The measurement and application of China's environmental policy uncertainty index: A study based on text analysis

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Abstract

Studies mainly focus on measuring the uncertainty of economic policy in different countries. However, few studies have focused on the construction of an environmental policy uncertainty index (EPUI). This study selects 460 newspapers from the China National Knowledge Infrastructure newspaper database from 2001 to 2016 and uses a text analysis method to directly construct China's national, provincial, and prefecture-level EPUI. We have analyzed the distribution and fluctuation trend of the EPUI and investigated the impact of environmental policy uncertainty on environmental pollutant emissions at the prefecture level. The Chinese EPUI constructed for the first time in this study provides significant basic data for research in the environment and energy fields and provides important empirical evidence for achieving China's carbon peak and carbon neutrality goals.

Keywords: environmental policy; uncertainty; text analysis; pollutant emissions

1. Introduction

China's rapid economic growth has long been inseparable from the excessive consumption of resources and energy, which has caused serious environmental pollutions (e.g., water pollution, air pollution, and land pollution). Environmental policies (such as pollution emission policies, carbon trading policies, carbon tax policies, etc.) are crucial means to solve environmental pollution problems. As China considered environmental protection as a basic state policy in its Party Congress work report in 1992, the party and state leaders have emphasized the promulgation and implementation of environmental policies. In 2003, the "Scientific Outlook on Development" stated that we should adhere to sustainable development and build a resource-saving and ecological protection-oriented society (X. Liu et al., 2021). In 2012, the Chinese government included the construction of ecological civilization into a "five-in-one" layout of the cause of socialism with Chinese characteristics. In 2018, the Chinese government incorporated ecological civilization into the Constitution. These measures show the strengthening of China's

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environmental protection policy and indicate the move from a single policy to comprehensive regulation. As of August 4, 2021, 6122 environmental protection laws, regulations, and departmental rules have been promulgated and implemented by departments at all levels. [1] Numerous environmental policies cover several fields, and there are obvious differences in the time, frequency, and intensity of their promulgation, and the impact of the policies, which has a non-negligible impact on China's environmental governance and high-quality economic development (Huang and Luk, 2020).

Since the 2008 global financial crisis, the world economy has transitioned from an era of "great easing" to that of high uncertainty (Handley and Limão, 2017). Academicians at home and abroad have debated how to construct various uncertainty indexes, of which, the economic policy uncertainty index is the most significant. The index can be traced back to Baker et al. (2016), who use the text analysis method to construct the economic policy uncertainty index of global and major economies based on the evaluation of mainstream news media. The index provides a new analytical tool for understanding how information is delivered to the market and arouses public reaction. Since its publication, the economic policy uncertainty index has been widely concerned and cited worldwide by scholars (Pirgaip and Dinçergök, 2020; Xia et al., 2020).

As the world's second-largest economy, China has been increasingly studied for its policy uncertainty. For 40 years of reform and opening-up, China has implemented many policy trials and reforms for economic development, which have led to policy uncertainties and a negative impact on the Chinese economy. Thus, how to accurately characterize policy uncertainty and examine its negative impact on China's economic growth has practical implications for achieving high-quality economic growth. Therefore, many systematic and in-depth studies have been conducted. For example, Huang and Luk (2020) construct a monthly index of China's economic policy uncertainty based on the text data of newspapers from 2000 to 2018. They use the same method to construct the uncertainty index of China's fiscal, monetary, trade, and exchange rate policies. Yu et al. (2021) construct an annual index of economic policy uncertainty for 30 provinces in China based on the China National Knowledge Infrastructure (CNKI) newspaper database from 2008 to 2011. Most studies so far have focused on policy uncertainty at the economic level while ignoring policy uncertainty at other levels, especially the environmental level, which provides a new scope of study.

At the 75th session of the United Nations General Assembly in 2020, General Secretary Xi Jinping proposed a green development goal of "striving to reach carbon peak by 2030 and carbon neutrality by 2060," which implied that China's economy and society will usher in unprecedented low-carbon reform. Carbon neutrality is both an opportunity and a challenge. Currently, China's level of energy consumption is much higher than the world average and the task of reducing overcapacity and adjusting the economic structure remains arduous. Against the carbon neutrality

[1] The data are obtained from the Pkulaw Law Database and its official website is http://www.pkulaw.cn/.

goal, the uncertainty of environmental policy caused by multiple policies will not only directly change the consumption and investment decisions of residents and enterprises but also largely affect their confidence and expectations, thus indirectly affecting the production scale of enterprises and the adjustment of industry structure. Therefore, selecting an appropriate method to reflect China's overall and regional environmental policy uncertainty is crucial for the early realization of the dual carbon goals (i.e., carbon peak and carbon neutrality).

Because of these considerations, this study attempts to construct China's national, provincial, and prefecture-level environmental policy uncertainty index (EPUI) by adopting the text analysis method and combining the method for constructing the economic policy uncertainty index proposed by Baker et al. (2016). In terms of data processing, this study selects 460 newspapers, which are widely distributed in 31 provinces, municipalities, and autonomous regions in China with broad representativeness, in the CNKI newspaper database from 2001 to 2016 as the data source for text analysis.

Compared with the existing literature, the marginal contribution of this study mainly covers the following: first, the literature has adopted indexes such as the environmental officials' turnover in the local government and the intensity of environmental regulations to indirectly measure the environmental policy uncertainty. Such depiction has certain limitations and cannot well reflect the true level of environmental policy uncertainty. Therefore, this study selects 460 newspapers distributed in 31 provinces, municipalities, and autonomous regions in China as the data source and adopts the construction method of Baker et al. (2016) on economic policy uncertainty index to construct China's national, provincial, and prefecture-level EPUI from 2001 to 2016 for the first time, which provides crucial basic data for the empirical research of environment. Besides, the EPUI constructed in this study has applications in the fields of economy, energy, and corporate decision-making. Second, under the dual carbon goals, the first-constructed EPUI is applied to reducing pollutant emission at the city level in China, and an important discovery is obtained: environmental policy uncertainty will reduce pollutant emission at the cost of reducing the output value of the urban secondary industry. The study results provide an important experience for policymaking to achieve the dual carbon goals.

The organization of this study is as follows: Section 2 presents the literature review; Section 3 presents the construction and distribution of China's EPUI at different levels; Section 4 discusses the application of China's EPUI; Section 5 presents the main conclusions and policy recommendations.

2. Literature review

Literature has shown that, currently, there are two types of methods for measuring policy uncertainty index. The first type measures policy uncertainty by constructing a synthetic index, such as Baker et al. (2016), Huang and Luk (2020), and Yu et al. (2021). Baker et al. (2016) pioneer the construction of an index based on newspaper text to measure economic policy uncertainty and apply this construction method to different countries and regions. After calculating

the preliminary economic policy uncertainty index, Baker et al. (2016) use manual reading and review to select articles containing keywords and combine manually calculated index with that obtained by the text analysis method. The obtained indexes are compared to test the effectiveness of the computer-constructed economic policy uncertainty index. The results show that the economic policy uncertainty indexes calculated using the two methods are highly positively correlated. Huang and Luk (2020) improve the index construction method proposed by Baker et al. (2016) from the aspects of standardized processing and keyword selection. They divide the target article by all articles containing the keyword "economy" in the current month for standardized processing, which effectively overcomes the systematic estimation bias caused by the different layouts and content of comprehensive newspapers. Yu et al. (2021) improve the Chinese economic policy uncertainty index constructed by Baker et al. (2016) based on the contextual difference between Chinese and English expressions and expand the index from national to provincial level for the first time. Similarly, Li et al. (2021) adopt the index construction method of Baker et al. (2016), replacing "economy" with "trade" to construct the uncertainty index of China's trade policy.

The second type measures policy uncertainty based on relevant economic or policy variables, such as Fernández-Villaverde et al. (2011), Julio and Yook (2012), Shah et al. (2021), and Tran and Houston (2021). Researchers have mainly used the time series model to measure policy uncertainty. For example, Fernández-Villaverde et al. (2011) use particle filter and Bayesian method to extract the time-varying volatility of government expenditure and taxation and use such time-varying volatility to characterize fiscal policy uncertainty. Using the simultaneous equation state-space model and Kalman filtering method, Anzuini et al. (2020) calculate the time-varying volatility of taxation and use it to express the uncertainty of fiscal policy. Fu and Luo (2021) adopt the method proposed by Fernández-Villaverde et al. (2011) to construct China's monetary policy uncertainty. Mumtaz and Surico (2018) highlight that the central bank mainly anchors the intermediary target through policy tools, which are difficult to directly observe and quantify. Besides, the monetary policy uncertainty can be measured by calculating the random volatility of the intermediary target of monetary policy. Additionally, some researchers use the government officials' turnover to measure policy uncertainty (Julio and Yook, 2012; M. Li et al., 2021). For example, Julio and Yook (2012) use election time across countries worldwide as a proxy variable for policy uncertainty, because existing policies may change owing to the change of leaders with different policy preferences. Cheng et al. (2021) use the turnover of municipal party secretary or mayor as the proxy variable for political uncertainty. G. Liu et al. (2021) use the political connection of corporate leaders to measure political uncertainty. Francis et al. (2021) select Google political election news, tax expiration index, CPI forecast difference, federal procurement forecast difference, and other factors to construct a political uncertainty index using the weighted method.

Therefore, the existing studies on policy uncertainty mainly focus on economic, fiscal,

monetary, trade policies, and political elections, while few studies have investigated environmental policy uncertainty. Particularly, no literature has investigated the uncertainty of China's environmental policy, and a few have only used changes in the intensity of environmental regulation or climate to describe the uncertainty of environmental policies (DeLuque and Shittu, 2019; Liu et al., 2018; Schubert and Smulders, 2019). Thus, this study adopts the uncertainty index construction method proposed by Baker et al. (2016), and selects 460 newspapers in the CNKI newspaper database from 2001 to 2016 as the data source for text analysis, and constructs China's EPUI at the national, provincial, and prefecture-level for the first time. This would provide very important basic data for empirical research of the environment and significant empirical support for guiding how to achieve China's dual carbon goals.

3. Construction and distribution of China's EPUI

3.1 Index construction

The method of constructing China's EPUI in this study is consistent with that of Baker et al. (2016). We have selected 460 newspapers from the CNKI newspaper database from 2001 to 2016 as the source of this study. These 460 newspapers are widely representative, covering China's 31 provinces, municipalities, and autonomous regions. Table 1 reports the basic statistics on the sources and distribution of 460 newspapers.

[Insert Table 1 here]

Table 2 reports the identification criteria for keywords related to environmental policy uncertainty. If a news report contains at least one keyword of "environment," "policy," and "uncertainty" simultaneously, then it is considered the target article. In the process of keyword screening, this study first conducts text processing and word frequency analyses on the texts used in the study and selects words that appeared more frequently as alternative word sets. Then, through manual reading and borrowing the words used in the literature as keywords to be considered in index construction (Baker et al., 2016). The specific method for constructing EPUI is shown as follows:

(1) According to the definition of the target article, the number of target articles in each month of each newspaper is sorted and recorded as A_{it}. Among them, *i* is the *i*-th newspaper, and *t* is the *t*-th month. To avoid the impact of differences in the total number of articles in different newspapers and different months, we conduct scale processing on the target number of articles per month for each newspaper, that is, $X_{it} = A_{it} / B_{it}$, where B_{it} is the total number of articles in the *i*-th newspaper in the *t*-th month.

