision	unease
unease	ambivalence	unsettled	confusion
confusion	wavering	unease	unsettled
unsettled		disquiet	wavering
turbulence		confusion	
		tentativeness	



# Reference