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Chapter 1

LDA of Investments in the United States

1.1 Introduction

While chapter ?? explored the locational preferences of institutional investors in the US as a whole and in the five largest American metropolitan areas by total funds under management, this chapter will explore whether geography can play a role in individual investors portfolio choices.

While Modern Portfolio Theory (MPT), as established by Markowitz (1952) advocates for holding a broad and negatively correlated portfolio, the notion of "not putting all of one's eggs in a single basket" is an old one, for Lofthouse (1997) finds that such advice was formally practised by the British investment firm Investment Registry as far back as 1904.

In concert with MPT's emphasis on diversification, the reaction to the Crash of

October 1987 placed renewed emphasis on risk management and the rise of “Value at Risk” (VAR) based investing in which firms would try to maximise returns while minimizing risk. This led to a homogenizing effect in investment strategies, as explained by Andrew G. Haldane, executive director of the Financial Stability at the Bank of England at a conference on risk management:

Within the financial sector, diversity appears to have been reduced for two separate, but related, reasons: the pursuit of return; and the management of risk. The pursuit of yield resulted in a return on equity race among all types of financial firm. As they collectively migrated to high-yield activities, business strategies came to be replicated across the financial sector. Imitation became the sincerest form of flattery.

So savings cooperatives transformed themselves into private commercial banks. Commercial banks ventured into investment banking. Investment banks developed in-house hedge funds through large proprietary trading desks. Funds of hedge funds competed with traditional investment funds. And investment funds - pension, money market mutual, insurance - imported the risk the others were shedding. (Haldane, 2009)[p.18]

As explored in Chapter ??, there is a substantial literature showing that stock pickers are biased towards industries in which they are knowledgeable or have personal connections. In particular, Coval and Moskowitz (2001) find that investors can draw abnormally high returns from local knowledge, and another study by Cohen et al. (2008) makes a compelling case that stock pickers are biased towards selecting stocks

of companies that their board of directors contain shared alumni networks.

Rather than looking at geographic differences of investors based on the type of institution they belong to such as but not limited to banks, hedge funds, pension funds, and insurance companies, this study will attempt to create a functional portfolio archetypes using machine learning and aggregate these archetypes by geography in order to look for regional patterns.

1.2 Latent Dirichlet allocation

Latent Dirichlet allocation (LDA) is a generative statistical technique developed by David Blei to find themes that are common across a corpus of texts (Blei et al., 2003). This technique is a derivation and refinement of Papadimitriou et al. (1998) and Papadimitriou et al. (2000) work on Latent Semantic Indexing.

LDA has made certain classification tasks feasible to conduct in a short time, such as analysing a large sample of digitized 18th century American newspapers for the topics of the day that would otherwise be unfeasible for any individual to read (Newman and Block, 2006). Another well known use of LDA is for finding in near-realtime the topics of controversy and/or debate at an academic conference via Twitter usage by the participants of the conference (Marwick, 2014).

In addition to text analysis, LDA has been used in multiple different fields such as finding latent patterns in biodiversity data (Valle et al., 2014), genetic data, images, social networks (Blei, 2012) as well as remote sensing data Lienou et al. (2010).

1.2.1 How does LDA work?

Ted Underwood, who studies the intersection of Information Science and English Literature, contends in his academic blog post entitled “Topic modeling made just simple enough[sic]” that academic papers make LDA look much harder than it is in practice, since their main goal is to show how and why their underlying formulas work and the mathematical proofs rely on highly advanced mathematics. If we take the algorithms to work as intended, the practice of LDA can be easily explained in practice (Underwood, 2012).

LDA assumes that each document being analyzed contains a multitude of different topics, and each of these topics are latent, that is to say they can’t be directly observed, but can be defined indirectly. Edwin Chen’s classic introduction to LDA example is quite straight forward (Chen, 2011). Take the following five sentences:

1. I like to eat broccoli and bananas.
2. I ate a banana and spinach smoothie for breakfast.
3. Chinchillas and kittens are cute.
4. My sister adopted a kitten yesterday.
5. Look at this cute hamster munching on a piece of broccoli.

If we treat each sentence as a document for LDA purposes, and we were to limit ourselves to two topics, we would see something to the effect of the following:

- **Sentences 1 and 2:** 100% Topic A
- **Sentences 3 and 4:** 100% Topic B
- **Sentence 5:** 60% Topic A, 40% Topic B

At this point, we see that the topics consists of:

- **Topic A:** 30% broccoli, 15% bananas, 10% breakfast, 10% munching, etc...
- **Topic B:** 20% chinchillas, 20% kittens, 20% cute, 15% hamster, etc...

At which point, we can see that Topic A consists mostly of food and food adjacent activities, whereas Topic B is about animals and their general cuteness.

At this point, it is important to state that LDA assumes that language is a "bag of words". That is to say that for the purpose of the model, the order of words and punctuation isn't considered important information. While this may cause some miss-coding of information in a limited context, since grammar, punctuation and word order can relay important information, larger corpora smooth-out these ambiguities. For example, an LDA model would treat the following two sentences as being identical:

- Have you eaten, my child?
- Have you eaten my child?

This study will be using LDA on Stock unique identifiers (CUSIP), the "bag of words" methodology works to our advantage, since the presented order of stocks in an institutional investor's portfolio will not influence the sorting algorithm. This relative location agnosticism is useful in this case, since unlike earth movers' distance classification (?), this method of classification is dependant on the initial relative distribution within the input variables, and therefore there is no need for a special ordering of stock positions in the input file.

The LDA process is mapped out graphically in Figure 1.1 and written out in Equation 1.1. For each possible topic (Z),

$$P(Z|W, D) = \frac{\# \text{ of words } W \text{ in topic } Z + \beta_w}{\text{total tokens in } Z + \beta} * (\# \text{ of words in } D \text{ that belong to } Z + \alpha) \quad (1.1)$$

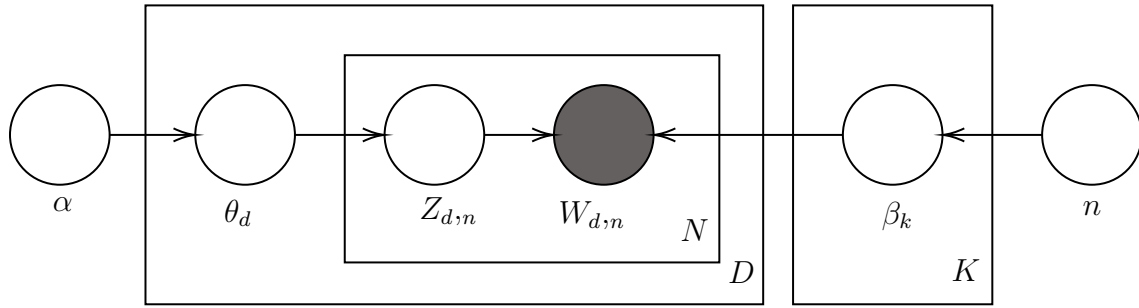


Figure 1.1: Graphical Model of Latent Dirichlet allocation replicated from the graphic in Blei (2012), where K is the total number of topics, β_k is the topic, a distribution over the vocabulary, D is the total number of documents, Θ_d is the per-document topic proportions, N is the total number of words in a document, $Z_{d,n}$ is the per-word topic assignment, $W_{d,n}$ observed word, and finally α and n as dirichlet parameters.

1.3 Preparing the Data

A closer analogue to using LDA is using this technique to classifying card selection in games such as Magic:The Gathering (Hlynsson, 2017). This collectible card game uses 60 cards decks that are selected ahead of time by the player. Due the game's complex resource system and multiple different strategies for attacking one's opponent, cards are not fungible, and thus the game consolidates towards certain discreet collection of cards. Similarly, the use LDA can be used to aggregate different stock portfolios into different investment strategies strategies.

In order to conduct an LDA analysis, the data was taken from the XBRL database of 13-F HR database for the period of the second quarter of 2013 to the end of 2018. The process used in collecting and cleaning this data was explained in Chapter ??.

Unfortunately the database had to be pruned of all holdings of less than 1 million dollars so that the matrix operations conducted by the LDA package would fit within the computer's available RAM (Random Access Memory). At the time, these computers contained 32gb of RAM. This value of 1 million dollars was achieved in an iterative manner, with one computer starting with all transactions above 10 million dollars and reducing this threshold by 1 million dollars every time the LDA converged on a solution and a second computer starting with all transactions and pruning by increments of 100 000 USD until the algorithm converged rather than crash the program due to overwhelming the available RAM. Furthermore, due to the nature of the LDA algorithm (needing full matrix operations), it was unfeasible to spread the workload across multiple computers, nor to slice the program into year-long slices and perform 5 LDA analyses, since this would give us the worst of both worlds - no time continuity, and the multiple testing problem.

In practice, this reduces the size of the database from X to Y filers, and the value Xhat to Yhat. That being said, the pruning of the database focuses the analysis on stock positions that have substantial, if theoretical, corporate power rather than holdings that are simply intended passively to accrue in value and render dividends as part of a diversification strategy under the modern portfolio theory.

Furthermore, in this LDA analysis each filer-quarter is treated as independent filers in the LDA model. Stock positions do shift over time to the point that act-

ing on information 45 days old can be ruinous, a fact that many whale watchers repeat in their newsletters and news reports (Brody, 2012; Brodie, 2013). Since stock positions shift over time to newer strategies, this should not pose a problem; for example this would treat a caterpillar and a butterfly differently. While indubitably the same creature, the caterpillar and the butterfly look, act, and occupy different ecological niches. This returns to the lumpers-splitter problem. In this case, do we value tracing the metamorphosis, or the different niches both ends occupy? This treatment of investors and filing periods as discrete periods allows for the tracing of an investor's strategy shifting from predominantly X to predominantly Y. However, since the follow-on analysis will take time into effect, not having it in the original training model is simply a nod to feasibility.

Literary-based LDA suggests removing stop words. These words are command grammatical words such but not limited to pronouns, common adjectives and articles that make text understandable, but don't necessarily convey the latent topic. For example, any LDA analysis that uses English language prose would be overwhelmed by articles such as "the" and as such the most common word, and would thus saturate any analysis of say Sherlock Holmes books by Arthur Conan Doyle (Silge, 2018). That being said, there are no "words" - that is to say stock - that are as common as the word "the" in this analysis. In fact the most common CUSIP in the training database is CUSIP 037833100 (Apple Inc.), accounting for approximately one percent of all positions in the pruned database. While this popularity should not be surprising considering Apple's status in the investing world during the late aughts and the early to mid twenty-tens, this is nowhere as common as "the" or "they" in English prose.

Another practice that is common in literary-based uses of LDA is stemming words. This removes prefixes and suffixes of words such that only their roots are used. For example, faster and fastest relate the same idea – fast. However, since the words used in this analysis are in-fact CUSIP numbers, there is no need for stemming. A case can be made that various class of stocks could have been stemmed since they are related to the same company, however this was not chosen since different class of stocks can be held for different reasons, such as using preferred stocks in a manner similar to bonds with the reduced voting rights exchanged for higher dividends and seniority. In other words, while different classes of stocks may be tied to the same company, they operate in different segments of portfolio allocation. For example, due to their promise to never force a stock split on their shareholders, Berkshire Hathaway was finding that their stock was getting into unwieldy large stock price, for investors would have to liquidate more stock value than they would usually need by selling one share. As such, partly to offer a more manageable stock denomination in order to ease buying into the fund by smaller investors, as well as scare-off index funds that would coast on Berkshire Hathaway's 13-F HR reports which chairperson Warren Buffet mused would lead to loss of goodwill due to the lower performance of these imitation index funds, Berkshire Hathaway renamed their existing stocks into Berkshire Hathaway A and offered a newer stock with 1/30 the face value of Berkshire Hathaway A and lessor voting rights as Berkshire Hathaway B. (?) The class B stock was further split at a 1/50 ratio in 2010 to make the Berkshire Hathaway Class B stock to be equivalent to 1/1500th of a Berkshire Hathaway Class A stock (Crippen, Crippen)

1.4 Number of Topics

LDA requires the user to determine *a priori* the number of topics used in the Topic Model. This leads to the lumpers vs splitter problem. Where one has to classify n objects, the optimal number of categories will exist between 1 and n , for 1 category encompasses the ensemble of things to be classified, and n categories will have perfect fit, but is utterly meaningless since it does not reduce data into a meaningful form. As such, classification is an art as well as a science, since many categories can exist as part of a continuum.

In this case, the optimal number of topics selected was facilitated by the R package LDAtuning (Nikita, 2019). This package takes the Document-Term matrix and runs an ensemble of 4 different information criteria in order to find the optimal number of topics. These methods are Arun et al. (2010) Cao et al. (2009) Griffiths and Steyvers (2004) and Deveaud et al. (2014). From these four information criterion techniques, the suggested number of topics occurs where differences between these methods are minimized. Figure 1.2 displays the results of LDAtunings' estimates for the number of topics. This resultant plot shows that the numbers of topics where the differences are minimized occur at 8, 14, 34 and 72 topics. However, we can further refine this for a better fit. A n of 8 and 14 offer a poor fit under Griffiths and Steyvers (2004), and thus this method suggest a much larger optimal number. By contrast, Cao et al. (2009) and Deveaud et al. (2014) suggest topics at 8, 14 and 34, with Deveaud et al. (2014) offering poorer solutions as the number of topics increases. As such, 34 topics offers the best compromise between the different tuning methods and was chosen.

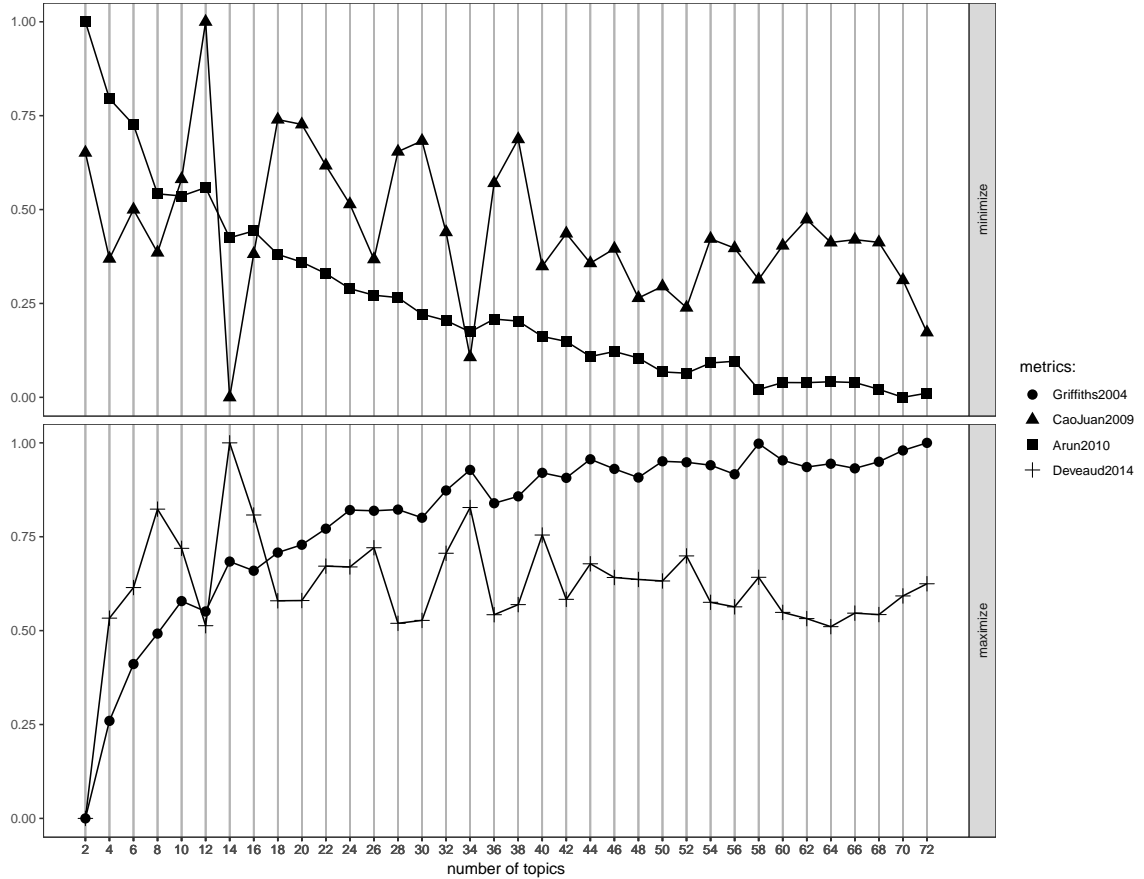


Figure 1.2: LDA tuning Ensemble for Determining the Number of Topics in LDA. As can be seen from the short distance between Deveaud(2014) and CaoJuan(2009) around 14 topics and the close agreement between the Griffiths(2004) and Arun(2010) measure as the number of topics increases - especially after 58. This suggests that a number of topics should be between 14 and 58. within this band, all 4 metrics are in closest agreement at 34 topics, therefore 34 topics will be used in the LDA analysis.

1.5 Applying the Model to the Data

After the model is trained, the LDA provides two tables: beta table and gamma table. The first table, beta table, gives the probability of each stock belonging to each topic, whereas the second table, gamma table, contains the probability of each investor belonging to each topic.

1.5.1 Per-Topic Probabilities

Figures 1.3 to 1.6 display the 10 stocks with the highest probability of being assigned to each Topic. It should be noted that the order of each topic number is purely arbitrary, and nothing should be read in the rank-order of the different topics, nor the relative distance between topic numbers (Silge, 2018).

Within these topics, some are easier to label than others. For example, Topic 7 appears to be concentrated in Canadian banks as well as energy companies, Topic 9 suggests to be a smorgasbord of various ETF and indexed securities, whereas Topic 25 appears to be a strong collection of bluechip staples.

On the other hand, this 34 topic LDA gives us topics that would appear superficially similar, but are treated as different topics. For example, Topics 10 and 13 are anchored by Berkshire Hathaway stock, but the main difference between the two is that Topic 13 puts a much larger importance on the acumen of Warren Buffet than Topic 10's more diversified approach.

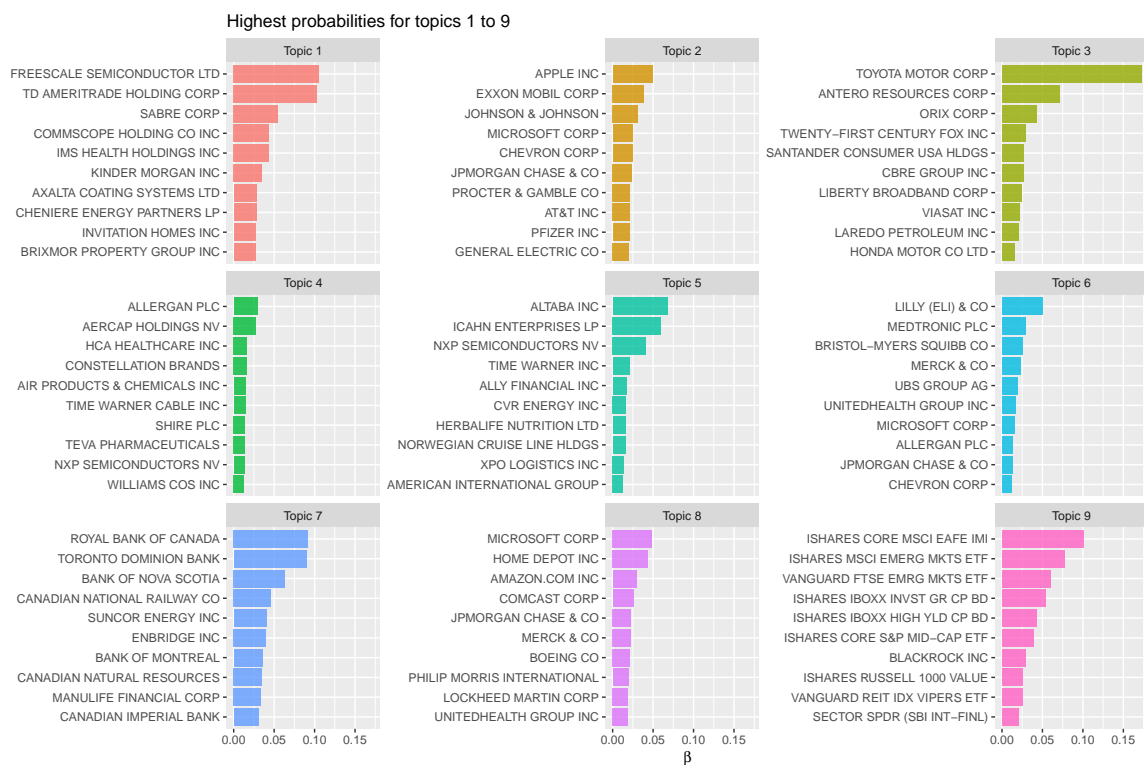


Figure 1.3: Topic Model with 34 Topics, Topics 1 through 9. This represents the 10 most likely stocks being associated to a particular portfolio archetype.

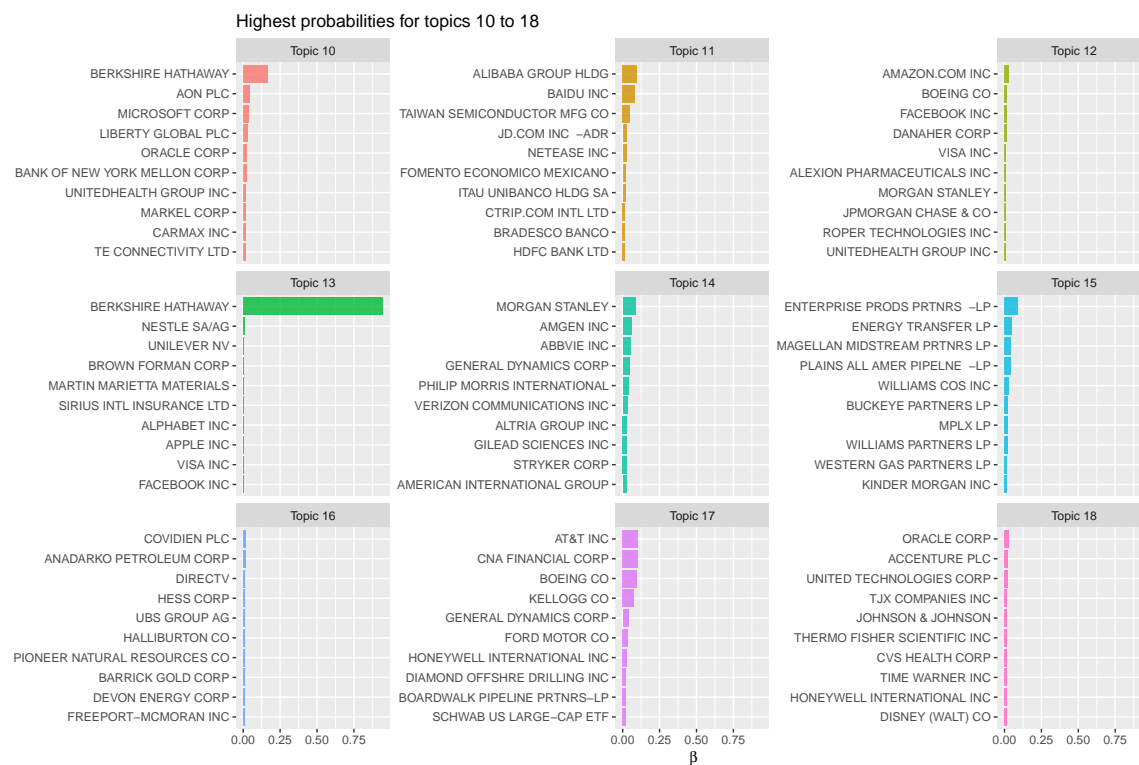


Figure 1.4: Topic Model with 34 Topics, Topics 10 through 19. This represents the 10 most likely stocks being associated to a particular portfolio archetype.

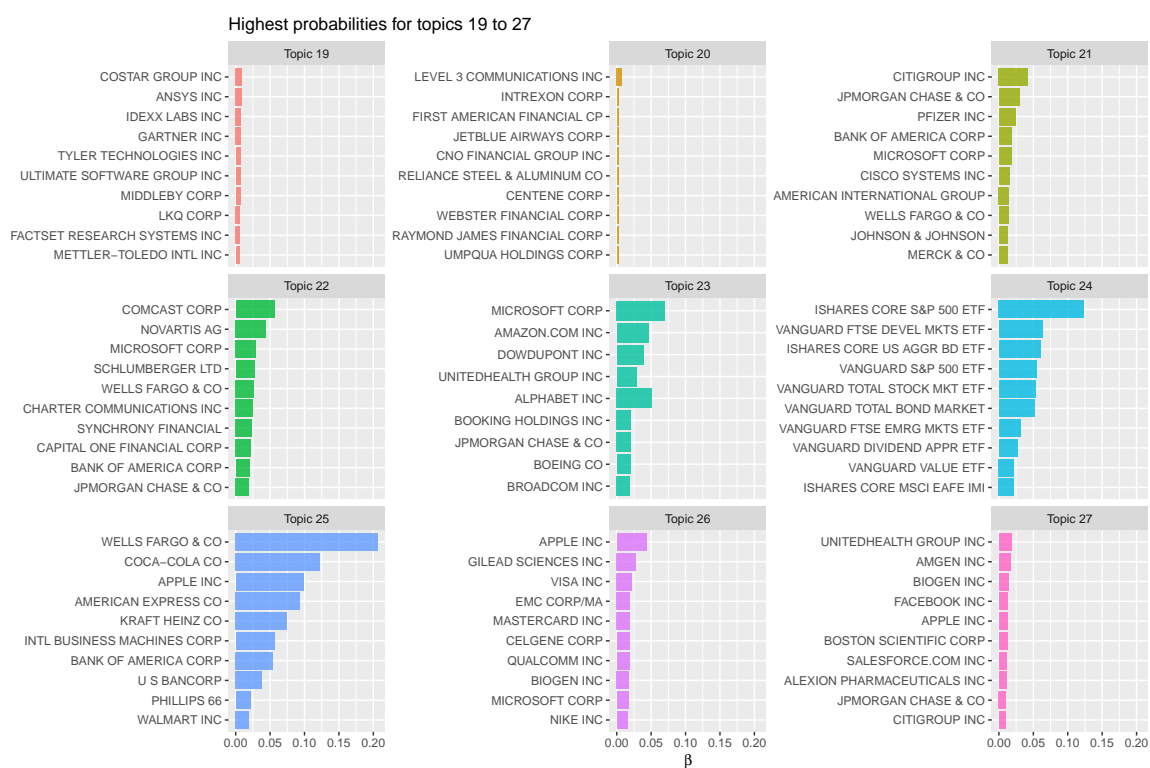


Figure 1.5: Topic Model with 34 Topics, Topics 19 through 27. This represents the 10 most likely stocks being associated to a particular portfolio archetype.