(2) Normalize *X*, namely, $Y_{it} = X_{it} / \delta_i$. δ_i is the standard deviation of $\{X_{it}\}$ to obtain the average normalized frequency of all sample newspapers, namely, $Z_{it} = \sum Y_{it} / i$.

(3) The EPUI of different monthly frequencies in China is obtained, $ENPU = Z_t * 100/M$,

and M represents the serial average value of $\{Z_t\}$. The annual EPUI of different levels in China can be calculated using the arithmetic average method. The larger the index, the stronger the uncertainty of environmental policy.

(4) The EPUI of China from 2001 to 2016 constructed in this study includes national, provincial, and prefecture levels. In the specific construction process, this study selects national, provincial, and prefecture-level newspapers as the data source. Among them, at the national level, 460 newspapers are used as the data source; at the provincial level, 460 newspapers are classified into 31 provinces, cities, and autonomous regions according to the place of publication; at the prefecture-level, 460 newspapers are classified into prefecture-level cities according to the publication location. Then, we calculate according to the aforementioned steps, in turn, and finally obtain China's EPUI at the national, provincial, and prefecture levels.

[Insert Table 2 here]

3.2 Characteristics of fluctuation in China's EPUI

Figure 1 shows the fluctuation trend of China's EPUI at the national level. As can be seen from Figure 1, China's EPUI from 2001 to 2011basically fluctuates from 50 to 110. During this period, the Chinese government's environmental protection policy was relatively stable. In addition to revising and promulgating environmental protection laws and regulations, environmental economic policies have entered a stage of centralized design and promotion. For example, in 2005, the fifth plenary session of the 16th Party Central Committee proposed the policy of building a resource-saving and environment-friendly society. In October 2007, the "Energy Conservation Law of the People's Republic of China" was revised. In February 2008, the "Water Pollution Prevention and Control Law of the People's Republic of China" was revised.

Compared with the period from 2001 to 2011, China's EPUI showed a volatile increase from 2012 to 2016. The 18th National Congress of the Communist Party of China (CPC) was held in 2012, and the new central leadership was elected. Meanwhile, the work focus on "vigorously promoting the construction of ecological civilization and reversing the deterioration of the ecological environment" was proposed. The report of the 18th National Congress of the CPC included "ecological civilization" into the "five-in-one" overall layout of socialism with Chinese characteristics and proposed the novel concept of "promoting green, circular, and low-carbon development" and "building a beautiful China." Improving environmental quality has gradually become the main goal and task of environmental protection, and environmental policy reform has entered a stage of deepening and sublimation, which have opened the prelude to the volatile rise of China's EPUI. At the 3rd plenary session of the 18th CPC Central Committee in 2013, the Party Central Committee emphasized that "protecting the ecological environment with systems." From September to October 2013, the "National Ten Articles" on air pollution prevention and control played a key role in promoting the control of air pollution and environmental protection, greatly

increasing the uncertainty in the implementation and formulation of environmental policies. During this period, China's EPUI showed a rapid rise.

[Insert Figure 1 here]

Figure 2 is the distribution map of EPUI at the provincial level in China in 2001. China's provincial EPUI is only available in 26 provinces in 2001, missing 5 provinces, cities, and autonomous regions,[2] with an average value of 89. The maximum value is in Qinghai Province, with an index of 170. The minimum value is Tibet, which has a value of 0. Overall, the EPUI in western China is higher than that in central China, and that in central China is higher than that in eastern China.

Figure 3 shows the distribution of EPUI at the provincial level in China in 2016, which is available in 31 provinces and cities. Among them, the average value of EPUI is 111, the maximum value is 161 in Shanghai. The minimum value is in Jilin, with a value of only 79. Overall, China's central inland provinces and eastern coastal provinces have significantly higher EPUI than other regions.

Figure 4 reports the mean distribution of EPUI at the provincial level in China from 2001 to 2016. During this period, the average value of EPUI is 99, the maximum value is 114 in Jilin. The minimum value is in Chongqing, which is only 88. Figures 2–4 show that the EPUI of northern provinces of China is significantly higher than that of southern provinces, which indicates that, compared with northern provinces of China, southern provinces have better continuity and consistency in developing environmental policies, thus showing relatively lower environmental policy uncertainty.

[Insert Figures 2-4 here]

Figure 5 shows the distribution of EPUI at the prefecture-level in China in 2001. There are only 28 prefecture-level cities available with EPUI data in 2001. The average value of EPUI is 77, the maximum value is 215 in Xining; the minimum value is 0 in Lhasa. The distribution of EPUI at the prefecture-level in China is nearly consistent with that in corresponding provinces. Meanwhile, the EPUI of prefecture-level cities in western China is higher than that of central China, and the EPUI of prefecture-level cities in central China is higher than that of eastern China. Compared with the EPUI at the provincial level, EPUI at the prefecture-level indicates the fluctuation trend of China's EPUI from a more microscopic perspective.

Figure 6 shows that the EPUI at the prefecture-level in China in 2016 is distributed in 240

[2] In 2001, data were missing for five provinces and municipalities such as Tianjin, Heilongjiang, Shandong, Hainan, and Ningxia Hui Autonomous Region.

prefecture-level cities with an average value of 103.9, and the maximum value is Xigaze City with an index of 214.5. This is closely related to China's continuous increase in the formulation and implementation of policies on ecological and environmental protection in Tibet. The minimum value is Jinzhou City, Shiyan City, Hami City, Hetian City, Honghe Hani, and Yi Autonomous Prefecture, Kizilsu Kirgiz Autonomous Prefecture, Nyingchi City, Shannan City, Chaozhou City, Kashgar City, Cangzhou City. The EPUI of these prefecture-level cities is 0. The EPUI of central and eastern coastal cities in China is significantly higher than that of other cities.

Figure 7 shows the mean distribution of the EPUI at the prefecture-level in China from 2001 to 2016. We find that the environmental policy uncertainty in eastern and northeastern China is relatively high. Among them, Hulunbuir in Inner Mongolia and Chengde in Hebei Province have the highest EPUI, which is related to the geographical location of the two cities. Hulunbuir is located in the Songhua River basin and Chengde is in the Haihe River and Huaihe River basins. Their geographic location determines that water resource protection and regulatory policies are issued and adjusted more frequently, thus showing a high degree of uncertainty. In contrast, the EPUI of Nagqu City in Tibet is the lowest, with a value of only 75. A comparison of Figures 5–7 shows that the EPUI of northern cities in China is significantly higher than that of southern cities, which is consistent with the distribution of Figures 2–4. Further analysis shows that over time, the EPUI distribution at the provincial and prefecture levels in China shows obvious regional transfer characteristics, that is, high EPUI gradually shifts from western China to central, eastern, and northeastern China. One possible explanation is that western China is relatively economically lagging behind other regions, which led to the relevant departments in western China focusing on economic development rather than environmental protection, leading to local governments lagging behind other regions in the introduction and revision of environmental protection policies. Thus, the EPUI in western China is lower than that in other regions.

[Insert Figures 5-7 here]

3.3 The robustness and accuracy tests of China's EPUI

This section tests the robustness and accuracy of China's EPUI, focusing on two aspects, namely, the construction of large-scale X_{it} and the instability that may be caused by the selection of newspaper samples.

First, the construction of large-scale X_{it}. In the process of constructing Chinese EPUI, $X_{it} = A_{it}/B_{it}$, where A_{it} is the target number of articles in each newspaper in each month, and B_{it} is the total number of articles in the *i*-th newspaper in the *t*-th month. However, the number of daily target articles differs from the total number of articles in each newspaper. If the number of monthly target articles and the total number of articles are directly used to construct large-scale X_{it}, certain deviation may occur. Thus, we construct the daily $X_{it,}$

namely $DX_{it} = DA_{it}/DB_{it}$, where DA_{it} is the daily target number of articles in the i-th newspaper in the t-th month, and DB_{it} is the total number of daily articles in the i-th newspaper in the t-th month. Then, we calculate according to Steps 2–4, and finally, obtain the daily data of China's EPUI from 2001 to 2016. We use the arithmetic average method to calculate the monthly data of China's EPUI (denoted as EPUI_day). Combining Table 3 and Figure 8, we find that EPUI_day is highly positively correlated with EPUI, with a correlation coefficient of 0.8154. Additionally, the fluctuation trend of EPUI constructed in two ways is almost the same, indicating that the EPUI constructed in the benchmark scenario in this study is robust.

Second, the selection of newspaper samples. In the process of constructing China's EPUI, we select the data of 460 newspapers distributed in 31 provinces, municipalities, and autonomous regions in China as the newspaper data source, covering the period from 2001 to 2016. To test whether the constructed EPUI depends on the selection of newspaper samples, we replace the newspaper samples used to construct the index to test the correlation between the indexes constructed by different newspaper samples to conduct the robustness test. If the correlation is high, then the EPUI does not depend on the selection of newspaper samples and has high robustness. Otherwise, it means that the EPUI depends on the selection of newspaper samples, and the robustness is low.

The method for processing is as follows: classify the newspapers in the CNKI newspaper database and extract the party newspapers of prefecture-level city organs as the article source for constructing EPUI (denoted as EPUI_dang). Table 3 and Figure 9 show that EPUI constructed from 303 prefecture-level party newspapers is highly positively correlated with that from 460 newspapers, with a correlation coefficient of 0.7930. Obviously, the fluctuation trends of the two indexes are the same, manifesting that the Chinese EPUI constructed in this study is robust.

[Insert Table 3 here]

[Insert Figures 8-9 here]

4. Application of China's EPUI

4.1 Data description and variable selection

In this section, the application scenario of China's EPUI is set at the prefecture level. The study data are obtained from the "China City Statistical Yearbook" from 2001 to 2016. The explained variable is the emission of environmental pollutants at the prefecture-level cities, which is recorded as pollution. Regarding the research settings in the literature (Huang et al., 2020), this study selects urban industrial sulfur dioxide emission (denoted as SO_2) and carbon dioxide emission (denoted as CO_2) as proxy indicators of environmental pollutant emissions. The larger

the value, the more pollutants are emitted. In the empirical analysis, all pollutant emissions are considered natural logarithms, which are recorded as ln SO_2 and ln CO_2, respectively.

China's prefecture-level EPUI is the core explanatory variable constructed for the first time in this study. Take the natural logarithm and record it as lnEPUI. Given the possible endogenous problems between the EPUI and urban pollution emissions, we adopt the logarithm of the EPUI lagging one year as the core explanatory variable. Meanwhile, a series of city-level control variables are also controlled. First, regarding urban population density, that is, the number of people per unit of land, it is obtained by dividing the total population of a city by the city's land area in that year, denoted as DP, and the unit is person per square kilometer. Second, the city's gross domestic product per capita, that is, the urban GDP per capita, is calculated in this study by dividing the annual GDP of a city by the total population, denoted as PGDP, and the unit is yuan per person. The urban GDP per capita is logarithmized and recorded as ln PGDP. Third, the scale of urban industrial enterprises is mainly represented by the number of industrial enterprises above the designated size in the municipal area, which is recorded as ES. Fourth, urban public finance expenditure is expressed by the logarithm of the city's total public finance expenditure in the current year and recorded as ln PFE. Fifth, the development status of the urban tertiary industry is measured by the proportion of the urban tertiary industry's GDP and denoted as TI. Sixth, the level of urban greening is measured by the completed green coverage rate in the city, denoted as GL. Seventh, the logarithm of the output value of the urban secondary industry is recorded as ln SGDP. Additionally, we also control for the city fixed effects and year fixed effects in the regressions, which are recorded as City FE and Year FE, respectively.