Figure 1.6: Topic Model with 34 Topics, Topics 28 through 34. This represents the 10 most likely stocks being associated to a particular portfolio archetype.

1.5.2 Per-Document-Per-Topic Probabilities

The per-document-per-topic probabilities are found in gamma table of the output. This table aggregates each stock's probability of belonging to a topic for each investor and thus gives the probability of each investor of belonging to each topic. The aggregate probability of each topic is displayed in Tables A.1 to A.3, giving us an idea of how the popularity of each topic fares over time. For example, Topic 26 saw a precipitous decline from 172.40 to 14.15 aggregate investor probability of belonging to this topic, conversely Topic 23 grew from 3.58 to 198.21 in this same metric.

Given that the investors were already geocoded in a previous chapter, the investors' topic probability was aggregated by State, and Figures A.1 to A.34 were created using the geofacet package in R. These geofacet maps allows for the thematic representation of line graphs in a geometric patterns that resembles the adjacency of US States, facilitating an easier to grok representation of the data than a series of choropleth maps representing different time slices.

Looking deeply at the aggregate investor probability tables offer hints at why certain seemingly related topics, such as Topics 10 and 13 – high concentrations of ETFs – as mentioned earlier might have a high thematic similarity, however these investors are given high probability classification to one topic and have a correspondingly low probability classification for the other topic. Going back to the fundamentals of Modern Portfolio Theory (MPT) might give insights into this outcome, and we are simply seeing two broadly similar strategies that are conceptually similar, but use different securities in the process. Furthermore, a look at the tables A.1 to A.3 indicates that

these topics are getting more followers over time, however figures A.10 and A.13 show that this growth is geographically uneven, given that Topic 13 has most of its growth coming from investors located outside of New York State than is the case with Topic 10.

In a more general sense, the maps from Figure A.1 to A.34 are a reflection of the national locational trends seen in Chapter ?? (Exploring the Data), in that institutional investor firms prefer to locate in places where there are already other institutional investors (mainly NY and to some extent California, Massachusetts and Texas). Furthermore, this fractional accounting of investment firms by percentage probability of belonging to an investment strategy will reflect this reality. That being said, this isn't really surprising in light of the literature on location decisions. Coval and Moskowitz (2001) show that it was the smaller investors that had out-sized returns from pursuing locality-based investment strategies, and that these strategies – due to the required personal interaction – would be very hard to scale up. Secondly, the reliance of HQ location for tying an investor to their location does not preclude an investor having an oil specialist in Houston or Calgary for their oil portfolio research.

Overall, what does this mean? Best practices and strategies tend to homogenize portfolios. Some strategies might be geographically concentrated to a certain extent, but the nature of trading as it is currently practiced has reduced the friction of information transfer, and thus while not quite unshackling the geography of trading, has added additional links to the chains.

1.6 Shift-Share

Shift-share is a technique used in econometrics and regional studies developed by Edgar Dunn Jr. to ascribe changes in the share of a particular sector of the local economy into 3 main factors: a national factor, that is to say how the global economy is doing, an industry factor, that is to say how well a particular industry is doing, and a regional factor, that is to say taking into account the national and industry trends (Dunn Jr, 1960). This last factor is important, since it allows various regions to see how they are doing relative to the set of global and industry headwinds, such that for an industry in decline, a regional decline of 3% in an industry declining 10% with a national economy growing by 2% is doing relatively well all things considered. Similarly, the use of regional shifts to measure how well a region is doing with regards to an investment topic is useful for determining how well a given strategy is doing when keeping with the investment topic and the national trends.

The equation for shift share is as follows:

$$e_i^{t+n} - e_i^t = NS_i + IM_i + RS_i \quad (1.2)$$

Where e is the shift-share in industry i between the time periods t and $t+n$. This shift-share is the sum of the three effects: national growth effect (NS_i), the industry mix effect (IM_i) and the local shift (RS_i).

The national share is calculated as follows:

$$NS = e_i^r g^n \quad (1.3)$$

The industry mix is calculated as follows:

$$IM = e_i^r (g_i^n - g^n) \quad (1.4)$$

and the regional shift is calculated as follows:

$$RS = e_i^r (g_i^r - g_i^n) \quad (1.5)$$

Where e_i^r is the value in Sector i in Region r at the beginning of the period, g^n is the growth rate for the value for the total area under study over the time period, g_i^n is the growth rate of Sector i for the total area under study for the time period, and g_i^r growth rate in sector i in Region r for the time period. (Houston, 1967).

1.6.1 Dynamic Shift-Share

However, as the release of data became more granular, both in terms of time period and geography, a more nuanced version of shift-share was developed: the dynamic shift-share. This version of shift-share takes into account the period to period fluctuations by performing the shift-share in a time-series and adding together all of the shifts (Barff and Knight III, 1988). Since this model uses a time-series, it is less vulnerable to effects caused by choosing the start and end years. Furthermore, Barff and Knight III (1988) and Harris (1994) show that the use of a dynamic shift-share with

regular reporting periods (as is the case of 13F-HR data) means that there is less of a compounding effect. That is to say that one abnormally large change in a short period of time in the data creates an change in regional-shift that is disproportional to the underlying trend. In this case, this could be exemplified by the start-up of one large fund entering the data-set and having a profound quarter-to-quarter change in the data during the quarter it entered and then returning to a national growth rate. The dynamic shift-share is better prepared to deal with this type of data intrusion.

The dynamic shift-share is written as follows:

$$e_i^{t+n} - e_i^t = NS_i + IM_i + RS_i \quad (1.6)$$

If the study period ranges from year t to year $t + n$, the traditional shift-share effects are calculated for every year k , where k spans from $t + 1$ to $t + n$.

$$NS_i = \sum_{k=t+1}^{t+n} [e_i^{k-1}(G^k)] \quad (1.7)$$

$$IM_i = \sum_{k=t+1}^{t+n} [e_i^{k-1}(G_i^k - G^k)] \quad (1.8)$$

$$RS_i = \sum_{k=t+1}^{t+n} [e_i^{k-1}(g_i^k - G_i^k)] \quad (1.9)$$

For the dynamic model shift-share, Equation 1.7 replaces Equation 1.3 for the national share, Equation 1.8 replaces Equation 1.4 for the industry mix and Equation 1.9 replaces Equation 1.5 for the regional share. The dynamic model shift-share is

then calculated at the sum of the annual effects (Barff and Knight III, 1988).

In this case, rather than calculate yearly effects for k , this application of the dynamic shift-share used each quarterly filing between the second quarter of 2013 to the fourth quarter of 2018, therefore creating 23 discreet time steps.

The analysis was performed using Soudis (2019) R package implementation for dynamic shift-share. The holdings of each portfolio was weighted by the β of each topic/portfolio archetype as determined by the 34 topic LDA analysis, and summed by relevant geography. The results in tabular form are in Appendix B.

By taking the regional shift values and then mapping them onto a map of the USA, this displays the local/regional effects of a given topic/portfolio archetype in a given geography while keeping the overall growth of the stock market and the varying popularity of a particular strategy constant. In order to minimize the role of outlier-values over-exposing the linear scale of the regional-shift, the regional shifts were binned into 10 categories using the Jenks method via the ClassInt package in R (Bivand, 2013). The Jenks natural breaks method classifies continuous data by grouping them iteratively into k groups such that it maximizes the square of variance between groups and minimizes the square of variance within groups (Jenks, 1967).

1.7 Regional results

Throughout the ensemble of the 34 maps displaying the regional shifts for the continental USA, a re-occurring theme is that New York State and the State of California are often at odds with one-another. In the majority of these cases, New York State

has a positive regional-shift value, and California has a corresponding negative shift value, whereas the reverse is only true in two cases: Topic 13 (majority Berkshire Hathaway) and Topic 32 (mostly broad sector and indexed ETFs). The question then becomes, why is California suffering such as persistent subordinate position to New York, despite being ranked second in the number of firms and firm growth during the time period of 1999 to 2018?

New York is not only number 1 in terms of absolute number of new firms, but also these firms proportionally handle more money (see Chapter ??). While California's tech sector might be a massive economic engine, these investment firms growing in San Francisco and Los Angeles are smaller than the new firms in New York City and Manhattan in particular. This may be explained by leaning into New York City's historic role as the United States' financial centre: Wall Street and the Financial District. Furthermore, the presence of Wall Street and the Financial District is further cemented by the wave of consolidation in the aftermath of the Great Financial Crisis of 2008 setting up operations in New York. In fact, New York is home to 5 of the 8 systemically important banks located in the USA¹, and 2 of the 3 other banks have substantial operations in New York² (Financial Stability Board, 2019).

As such, this hints strongly that while NYC may be in relative decline in terms of number of institutional investors in the USA, NYC is still the centre of gravity in the system.

-The dogs that don't bark - Boston and Chicago

¹Morgan Stanley, JPMorgan Chase, Goldman Sachs, Citigroup and Bank of NY Mellon

²Wells Fargo has its official Headquarters in San Francisco and a substantial operation in the Seagram Building on Park Avenue, Bank of America has substantial operations in New York in the Bank of America Tower on Sixth Avenue

Topic 13 is very strong in Missouri, Texas and Illinois, while weak in NY and CA.

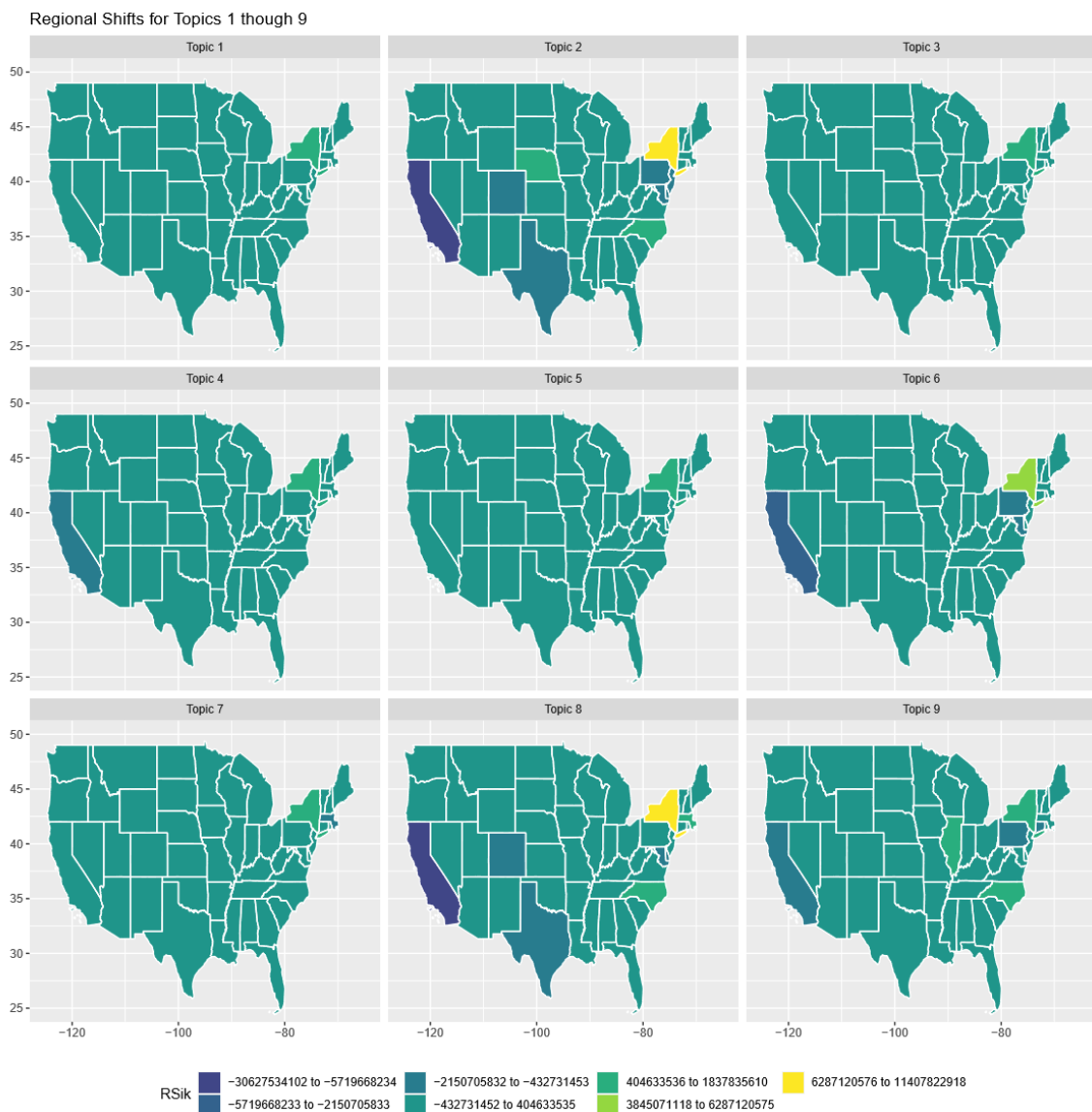


Figure 1.7: Regional shifts for topics 1 through 9 of the 34 topic LDA for the Continental USA.

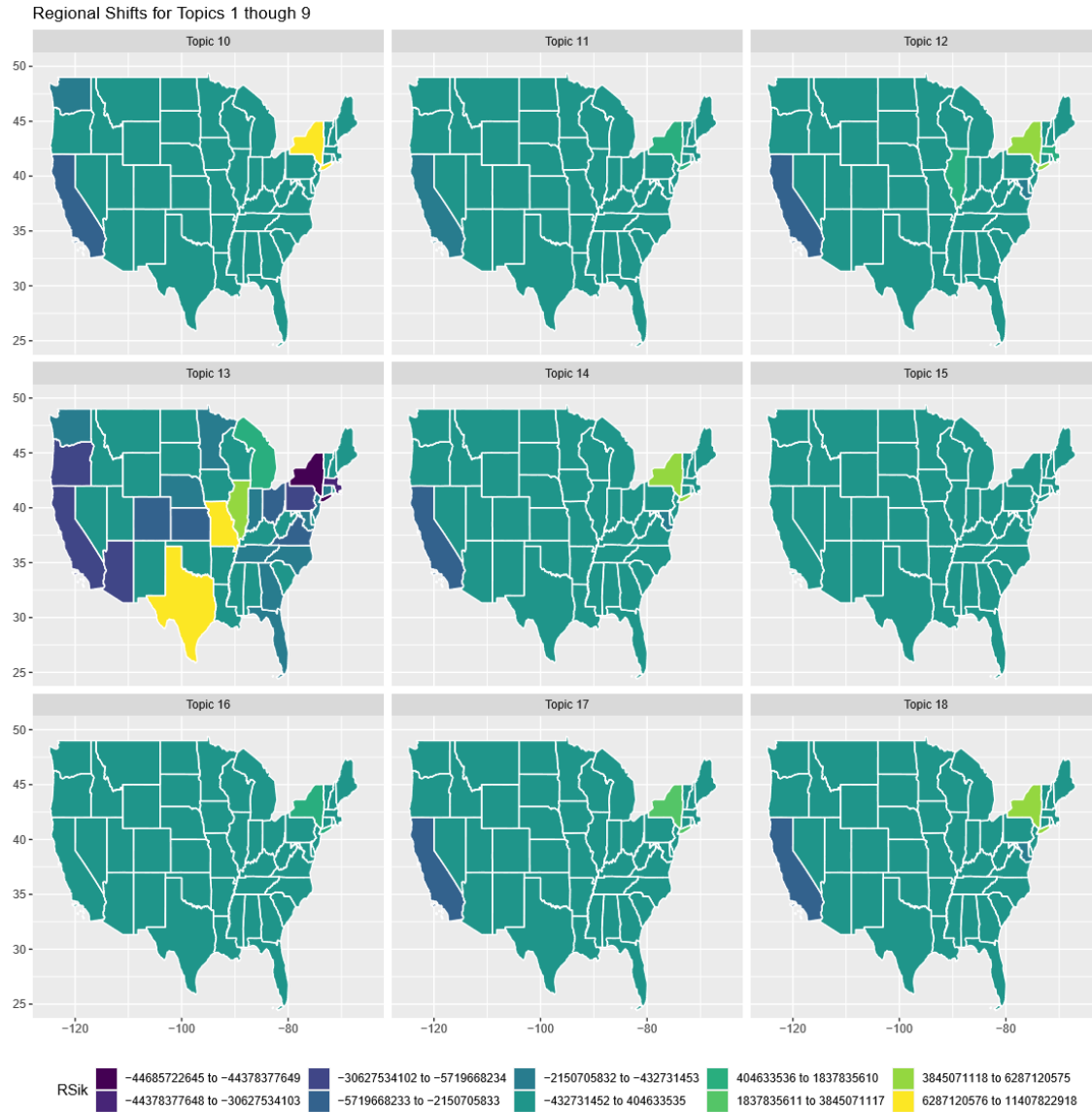


Figure 1.8: Regional shifts for topics 10 though 18 of the 34 topic LDA for the Continental USA.

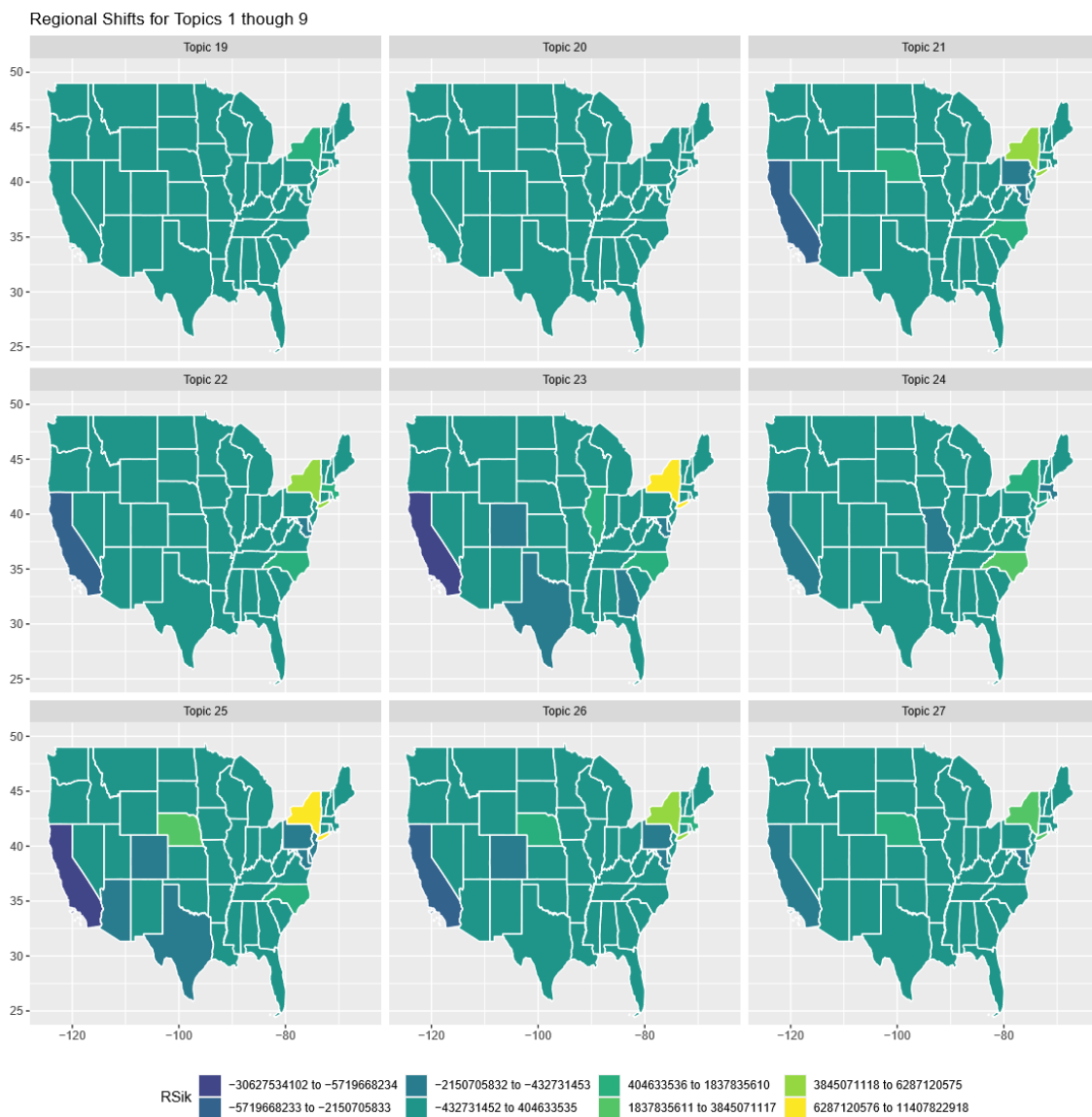


Figure 1.9: Regional shifts for topics 19 though 27 of the 34 topic LDA for the Continental USA.

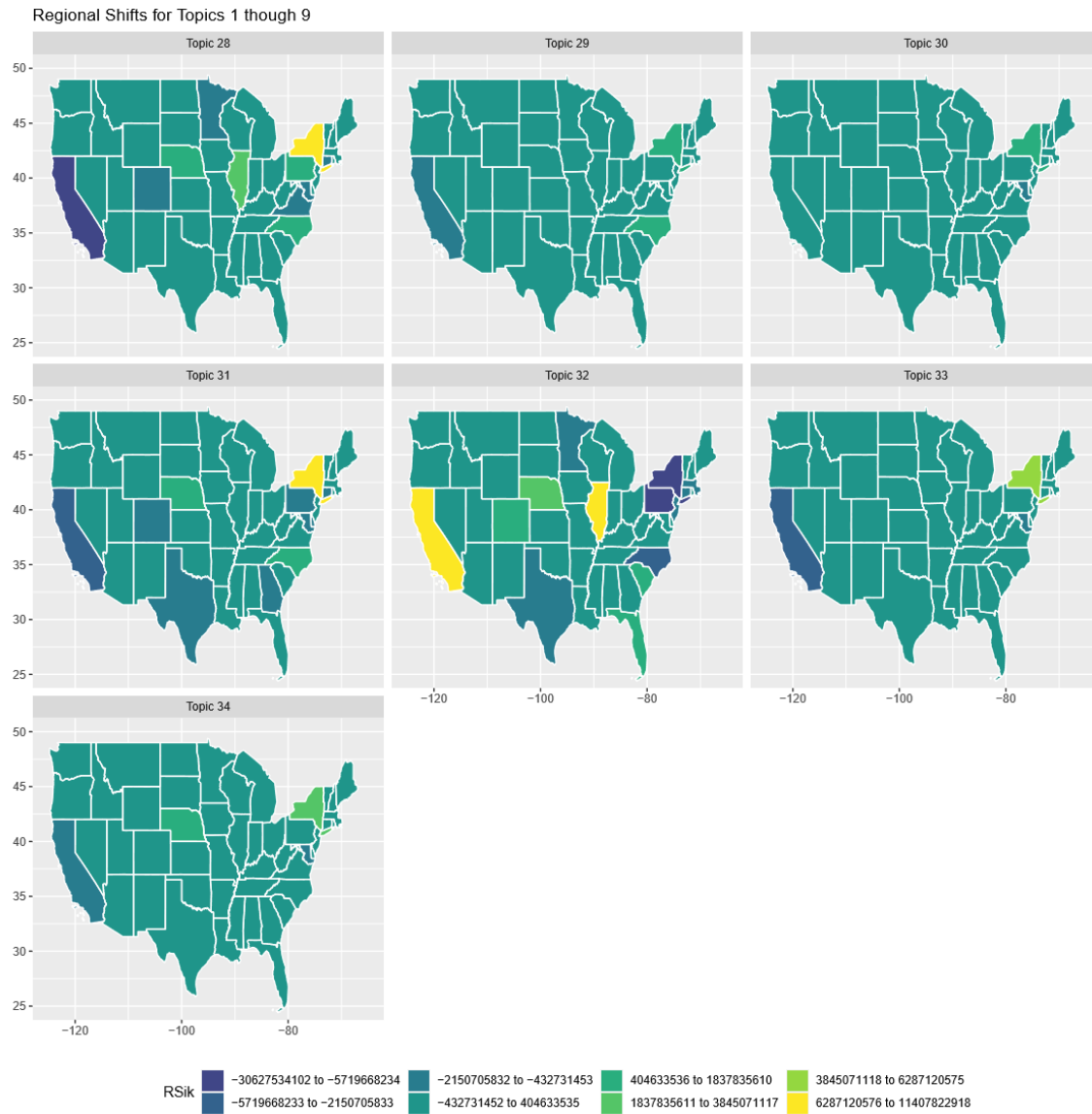


Figure 1.10: Regional shifts for topics 28 though 34 of the 34 topic LDA for the Continental USA.