Table 4 reports the descriptive statistics of the key variables. Table 4 shows that the average value and standard deviation of urban industrial sulfur dioxide emissions are significantly higher than those of carbon dioxide, indicating that city managers should focus on reducing sulfur dioxide emissions in terms of environmental pollution control. However, industrial sulfur dioxide emissions vary greatly among different cities. The minimum value of China's city-level EPUI is 0 and the maximum value is 6.913, manifesting that different cities have great differences in issuing and revising local environmental protection laws and regulations. The descriptive statistics of the average value, standard deviation, minimum, and maximum of each variable show large differences in the level of economic development, population distribution, and economic structure of different cities in China.

[Insert Table 4 here]

4.2 Methodology

This study uses a two-way fixed effects model with panel data to study the impact of prefecture-level environmental policy uncertainty on urban environmental pollutant emissions. The specific model is set as follows:

$$Pollution_{i,t} = \beta_0 + \beta_1 \cdot \ln ENPU_{i,t-1} + \beta_2 \cdot X_{i,t} + \lambda_i + \gamma_t + \varepsilon_{i,t} \quad (1)$$

Where $Pollution_{i,t}$ refers to the pollutant emissions of the city i in year t, including industrial sulfur dioxide and carbon dioxide emissions. $\ln LNENPU_{i,t-1}$ is the logarithm of the EPUI of the city i in year t-1, $X_{i,t}$ is the set of control variables of the city i in year t. λ_i is the city fixed effects, γ_t is the year fixed effects, and $\varepsilon_{i,t}$ is the error term. β_1 is the core coefficient of this article. Positive value of β_1 suggests that an increase in urban environmental policy uncertainty promotes urban pollutant emissions, while the negative value inhibits urban pollutant emissions.

4.3 Empirical results and analysis

Table 5 reports the benchmark regression results. Columns 1 and 3 report the direct impact of environmental policy uncertainty on urban industrial sulfur dioxide and carbon dioxide emissions without adding any control variables. The results show that the coefficient of β_1 is significantly negative, indicating that the increase in environmental policy uncertainty will inhibit urban pollutant emissions. Columns 2 and 4 report the regression results after controlling for factors such as urban population density, economic development level, economic structure, and urban green rate. The regression results show that the coefficient of β_1 is still significantly negative. When urban environmental policy uncertainty increases by 1%, urban industrial sulfur dioxide emission decreases by 0.145%, and carbon dioxide emission decreases by 0.053%. This result differs from that of Yu et al. (2021), who find that when uncertainty in local economic policy increases, enterprises will use more cheap and dirty energy (such as oil and coal) to avoid the risk impact of policy change, thus greatly increasing their carbon dioxide emission. We believe that the scale of the urban secondary industry is key to explaining the inhibitory effect of environmental policy uncertainty on urban pollutant emissions. Theoretically, the secondary industry is the main body of industrial sulfur dioxide and carbon dioxide emissions and the key target of urban pollutant control. The people's yearning for a better life has forced the central and local governments at all levels to continuously increase the intensity of environmental regulation and to successively promulgate various environmental protection policies, which in turn steadily increases the environmental policy uncertainty. This phenomenon is particularly evident in China's eastern coastal cities, where the economic development is relatively high (see Figures 6 and 7). The risk impact caused by environmental policy changes inhibits the growth rate and scale of urban secondary industries to varying degrees. In this case, urban pollutant emissions will also decrease. However, the reduction of urban pollutant emissions is achieved at the expense of economic development. Of course, the channel of urban secondary production scale should still be rigorously verified.

[Insert Table 5 here]

Two methods are used in this study to verify the secondary production scale channel through which environmental policy uncertainty affects urban pollutant emissions. The first method is to

directly analyze the impact of urban environmental policy uncertainty on the output value of the secondary industry, that is, to replace the explained variable in the benchmark regression with the logarithm of the output value of the urban secondary industry. The specific model is set as follows:

$$\ln SGDP_{i,t} = \beta_0 + \beta_1 \cdot \ln ENPU_{i,t-1} + \beta_2 \cdot X_{i,t} + \lambda_i + \gamma_t + \varepsilon_{i,t} \quad (2)$$

Here, $\ln SGDP_{i,t}$ represents the logarithm of the output value of the secondary industry in the *i*-th city in the *t*-th year, and the definitions of other variables are the same as in Equation (1). Table 6 reports the relevant regression results. Control variables are not added in Column 1 of Table 6, while control variables such as urban population density, economic development level, economic structure, and urban green rate are added in Column 2. The results show that the coefficients β_1 in Columns 1 and 2 in Table 6 are both significantly negative, indicating that an increase in environmental policy uncertainty inhibits the development of secondary industry and reduces its scale. With a 1% increase in environmental policy uncertainty, the output value of the urban secondary industry decreases by 0.143%.

[Insert Table 6 here]

The second method is to introduce the interaction term between the output value of urban secondary industry and environmental policy uncertainty in the benchmark regression equation. The model is set as follows:

$$Pollution_{i,t} = \beta_0 + \beta_1 \cdot \ln ENPU_{i,t-1} \cdot \ln SGDP_{i,t} + \beta_2 \cdot \ln ENPU_{i,t-1} + \beta_3 \cdot \ln SGDP_{i,t} + \beta_4 \cdot X_{i,t} + \lambda_i + \gamma_t + \varepsilon_{i,t} \quad (3)$$

The estimated results are shown in Table 7, which show that the estimated coefficient of $\ln ENPU_{i,t-1}$ is significantly negative, which is consistent with the benchmark regression results in Table 5. The estimated coefficient of $\ln SGDP_{i,t}$ is positive, demonstrating that the larger the scale of the urban secondary industry is, the larger the emissions of industrial sulfur dioxide and carbon dioxide will be, which is consistent with Huang et al. (2020). The estimated coefficient of the interaction term is significantly negative, indicating that environmental policy uncertainty can reduce urban pollutant emissions by downsizing the output value of the secondary industry. Specifically, such a method for reducing emissions is achieved at the expense of economic development.

In short, combined with the regression results in Tables 5, 6, and 7, it can be concluded that an increase in environmental policy uncertainty reduces pollutant emissions, such as urban industrial sulfur dioxide and carbon dioxide, at the expense of downsizing the scale of the output value of the urban secondary industry. However, the channel through which environmental policy uncertainty affects urban pollutant emissions is not limited to the scale of secondary industry. There are other transmission channels, such as green investment. Our future studies would include

more in-depth research if data on green investment at the city level in China are available.

[Insert Table 7 here]

5. Conclusions and policy implications

This study selects 460 newspapers from the CNKI newspaper database from 2001 to 2016 as the data source and, for the first time, uses the text analysis method and the construction method of economic policy uncertainty index proposed by Baker et al. (2016) to construct China's national, provincial, and prefecture-level EPUI. The results show that China's EPUI has an obvious stage and regional characteristics. Among them, China's EPUI from 2012 to 2016 is higher than that from 2001 to 2011, and the EPUI of northern provinces is significantly higher than that of southern provinces. From 2001 to 2016, the distribution of EPUI at the provincial and prefecture-level in China shows obvious regional transfer characteristics, that is, a high EPUI gradually shifts from western China to central, eastern, and northeastern China. By applying the Chinese city-level EPUI to the field of urban pollution reduction, we have obtained an important finding that an increase in environmental policy uncertainty reduces pollutant emissions, such as urban industrial sulfur dioxide and carbon dioxide, but at the expense of the development of the urban secondary industry.

Based on the above conclusions, we propose the following policy recommendations: first, when government policymakers at all levels introduce environmental protection policies, they should have a thorough understanding of the local natural resource endowment, geographic location and climate, level of economic development, and other factors. They should maintain consistency and continuity of environmental protection policies over time instead of making frequent changes when the environmental protection policies are introduced. Simultaneously, there is a need to eliminate confusion in the environmental policy caused by divided policies from various sources and reasonably control the uncertainty of environmental policy. Second, although the continuous promulgation and revision of environmental protection policies can effectively reduce urban industrial sulfur dioxide and carbon dioxide emissions, such emission reduction comes at the expense of economic development. How to strike a balance between environmental protection and economic development is a key consideration for policymakers. While continuously improving environmental protection standards in the economically backward central and western inland areas, it is recommended that the central government should implement some transfer payments between eastern and western provinces and cities to help those inland cities to eliminate the worries of continually improving standards. Finally, the national, provincial, and prefecture-level EPUI constructed in this study has important application prospects in energy structure transformation and developing a low-carbon economy. It also has positive policy guidance for the early realization of the dual carbon goals. Therefore, governments at all levels should increase funding for various types of basic data research and continuously increase policy

support for basic research.

The limitation of this study is that the application of EPUI only stays at the city level. The transmission channel through which environmental policy uncertainty affects urban pollutant emissions is only concentrated on the scale of secondary industry, without considering other transmission channels (such as green investment), policy dividends, or spillover effects brought to neighboring cities by the introduction or revision of environmental policies. In the future, we would apply the EPUI to more scenarios (such as at the enterprise or household level) or use the spatial econometric regression method to study the spillover effect of environmental policy changes in different regions.

Acknowledgement

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References

Anzuini, A., Rossi, L., Tommasino, P., 2020. Fiscal policy uncertainty and the business cycle: Time series evidence from Italy. Journal of Macroeconomics 65, 103238.

Baker, S.R., Bloom, N., Davis, S.J., 2016. Measuring economic policy uncertainty. Quarterly Journal of Economics 131, 1593–1636.

Cheng, M., Guo, P., Jin, J.Y., Geng, H., 2021. Political uncertainty and city bank lending in China: Evidence from city government official changes. Emerging Markets Review. https://doi.org/10.1016/j.ememar.2021.100802

DeLuque, I., Shittu, E., 2019. Generation capacity expansion under demand, capacity factor and environmental policy uncertainties. Computers and Industrial Engineering 127, 601–613.

Fernández-Villaverde, J., Guerrón-Quintana, P., Rubio-Ramírez, J.F., Uribe, M., 2011. Risk matters: The real effects of volatility shocks. American Economic Review 101, 2530–2561.

Francis, B.B., Hasan, I., Zhu, Y., 2021. The impact of political uncertainty on institutional ownership. Journal of Financial Stability 100921. https://doi.org/10.1016/j.jfs.2021.100921

Fu, B., Luo, D., 2021. Monetary policy uncertainty and bank leverage: Evidence from China. Economics Letters 203, 109866.

Handley, K., Limão, N., 2017. Policy uncertainty, trade, and welfare: Theory and evidence for China and the United States. American Economic Review 107, 2731–2783.

Huang, G., Zhang, J., Yu, J., Shi, X., 2020. Impact of transportation infrastructure on industrial pollution in Chinese cities: A spatial econometric analysis. Energy Economics 92, 104973.

Huang, Y., Luk, P., 2020. Measuring economic policy uncertainty in China. China Economic Review 59, 101367.

Julio, B., Yook, Y., 2012. Political uncertainty and corporate investment cycles. Journal of Finance 67, 45–83.

Li, M., Cao, Y., Lu, M., Wang, H., 2021. Political uncertainty and allocation of decision rights among business groups: Evidence from the replacement of municipal officials. Pacific Basin Finance Journal 67, 101541.

Li, X.L., Li, J., Wang, J., Si, D.K., 2021. Trade policy uncertainty, political connection and government subsidy: Evidence from Chinese energy firms. Energy Economics 99, 105272.

Liu, G., Hu, M., Cheng, C., 2021. The information transfer effects of political connections on mitigating policy uncertainty: Evidence from China. Journal of Corporate Finance 67, 101916.

Liu, N., Tang, S.Y., Zhan, X., Lo, C.W.H., 2018. Policy uncertainty and corporate performance in government-sponsored voluntary environmental programs. Journal of Environmental Management 219, 350–360.

Liu, X., Ji, Q., Yu, J., 2021. Sustainable development goals and firm carbon emissions: Evidence from a quasi-natural experiment in China. Energy Economics 103, 105627.

Mumtaz, H., Surico, P., 2018. Policy uncertainty and aggregate fluctuations. Journal of Applied Econometrics 33, 319–331.

Pirgaip, B., Dinçergök, B., 2020. Economic policy uncertainty, energy consumption and carbon emissions in G7 countries: evidence from a panel Granger causality analysis. Environmental Science and Pollution Research 27, 30050–30066.

Schubert, K., Smulders, S., 2019. How important are uncertainty and dynamics for environmental and climate policy? Some analytics. Journal of Environmental Economics and Management 97, 1–22.

Shah, A.A., Dar, A.B., Bhanumurthy, N.R., 2021. Are precious metals and equities immune to monetary and fiscal policy uncertainties? Resources Policy 74, 102260.

Tran, D.V., Houston, R., 2021. The effects of policy uncertainty on bank loan loss provisions. Economic Modelling 102, 105575. https://doi.org/10.1016/j.econmod.2021.105575

Xia, T., Yao, C.X., Geng, J.B., 2020. Dynamic and frequency-domain spillover among economic policy uncertainty, stock and housing markets in China. International Review of Financial Analysis 67, 101427.

Tables and figures

Table 1 Provincial distribution statistics of 460 newspapers

Province	Number of newspapers	The percentage of newspapers in the total number of newspapers (%)	Number of articles reported	The percentage of articles reported in total articles reported (%)
Shanghai	11	2.39	521,492	4.78
Yunnan	9	1.96	204,691	1.88
Inner Mongolia	10	2.17	193,498	1.77
Beijing	83	18.04	3,451,415	31.66
Jilin	10	2.17	181,175	1.66
Sichuan	21	4.57	397,989	3.65
Tianjin	4	0.87	49,288	0.45
Ningxia	8	1.74	63,684	0.58
Anhui	13	2.83	168,934	1.55
Shandong	14	3.04	261,381	2.40
Shanxi	18	3.91	318,848	2.92
Guangdong	23	5	767,260	7.04
Guangxi	8	1.74	160,373	1.47
Xinjiang	17	3.7	161,546	1.48
Jiangsu	19	4.13	432,949	3.97
Jiangxi	9	1.96	158,424	1.45
Hebei	17	3.7	377,578	3.46
Henan	20	4.35	436,180	4.00
Zhejiang	13	2.83	298,238	2.74
Hainan	5	1.09	64,024	0.59
Hubei	12	2.61	248,554	2.28
Hunan	14	3.04	235,658	2.16
Gansu	16	3.48	307,677	2.82
Fujian	13	2.83	204,005	1.87
Tibet	7	1.52	51,339	0.47
Guizhou	10	2.17	207,715	1.91
Liaoning	14	3.04	262,140	2.40
Chongqing	3	0.65	61,655	0.57
Shaanxi	12	2.61	300,103	2.75

Qinghai	9	1.96	121,144	1.11
Heilongjiang	18	3.91	233,895	2.15
Total	460	100	10,902,852	100

Source: Compiled by the author.

Table 2 Keyword criteria used to identify the EPUI

keyword	Definitions
Environment (in English)	Environment, environmental protection, pro-environment, pollution, energy consumption, emission reduction, pollution discharge, ecology, green, low carbon, air, chemical oxygen demand, sulfur dioxide, carbon dioxide, PM10, PM2.5
Environment (in Chinese)	环境, 环境保护, 环保,污染, 能耗, 减排, 排污, 生态, 绿色, 低碳, 空气, 化学需氧量, 二氧化硫, 二氧化碳, PM10, PM2.5
Policy (in English)	Environmental protection department, environmental protection bureau, supervision, oversight, inspection, remediation, rectification, governance, protection, policy, measure, method, suggestion, public, government, department, reform, tax, rule, regulation, ordinance
Policy (in Chinese)	环保部门, 环保局, 监管, 监督, 督察, 整治, 整改, 治理, 保护, 政策, 措施, 办法, 建议, 公共, 政府, 部门, 改革, 税, 规章, 规则, 条例
Uncertainty (in English)	Uncertain, probabilistic, unspecified, fluctuating, shocking, unstable, undetermined, ambiguous, unclear, not clear, doubtful, unpredictable, inestimable, unforeseeable, incalculable, unexpected, non-predicative, imponderable
Uncertainty (in Chinese)	不确定, 不确定性的, 不明确, 波动, 震荡, 不稳, 未明, 不明朗, 不清晰, 未清晰, 难料, 难以预料, 难以估计, 无法预料, 无法估计, 不可预料, 不可预计, 不可估计

Table 3 Construction of the correlation coefficient matrix of EPUI with different characteristics

	EPUI	EPUI_day	EPUI_dang
EPUI	1		
EPUI_day	0.8154	1	
EPUI_dang	0.7930	0.8073	1

Table 4 The descriptive statistics of key variables at the city level in China

Variables	Definition	Obs.	Mean	S.D.	Min	Max
ln SO_2	Logarithm of industrial sulfur dioxide emissions	2,314	9.282	2.372	4.533	13.43
ln CO_2	Logarithm of carbon dioxide emissions	2,642	3.025	0.681	0.613	5.445
ln SGDP	Logarithm of actual output value of the secondary industry	2,020	15.05	1.225	10.96	17.95
ln EPUI	City-level EPUI logarithm	2,647	4.260	1.210	0	6.913
DP	Urban population density	2,097	1,089	955.1	13.11	11,449
ln PGDP	Logarithm of urban GDP per capita	2,293	10.62	0.712	7.972	13.06
ES	Number of industrial enterprises above designated size_ Municipal area	2,318	783.5	1,546	5	18,474
ln PFE	Logarithm of public finance expenditure_ Municipal area	2,313	13.46	1.253	9.571	18.05
TI	The proportion of tertiary industry in GDP_ Municipal area	2,309	0.392	0.095	0.111	0.853
GL	Completed green coverage rate_ Municipal area	2,285	0.375	0.084	0.004	0.929

Table 5 The baseline results

	(1)	(2)	(3)	(4)
Variables	ln SO_2	ln SO_2	ln CO_2	ln CO_2
ln $ENPU_{i,t-1}$	**−0.0604****	**−0.140*****	**−0.0342*****	**−0.0534*****
	(0.0234)	(0.0386)	(0.00701)	(0.0131)
DP		−0.00278**		−0.00149**
		(0.00108)		(0.000628)
ES		−5.76e-05		−4.82e-05**
		(4.95e-05)		(2.02e-05)
ln PFE		0.571*		0.202**
		(0.297)		(0.0933)
ln PGDP		0.00307		0.149**
		(0.182)		(0.0633)
TI		−0.291		−1.813***
		(1.428)		(0.534)
GL		−1.489***		0.266*
		(0.516)		(0.151)
Constant	10.00***	4.927	3.205***	0.264
	(0.100)	(5.028)	(0.030)	(1.576)
Observations	2,032	1,502	2,360	1,803
R-squared	0.811	0.624	0.756	0.796
City FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Adjusted R-squared	0.782	0.554	0.725	0.765

Notes: robust standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 6 Results of the impact of EPUI on the output value of secondary industry

	(1)	(2)
ln $ENPU_{i,t-1}$	**−0.163*****	**−0.143****
	(0.0575)	(0.0627)
DP		0.00503
		(0.00342)
ES		0.000411
		(0.000252)
ln PFE		0.190
		(0.719)
ln PGDP		0.0325
		(0.398)
TI		−6.320*
		(3.262)
GL		−2.625**
		(1.095)
Constant	27.64***	24.54**
	(0.252)	(11.13)
Observations	2,061	1,814
R-squared	0.941	0.948
City FE	YES	YES
Year FE	YES	YES
Adjusted R-squared	0.933	0.940

Notes: robust standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 7 Results of introducing the interaction term of EPUI and the output value of secondary industry

	(1)	(2)	(3)	(4)
Variables	ln SO_2	ln SO_2	ln CO_2	ln CO_2
$\ln ENPU_{i,t-1} \times \ln SGDP_{i,t}$	−0.0232***	−0.0203***	−0.00689***	−0.00699***
	(0.00631)	(0.00696)	(0.00200)	(0.00221)
$\ln ENPU_{i,t-1}$	−0.433***	−0.347**	−0.113**	−0.110**
	(0.151)	(0.155)	(0.0479)	(0.0483)
$\ln SGDP_{i,t}$	0.0428	0.0403	0.00430	0.00174
	(0.0394)	(0.0424)	(0.0158)	(0.0152)
DP		−0.00253**		−0.00133**
		(0.00104)		(0.000585)
ES		−3.73e-05		−3.57e-05
		(5.79e-05)		(2.28e-05)
ln PFE		0.600**		0.210**
		(0.295)		(0.0890)
ln PGDP		0.0368		0.157**
		(0.175)		(0.0613)
TI		−0.421		−1.937***
		(1.482)		(0.527)
GL		−1.716***		0.182
		(0.533)		(0.164)
Constant	10.22***	3.369	3.319***	0.101
	(1.056)	(4.753)	(0.434)	(1.487)
Observations	1,716	1,500	2,045	1,801
R-squared	0.621	0.627	0.764	0.801
City FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Adjusted R-squared	0.561	0.558	0.734	0.772

Notes: Robust standard errors are in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