Appendices

Appendix A

LDA Gamma Table Counts

A.0.1 Tables

A.0.2 Maps

Topic	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014
1	23.28	25.19	26.70	22.95	21.42	20.61	24.40
2	524.14	498.34	531.56	521.16	523.32	529.29	540.23
3	25.33	24.56	25.92	32.59	30.87	29.15	40.45
4	100.68	103.79	127.26	135.15	141.69	149.83	171.77
5	36.42	39.78	44.60	49.04	56.87	57.24	80.39
6	9.78	8.92	9.20	10.78	10.60	10.55	13.38
7	54.09	52.64	50.46	52.10	55.12	56.98	54.73
8	33.46	31.23	33.02	32.55	32.72	35.74	39.68
9	141.96	151.32	165.15	163.62	156.84	143.17	162.96
10	61.79	61.33	65.02	67.02	68.78	72.84	79.48
11	62.61	66.60	75.55	77.50	80.50	82.38	95.93
12	16.50	16.65	18.58	19.40	19.52	19.89	25.48
13	21.13	18.48	23.50	24.51	27.70	29.80	34.57
14	38.39	37.11	36.74	42.38	41.08	45.31	49.11
15	68.72	69.16	82.88	86.14	87.46	90.61	86.85
16	314.44	306.63	304.31	278.40	270.54	222.80	195.87
17	28.82	29.63	33.21	32.24	32.65	32.64	41.71
18	201.16	201.06	207.73	211.25	200.58	190.57	203.84
19	116.77	117.30	129.18	129.30	125.47	129.02	144.79
20	225.17	234.10	258.97	261.05	261.07	262.57	297.43
21	152.19	140.96	155.17	153.09	147.40	150.96	158.72
22	55.67	58.09	63.41	65.36	65.55	62.08	60.02
23	3.58	3.98	3.26	4.58	4.49	4.43	5.02
24	148.99	148.63	179.08	184.07	186.73	194.47	233.87
25	57.60	54.75	63.14	63.35	60.36	61.09	67.52
26	172.40	191.17	201.08	192.10	193.55	196.29	195.40
27	29.79	32.62	46.62	48.24	51.02	54.32	75.91
28	38.87	42.97	46.61	40.85	44.96	50.41	62.17
29	126.87	132.25	145.09	152.00	156.54	158.16	186.48
30	51.39	50.32	47.21	52.13	51.82	50.47	57.45
31	52.70	49.37	58.75	53.43	51.97	59.30	79.55
32	171.44	171.29	192.07	188.81	200.29	198.54	219.59
33	32.34	33.35	38.56	41.29	42.78	42.60	55.69
34	4.54	4.44	5.40	6.58	6.73	7.88	12.54

Table A.1: Topics by Quarter, 2013-2014, All Investors

Topic	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
1	25.13	26.48	26.49	26.54	26.95	28.13	30.19	28.33
2	516.30	506.85	507.28	523.89	546.08	554.90	531.17	543.47
3	40.56	39.22	38.62	40.69	40.92	44.19	48.77	55.10
4	171.88	191.36	187.00	185.08	178.55	160.10	149.76	133.41
5	87.58	85.86	88.22	97.16	97.66	101.11	108.55	151.89
6	20.32	22.68	23.12	25.03	20.82	25.11	21.92	21.07
7	50.90	49.83	47.13	44.43	49.01	48.57	48.61	51.43
8	39.02	35.36	40.03	44.28	46.07	47.61	47.69	53.99
9	164.33	156.35	149.01	160.29	157.56	154.78	157.18	172.26
10	83.29	82.72	85.98	85.62	89.65	84.94	86.48	93.87
11	99.89	94.25	91.63	106.29	103.10	97.14	101.98	107.83
12	28.80	28.89	25.88	22.06	18.83	20.95	16.23	14.71
13	31.41	32.32	28.29	28.73	29.35	27.62	31.14	30.50
14	47.98	48.81	47.90	46.53	43.53	45.84	43.58	43.71
15	87.00	87.96	81.17	83.66	82.54	90.57	87.94	91.83
16	169.74	135.30	93.49	72.15	79.01	75.34	74.03	75.51
17	43.43	45.45	45.75	48.42	48.97	49.52	47.34	51.45
18	197.96	190.39	178.98	164.27	166.64	168.18	156.14	155.66
19	147.56	151.33	153.79	152.52	146.15	151.20	149.44	145.89
20	293.93	298.63	293.38	283.69	275.65	264.32	262.36	288.36
21	158.67	155.56	146.09	142.56	122.91	112.74	112.66	123.31
22	59.43	60.27	59.94	58.63	54.05	60.04	60.76	64.28
23	5.16	5.21	5.81	7.35	8.82	8.43	11.32	15.15
24	238.37	246.98	253.88	295.12	301.59	312.74	318.78	372.18
25	65.41	68.86	73.60	70.74	66.61	59.62	61.13	69.52
26	173.34	178.81	150.48	129.11	91.12	75.38	58.07	36.58
27	80.25	82.27	75.56	86.01	78.39	79.13	87.30	86.31
28	62.31	75.42	89.68	131.34	120.93	129.94	148.62	146.65
29	203.02	204.06	219.40	235.16	231.49	232.18	232.93	252.08
30	59.76	56.31	60.65	63.52	62.56	66.39	61.51	59.17
31	95.24	108.48	156.89	228.83	240.11	222.59	233.94	228.07
32	210.18	205.96	202.40	201.25	212.73	219.33	215.00	231.19
33	51.17	41.58	46.17	48.70	41.19	35.86	39.59	42.21
34	16.67	19.18	28.32	41.33	50.48	66.51	82.86	98.05

Table A.2: Topics by Quarter, 2015-2016, All Investors

Topic	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018
1	27.30	25.32	24.35	26.40	23.24	28.09	27.07	26.59
2	516.69	490.06	474.48	525.98	480.04	464.32	471.88	508.19
3	55.84	59.95	62.50	73.66	74.86	81.66	83.73	94.92
4	121.44	96.19	82.03	80.20	71.90	66.18	66.38	69.51
5	176.62	222.77	238.15	259.60	267.49	260.67	260.97	256.51
6	21.96	23.24	22.44	21.42	22.02	21.59	22.04	24.72
7	55.38	53.28	55.31	59.92	55.16	55.66	53.22	57.53
8	55.81	56.19	42.63	42.17	39.32	38.37	35.12	35.07
9	167.90	173.77	174.70	182.46	182.08	162.74	150.53	152.56
10	96.29	95.63	96.78	100.97	99.12	95.22	97.28	108.95
11	114.22	115.64	116.82	127.19	128.91	120.49	115.29	122.39
12	15.12	13.60	12.59	14.24	13.35	13.80	13.21	17.49
13	30.80	29.40	30.85	33.59	32.89	29.60	33.17	39.17
14	42.89	42.69	39.30	39.86	37.75	31.90	32.40	34.15
15	88.69	85.27	83.70	82.24	77.72	76.29	78.18	79.92
16	69.98	59.84	58.90	60.33	58.14	56.98	53.38	55.93
17	47.48	46.09	49.04	55.66	55.90	56.49	53.74	57.51
18	145.68	139.61	124.85	130.97	125.08	111.38	112.29	114.10
19	143.82	144.71	143.91	155.47	154.01	157.54	154.36	161.59
20	265.34	252.92	248.15	251.82	235.83	226.80	220.00	227.90
21	111.46	107.90	101.63	104.71	101.60	90.67	89.19	83.76
22	62.09	57.84	57.89	61.54	57.80	52.81	51.35	56.24
23	16.36	20.22	55.64	86.46	125.99	152.78	172.37	198.21
24	384.19	398.24	404.35	483.80	477.37	455.02	455.27	528.56
25	68.77	64.23	61.75	66.34	60.22	61.59	55.23	59.91
26	30.51	26.37	17.83	19.98	18.43	14.82	13.49	14.15
27	88.36	90.44	94.44	98.13	97.82	96.57	98.16	109.14
28	164.97	179.88	183.62	207.48	221.05	244.46	236.75	235.23
29	249.24	247.97	247.60	292.55	311.47	359.03	369.76	449.72
30	58.49	57.42	55.08	51.36	54.26	56.41	50.57	60.80
31	239.51	245.86	236.46	253.31	247.29	251.41	260.68	299.54
32	215.92	202.15	205.74	231.47	239.90	249.66	241.78	253.67
33	40.13	42.39	42.95	46.24	44.00	40.19	42.33	44.43
34	118.76	127.90	139.54	151.45	154.00	148.79	144.84	135.91

Table A.3: Topics by Quarter, 2017-2018, All Investors

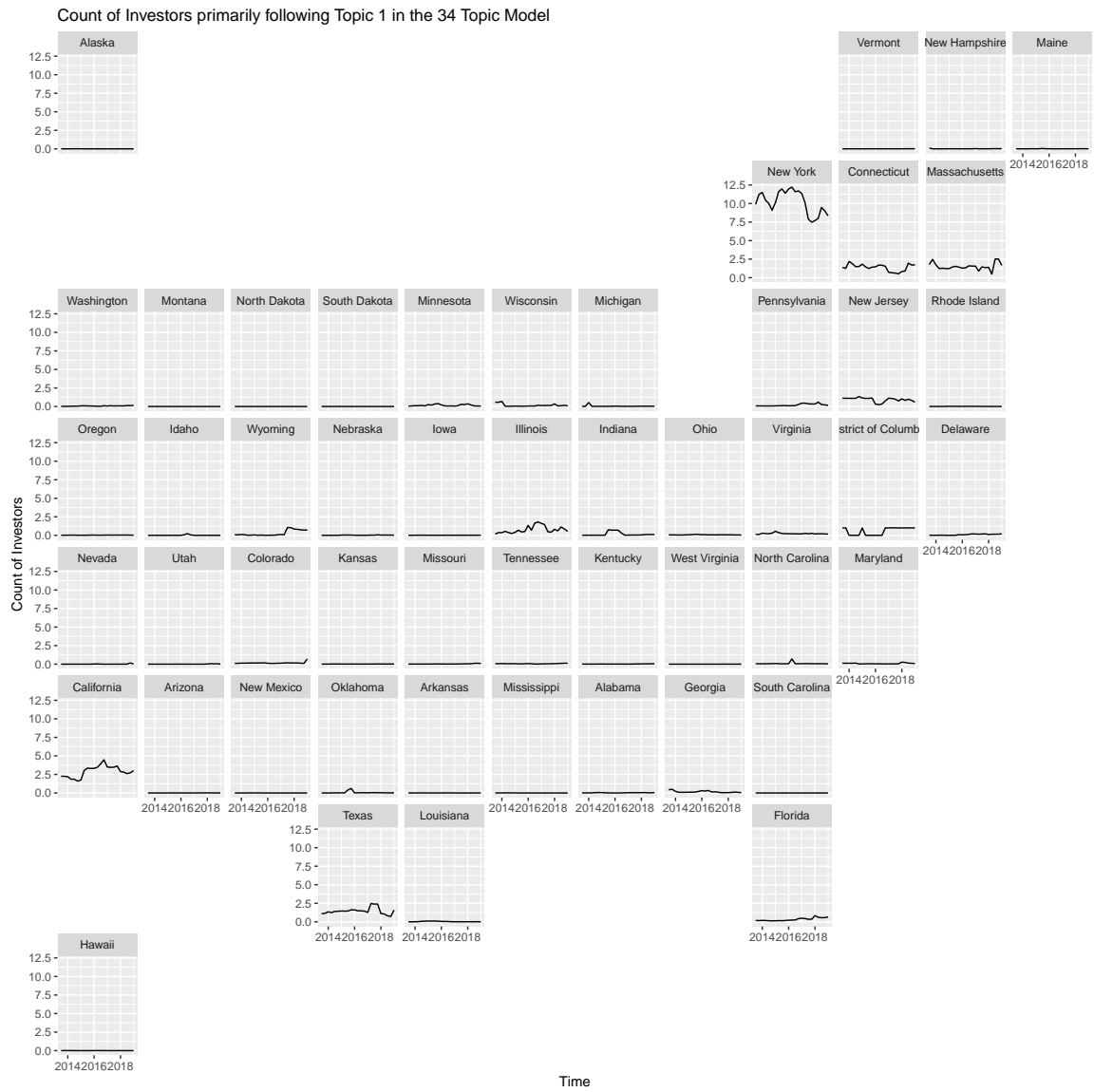


Figure A.1: Count of firms by highest likely topic in the 34 topic LDA for Topic 1

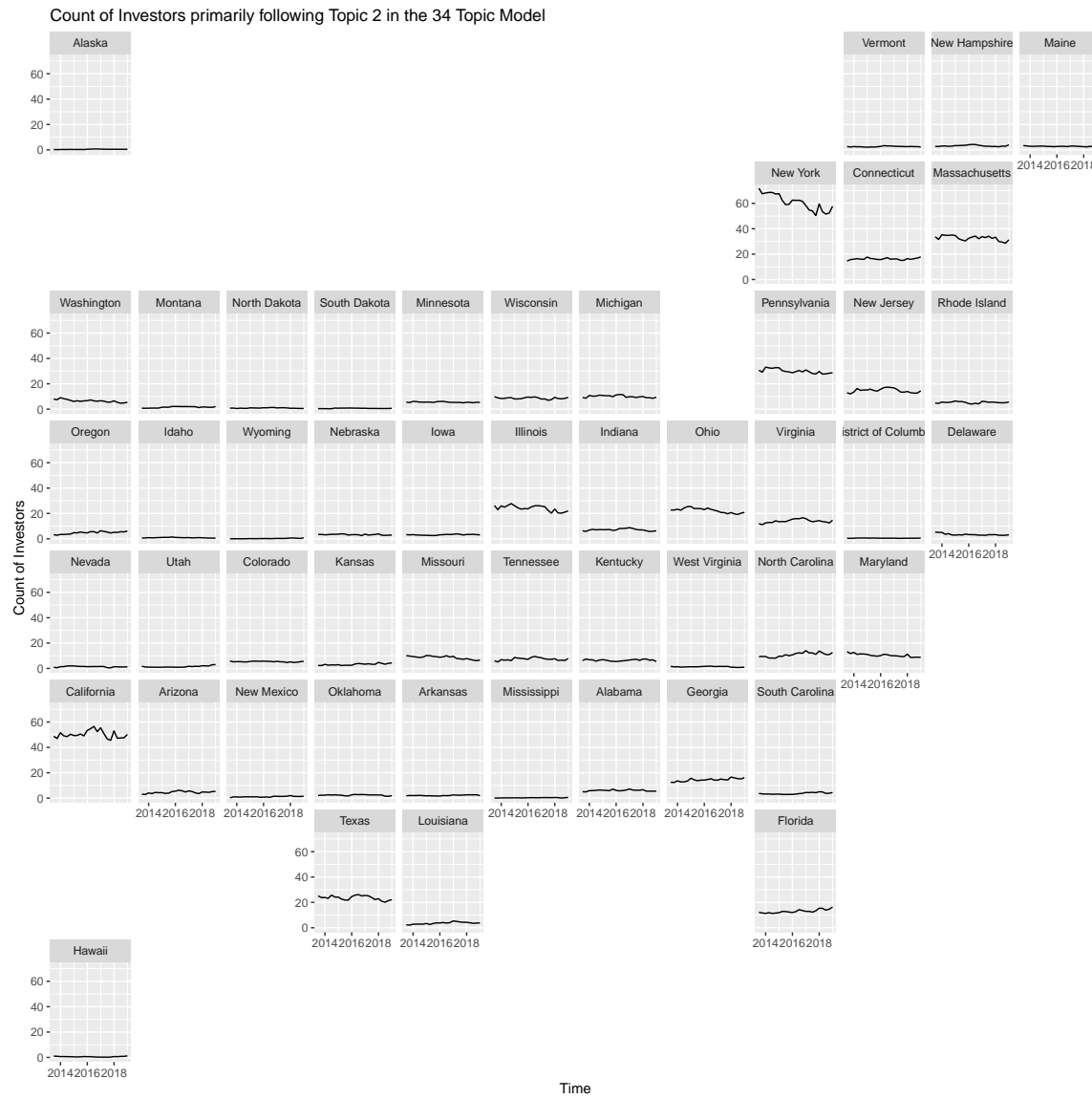


Figure A.2: Count of firms by highest likely topic in the 34 topic LDA for Topic 2

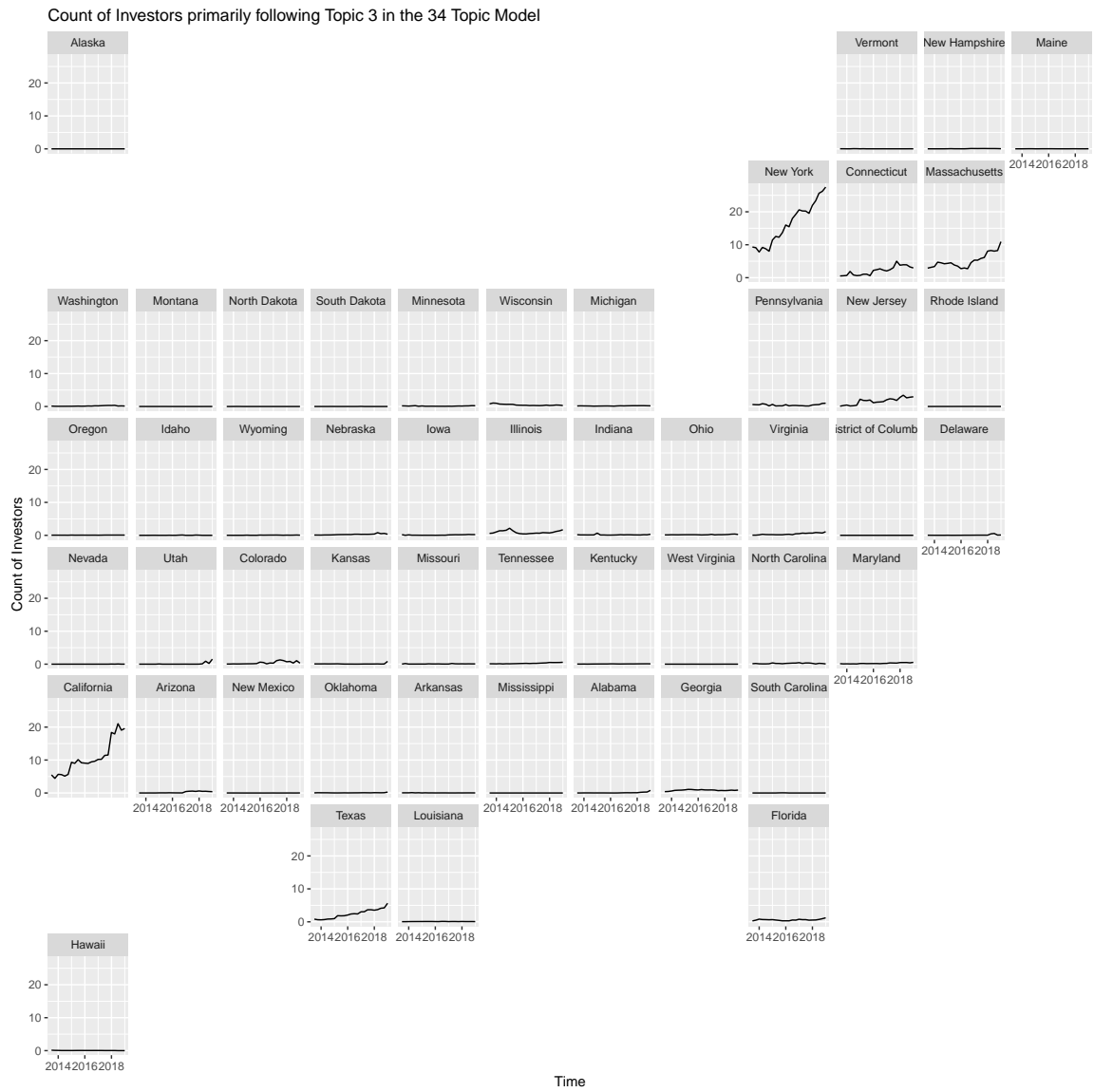


Figure A.3: Count of firms by highest likely topic in the 34 topic LDA for Topic 3

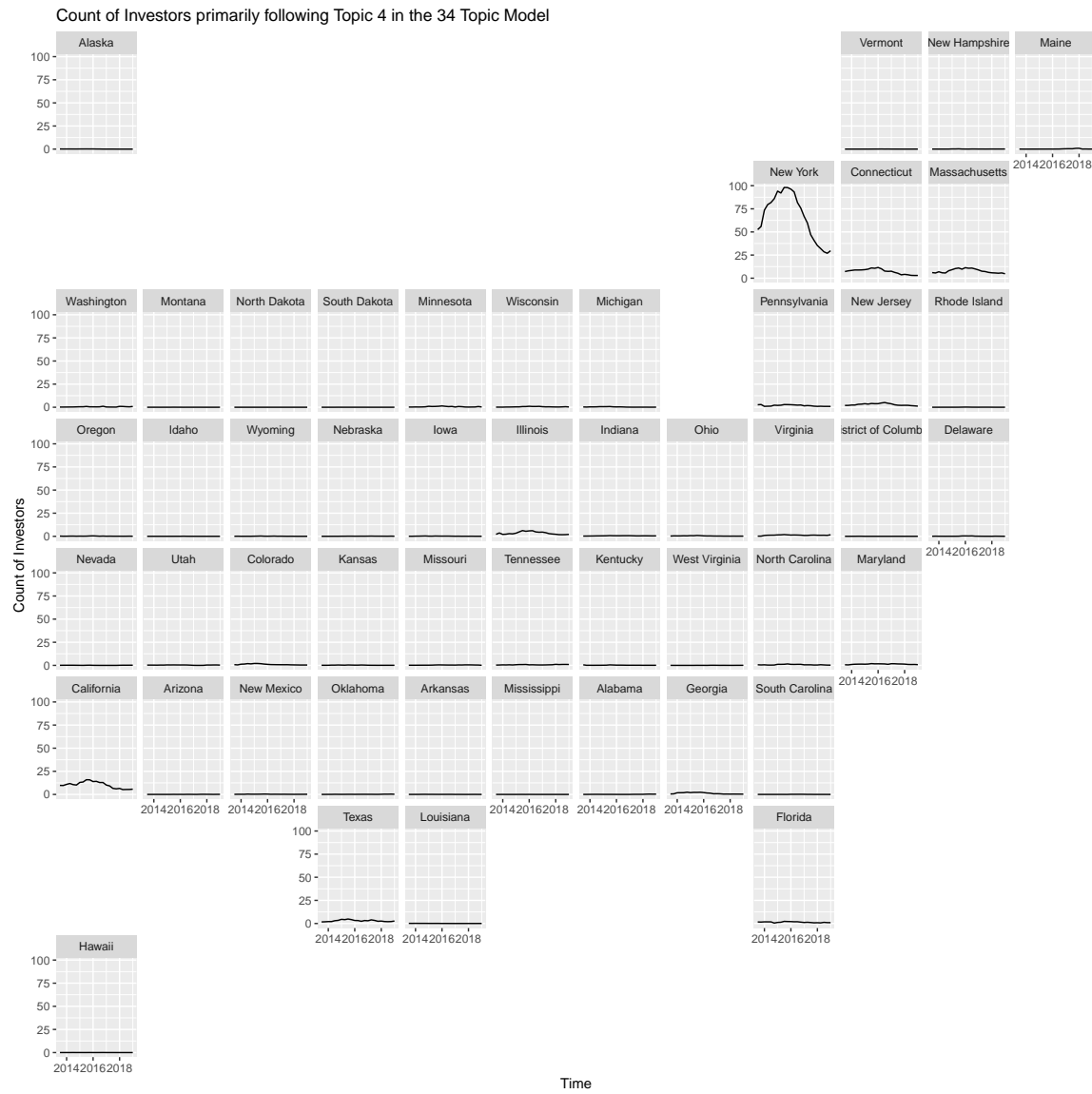


Figure A.4: Count of firms by highest likely topic in the 34 topic LDA for Topic 4

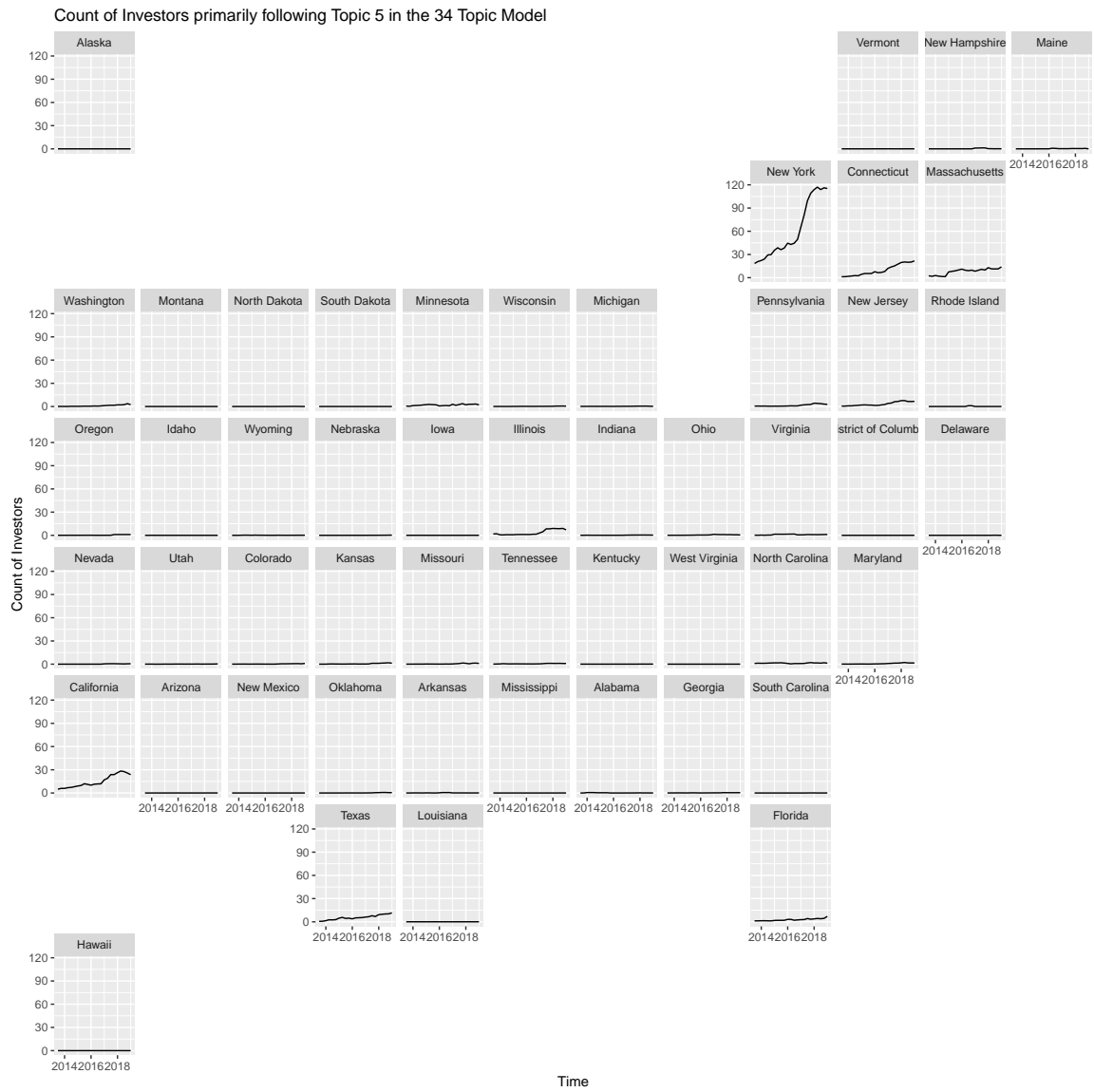


Figure A.5: Count of firms by highest likely topic in the 34 topic LDA for Topic 5