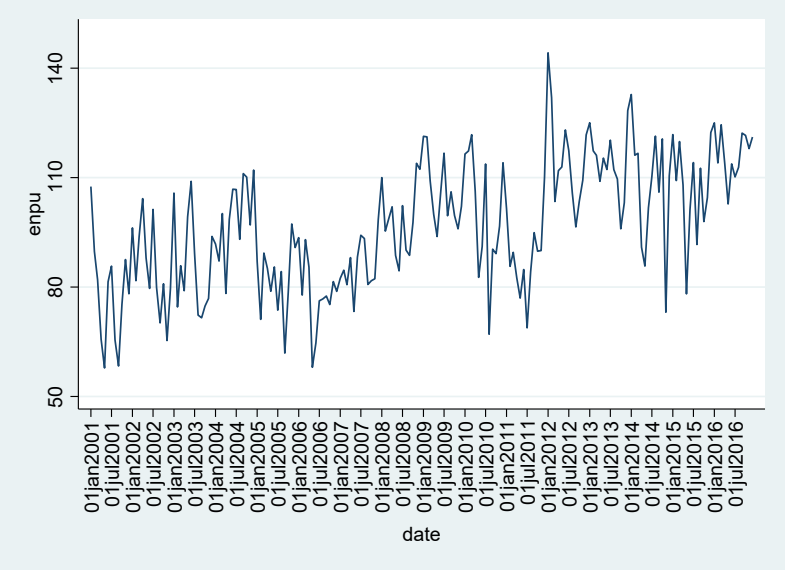

Figure 1 The fluctuation trend of China's EPUI from 2001 to 2016

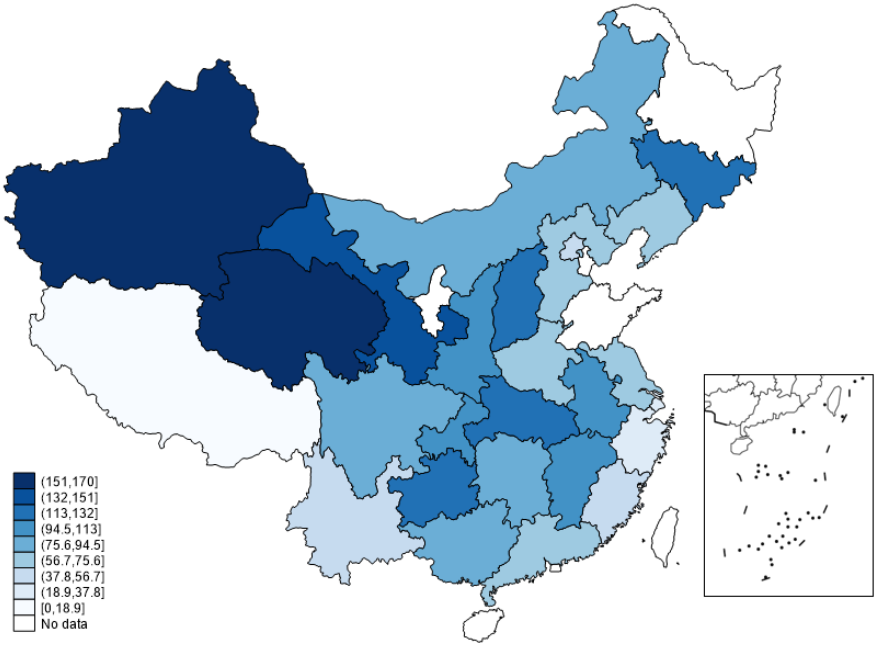

Figure 2 The distribution of EPUI at the provincial level in China in 2001

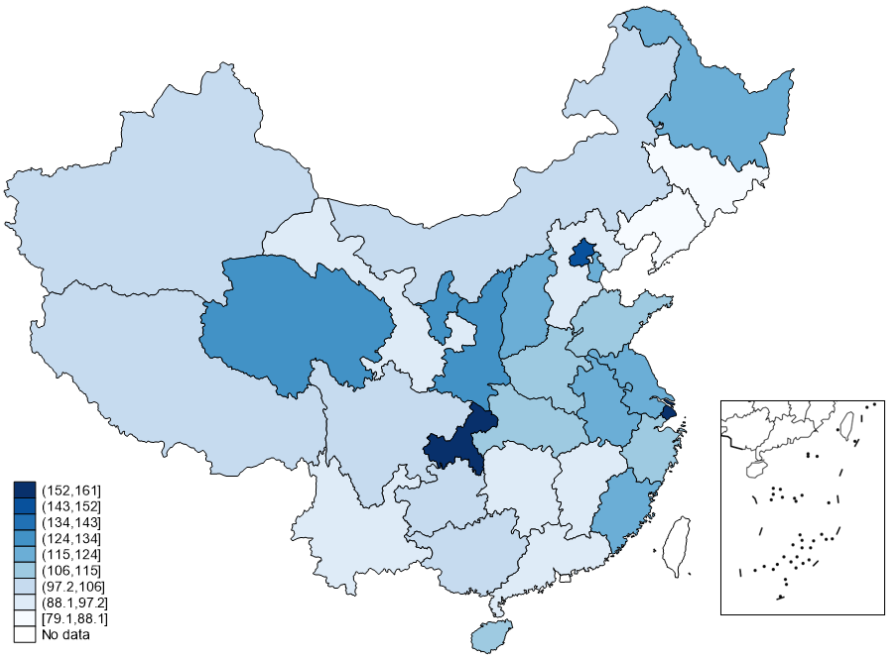

Figure 3 The distribution of EPUI at the provincial level in China in 2016

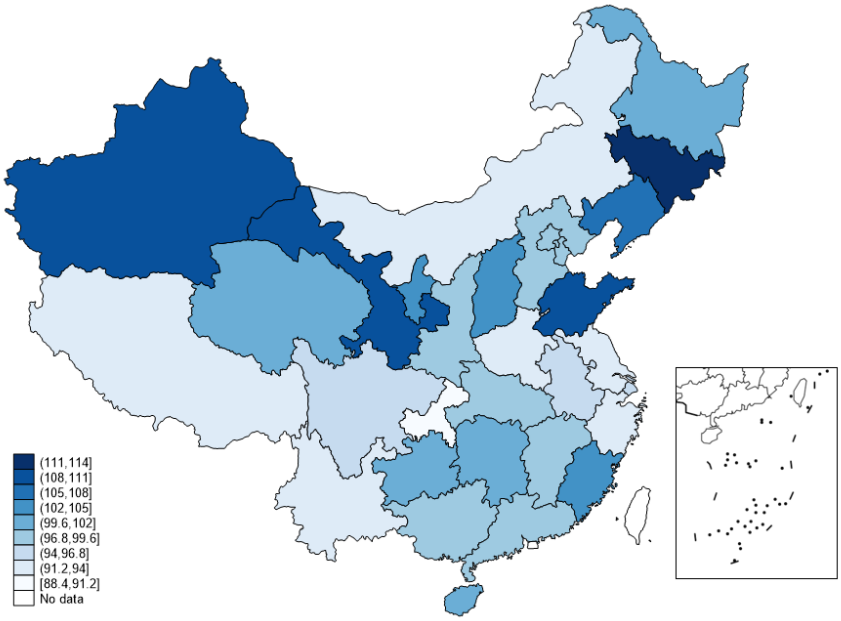

Figure 4 The mean distribution of EPUI at the provincial level in China from 2001 to 2016

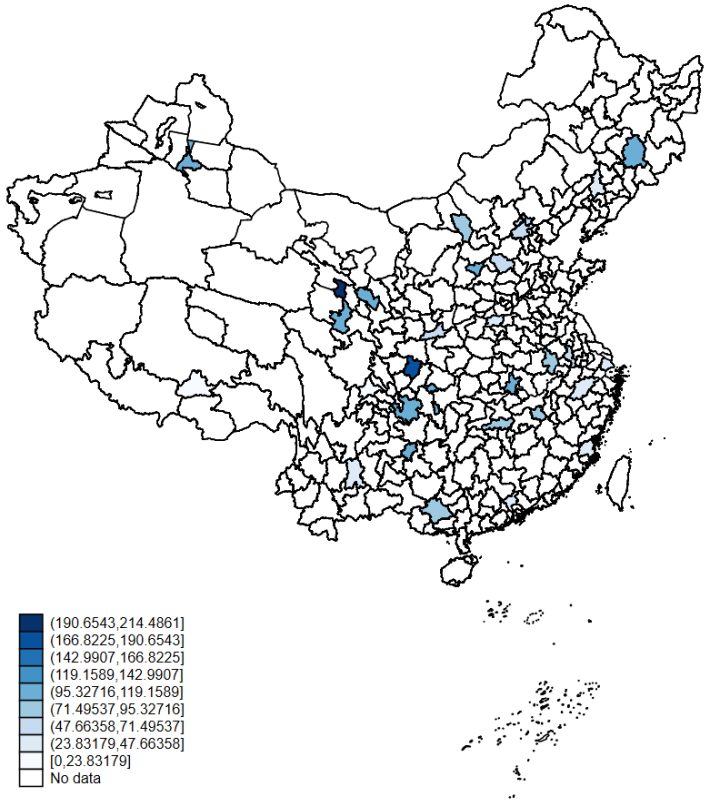

Figure 5 The distribution of EPUI at the prefecture-level in China in 2001

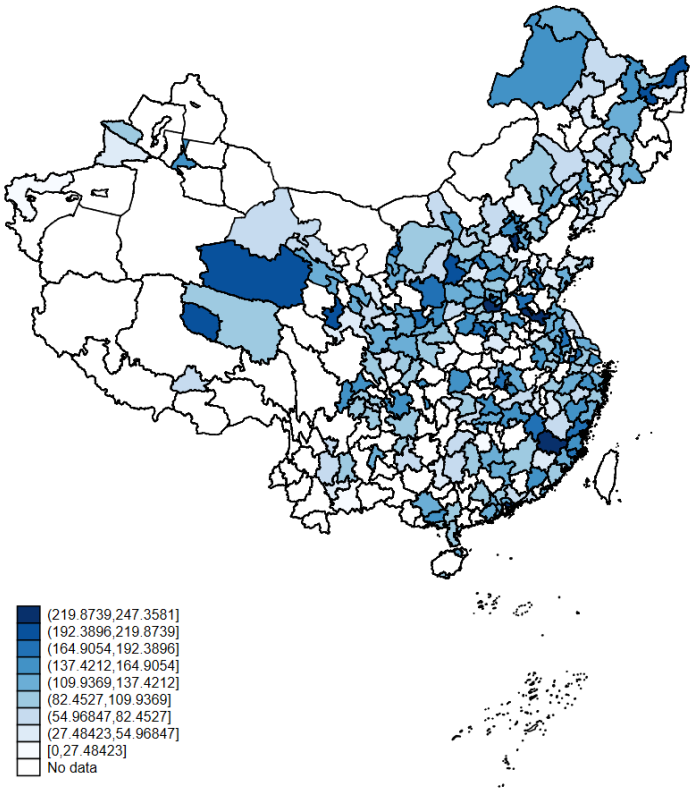

Figure 6 The distribution of EPUI at the prefecture-level in China in 2016

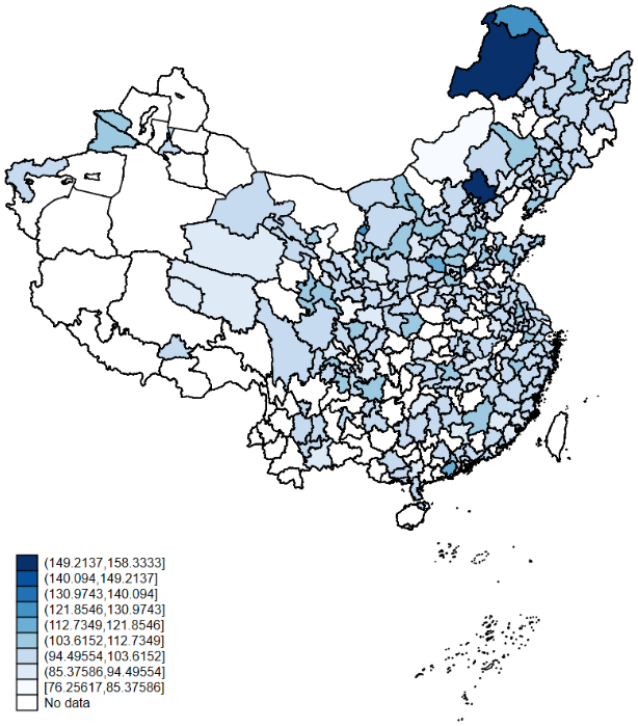

Figure 7 The mean distribution of EPUI at the prefecture-level in China from 2001 to 2016

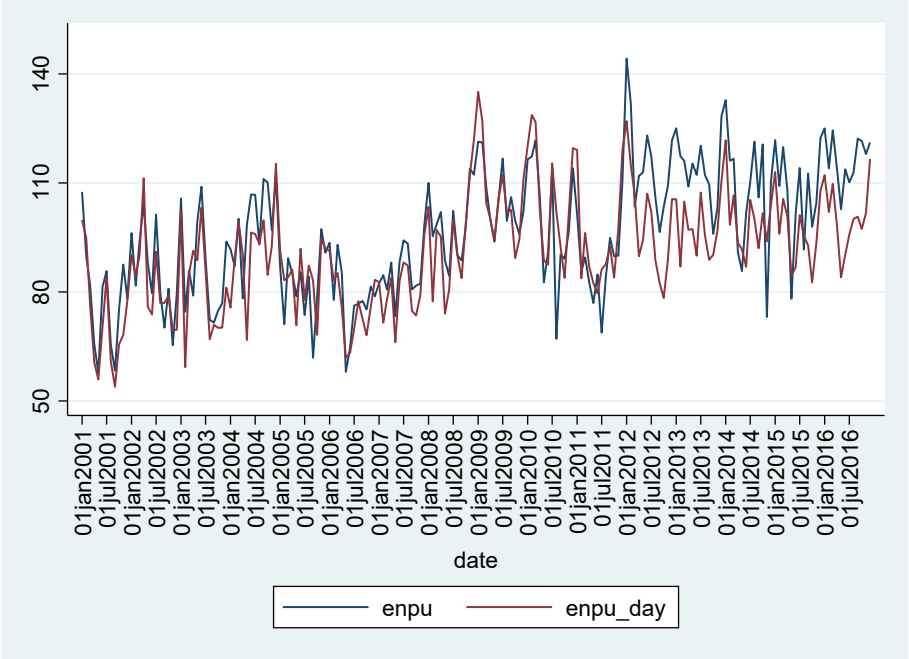

Figure 8 The fluctuation trends of EPUI and EPUI_day from 2001 to 2016

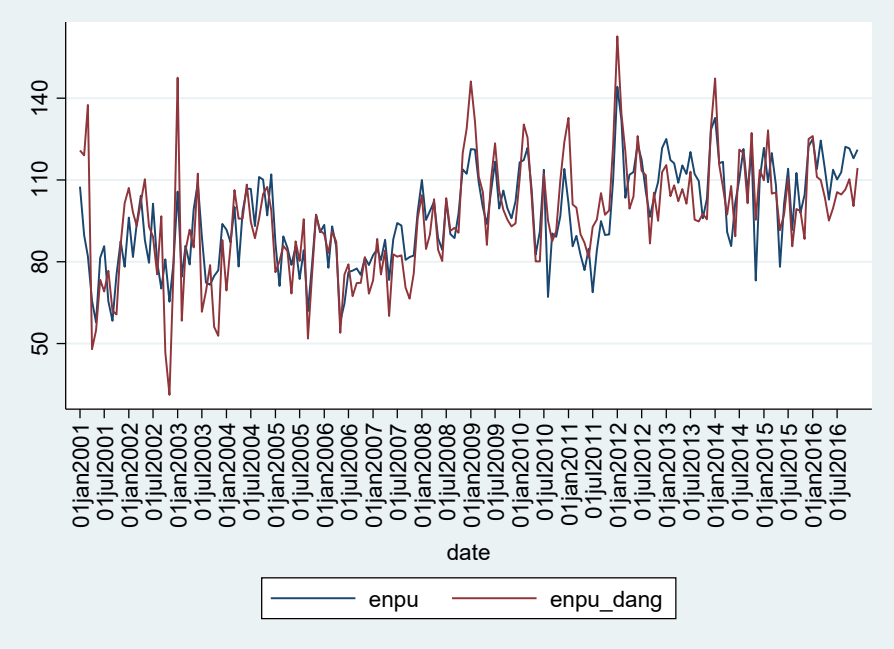

Figure 9 The fluctuation trends of EPUI and EPUI_dang from 2001 to 2016

Appendix

Table A.1 Sources and distribution of 460 newspapers in China

Province	Newspaper name in Chinese	Newspaper name in English	City	Newspaper name in Chinese	Newspaper name in English	City
Anhui	安徽经济报	ANHUI ECNOMIC DAILY	Hefei	安庆日报	ANQING DAILY	Anqing
	安徽日报	ANHUI DAILY	Hefei	蚌埠日报	Bengbu Daily	Bengbu
	合肥日报	Hefei Daily	Hefei	巢湖日报	CHAOHU DAILY	Suzhou
	合肥晚报	Hefei Evening News	Hefei	滁州日报	CHUZHOU DAILY	Chuzhou
	江淮时报	JIANGHUAI TIMES	Hefei	淮南日报	HUAI NAN RI BAO	Huainan
	马鞍山日报	MAANSHAN DAILY	Maanshan	黄山日报	HUANGSHAN RIBAO	Huangshan
	芜湖日报	WUHU DAILY	Wuhu			
Beijing	北京人才市场报	BEIJING BUSINESS TODAY	Beijing	中国纪检监察报	ZHONGGUO JIJIAN JIANCHA BAO	Beijing
	北京日报	BEIJING DAILY	Beijing	中国教师报	CHINA TEACHER PAPER	Beijing
	北京商报	BEIJING BUSINESS TODAY	Beijing	中国教育报	ZHONGGUO JIAOYU BAO	Beijing
	北京社区报	BEIJING COMMUNITY NEWS	Beijing	中国经济导报	China Economic Herald	Beijing
	财会信报	ACCOUNTING MESSENGER	Beijing	中国经济时报	CHINA ECONOMIC TIMES	Beijing
	财经时报	China Business Post	Beijing	中国经营报	CHINA BUSINESS JOURNAL	Beijing
	电脑商报	Computer Partner World	Beijing	中国劳动保障报	CHINA LABOUR AND SOCIAL SECURITY NEWS	Beijing
	法制日报	LEGAL DAILY	Beijing	中国老年报	China Aged News	Beijing
	公益时报	CHINA PHILANTHROPY TIMES	Beijing	中国联合商报	China United Business News	Beijing

	光明日报	GUANGMING DAILY	Beijing	中国旅游报	CHINA TOURISM NEWS	Beijing
	国际商报	INTERNATIONAL BUSINESS DAILY	Beijing	中国绿色时报	CHINA GREED TIMES	Beijing
	华夏时报	CHINA TIMES	Beijing	中国贸易报	CHINA TRADE NEWS	Beijing
	机电商报	Machinery & Electronics Business	Beijing	中国能源报	CHINA ENERGY NEWS	Beijing
	检察日报	PROCURATORATE DAILY	Beijing	中国农村信用合作报	THE CREDIT COOPERATIVE	Beijing
	解放军报	JIEFANGJUN BAO	Beijing	中国企业报	CHINA ENTERPRISE NEWS	Beijing
	金融时报	FINANCIAL NEWS	Beijing	中国人口报	CHINA POPULATION NEWS	Beijing
	经济参考报	ECONIMIC INFORMAITION DAILY	Beijing	中国商报	CHINA BUSINESS HERALD	Beijing
	经济日报	ECONOMIC DAILY	Beijing	中国社会报	CHINA SOCIETY NEWS	Beijing
	农村金融时报	Rural Financial Times	Beijing	中国社会科学报	CHINESE SOCIAL SCIENCES TODAY	Beijing
	人民日报	PEOPLE'S DAILY	Beijing	中国审计报	ZHONGGUO SHENJI BAO	Beijing
	人民日报海外版	PEOPLE'S DAILY OVERSEAS EDITION	Beijing	中国税务报	CHINA TAXATION NEWS	Beijing
	人民政协报	RENMIN ZHENGXIE BAO	Beijing	中国特产报	ZHONG GUO TE CHAN BAO	Beijing
	商务时报	Commercial Times	Beijing	中国体育报	CHINA SPORTS DAILY	Beijing
	世界报	WORLD NEWS	Beijing	中国县域经济报	CHINA COUNTY TIMES	Beijing
	团结报北京	TUANJIE BAO	Beijing	中国消费者报	CHINA CONSUMER JOURNAL	Beijing
	西部时报	WEST TIMES	Beijing	中国信息报	CHINA INFORMATION NEWS	Beijing
	消费日报	CONSUMPTION DAILY	Beijing	中国邮政报	CHINA POST NEWS	Beijing
	新华每日电讯	XINHUA DAILY TELEGERAPH	Beijing	中国证券报	China Securities Journal	Beijing
	新农村商报	New Countryside Commerce	Beijing	中国政府采购报	CHINA GOVERNMENT PROCUREMENT NEWS	Beijing

	新清华	TSINGHUA WEEKLY	Beijing	中国知识产权报	CHINA INTELLECTUAL PROPERTY NEWS	Beijing
	学习时报	STUDY TIMES	Beijing	中国质量报	China Quality Daily	Beijing
	证券日报	SECURITIES DAILY	Beijing	中国足球报	China Soccer	Beijing
	政府采购信息报	GOVERNMENT PROCUREMENT NFORMATION	Beijing	中华读书报	CHINA READING WEEKLY	Beijing
	中国保险报	CHINA INSURANCE NEWS	Beijing	中华工商时报	CHINA BUSINESS TIMES	Beijing
	中国财经报	CHINA FINANCIAL AND ECONOMIC NEWS	Beijing	中华合作时报	CHINA CO-OPERATIVE TIMES	Beijing
	中国产经新闻	CHINA INDUSTRIAL ECONOMY NEWS	Beijing	中华新闻报	CHINA PRESS JOURBAL	Beijing
	中国城市报	CHINA CITY NEWS	Beijing	中国工业报	CHINA INDUSTRY NEWS	Beijing
	中国城乡金融报	CHINA URBAN-RURAL FINANCIAL NEWS	Beijing	中国国土资源报	CHINA LAND AND RESOURCES NEWS	Beijing
	中国房地产报	China Real Estate Business	Beijing	中国环境报	CHINA ENVIRONMENT NEWS	Beijing
	中国改革报	CHINA REFORM	Beijing	中国会计报	China Accounting News	Beijing
	中国高新技术产业导报	CHINA HIGH-TECH INDUSTRY HERALD	Beijing	中国集邮报	CHINA PHILATELY NEWS	Beijing
	中国工商报	CHINA INDUSTRY & COMMERCE NEWS	Beijing			
Fujian	福建日报	FUJIAN RIBAO	Fuzhou	闽西日报	MINXIRIBAO	Longyan
	福州日报	FUZHOU DAILY	Fuzhou	泉州晚报	QUANZHOU WANBAO	Quanzhou
	湄洲日报	MEIZHOU RIBAO	Putian	三明日报	SANMING RIBAO	Sanming
	闽北日报	MINBEI DAILY	Nanping	厦门日报	XIAMEN DAILY	Xiamen
	闽东日报	MINDONG DAILY	Ningde	石狮日报	SHISHI DAILY	Fuzhou