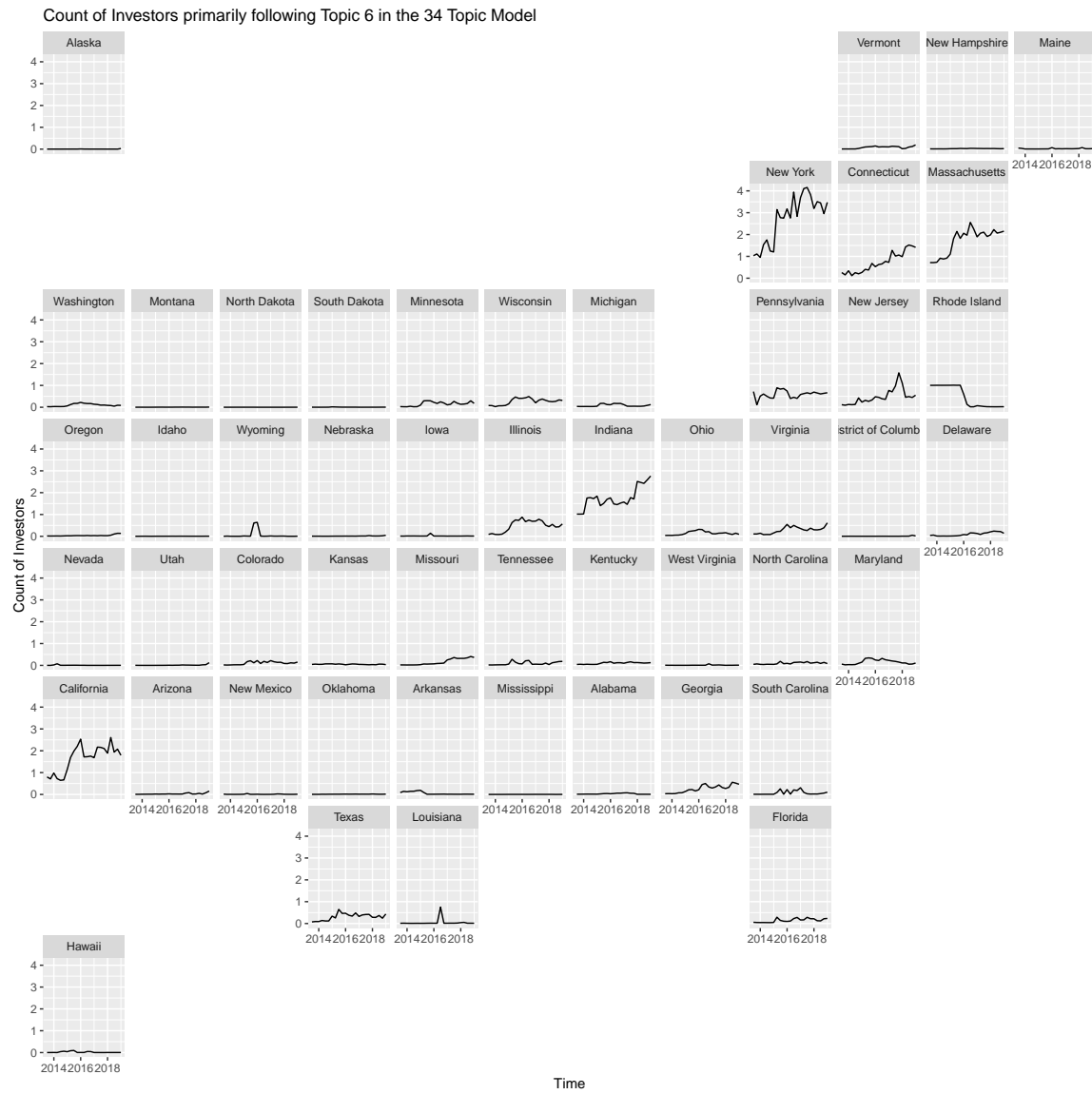


Figure A.6: Count of firms by highest likely topic in the 34 topic LDA for Topic 6

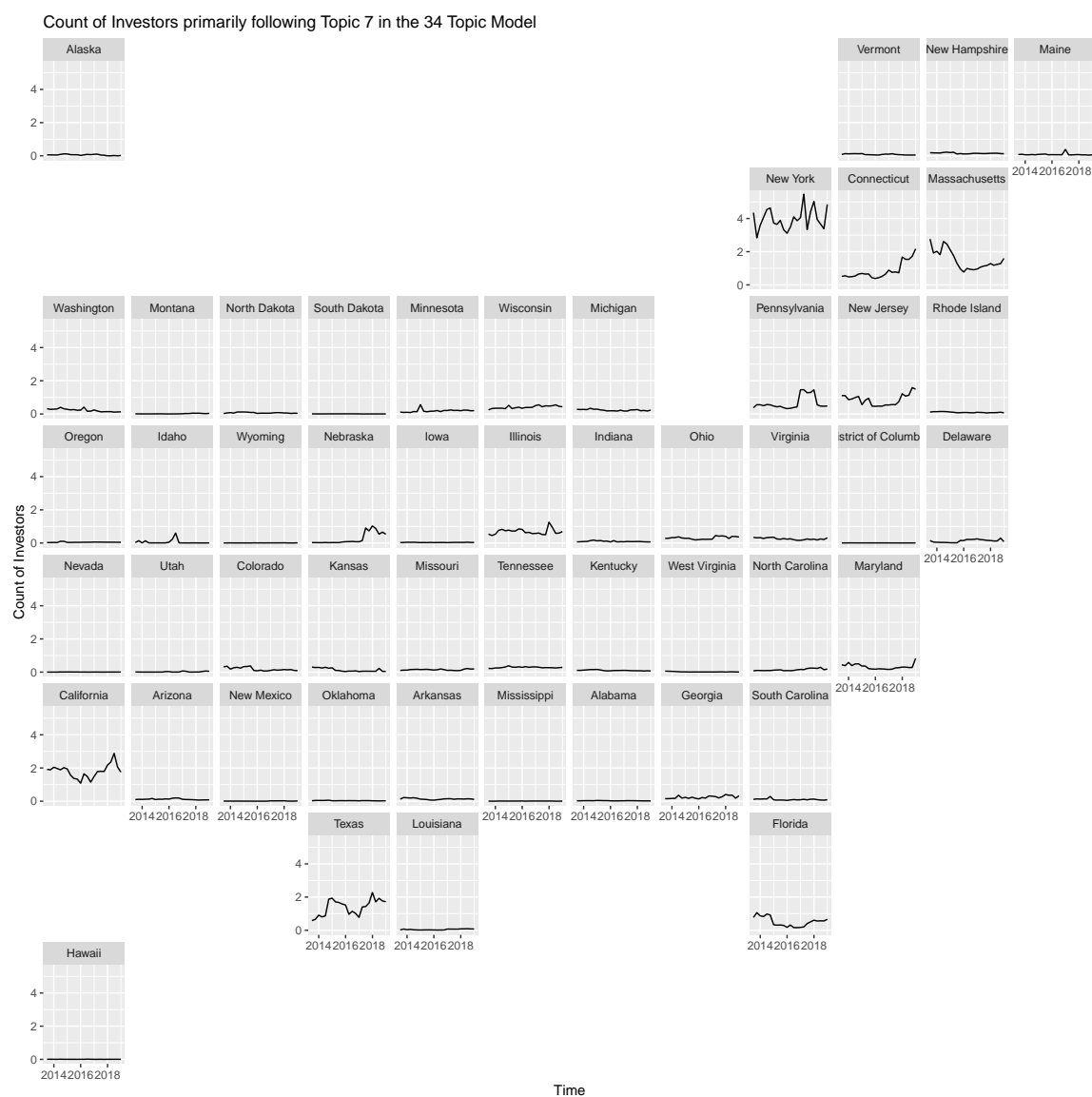


Figure A.7: Count of firms by highest likely topic in the 34 topic LDA for Topic 7

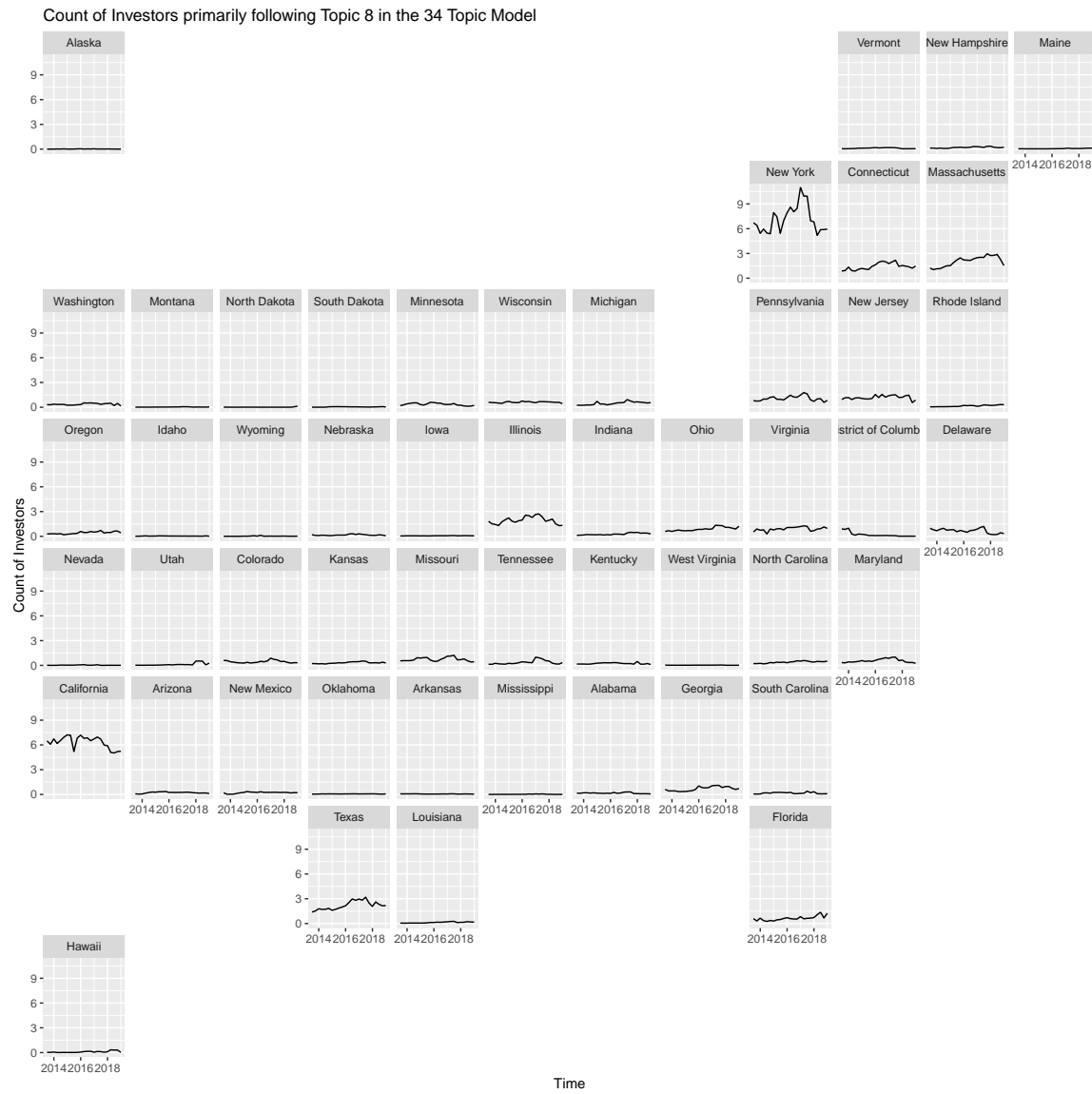


Figure A.8: Count of firms by highest likely topic in the 34 topic LDA for Topic 8

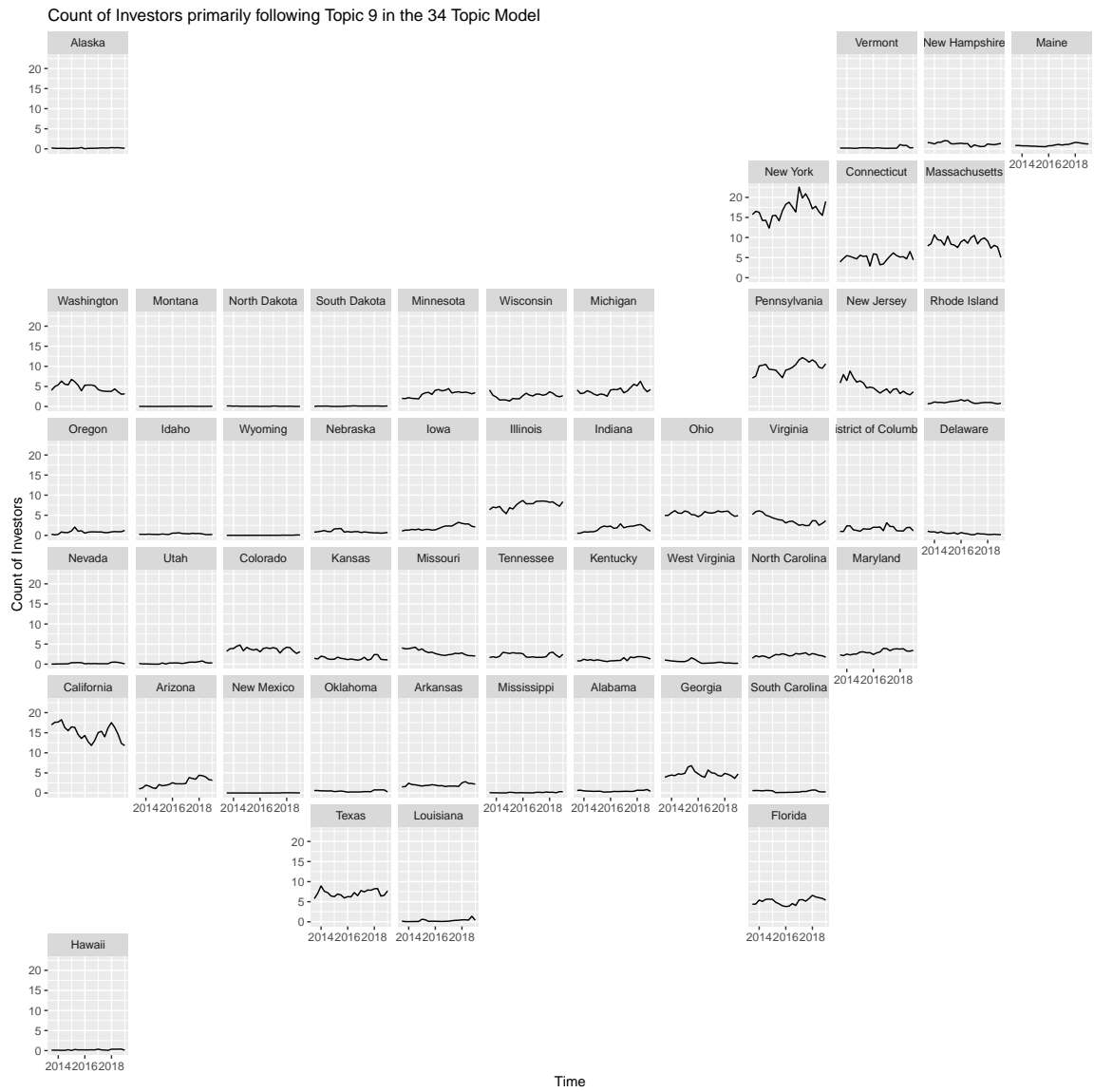


Figure A.9: Count of firms by highest likely topic in the 34 topic LDA for Topic 9

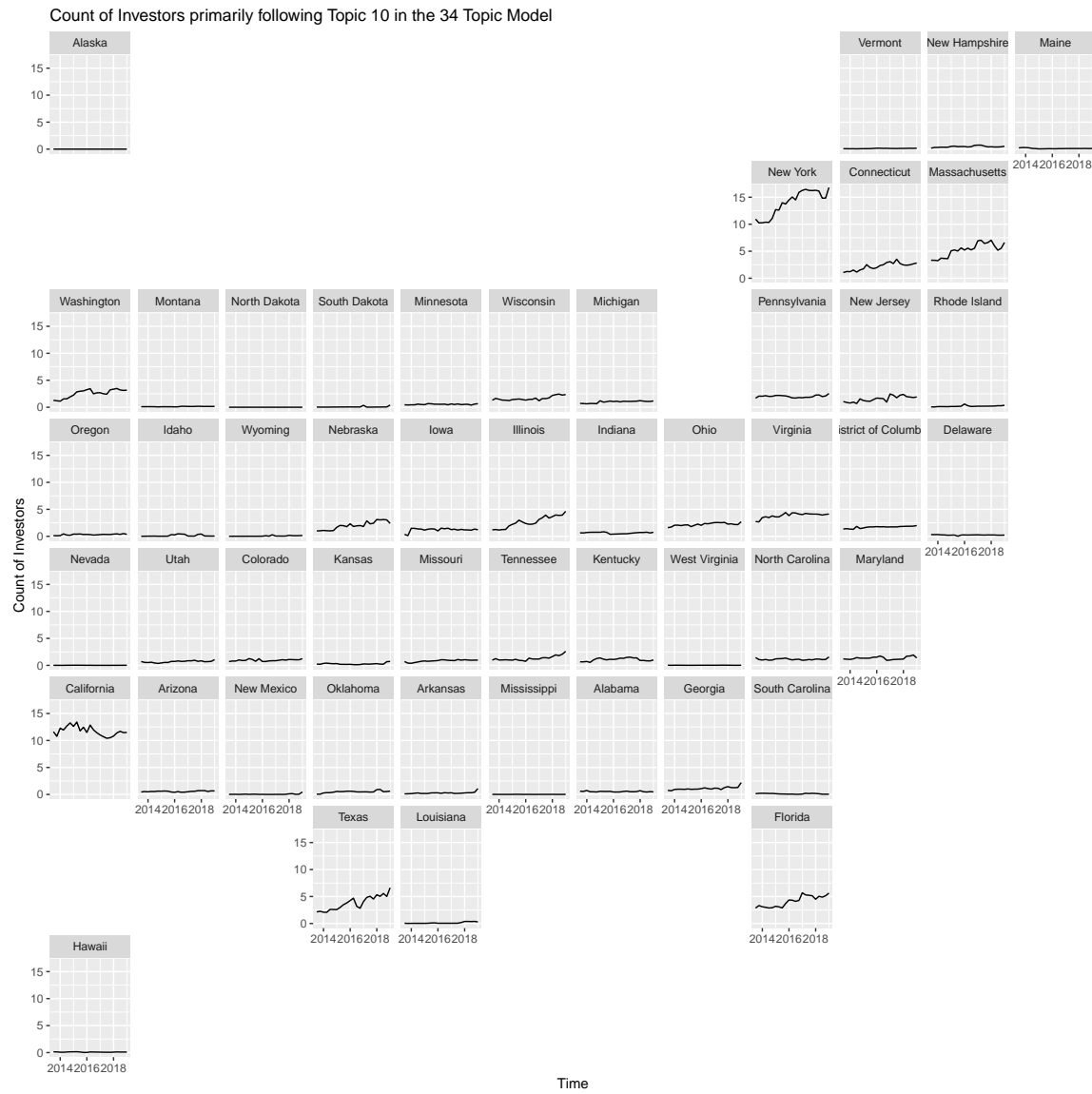


Figure A.10: Count of firms by highest likely topic in the 34 topic LDA for Topic 10

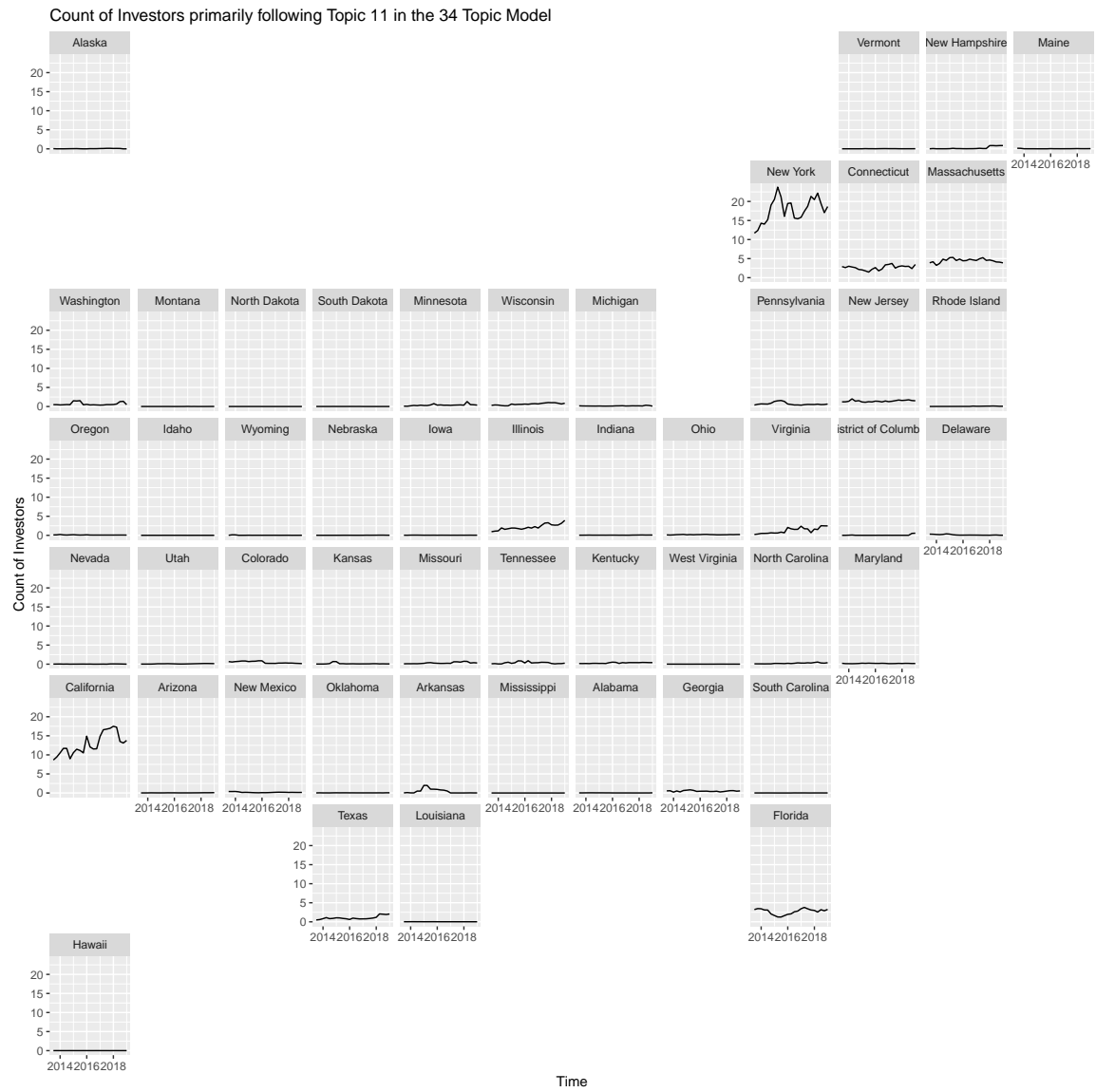


Figure A.11: Count of firms by highest likely topic in the 34 topic LDA for Topic 11



Figure A.12: Count of firms by highest likely topic in the 34 topic LDA for Topic 12



Figure A.13: Count of firms by highest likely topic in the 34 topic LDA for Topic 13

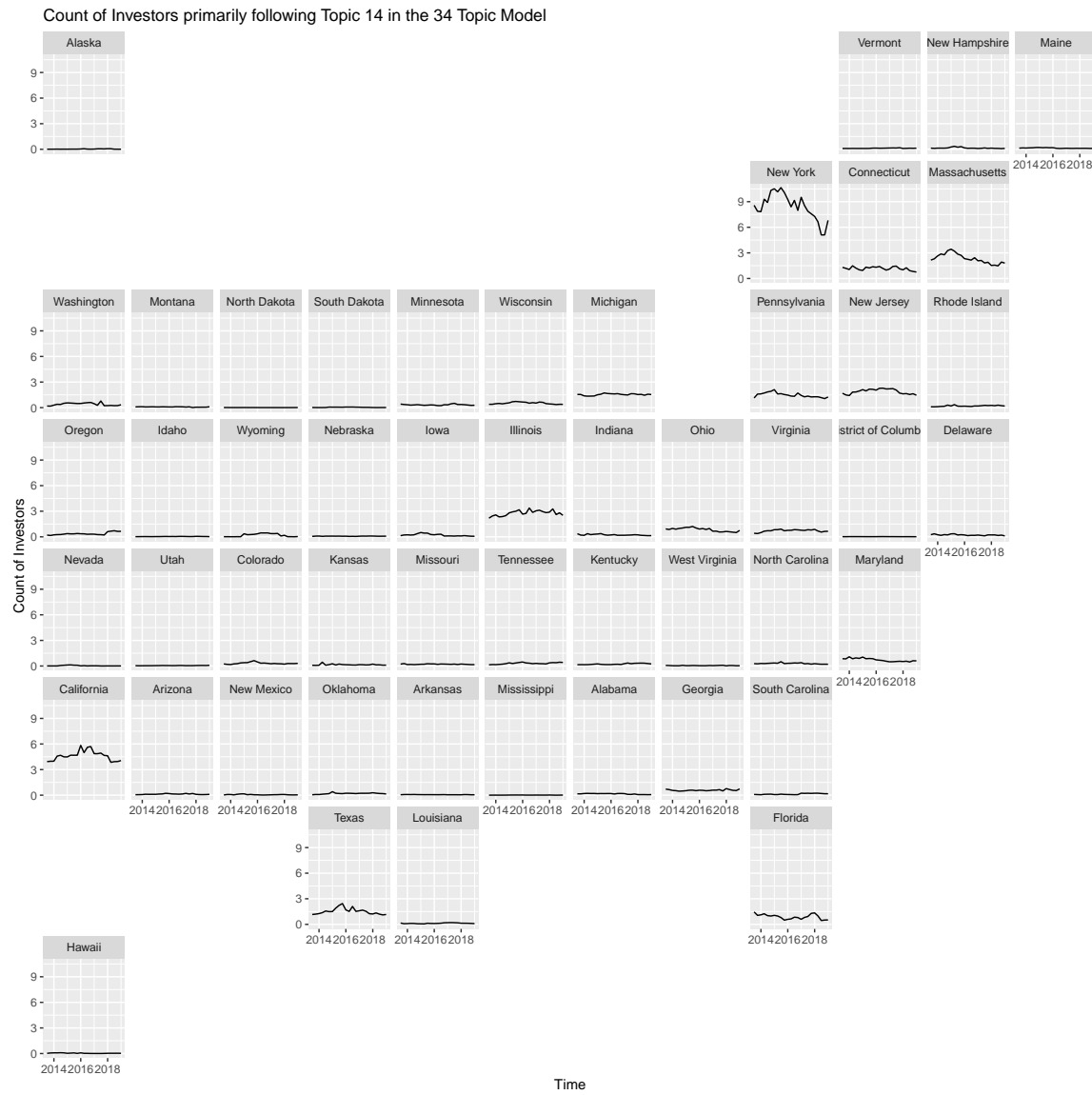


Figure A.14: Count of firms by highest likely topic in the 34 topic LDA for Topic 14