	闽南日报	MINNAN RIBAO	Zhanzhou	学知报	XUE ZHI BAO	Xiamen
	闽商报	MINSHANG NEWS	Fuzhou			
Gansu	白银日报	BAIYIN RIBAO	Baiyin	陇东报	LONGDONG BAO	Qingyang
	定西日报	DINGXI RIBAO	Dingxi	陇南日报	LONGNAN RI BAO	Longnan
	甘南日报	GAN NAN RI BAO	Gannan Tibetan Autonomous Prefecture	民主协商报	MIN ZHU XIE SHANG BAO	Lanzhou
	甘肃经济日报	GANSU ECONOMIC DALIY	Lanzhou	民族日报	MINZU RIBAO	Linxia Hui Autonomous Prefecture
	甘肃日报	GANSU RIBAO	Lanzhou	平凉日报	PINGLIANG DAILY	Pingliang
	金昌日报	JINCHANG RIBAO	Jinchang	天水日报	TIANSHUI DAILY	Tianshui
	酒泉日报	JIUQUAN RIBAO	Jiuquan	武威日报	WUWEI RIBAO	Wuwei
	兰州日报	LANZHOU RIBAO	Lanzhou	张掖日报	ZHANGYE DAILY	Zhangye
Guangdong	21 世纪经济报道	21st CENTURY BUSINESS HERALD	Guanzhou	汕尾	SHANWEI RIBAO	Shanwei
	潮州日报	CHAOZOU DAILY	Chaozhou	韶关日报	SHAOGUAN DAILY	Shaoguan
	东莞日报	DONGGUAN DAILY	Dongguan	深圳商报	SHENZHEN ECONOMIC DAILY	Guangzhou
	佛山日报	FOSHAN DAILY	Foshan	深圳特区报	SHENZHEN SPECIAL ZONE DAILY	Shenzhen
	广州日报	GUANGZHOU DAILY	Guanghzou	西江日报	XIJIANG DAILY	Zhaoqing
	惠州日报	HUIZHOU DAILY	Huizhou	亚太经济时报	ASIA PACIFIC ECONOMIC TIMES	Guangzhou

	江门日报	JIANGMEN DAILY	Jiangmen	湛江日报	ZHANJIANG DAILY	Zhanjiang
	梅州日报	MEIZHOU DAILY	Meizhou	证券时报	Securities Times	Guangzhou
	民营经济报	PRIVATE ECONOMY NEWS	Guangzhou	中国基金报	CHINAFUND	Shenzhen
	南方日报	SOUTHERN DAILY	Guangzhou	中山日报	ZHONGSHAN DAILY	Zhongshan
	南方周末	SOUTHERN WEEKLY	Guanzhou	珠海特区报	ZHUHAI DAILY	Zhuhai
	汕头日报	SHANTOU RIBAO	Shantou			
Guangxi	北海日报	BEIHAIRIBAO	Beihai	柳州日报	LIUZHOU RIBAO	Liuzhou
	广西日报	Guangxi Daily	Nanning	南宁日报	NANZNINGZ YIZBAU	Nanning
	广西政协	Guangxi Political Consultative Conference	Nanning	钦州日报	QINZHOU RIBAO	Qinzhou
	桂林日报	GUILIN DAILY	Guilin	玉林日报	YULIN RIBAO	Yulin
Guizhou	毕节日报	BIJIE DAILY	Bijie	黔西南日报	QIAN XI NAN RI BAO	Guiyan
	贵阳日报	GUIYANG DAILY	Guiyang	六盘水日报	LIU PAN SHUI RI BAO	Liupanshui
	贵州日报	GUIZHOU DAILY	Guiyang	黔南日报	Qiannan Daily	Qiannan Buyi and Miao Autonomous Prefecture
	贵州政协报	GUIZHOU ZHENGXIE BAO	Guiyang	铜仁日报	TONGREN DAILY	Tongren
	经济信息时报	Economic Information Times	Guiyang	遵义日报	ZUNYI DAILY	Zunyi
Hainan	海口晚报	HAIKOU DAILY	Haikou	海南日报	HAINAN DAILY	Haikou
	海南报	HAINAN DAILY	Haikou	三亚日报	SANYARIBAO	Sanya

	海南农垦报	HAINAN NONGKEN BAO	Haikou			
Hebei	保定日报	BAO DING RI BAO	Baoding	廊坊日报	LangFang Daily	Langfang
	沧州日报	CANGZHOU DAILY	Cangzhou	秦皇岛日报	QINHUANGDAO NEWS	Qinhuangdao
	承德日报	CHENGDERIBAO	Chengde	石家庄日报	SHIJIAZHUANG RIBAO	Shijiazhuang
	邯郸日报	HANDAN DAILY	Handan	石油管道报	SHIYOU GUANDAO BAO	Shijiazhuang
	河北经济日报	HEBEI ECONOMIC DAILY	Shijiazhuang	唐山劳动日报	TANGSHAN LAODONG RIBAO	Tangshan
	河北科技报	Hebei Science and Technology News	Shijiazhuang	现代物流报	Modern Logistics News	Shijiazhuang
	河北农民报	Hebei Farmers News	Shijiazhuang	邢台日报	XINGTAI DAILY	Xingtai
	河北日报	HEBEI DAILY	Shijiazhuang	张家口日报	ZHANGJIAKOU DAILY	Zhangjiakou
	衡水日报	HENGSHUIRIBAO	Hengshui			
Henan	安阳日报	ANYANG RIBAO	Anyang	河南法制报	HENAN LEGAL DAILY	Zhengzhou
	鹤壁日报	HEBI DAILY	Hebi	河南科技报	HENANKEJIBAO	Zhengzhou
	焦作日报	JIAOZUO DAILY	Jiaozuo	河南日报	HENAN DAILY	Zhengzhou
	开封日报	KAIFENG RIBAO	Kaifeng	黄河报	YELLOWRIVER NEWS	Zhengzhou
	洛阳日报	LUOYANG DAILY	Luoyang	经济视点报	THE ECONOMIC VIEW	Zhengzhou
	平顶山日报	PINGDINGSHAN DAILY	Pingdingshan	粮油市场报	GRAIN NEWS	Zhengzhou
	濮阳日报	PUYANG RIBAO	Puyang	期货日报	Futures Daily	Zhengzhou
	商丘日报	SHANGQIU DAILY	Shangqiu	郑州日报	ZHENGZHOU DAILY	Zhengzhou
	新乡日报	XINXIANG RIBAO	Xinxiang	周口日报	ZHOUKOU RIBAO	Zhoukou
	许昌日报	XUCHANG DAILY	Xuchang	驻马店日报	ZHUMADIAN DAILY	Zhumadian

Heilongjiang	北大荒日报	BEIDAHUANG DAILY	Harbin	鸡西日报	JIXI RIBAO	Jixi
	北方时报	Northern Times	Harbin	佳木斯日报	JIAMUSI DAILY	Jiamusi
	大庆日报	DAQING DAILY	Daqing	牡丹江日报	MUDANJIANG DAILY	Mudanjiang
	大兴安岭日报	DAXINGANLING RIBAO	Da Hinggan Ling Prefecture	齐齐哈尔日报	QIQIHAER RIBAO	Qiqihaer
	哈尔滨日报	Harbin Daily	Harbin	双鸭山日报	SHUANGYASHANRIBAO	Shuangyashan
	鹤岗日报	Hegang Daily	Hegang	绥化日报	SUIHUA RIBAO	Suihua
	黑河日报	Heihe Daily	Heihe	伊春日报	YICHUN RIBAO	Yichun
	黑龙江经济报	HEILONGJIANG ECONOMIC DAILY	Harbin	远东经贸导报	Far East Economic and Trade Herald	Harbin
	黑龙江日报	Heilongjiang Newspaper	Harbin	中俄经贸时报	Sino-Russian Economic and Trade Times	Mudanjiang
Hubei	鄂州日报	EZHOU DAILY	Ezhou	十堰日报	SHIYAN DAILY	Shiyan
	恩施日报	ENSHI DAILY	Enshi	围棋报	GO NEWS	Wuhan
	湖北日报	HUBEI DAILY	Wuhan	咸宁日报	XIANNING DAILY	Xianning
	黄冈日报	Huanggang Daily	Huanggang	襄阳日报	XIANGYANG DAILY	Xiangyang
	黄石日报	HUANGSHI DAILY	Huangshi	孝感日报	XIAOGAN DAILY	Xiaogan
	三峡日报	SANXIA DAILY	Yichang	长江日报	CHANGJIANG RIBAO	Wuhan
Hunan	常德日报	CHANGDE RI BAO	Changed	湘声报	Xiang Sheng News	Changsha
	郴州日报	CHENZHOU RIBAO	Chenzhou	湘潭日报	Xiangtan Daily	Xiangtan
	衡阳日报	Hengyang Daily	Hengyang	益阳日报	Yiyang Daily	Yiyang
	湖南经济报	HUNAN ECONOMIC DAILY	Changsha	永州日报	YONGZHOU RIBAO	Yongzhou

	湖南日报	HUNAN RIBAO	Changsha	岳阳日报	YUEYANG DAILY	Yueyang
	邵阳日报	SHAOYANG RIBAO	Shaoyang	张家界报	Zhangjiajie News	Zhangjiajie
	团结报湖南	TUANJIE BAO HUNAN	Changsha	长沙晚报	Changsha Evening News	Changsha
Jilin	吉林党校报	JI LIN DANG XIAO BAO	Changchun	通化日报	TONGHUA DAILY	Tonghua
	吉林日报	JILIN DAILY	Jilin	协商新报	Negotiating News	Changchun
	就业时报	EMPLOYMENT TIMES	Changchun	延边日报	Yanbian Daily	Yanbian
	辽源日报	LIAO YUAN RI BAO	Liaoyuan	长白山日报	CHANGBAISHAN RIBAO	Baishan
	四平日报	SIPING RIBAO	Siping	长春日报	CHANGCHUN DAILY	Changchun
Jiangsu	常州日报	CHANZHOU DAILY	Changzhou	宿迁日报	SUQIAN DAILY	Suqian
	华东旅游报	Tourism	Nanjing	泰州日报	TAIZHOU DAILY	Taizhou
	淮安日报	HUAIAN DAILY	Huanan	无锡日报	WUXI DAILY	Wuxi
	江苏教育报	JIANGSU JIAOYU BAO	Nanjing	新华日报	XINHUA RIBAO	Nanjing
	江苏经济报	JIANGSU ECONOMIC NEWS	Nanjing	徐州日报	XUZHOU DAILY	Xuzhou
	江阴日报	JIANGYIN DAILY	Wuxi	盐阜大众报	YANFU PEOPLE'S DAILY	Yancheng
	连云港日报	LIANYUNGANG DAILY	Lianyungang	扬州日报	YANZHOU RIBAO	Yangzhou
	南京日报	NANJING DAILY	Nanjing	宜兴日报	YiXing Daily	Nanjing
	南通日报	Nantong Daily	Nantong	镇江日报	ZHENJIANG DAILY	Zhenjiang
	苏州日报	SUZHOU DAILY	Suzhou			
Jiangxi	抚州日报	FU ZHOU RI BAO	Fuzhou	南昌日报	NanChang Daily	Nancang
	赣南日报	GANNAN DAILY	Ganzhou	上饶日报	SHANGRAO RIBAO	Shangrao