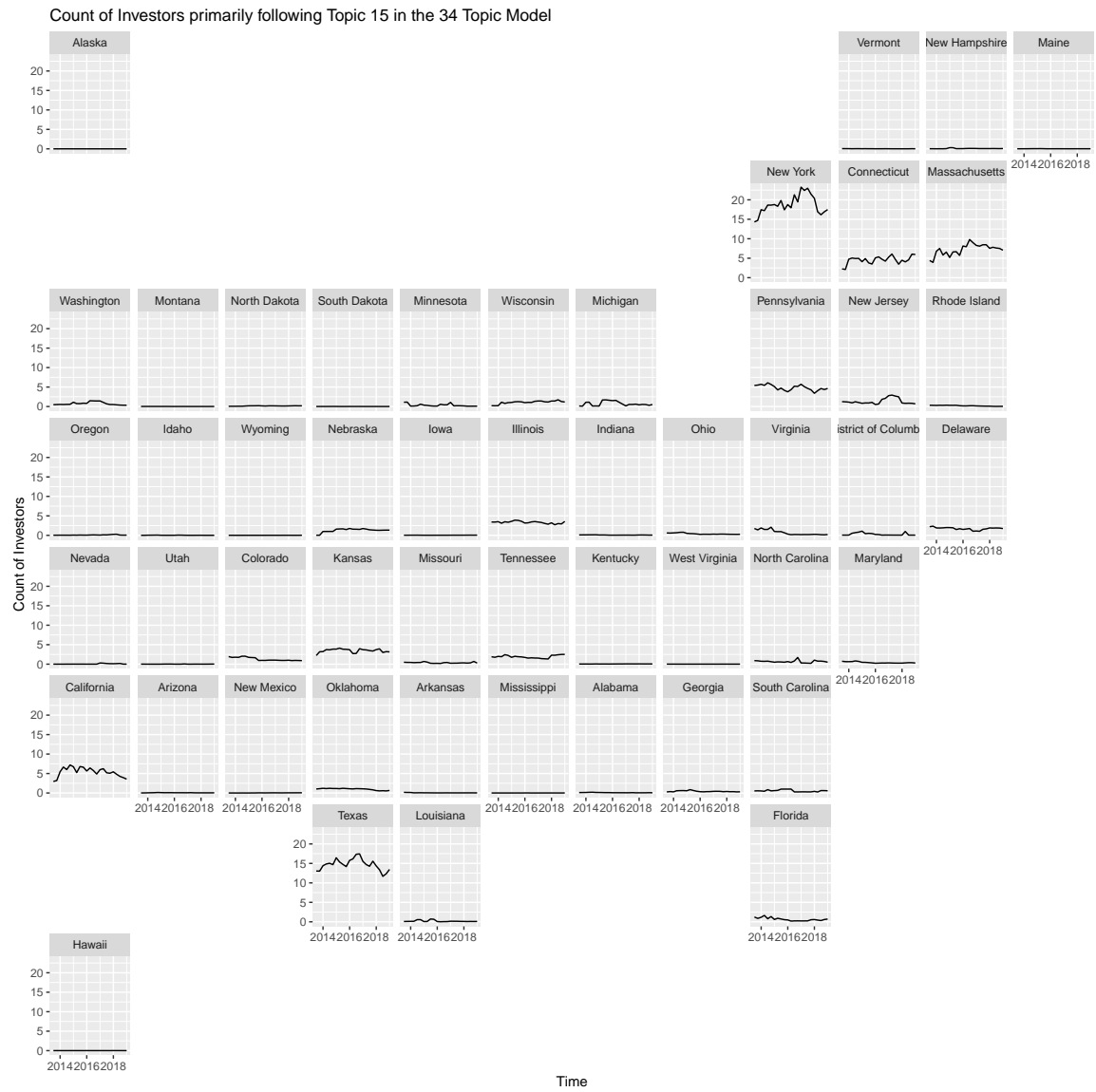


Figure A.15: Count of firms by highest likely topic in the 34 topic LDA for Topic 15

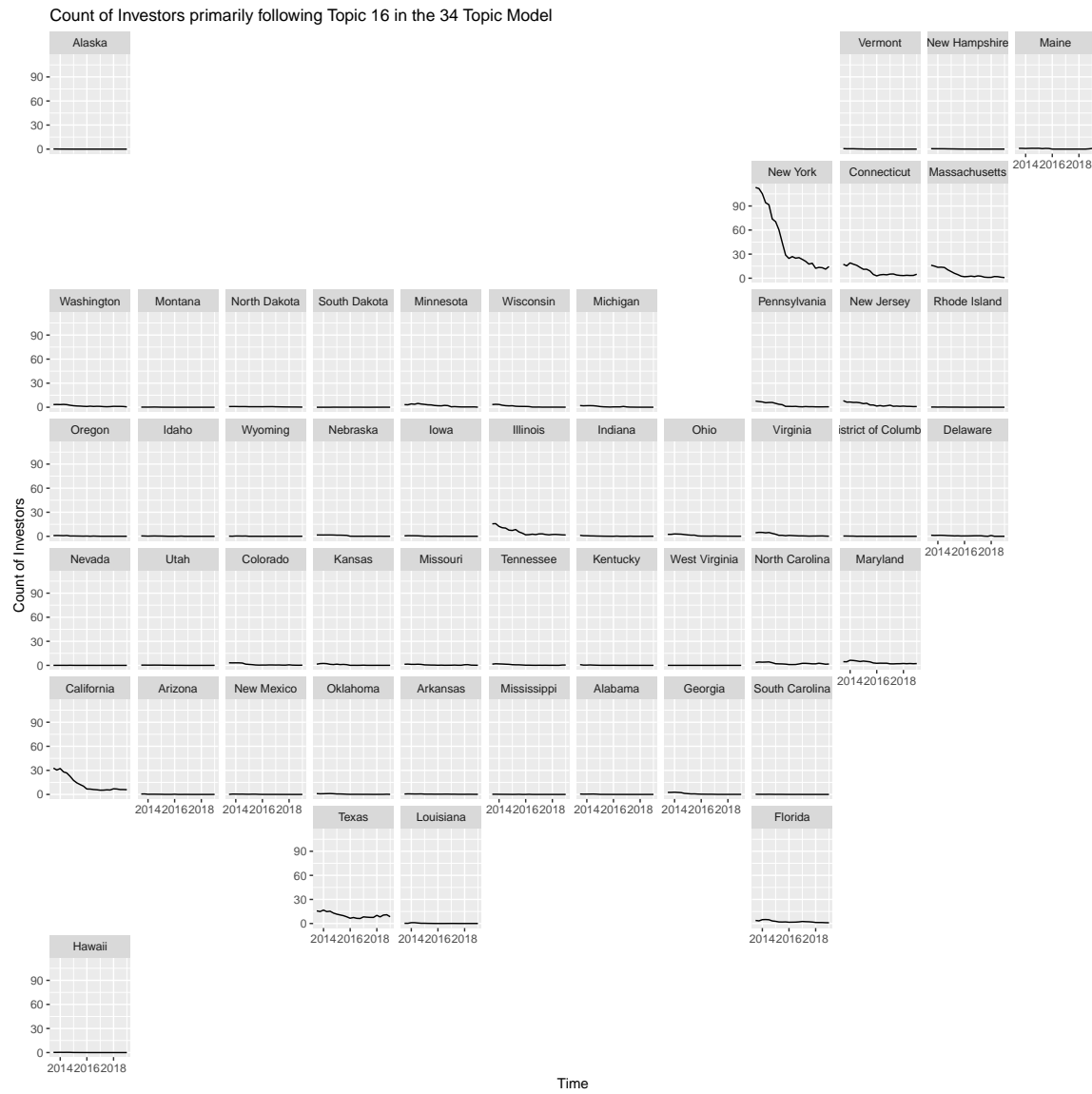


Figure A.16: Count of firms by highest likely topic in the 34 topic LDA for Topic 16

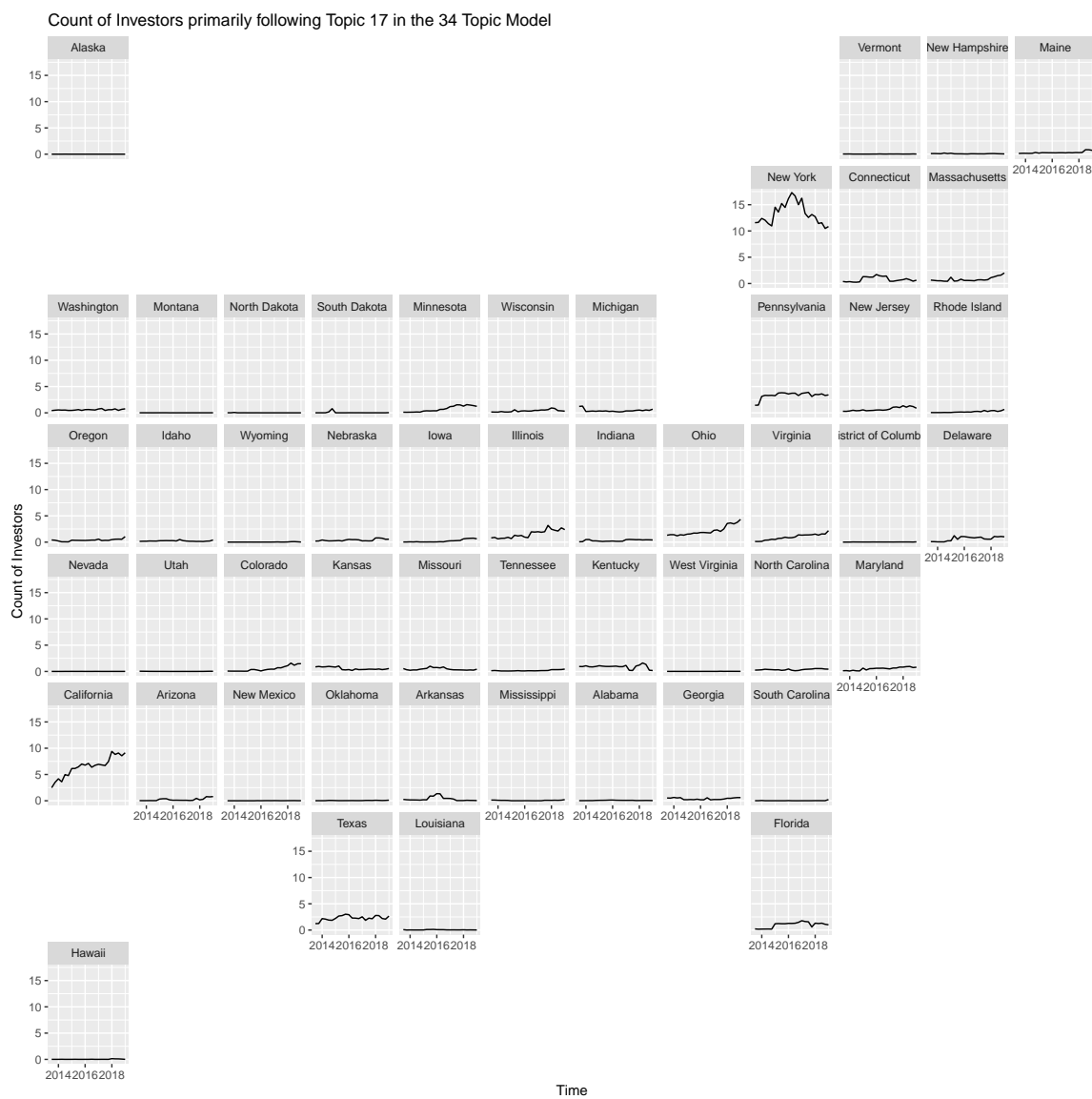


Figure A.17: Count of firms by highest likely topic in the 34 topic LDA for Topic 17

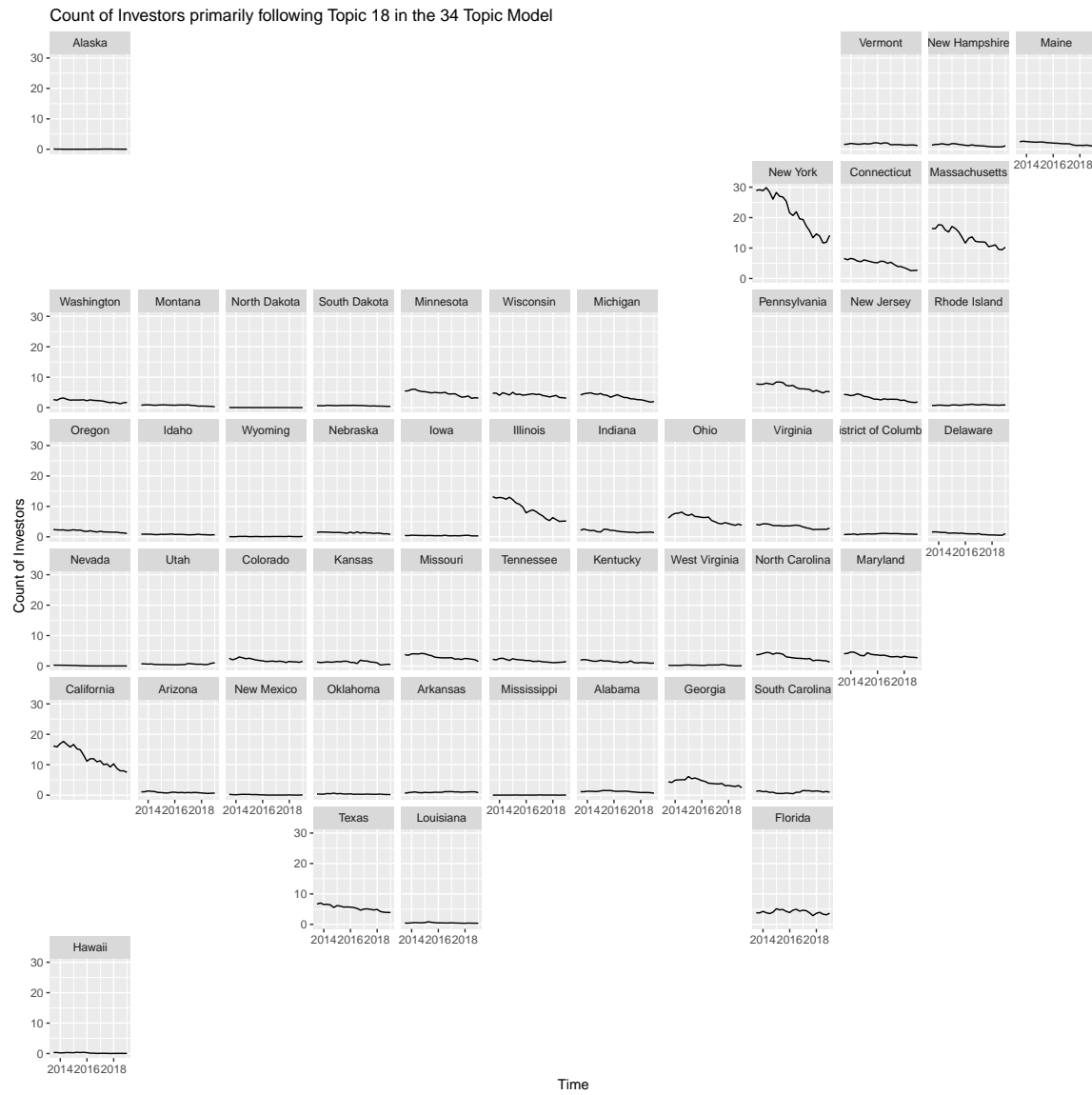


Figure A.18: Count of firms by highest likely topic in the 34 topic LDA for Topic 18

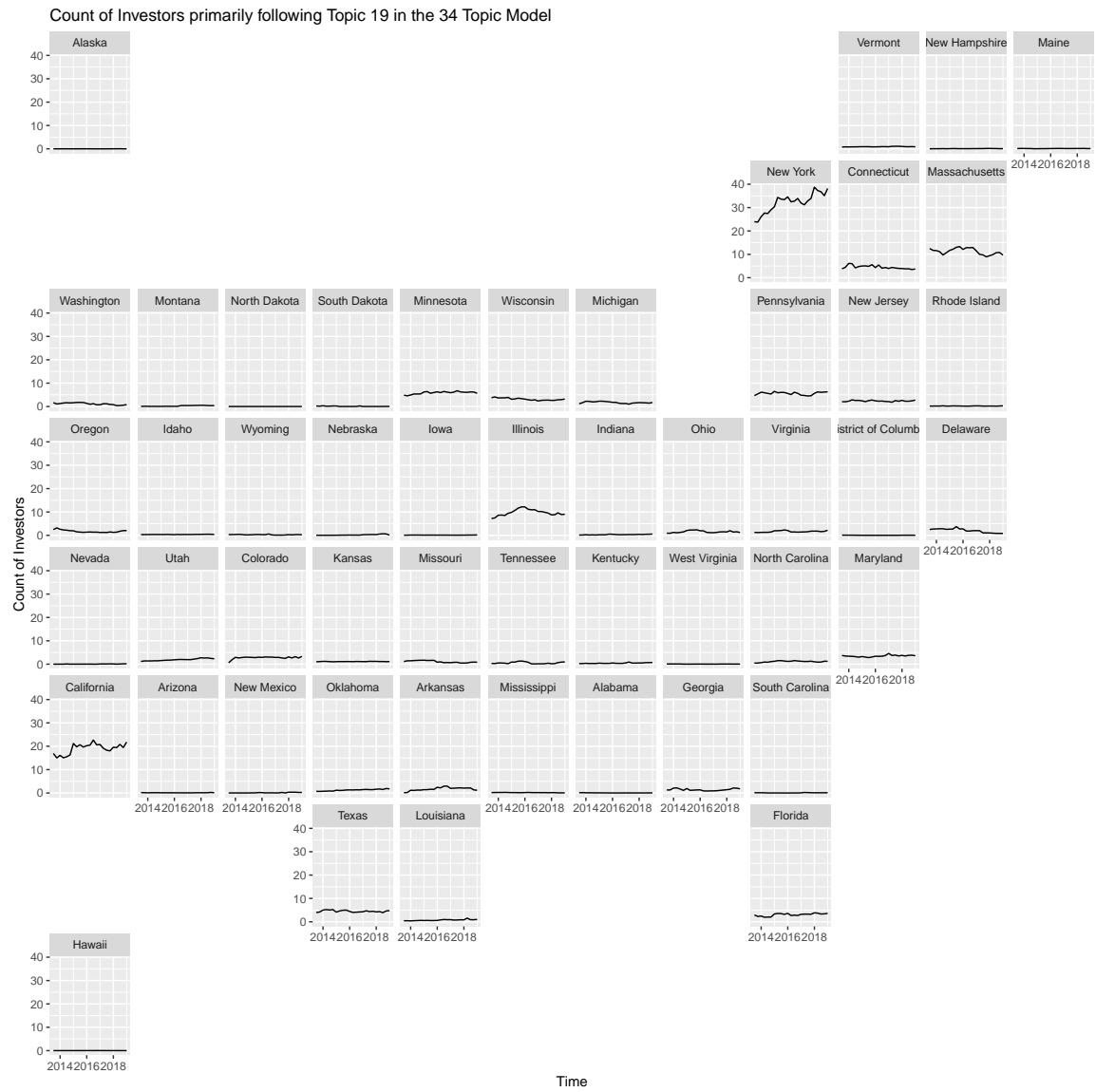


Figure A.19: Count of firms by highest likely topic in the 34 topic LDA for Topic 19

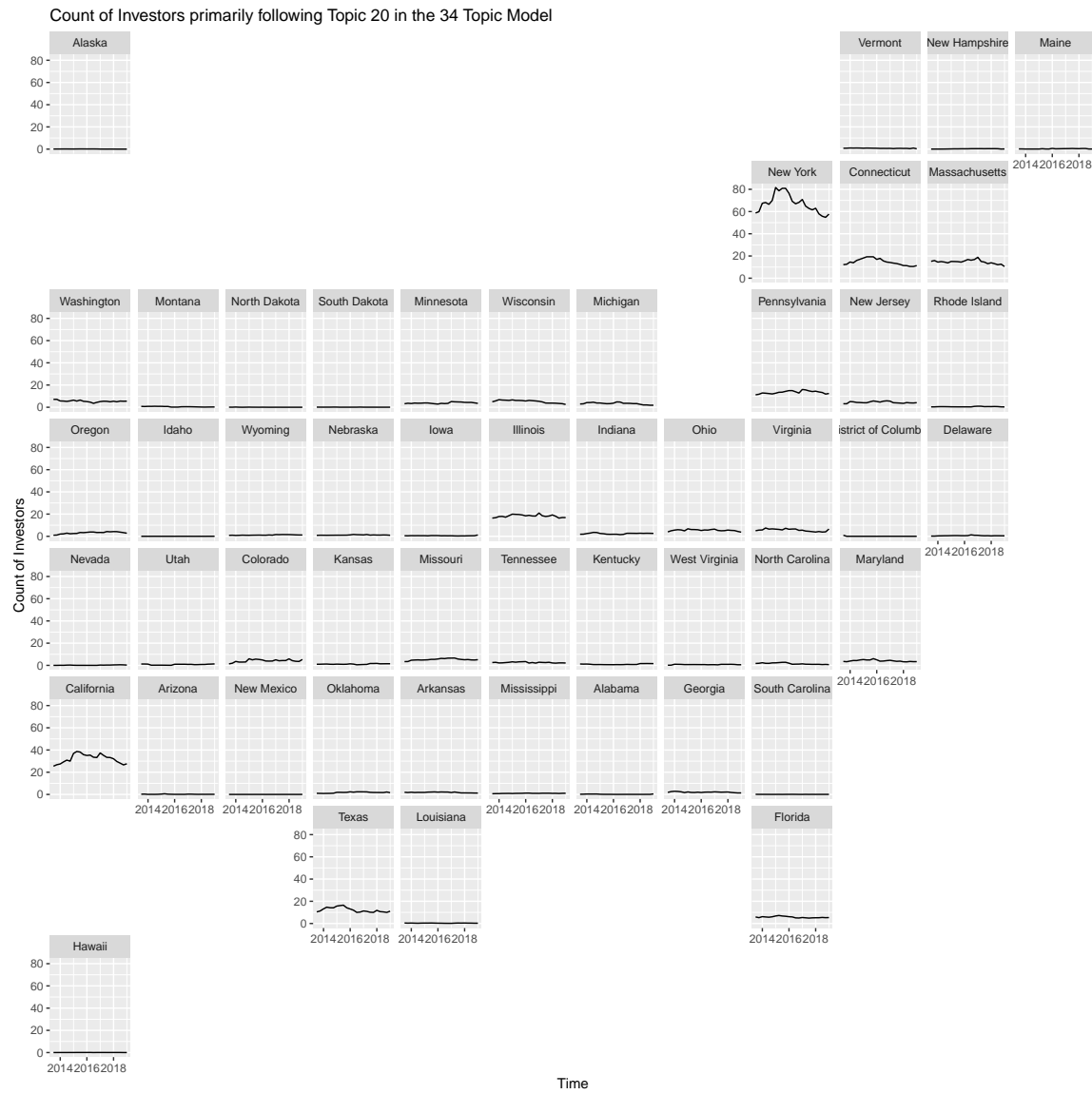


Figure A.20: Count of firms by highest likely topic in the 34 topic LDA for Topic 20

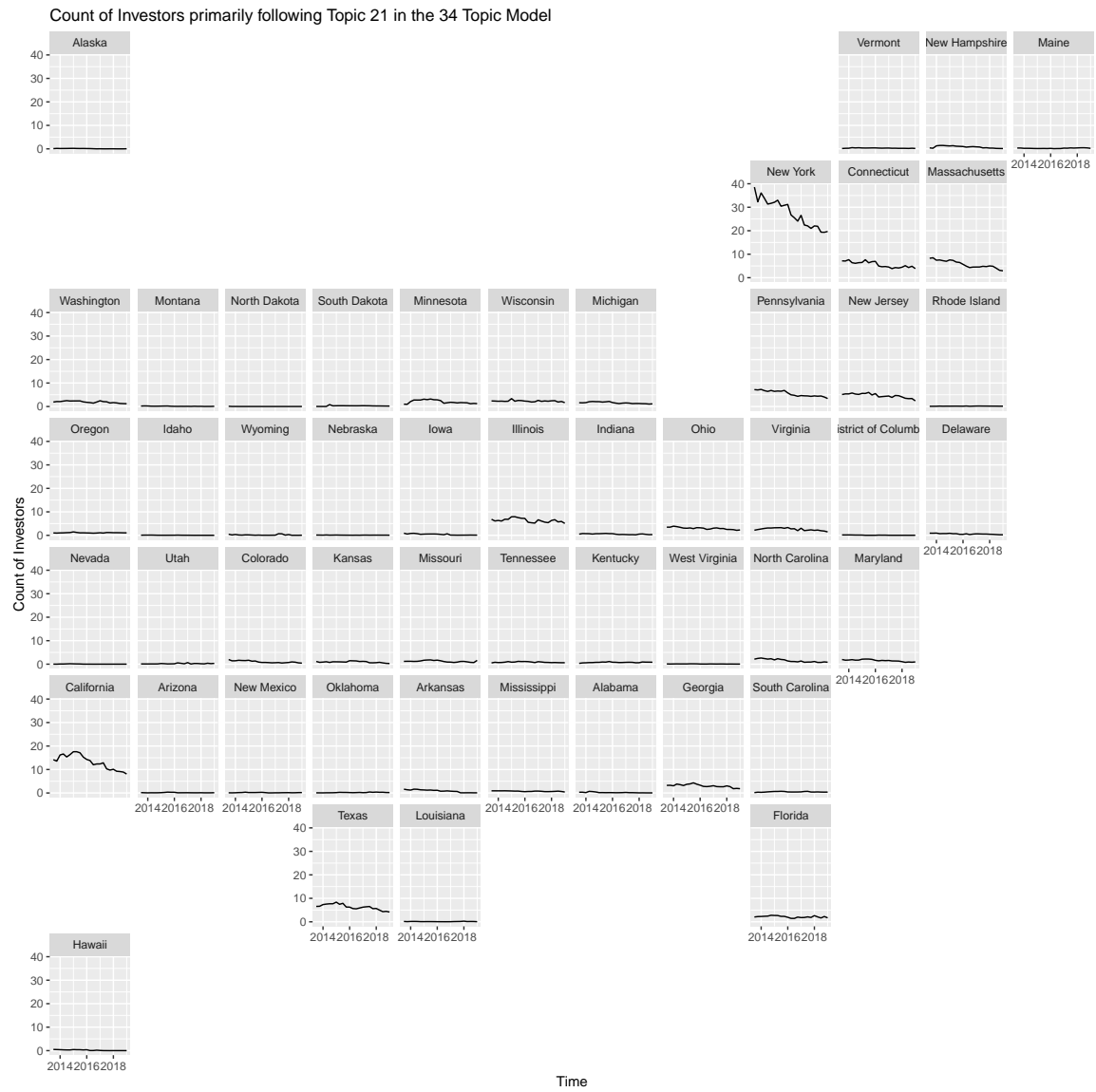


Figure A.21: Count of firms by highest likely topic in the 34 topic LDA for Topic 21