	光华时报	GUANGHUA SHIBAO	Fuzhou	新余日报	XINYU RIBAO	Xinyu
	江西日报	JIANGXI DAILY	Nanchang	宜春日报	YICHUN DAILY	Yichun
	九江日报	JIUJIANG DAILY	Jiujiang			
Liaoning	鞍山日报	ANSHAN DAILY	Anshan	锦州日报	JINZHOU DAILY	Jinzhou
	本溪日报	BENXI DAILY	Benxi	辽宁日报	LIAONING DAILY	Shenyang
	朝阳日报	CHAOYANG DAILY	Chaoyang	盘锦日报	PANJIN RIBAO	Panjin
	大连日报	DALIAN DAILY	Dalian	沈阳日报	SHENYANG DAILY	Shenyang
	丹东日报	DANDONG DAILY	Dandong	铁岭日报	TIELING RIBAO	Tieling
	抚顺日报	FUSHUN DAILY	Fushun	营口日报	YINGKOURIBAO	Yingkou
	阜新日报	FUXIN DAILY	Fuxin	友报	CPCC LIAONING COMMITTEE DIRECT	Shenyang
Inner Mongolia	巴彦淖尔	Bayannaoer News	Bayan Nur	呼伦贝尔日报	Hulunbuir Daily	Hulun Buir
	包头日报	BAOTOU RIBAO	Baotou	内蒙古日报	Inner Mongolia Daily	Huhhot
	赤峰日报	Chifeng Daily	Chifeng	通辽日报	Tongliao Daily	Tongliao
	鄂尔多斯日报	Ordos Daily	Ordos	乌海日报	WUHAI DAILY	Wuhai
	呼和浩特日报	Hohhot Daily	Huhhot	锡林郭勒日报	Xilin Gol Daily	Xilingol League
Ningxia	固原日报	Guyuan Daily	Guyuan	吴忠日报	Wuzhong Daily	Wuzhong
	华兴时报	HUA XING SHI BAO	Yinchuan	银川日报	YINCHUAN RIBAO	Yinchuan
	宁夏日报	NINGXIA RIBAO	Yinchuan	银川晚报	Yinchuan Evening News	Yinchuan

	石嘴山日报	SHIZUISHAN RIBAO	Shizuishan	中卫日报	ZHONGWEI RIBAO	Yinchuan
Qinghai	柴达木日报	Qaidam Daily	Haixi Mongolian and Tibetan Autonomous Prefecture	祁连山报	QILIANSHAN DAILY	Tibetan Autonomous Prefecture of Haibei
	格尔木日报	GEERMU DAILY	Haixi Mongolian and Tibetan Autonomous Prefecture	青海日报	QINGHAI DAILY	Xining
	果洛报	GUOLUO NEWS	Xining	三江源报	SANJIANGYUAN NEWS	Yushu Tibetan Autonomous Prefecture
	海东时报	HAIDONG TIMES	Haidong	西宁晚报	XINING EVENING NEWS	Xining
	黄南报	HUANGNAN NEWS	Tibetan Autonomous Prefecture of Huangnan			
Shandong	德州日报	DEZHOU RIBAO	Dezhou	青岛日报	Qingdao Daily	Qingdao
	东营日报	DONGYING RIBAO	Dongying	日照日报	RIZHAO RIBAO	Rizhao
	菏泽日报	HEZE DAILY	Heze	泰安日报	TAI'AN DAILY	Taian
	济南日报	JINAN DAILY	Jinan	威海日报	WEIHAI DAILY	Weihai

	济宁日报	JINING DAILY	Jining	潍坊日报	WEIFANG RIBAO	Weifang
	莱芜日报	LAIWU DAILY	Laiwu	烟台日报	YANTAI DAILY	Yantai
	联合日报	Joint Daily	Jinan	淄博日报	ZIBO RIBAO	Zibo
Shanxi	大同日报	DATONG RIBAO	Datong	山西日报	SHANXI DAILY	Taiyuan
	瓜果蔬菜报	Fruits and vegetable News	Taiyuan	山西政协报	SHANXI ZHENGXIE BAO	Taiyuan
	晋中日报	JINZHONG DAILY	Jinzhong	朔州日报	SHUOZHOU DAILY	Shuozhou
	临汾日报	LINFEN RIBAO	Linfen	太行日报	TAI HANG RI BAO	Jincheng
	吕梁日报	LULIANG DAILY	Lvliang	太原日报	TAIYUAN DAILY	Taiyuan
	人民代表报	RENMINDAIBIAOBAO	Taiyuan	忻州日报	XINZHOU DAILY	Xinzhou
	山西党校报	SHANXI DANGXIAO NEWS	Taiyuan	阳泉日报	YANGQUAN RIBAO	Yangquan
	山西经济报	Shanxi Economic News	Taiyuan	运城日报	YUNCHENG DAILY	Yuncheng
	山西青年报	Shanxi Youth Daily	Taiyuan	长治日报	CHANGZHI RIBAO	Changzhi
Shaanxi	安康日报	ANKANG DAILY	Ankang	铜川日报	TONGCHUAN DAILY	Tongzhou
	宝鸡日报	BAOJI DAILY	Baoji	渭南日报	WEINAN DAILY	Weinan
	各界导报	GUIDE NEWS FOR ALL CIR CLES	Xi’an	西安日报	XI'AN DAILY	Xi’an
	汉中日报	HANZHONG DAILY	Hanzhong	咸阳日报	Xianyang Daily	Xianyang
	陕西日报	SHAANXI DAILY	Xi’an	延安日报	YANAN DAILY	Yanan
	商洛日报	SHANGLUO RIBAO	Shangluo	榆林日报	Yulin Daily	Yulin
Shanghai	第一财经日报	China Business News	Shanghai	人才市场报	JOB MARKET	Shanghai
	东方城乡报	DONGFANG CHENGXIANG BAO	Shanghai	上海金融报	SHANGHAI FINANCIAL NEWS	Shanghai

	房地产时报	REAL ESTATE TIMES	Shanghai	上海证券报	SHANGHAI SECURITIES NEWS	Shanghai
	国际金融报	INTERNATIONAL FINANCE NEWS	Shanghai	社会科学报	Social Sciences Weekly	Shanghai
	解放日报	JIEFANG DAILY	Shanghai	文汇报	WENHUI DAILY	Shanghai
	联合时报	UNITED TIMES	Shanghai			
Sichuan	阿坝日报	ABA DAILY	Tibetan Qiang Autonomous Prefecture of Ngawa	眉山日报	MEISHAN DAILY	Meishan
	巴中日报	BAZHONG DAILY	Bazhong	绵阳日报	MIANYANG DAILY	Mianyang
	成都日报	CHENGDU DAILY	Chengdu	南充日报	NC DAILY	Nanchong
	达州日报	DAZHOU RIBAO	Dazhou	内江日报	NEIJIANG RIBAO	Neijing
	甘孜日报	GANZI DAILY	Tibetan Autonomous Prefecture of Garzê	攀枝花日报	PANZHIHUA DAILY	Panzhihua
	广安日报	GUANGAN RIBAO	Guang’an	企业家日报	ENTREPRENEURS' DAILY	Chengsu
	广元日报	GUANGYUAN DAILY	Guangyuan	四川日报	SICHUAN DAILY	Chengdu
	乐山日报	LESHAN DAILY	Leshan	四川政协报	SICHUAN ZHENGXIE BAO	Bazhong
	凉山日报	LIANGSHAN DAILY	Liangshan	雅安日报	YAAN DAILY	Ya'an
	泸州日报	LUZHOU DAILY	Luzhou	宜宾日报	Yibin Daily	Yibin
	自贡日报	ZIGONG RIBAO	Zigong			
Tianjin	天津教育报	TIANJIN EDUCATION NEWS	Tianjin	新金融观察	INNOVATIVE FINANCE	Tianjin

					OBSERVATION	
	天津日报	TIANJIN DAILY	Tianjin	中国技术市场报	CHINA TECHNOLOGY MARKET NEWS	Tianjin
Tibet	昌都报	CHANGDU NEWS	Qamdo	日喀则报	Shigatse News	Shigatse
	拉萨晚报	Lhasa Evening News	Lhasa	山南报	SHANNAN NEWS	Lhoka
	林芝报	LINZHI NEWS	Nyingchi	西藏日报	Tibet Daily	Lhasa
	那曲报	NAQU NEWS	Nagqu			
Xinjiang	阿克苏日报	Aksu Daily	Aksu	克孜勒苏报	KEZILESU BAO	Kizilsu Kirghiz Autonomous Prefecture
	阿勒泰日报	Altai Daily	Altay	石河子日报	SHIHEZI DAILY	Shihezi
	巴音郭楞日报	Barin Guo Yu Daily	Korla	塔城日报	TACHENG DAILY	Tacheng
	兵团日报	Bingtuan Daily	Urumqi	吐鲁番日报	Turpan Daily	Turpan
	博尔塔拉报	Boretala Daily	Bortala Mongol Autonomous Prefecture	乌鲁木齐晚报	WULUMUQI EVENING NEWS	Urumqi
	昌吉日报	Changji Daily	Changji	新疆日报	XINJIANG DAILY	Urumqi
	哈密日报	Hami Daily	Hami	亚洲中心时报	Asian Central Times	Urumqi
	和田日报	Hetian Daily	Hetian	伊犁日报	YILI RIBAO	Ili Kazak Autonomous

						Prefecture
	喀什日报	Kashi Daily	Qeshqer Shehiri			
Yunnan	楚雄日报	CHUXIONG DAILY	Chuxiong	玉溪日报	YUXI RIBAO	Yuxi
	大理日报	DALI DAILY	Dali	云南经济日报	YUNNAN ECONOMIC DAILY	Kunming
	红河日报	HAOQHOQ SSIIQBAOF	Hani-Yi Autonomous Prefecture of Honghe	云南日报	YUNNAN DAILY	Kunming
	昆明日报	KUNMING DAILY	Kunming	云南政协报	YUNNAN ZHENGXIE BAO	Kunming
	普洱日报	PUER DAILY	Kunming			
Zhejiang	杭州日报	HANGZHOU DAILY	Hangzhou	衢州日报	QUZHOU DAILY	Quzhou
	湖州日报	HUZHOU DAILY	Huzhou	绍兴日报	SHAOXING DAILY	Shaoxing
	嘉兴日报	JIAXING DAILY	Jiaxing	台州日报	TAIZHOU DAILY	Taizhou
	江南游报	JIANGNAN TOURISM NEWS	Hangzhou	温州日报	WENZHOU DAILY	Wenzhou
	金华日报	JINHUA DAILY	Jinhua	浙江日报	ZHEJIANG DAILY	Hangzhou
	丽水日报	LISHUI DAILY	Lishui	舟山日报	ZHOUSHAN DAILY	Zhoushan
	宁波日报	NIBGBO DAILY	Ningbo			
Chongqing	重庆日报	CHONGQING DAILY	Chongqing	重庆政协报	Chongqing Zhengxie Bao	Chongqing
	重庆商报	CHONGQING ECONOMIC TIMES	Chongqing			