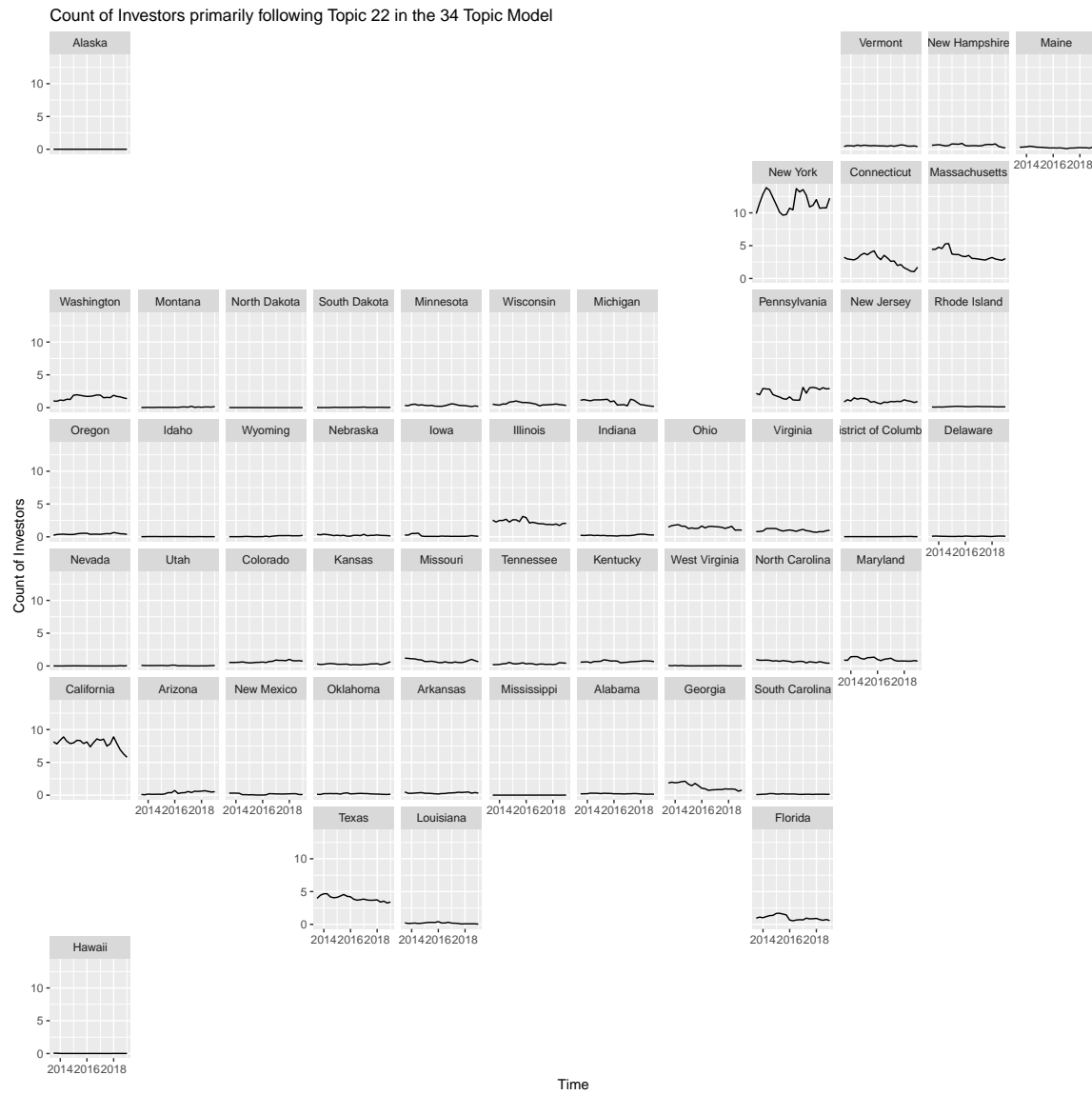


Figure A.22: Count of firms by highest likely topic in the 34 topic LDA for Topic 22

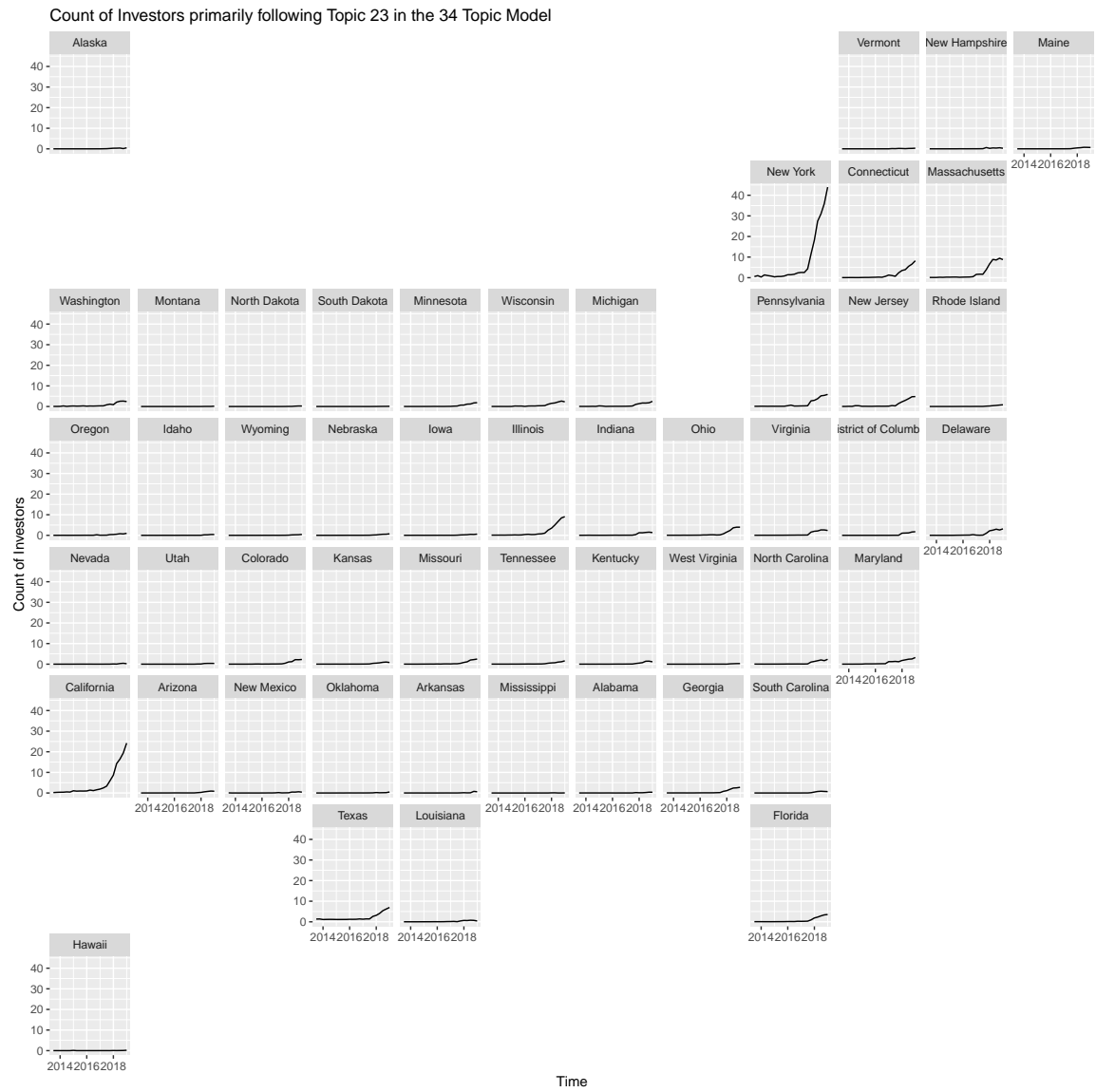


Figure A.23: Count of firms by highest likely topic in the 34 topic LDA for Topic 23

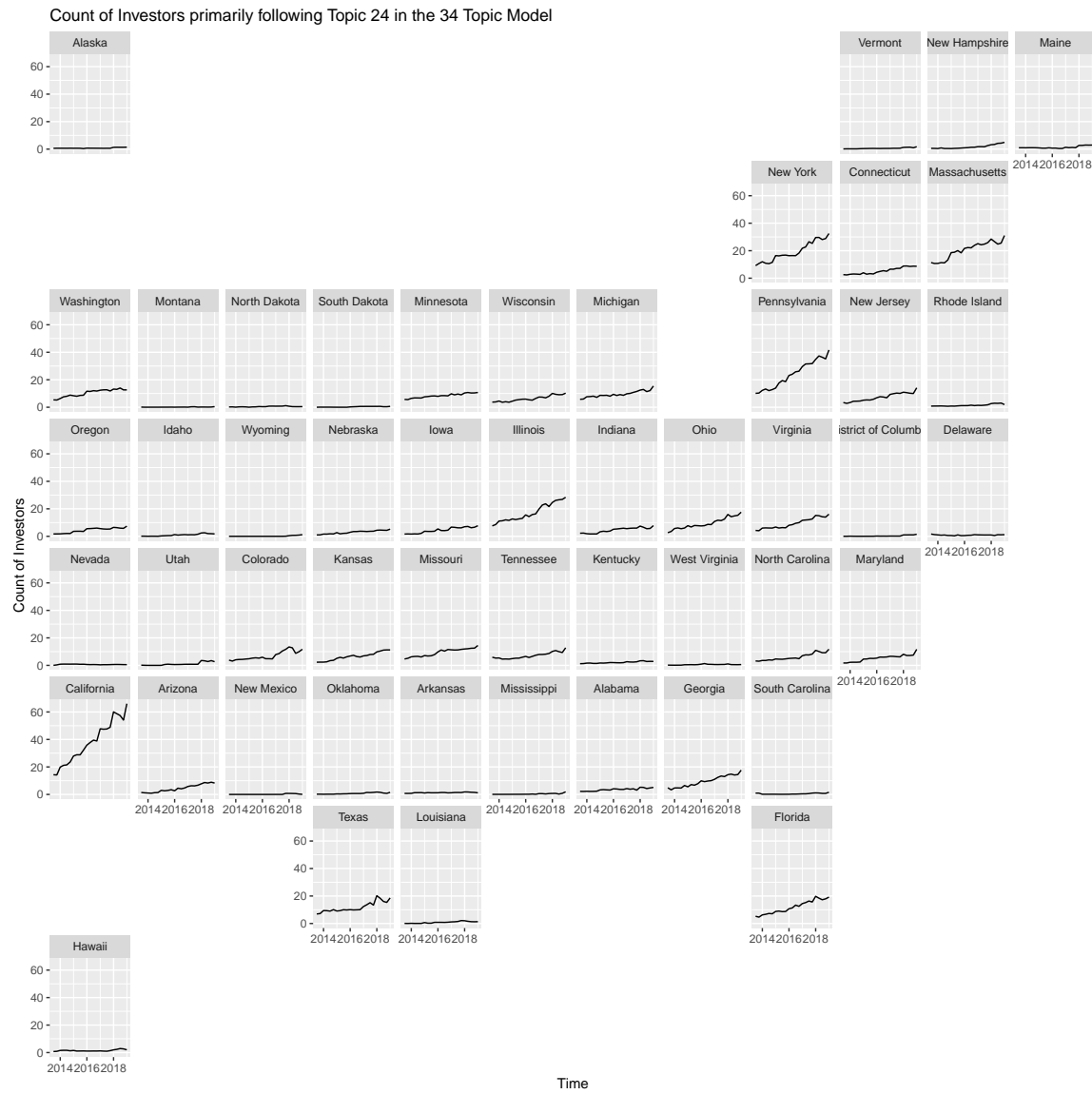


Figure A.24: Count of firms by highest likely topic in the 34 topic LDA for Topic 24

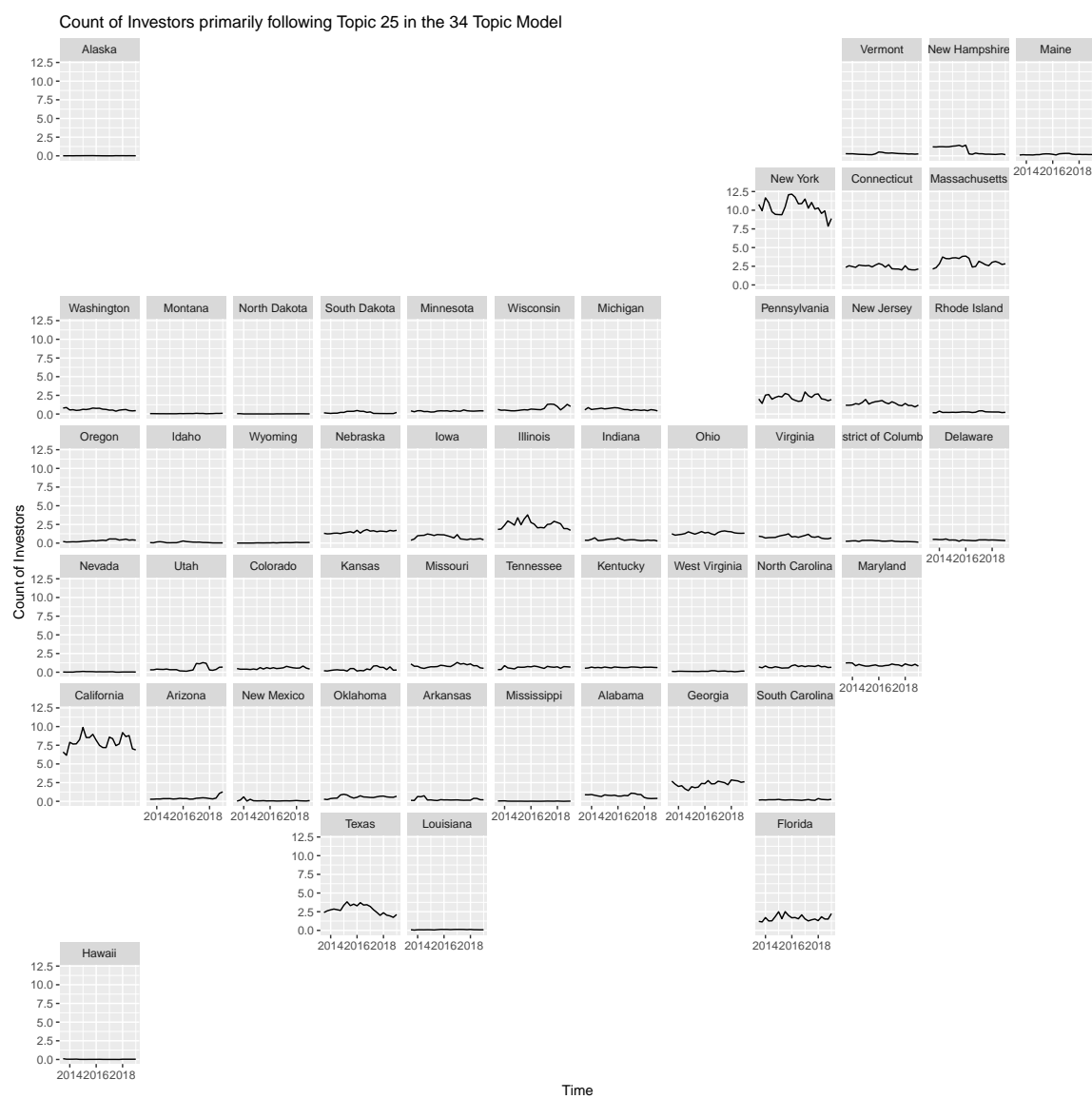


Figure A.25: Count of firms by highest likely topic in the 34 topic LDA for Topic 25

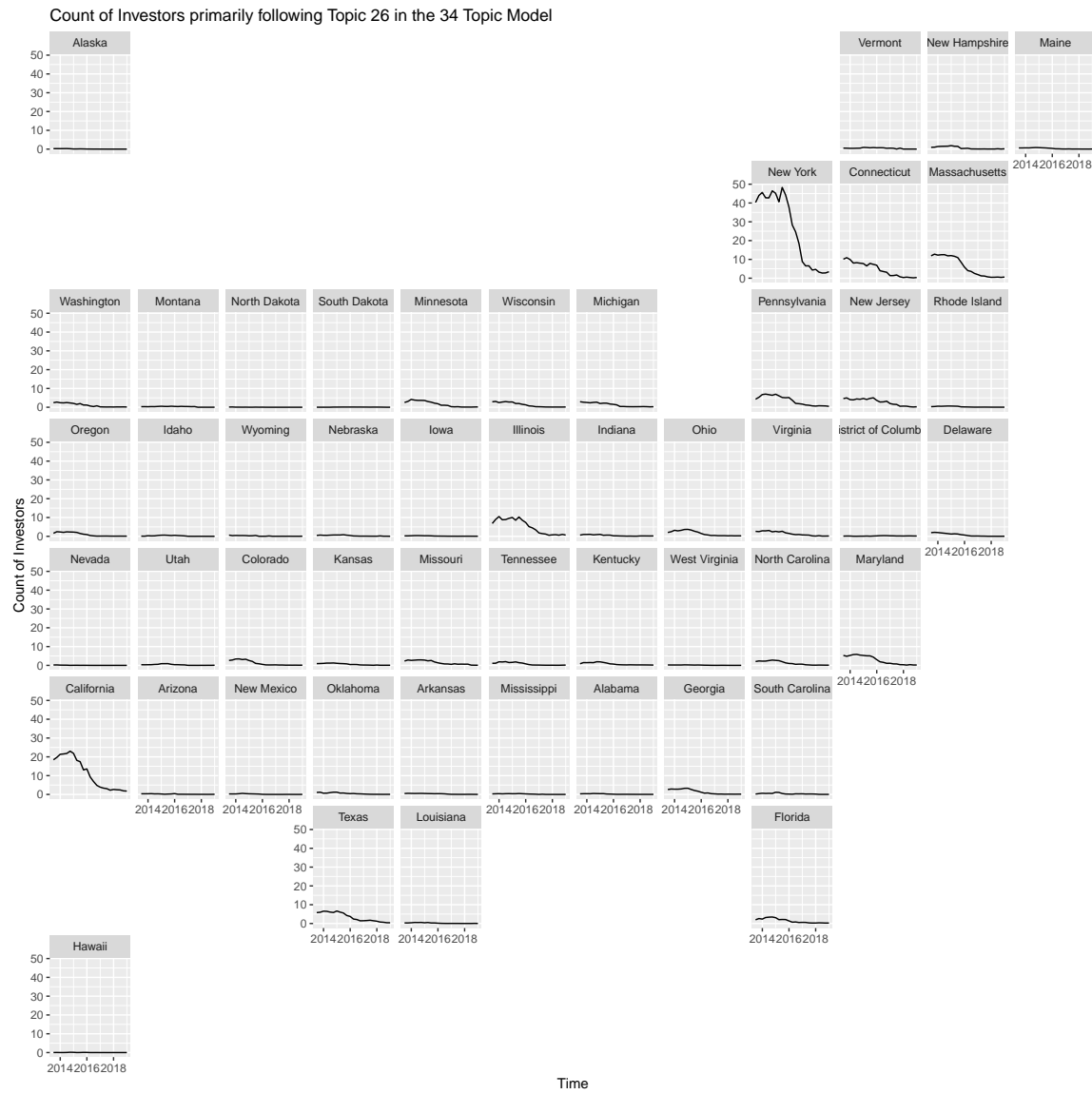


Figure A.26: Count of firms by highest likely topic in the 34 topic LDA for Topic 26

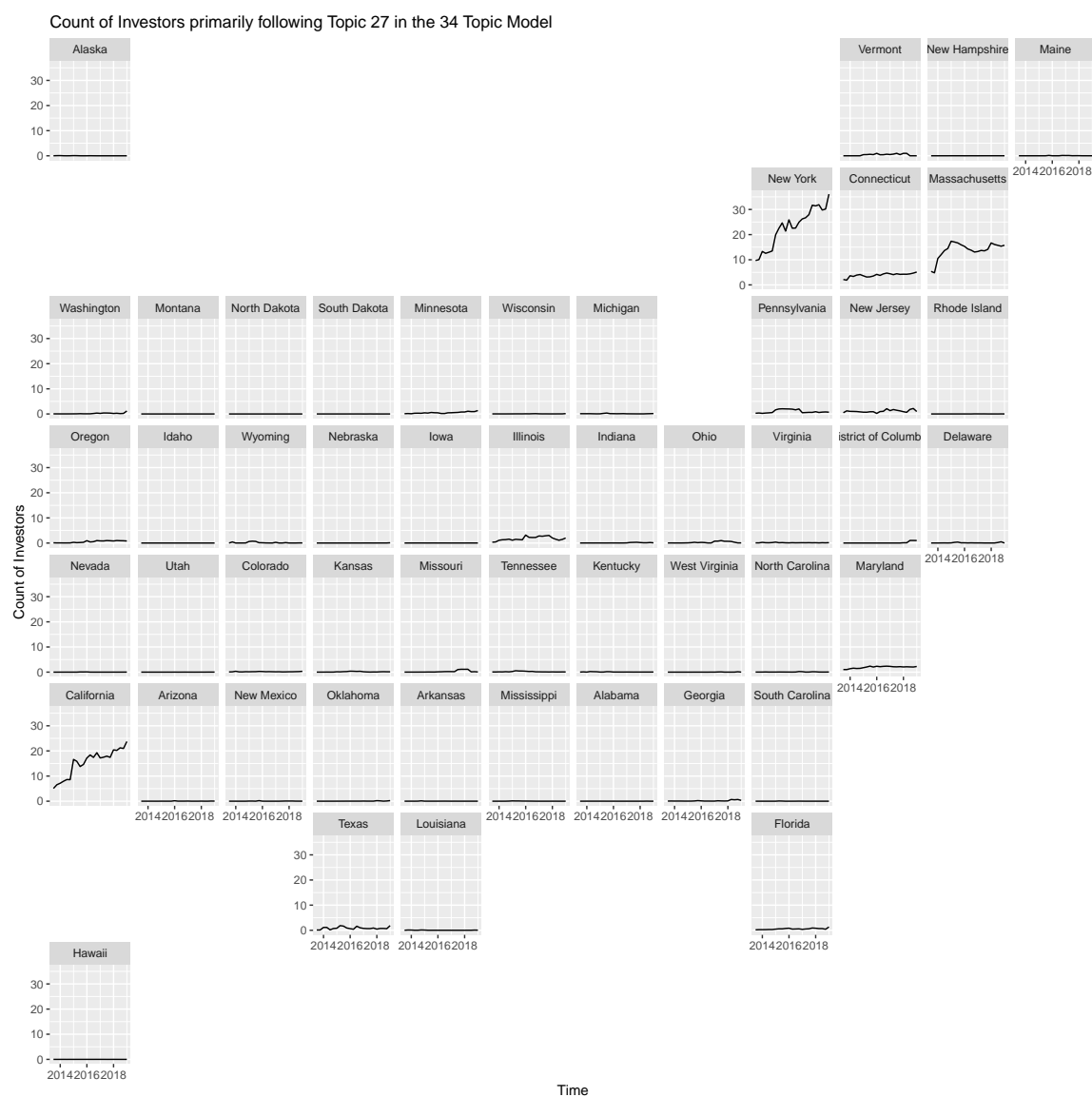


Figure A.27: Count of firms by highest likely topic in the 34 topic LDA for Topic 27

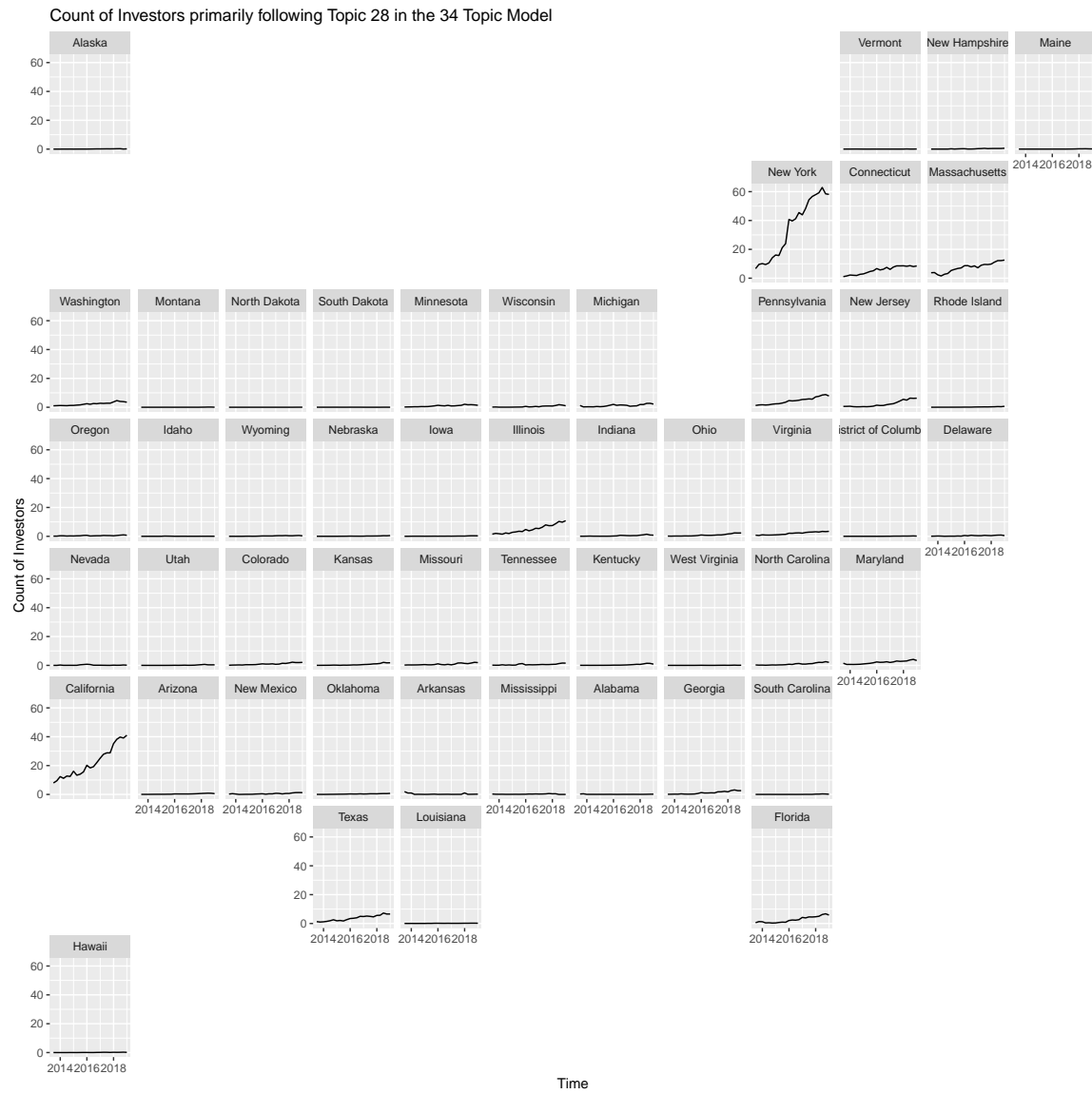


Figure A.28: Count of firms by highest likely topic in the 34 topic LDA for Topic 28

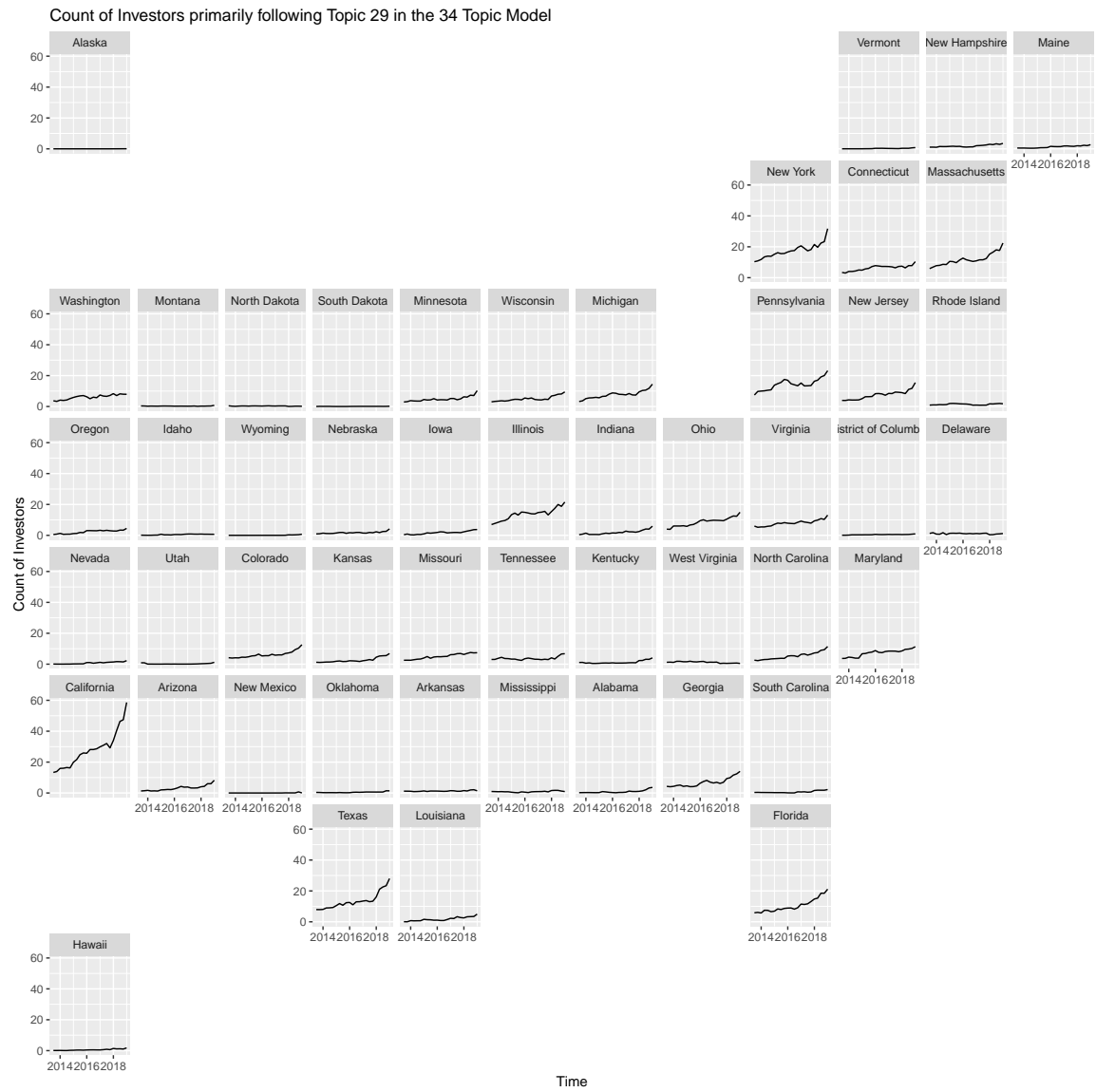


Figure A.29: Count of firms by highest likely topic in the 34 topic LDA for Topic 29

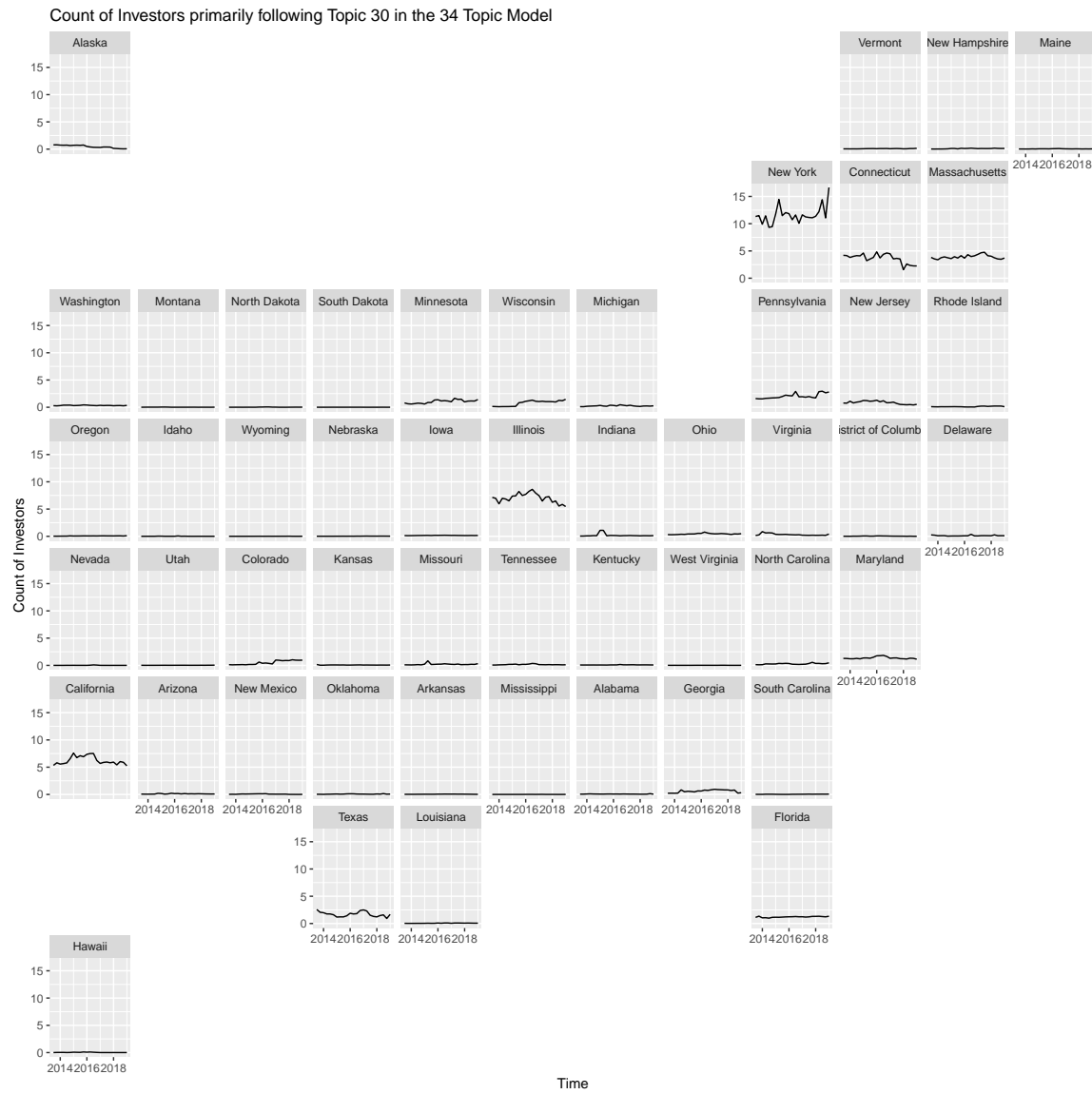


Figure A.30: Count of firms by highest likely topic in the 34 topic LDA for Topic 30

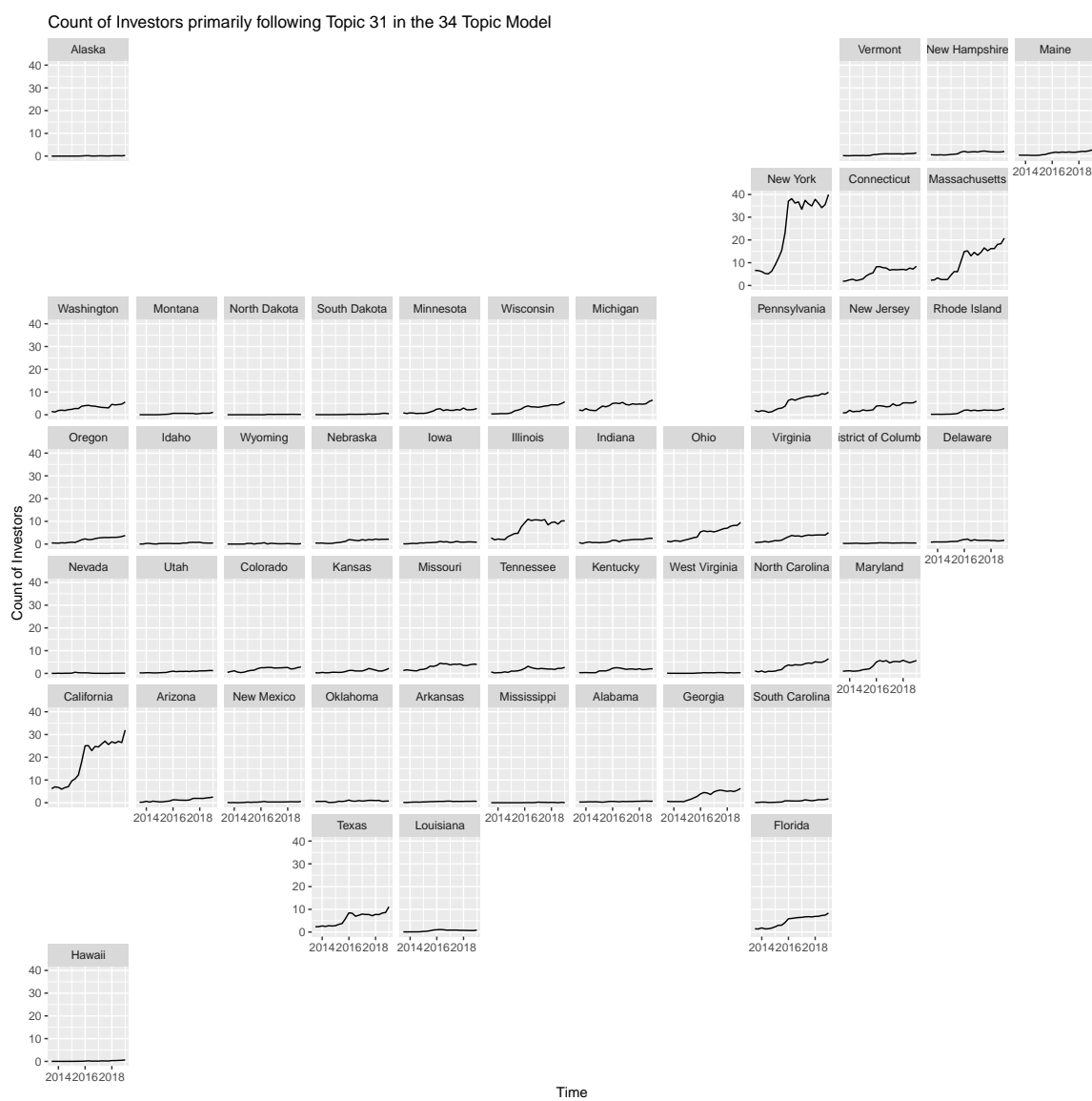


Figure A.31: Count of firms by highest likely topic in the 34 topic LDA for Topic 31

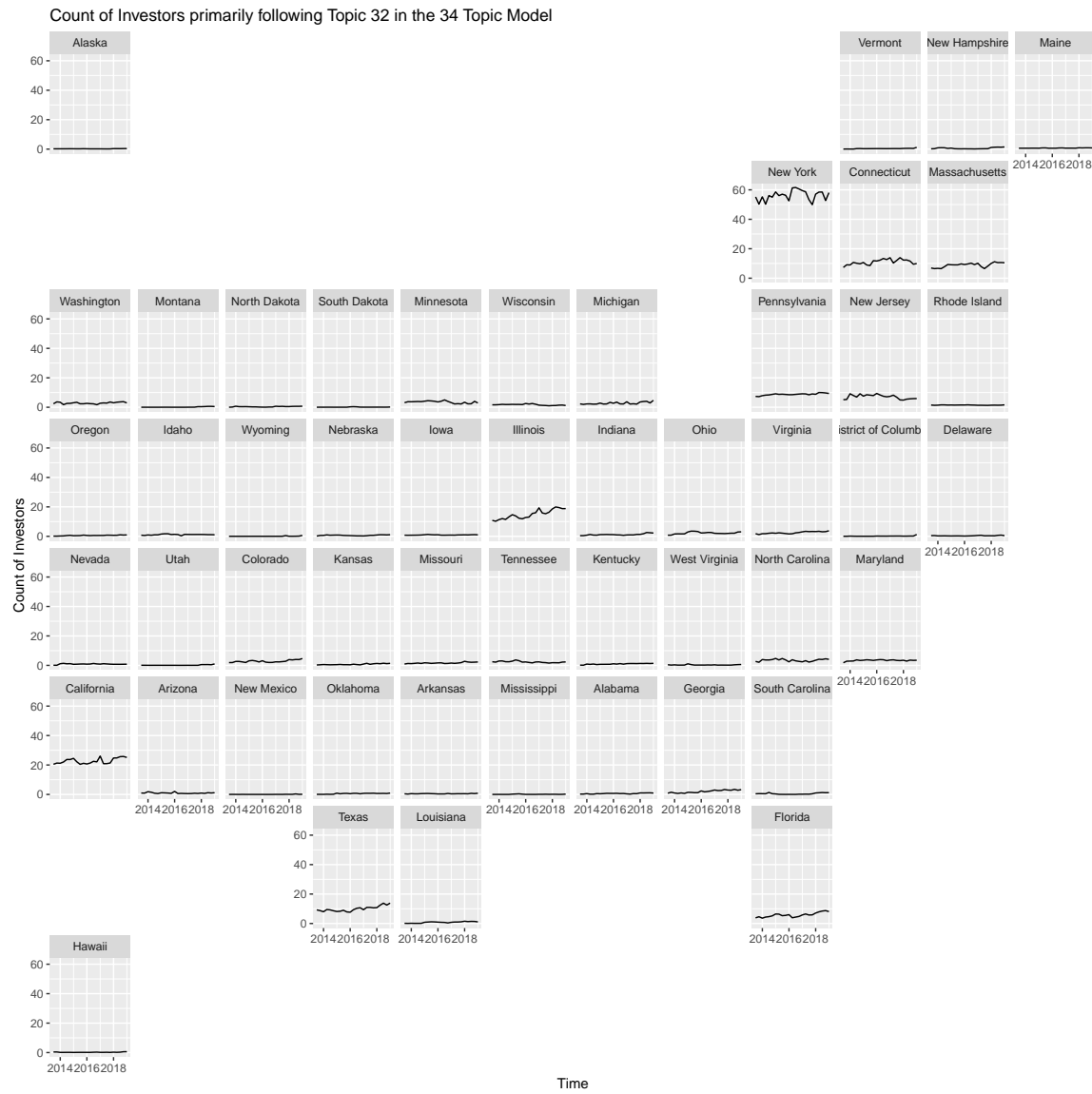


Figure A.32: Count of firms by highest likely topic in the 34 topic LDA for Topic 32

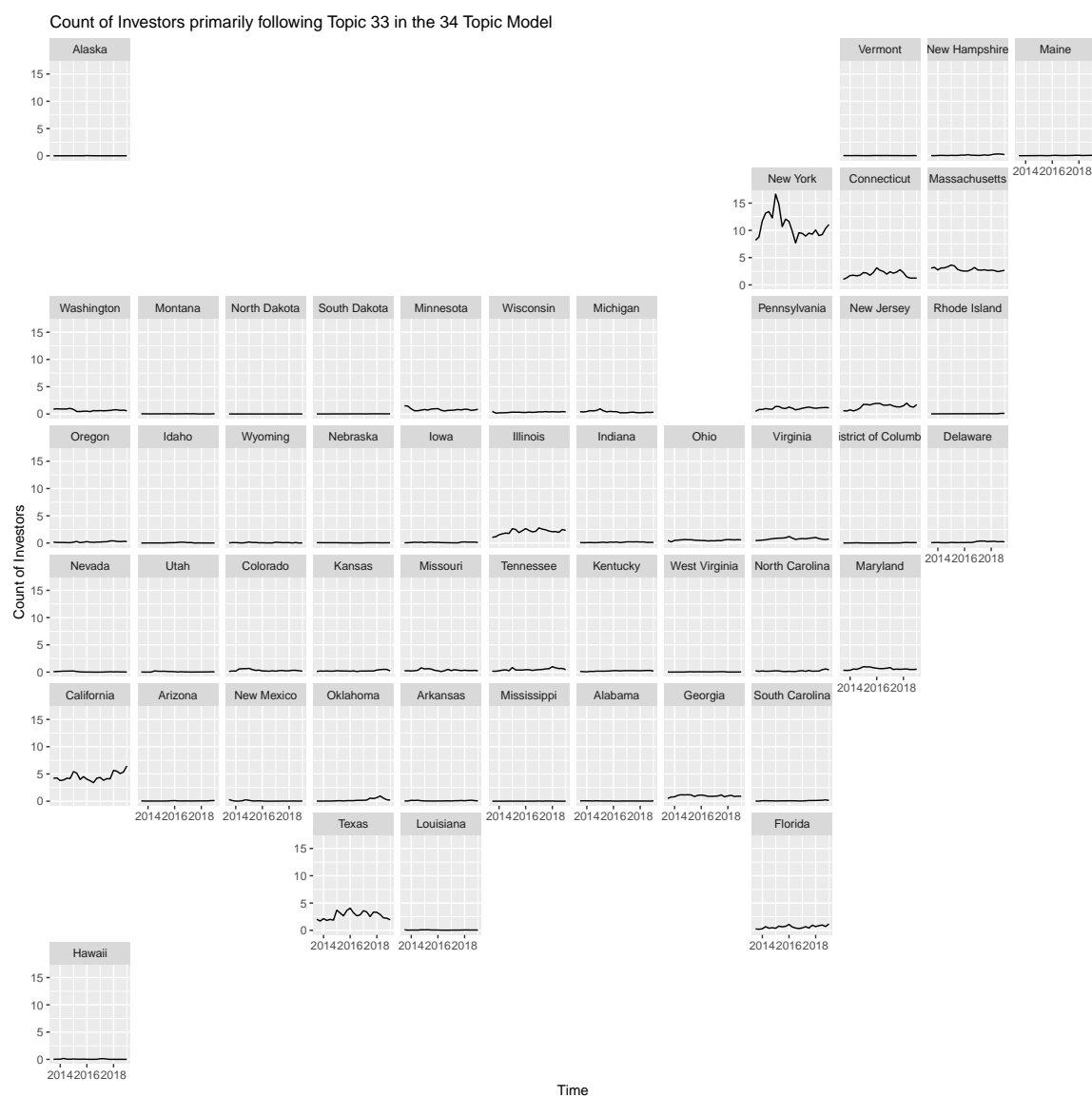


Figure A.33: Count of firms by highest likely topic in the 34 topic LDA for Topic 33

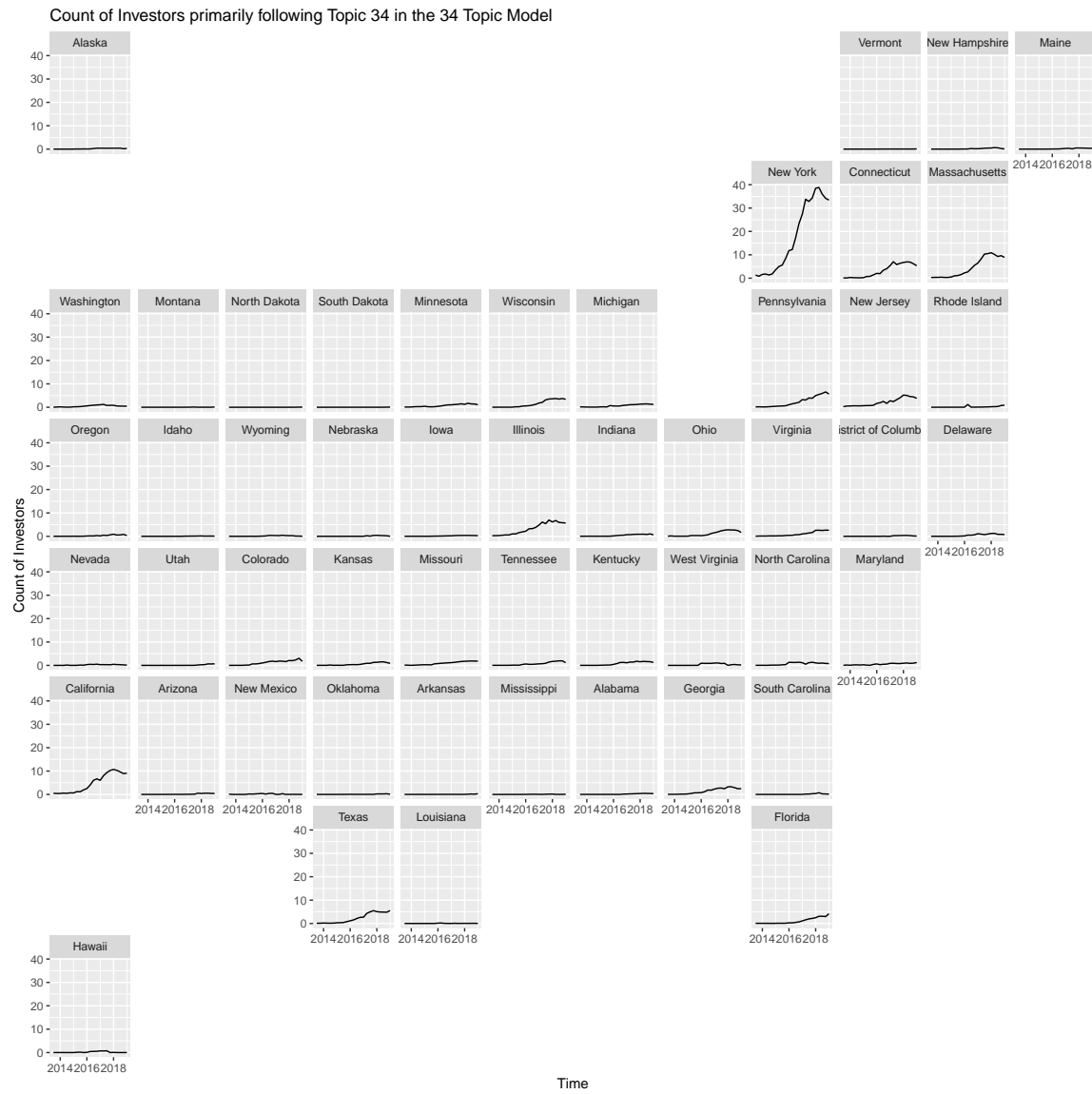


Figure A.34: Count of firms by highest likely topic in the 34 topic LDA for Topic 34

Appendix B

Shift Share

B.1 Dynamic Shift Share of the States

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Alabama	01	9381938	4246846	-3219830	Alaska	01	301958.5	39702.34	549913.6
Alabama	02	87122220	-2.5E+07	49168126	Alaska	02	7065141	-3062784	27947843
Alabama	03	4630689	-3814769	8761547	Alaska	03	111449.4	-162126	1196745
Alabama	04	9329579	-9807377	13217817	Alaska	04	2291757	-1052198	-348041
Alabama	05	4744915	-1276702	-2697642	Alaska	05	485474.5	-431056	652607.5
Alabama	06	42402460	-6151090	26061820	Alaska	06	3359060	-338510	12256168
Alabama	07	7179100	-4044443	4418807	Alaska	07	2790365	-1560997	-2299808
Alabama	08	57867150	1648924	54558448	Alaska	08	6375559	166747.2	19381208
Alabama	09	40916317	-8223203	8942599	Alaska	09	3487196	-1451642	-3588281
Alabama	10	53444088	18800856	34978689	Alaska	10	1244863	1726677	18679851
Alabama	11	6281087	3375336	-3204321	Alaska	11	5952080	2076162	-6470174
Alabama	12	35716690	7107049	38991563	Alaska	12	3865636	795833.8	10201216
Alabama	13	19442327	1.95E+08	-1.7E+08	Alaska	13	233395.5	4057038	-3513129
Alabama	14	44761384	-1.9E+07	37313087	Alaska	14	4429698	-2549420	10039198
Alabama	15	2747641	-1936033	966860.9	Alaska	15	346461.7	-230408	840027.2
Alabama	16	4824719	-6666604	5716061	Alaska	16	901662.6	-1441372	537515
Alabama	17	38118563	-7533871	-1905427	Alaska	17	1430652	-1129575	7340472
Alabama	18	66914379	-4.5E+07	39410931	Alaska	18	3206248	-3027983	10656139
Alabama	19	3432453	-680567	2419548	Alaska	19	450634.5	-99111.7	623826.7
Alabama	20	2917201	-2258085	4859808	Alaska	20	352286	-230958	173107.2
Alabama	21	51918211	-2E+07	27891050	Alaska	21	3578708	-2429965	11503608
Alabama	22	39566980	-1E+07	28124162	Alaska	22	3851058	-1535867	8336579
Alabama	23	54362119	61323292	77364967	Alaska	23	7605590	7438502	19861914
Alabama	24	28439528	55776558	9728817	Alaska	24	4700191	6902859	-8881496
Alabama	25	90712036	-4.4E+07	25717474	Alaska	25	6777968	-8501483	25950856
Alabama	26	44511165	-2E+07	48542356	Alaska	26	4553259	-2905799	8888658
Alabama	27	21408995	-5077024	23303890	Alaska	27	2658862	-908269	5179252
Alabama	28	49825998	63169102	1.67E+08	Alaska	28	10739620	13299557	20668182
Alabama	29	12562994	1932376	3164711	Alaska	29	2140125	383290.1	1687612

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Alabama	30	4783254	-4028552	11358332	Alaska	30	5846965	-2963583	267317
Alabama	31	92253242	50598548	74562887	Alaska	31	8562757	4323638	22698254
Alabama	32	45813269	-1.5E+07	-5.4E+07	Alaska	32	16902096	-3610099	27762114
Alabama	33	31030818	2058181	25067814	Alaska	33	3042031	18707.7	7814492
Alabama	34	21647638	1402802	16904242	Alaska	34	3050213	-95230.9	6513064
Arizona	01	4258601	-1639897	-1999684	Arkansas	01	228450.3	-150903	746402
Arizona	02	1.08E+08	-3.6E+07	-7.6E+07	Arkansas	02	13943781	-3972088	-1409656
Arizona	03	5219966	-1483320	-1.2E+07	Arkansas	03	464139.4	-418490	763681
Arizona	04	12751414	-4685738	-2.5E+07	Arkansas	04	1298651	-1085356	2055562
Arizona	05	7568915	-1212533	-1.5E+07	Arkansas	05	993882	329748.5	-1261233
Arizona	06	58519362	-7131912	-8E+07	Arkansas	06	7329744	-324131	-2582798
Arizona	07	18826134	-5141745	-6E+07	Arkansas	07	1601287	-889083	-211789
Arizona	08	1.26E+08	-6678321	-1.4E+08	Arkansas	08	8630244	172905.2	-2782716
Arizona	09	3491825	-1470017	46667647	Arkansas	09	8767323	-2212047	6104436
Arizona	10	1.38E+08	5660380	-2.4E+08	Arkansas	10	8373239	2079597	-3179830
Arizona	11	10821890	-3990016	53966318	Arkansas	11	21020575	-1.5E+07	-3729990
Arizona	12	77581435	14284919	-7.1E+07	Arkansas	12	5650403	1132775	-3573614
Arizona	13	8.77E+08	5.69E+09	-7.3E+09	Arkansas	13	11662632	3.16E+08	-3.2E+08
Arizona	14	51463962	-1.4E+07	-5.5E+07	Arkansas	14	5741062	-2023550	1922743
Arizona	15	1085776	-139986	649136.2	Arkansas	15	1357844	-949098	1324094
Arizona	16	10587349	-1.3E+07	-5169196	Arkansas	16	1304312	-2210476	634497.7
Arizona	17	14706879	-7616161	10750663	Arkansas	17	5309313	-2323124	569550.7
Arizona	18	91427785	-6.4E+07	-1.7E+08	Arkansas	18	4975295	-3451948	3308428
Arizona	19	3165243	-277354	-4275925	Arkansas	19	4642310	-875845	5869408
Arizona	20	1692087	-883355	-2732234	Arkansas	20	1078994	-653001	257847.2
Arizona	21	78988961	-4.1E+07	-6.9E+07	Arkansas	21	7184304	-3019873	-1735493
Arizona	22	1.28E+08	-3.7E+07	-1.5E+08	Arkansas	22	5488947	-1159718	-668494
Arizona	23	1.45E+08	1.21E+08	-1.6E+08	Arkansas	23	9802062	6591820	-8437402
Arizona	24	-1441170	29269608	1.3E+08	Arkansas	24	9106428	11869035	-3784430

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Arizona	25	3.75E+08	-2.1E+08	-6.9E+08	Arkansas	25	10550752	-6731935	6505870
Arizona	26	42449617	-1.5E+07	-5.7E+07	Arkansas	26	4980694	-2296949	228881.1
Arizona	27	37722884	-3518652	-4.7E+07	Arkansas	27	3872175	-604009	-1346188
Arizona	28	2.19E+08	3.03E+08	-1.5E+08	Arkansas	28	13394767	15871160	-3.5E+07
Arizona	29	10482992	3875498	13365313	Arkansas	29	4902666	1216443	-913539
Arizona	30	12566778	-6086101	-1.6E+07	Arkansas	30	1551599	-746358	-80479.5
Arizona	31	1.2E+08	53065484	-1E+08	Arkansas	31	7274259	5053640	-4012479
Arizona	32	7960496	-1.6E+07	96286682	Arkansas	32	10995021	-2479795	15887317
Arizona	33	67049150	1743565	-9.1E+07	Arkansas	33	6337268	-476863	-1033664
Arizona	34	28417773	3741493	-2.5E+07	Arkansas	34	3440393	373175.8	553696.5
California	01	3E+08	-1.3E+08	-1.9E+08	Colorado	01	16945633	-2.6E+07	-5594983
California	02	8.94E+09	-2.7E+09	-7.4E+09	Colorado	02	3.19E+08	-1.1E+08	-7E+08
California	03	4.83E+08	-2.4E+08	-4.1E+08	Colorado	03	13580036	-9454424	-2.4E+07
California	04	1.19E+09	-7E+08	-5.2E+08	Colorado	04	65579098	-8026565	-1.7E+08
California	05	7.32E+08	-3E+08	-3.7E+08	Colorado	05	24506875	-2067632	-6.8E+07
California	06	4.87E+09	-9E+08	-2.8E+09	Colorado	06	1.66E+08	-1.4E+07	-3.9E+08
California	07	1.28E+09	-6.4E+08	-2.3E+08	Colorado	07	33522119	-1.1E+07	-8.6E+07
California	08	8.7E+09	-6.8E+08	-6.4E+09	Colorado	08	2.45E+08	-2790925	-5.8E+08
California	09	1.57E+09	-2.5E+08	-8E+08	Colorado	09	57962056	-1.8E+07	-1E+07
California	10	4.36E+09	4.91E+08	-3.6E+09	Colorado	10	1.46E+08	-3724915	-2.5E+08
California	11	1.9E+09	6.02E+08	-9.4E+08	Colorado	11	87392545	77608909	-4E+08
California	12	3.87E+09	6.24E+08	-3.2E+09	Colorado	12	1.48E+08	25394823	-3.4E+08
California	13	3.65E+09	3.41E+10	-3.1E+10	Colorado	13	3.68E+08	3.12E+09	-3.1E+09
California	14	5.83E+09	-1.8E+09	-3.7E+09	Colorado	14	1.59E+08	-3.2E+07	-3.7E+08
California	15	3.56E+08	-1.7E+08	-2.3E+08	Colorado	15	2.19E+08	-1.8E+08	-1.3E+08
California	16	6.69E+08	-9.8E+08	-3.2E+08	Colorado	16	27480154	-4.4E+07	-5.7E+07
California	17	2.8E+09	-1.3E+09	-2.4E+09	Colorado	17	87606449	-5.1E+07	-1.5E+08
California	18	3.56E+09	-2.4E+09	-2.2E+09	Colorado	18	1.57E+08	-1E+08	-3.3E+08
California	19	3.12E+08	-3.9E+07	-1.9E+08	Colorado	19	33868833	-1.4E+07	-3.6E+07

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California	20	1.83E+08	-7.4E+07	-1.8E+08	Colorado	20	12323359	-7963277	-1.2E+07
California	21	4.73E+09	-2.3E+09	-2.9E+09	Colorado	21	1.56E+08	-6.6E+07	-4E+08
California	22	5.94E+09	-1.8E+09	-3.5E+09	Colorado	22	1.54E+08	-2.2E+07	-3.8E+08
California	23	7.87E+09	6.12E+09	-6E+09	Colorado	23	2.09E+08	2.19E+08	-5.5E+08
California	24	1.74E+09	1.54E+09	-7.7E+08	Colorado	24	77242087	98010530	-1.3E+08
California	25	9.85E+09	-4.4E+09	-8E+09	Colorado	25	3.53E+08	-2.1E+08	-7.3E+08
California	26	4.52E+09	-1.4E+09	-4E+09	Colorado	26	2.03E+08	-6.8E+07	-5.1E+08
California	27	2.65E+09	-3.1E+08	-1.8E+09	Colorado	27	1.19E+08	-1E+07	-2.9E+08
California	28	7.59E+09	9.68E+09	-7.5E+09	Colorado	28	2.58E+08	5.13E+08	-7.6E+08
California	29	1.08E+09	1.42E+08	-8.3E+08	Colorado	29	51152410	2514502	-9.1E+07
California	30	9.68E+08	-7.4E+08	-1.9E+08	Colorado	30	51758901	-3.5E+07	-6.7E+07
California	31	7.96E+09	3.93E+09	-5.7E+09	Colorado	31	2.8E+08	3.33E+08	-8.4E+08
California	32	8.7E+09	-3.2E+09	7.88E+09	Colorado	32	2.26E+08	-1.2E+08	6.85E+08
California	33	5.01E+09	99381872	-3E+09	Colorado	33	1.42E+08	6891119	-3.7E+08
California	34	2.34E+09	3.49E+08	-2.2E+09	Colorado	34	1.06E+08	21411347	-2.6E+08
Connecticut	01	36986709	-2.2E+07	-1.6E+07	Delaware	01	13598432	-5496908	-2.8E+07
Connecticut	02	6.11E+08	-2.5E+08	-2.2E+08	Delaware	02	2.11E+08	-7.5E+07	-8.1E+08
Connecticut	03	58799934	-3.2E+07	-2.4E+07	Delaware	03	10802214	-1529465	-3.4E+07
Connecticut	04	2.48E+08	-9.1E+07	-2E+08	Delaware	04	35543521	-1.1E+07	-1E+08
Connecticut	05	1.3E+08	-8.2E+07	-5155921	Delaware	05	10848519	1904083	-4.5E+07
Connecticut	06	3.33E+08	-3.7E+07	-1.3E+08	Delaware	06	1.08E+08	-3.9E+07	-4.1E+08
Connecticut	07	1.14E+08	-7.2E+07	30190228	Delaware	07	33007295	-7278913	-9.4E+07
Connecticut	08	5.56E+08	-4.9E+07	-2.5E+08	Delaware	08	1.67E+08	-4.1E+07	-6.4E+08
Connecticut	09	4.05E+08	-1.9E+08	-4.5E+08	Delaware	09	43854411	2389708	-1.5E+08
Connecticut	10	3.08E+08	58855162	-8E+07	Delaware	10	1.04E+08	-9323317	-2.9E+08
Connecticut	11	2.55E+08	1.53E+08	-4E+07	Delaware	11	21404520	27013773	-1E+08
Connecticut	12	3.82E+08	36734122	-2.3E+08	Delaware	12	88844236	15628211	-3.2E+08
Connecticut	13	2.12E+08	1.9E+09	-1.9E+09	Delaware	13	52076376	1.27E+08	-1.9E+08
Connecticut	14	3.23E+08	-1.1E+08	-1.8E+08	Delaware	14	96062686	-1.3E+07	-3.6E+08

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Connecticut	15	88795421	-4E+07	-2.9E+07	Delaware	15	38306995	-7730608	-6E+07
Connecticut	16	87031644	-1.6E+08	-2.7E+07	Delaware	16	20143057	-1.6E+07	-8.6E+07
Connecticut	17	1.81E+08	-1.1E+08	-9.6E+07	Delaware	17	32790836	-1.8E+07	-1.2E+08
Connecticut	18	3.09E+08	-2.3E+08	-2.3E+08	Delaware	18	1.09E+08	-6.5E+07	-3.9E+08
Connecticut	19	40414540	-7335341	-2.8E+07	Delaware	19	13312166	-856265	-3.6E+07
Connecticut	20	28599714	-1.8E+07	-3020777	Delaware	20	5573073	-1012969	-1.6E+07
Connecticut	21	3.68E+08	-1.9E+08	-1.5E+08	Delaware	21	1.13E+08	-6.8E+07	-4.9E+08
Connecticut	22	4.46E+08	-1.2E+08	-3.6E+08	Delaware	22	99127790	-2.5E+07	-4.4E+08
Connecticut	23	6.16E+08	4.6E+08	-2.4E+08	Delaware	23	1.49E+08	72423598	-5E+08
Connecticut	24	1.49E+08	1.73E+08	-2E+08	Delaware	24	43280106	43170636	-1.6E+08
Connecticut	25	7.59E+08	-4.9E+08	-3.8E+08	Delaware	25	2.24E+08	-9.2E+07	-9.1E+08
Connecticut	26	4.24E+08	-1.9E+08	-3.1E+08	Delaware	26	1.13E+08	-1.1E+07	-4E+08
Connecticut	27	2.33E+08	-4E+07	-1.1E+08	Delaware	27	63975291	5331969	-2.3E+08
Connecticut	28	1.1E+09	1.18E+09	-1E+09	Delaware	28	1.47E+08	1.84E+08	-4.1E+08
Connecticut	29	69832591	4151821	-5E+07	Delaware	29	23404573	431413.1	-9.6E+07
Connecticut	30	51059296	-1.9E+07	-3.9E+07	Delaware	30	23571015	-2.2E+07	-2.7E+07
Connecticut	31	7.46E+08	4.13E+08	-4.8E+08	Delaware	31	1.86E+08	1.04E+08	-6.2E+08
Connecticut	32	2.86E+09	-5.3E+08	-1.2E+09	Delaware	32	55894609	16398003	-2E+08
Connecticut	33	3.59E+08	21728444	-8.5E+07	Delaware	33	79607699	2343479	-3E+08
Connecticut	34	2.35E+08	22686923	-1.2E+08	Delaware	34	60612374	14281031	-2E+08
D.C.	01	27757518	1.25E+08	-4.7E+08	Florida	01	22422451	-3.8E+07	33687733
D.C.	02	8085489	-2409230	4424844	Florida	02	4.48E+08	-1.4E+08	2.77E+08
D.C.	03	3385270	1092992	-2.4E+07	Florida	03	16972041	-1.5E+07	44825297
D.C.	04	2066669	-245543	-4556677	Florida	04	67336709	-3.9E+07	7389535
D.C.	05	1078180	271433.9	-2224101	Florida	05	35176025	-6943194	-2.1E+07
D.C.	06	4873523	-236584	321886.2	Florida	06	2.1E+08	-1.7E+07	1.33E+08
D.C.	07	680816.9	-383742	660009.5	Florida	07	43427590	-3E+07	49289407
D.C.	08	7854742	-112429	-311057	Florida	08	3.03E+08	29931142	2.97E+08
D.C.	09	8199425	678754.5	4587133	Florida	09	1.42E+08	-3E+07	65907024

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D.C.	10	10338679	1917540	-5763898	Florida	10	2.9E+08	67930842	1.35E+08
D.C.	11	1093785	1046110	3325823	Florida	11	86850404	17914636	56562666
D.C.	12	4734599	1175843	480215.8	Florida	12	1.71E+08	39290162	1.61E+08
D.C.	13	8995236	35623755	-6.1E+07	Florida	13	1.91E+08	1.15E+09	-5.6E+08
D.C.	14	3976913	-1131859	-3062329	Florida	14	2.06E+08	-6.7E+07	-2958748
D.C.	15	1254020	-612828	-100483	Florida	15	24083170	-2E+07	26105399
D.C.	16	1096732	-1623271	-463902	Florida	16	28974621	-5.4E+07	19076131
D.C.	17	1231818	-584885	527539.7	Florida	17	1.46E+08	-7.1E+07	76645665
D.C.	18	6952273	-4605638	1798440	Florida	18	1.94E+08	-1.4E+08	1.62E+08
D.C.	19	1913242	339427	-7294722	Florida	19	39170555	-2.4E+07	43514590
D.C.	20	492950.6	-62637	-2392315	Florida	20	18093122	-1.8E+07	8875637
D.C.	21	4943168	-2294201	-616729	Florida	21	2.18E+08	-1E+08	66771987
D.C.	22	5947340	-1728643	-1740763	Florida	22	1.95E+08	-4.8E+07	1.61E+08
D.C.	23	7114372	7765026	7830363	Florida	23	2.91E+08	3.8E+08	3.09E+08
D.C.	24	3525038	4662650	-2435056	Florida	24	6E+08	9611983	1.38E+08
D.C.	25	19286993	-9107939	-2.9E+07	Florida	25	5.04E+08	-3.3E+08	1.56E+08
D.C.	26	6129177	-2749304	2993892	Florida	26	2.33E+08	-1.2E+08	2.4E+08
D.C.	27	2193419	12837.24	-2169540	Florida	27	1.3E+08	-3.1E+07	1.06E+08
D.C.	28	4705169	7441410	5859442	Florida	28	3.61E+08	4.98E+08	2.92E+08
D.C.	29	1054817	338864.2	1901949	Florida	29	1.26E+08	-1253905	80282854
D.C.	30	1413266	-622640	867881	Florida	30	45288401	-2.2E+07	20440027
D.C.	31	10883684	7020843	4191956	Florida	31	4.16E+08	3.38E+08	4.04E+08
D.C.	32	5932693	-855159	33169537	Florida	32	4.62E+08	-3.4E+08	1.31E+09
D.C.	33	4078001	169331	3483950	Florida	33	1.83E+08	18233345	1.97E+08
D.C.	34	2565749	609204.1	-2184225	Florida	34	1.25E+08	11975275	1.06E+08
Georgia	01	43368908	-3.2E+07	40578572	Hawaii	01	121277.7	229958	-216653
Georgia	02	1.2E+09	-4E+08	-3.9E+08	Hawaii	02	2502678	-642912	227904.2
Georgia	03	51983545	-2.9E+07	-96538.7	Hawaii	03	217741.8	-158781	88717.07
Georgia	04	1.71E+08	-8.6E+07	-1.2E+07	Hawaii	04	232953.7	-42802.9	-85308.8

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Georgia	05	66265710	-1.5E+07	-2.5E+07	Hawaii	05	68025.72	52676.71	-296460
Georgia	06	6.27E+08	-5.2E+07	-2.4E+08	Hawaii	06	1406271	198134.6	-1389082
Georgia	07	2.1E+08	-1.1E+08	-6.1E+07	Hawaii	07	163650.9	-46667.1	107327.7
Georgia	08	9.4E+08	3363081	-3.1E+08	Hawaii	08	1354479	599601.4	2046205
Georgia	09	1.39E+08	-2.1E+07	-2.3E+07	Hawaii	09	1368004	68180.86	3669996
Georgia	10	5.29E+08	1.12E+08	-3.1E+08	Hawaii	10	3950756	928140.8	-2223174
Georgia	11	2.64E+08	1.19E+08	-1.2E+08	Hawaii	11	106257.1	153971.2	-91270.2
Georgia	12	5.31E+08	1.23E+08	-1.3E+08	Hawaii	12	735132.3	622545.4	1394618
Georgia	13	2.47E+08	1.16E+09	-1.5E+09	Hawaii	13	756788.3	5370366	-5512689
Georgia	14	6.01E+08	-1.8E+08	-2.3E+08	Hawaii	14	615078.2	57494.77	860658.2
Georgia	15	84894268	-4.8E+07	3962513	Hawaii	15	31855.08	43067.62	118737.7
Georgia	16	91535575	-1.7E+08	10024801	Hawaii	16	172665	-418997	-216410
Georgia	17	2.81E+08	-1.3E+08	-2.6E+07	Hawaii	17	42377.52	-6406.02	671706.8
Georgia	18	4.55E+08	-3.2E+08	-7.5E+07	Hawaii	18	1288765	-1049790	126865.2
Georgia	19	50656787	-4205276	24624154	Hawaii	19	86507.1	-8889.71	162683.7
Georgia	20	35329531	-2.1E+07	2119534	Hawaii	20	50251.69	-27767.4	109849.3
Georgia	21	7.02E+08	-3.4E+08	-2.3E+08	Hawaii	21	1043123	-616808	725499.5
Georgia	22	6.86E+08	-1.9E+08	-2.9E+08	Hawaii	22	747759.8	-46463.9	-78137
Georgia	23	9.29E+08	9.32E+08	-4.8E+08	Hawaii	23	745385.6	3028782	3860525
Georgia	24	1.76E+08	3.11E+08	-2.2E+08	Hawaii	24	6949551	25043670	27321118
Georgia	25	1.45E+09	-9.1E+08	-1.1E+07	Hawaii	25	1744881	-1400940	-3705990
Georgia	26	7.01E+08	-3.4E+08	-2E+08	Hawaii	26	470841.8	-267050	2658460
Georgia	27	3.96E+08	-6.2E+07	-1.6E+08	Hawaii	27	548509.2	4019.801	1523097
Georgia	28	1.06E+09	1.68E+09	-2.5E+08	Hawaii	28	568274.4	3217497	6421159
Georgia	29	1.42E+08	27069224	-6E+07	Hawaii	29	393700.1	901747.1	4457042
Georgia	30	3.73E+08	-1.6E+08	-3.3E+08	Hawaii	30	248665.1	44080.41	110113
Georgia	31	1.19E+09	7.58E+08	-5.5E+08	Hawaii	31	872867.5	2928993	5130377
Georgia	32	5.49E+08	-6.2E+07	-9.6E+07	Hawaii	32	-881269	5683675	29424874
Georgia	33	6.23E+08	30152644	-2.2E+08	Hawaii	33	661930.6	487089.3	1527354

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Georgia	34	3.77E+08	49403808	-1.2E+08	Hawaii	34	484568	271390.3	1217547
Idaho	01	566127.4	92399.67	-613147	Illinois	01	1.17E+08	-5.3E+07	-1.4E+07
Idaho	02	4271122	-1090563	-461821	Illinois	02	2.04E+09	-7.1E+08	7814311
Idaho	03	473571.2	-199572	-363577	Illinois	03	1.02E+08	-6.2E+07	-897396
Idaho	04	3037303	-4165537	5825345	Illinois	04	3.25E+08	-2.7E+08	71875761
Idaho	05	253617	21474.59	-356767	Illinois	05	2.25E+08	-1.4E+08	-4937085
Idaho	06	2056639	-265416	-241849	Illinois	06	1E+09	-1.8E+08	-1.1E+08
Idaho	07	1019548	-375851	-53553.1	Illinois	07	2.07E+08	-1.2E+08	71619638
Idaho	08	2964885	41130.48	-242775	Illinois	08	1.46E+09	49370777	3.15E+08
Idaho	09	3449640	-1096647	1187087	Illinois	09	3.98E+08	-8.5E+07	5.06E+08
Idaho	10	2296431	451628.1	-561061	Illinois	10	7.36E+08	1.65E+08	-3.2E+08
Idaho	11	485861.2	195214.1	-316531	Illinois	11	4.13E+08	84812329	1.91E+08
Idaho	12	2357611	347230.3	-653137	Illinois	12	8.23E+08	2.35E+08	4.32E+08
Idaho	13	16365307	13655935	-2.9E+07	Illinois	13	-6.8E+08	7.27E+09	3.85E+09
Idaho	14	1610808	-577259	394594.6	Illinois	14	1.1E+09	-4.2E+08	3.71E+08
Idaho	15	379105	30992.49	-327703	Illinois	15	1.35E+08	-6.9E+07	-4.1E+07
Idaho	16	691805	-1368318	565920.1	Illinois	16	1.87E+08	-3.6E+08	-2.2E+07
Idaho	17	1070937	-360287	1041576	Illinois	17	8.63E+08	-4.1E+08	3.59E+08
Idaho	18	3319321	-2186490	371621.9	Illinois	18	8.66E+08	-6.6E+08	-1.2E+08
Idaho	19	941553.7	-143506	-345904	Illinois	19	1.35E+08	-1.4E+07	-6.7E+07
Idaho	20	146087.3	-97990.7	144328.1	Illinois	20	87583779	-5.3E+07	-1.8E+07
Idaho	21	1813038	-628327	-63372.5	Illinois	21	1.13E+09	-5.8E+08	-1.7E+08
Idaho	22	1849185	-384996	-319224	Illinois	22	9.29E+08	-3.1E+08	-1E+08
Idaho	23	2974901	2472845	-1465996	Illinois	23	1.36E+09	1.56E+09	6.53E+08
Idaho	24	4427694	5308618	934753	Illinois	24	6.52E+08	1.12E+09	-1E+08
Idaho	25	5442900	-2429970	-2057471	Illinois	25	2.16E+09	-1.3E+09	-1.4E+07
Idaho	26	2166722	-1030803	187320.2	Illinois	26	9.7E+08	-4.9E+08	-2.9E+07
Idaho	27	1495922	-285180	-96327.7	Illinois	27	6.12E+08	-1.4E+08	96432.15
Idaho	28	1963643	1994402	-629691	Illinois	28	1.39E+09	2.55E+09	3.06E+09

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Idaho	29	1586035	212433.8	-108568	Illinois	29	2.66E+08	74804376	1.31E+08
Idaho	30	236327.1	-91145	-8710.15	Illinois	30	4.22E+08	-2.2E+08	-2E+08
Idaho	31	4391125	1897578	-1934877	Illinois	31	1.68E+09	7.81E+08	1.75E+08
Idaho	32	18276553	-1.3E+07	17041537	Illinois	32	3.71E+09	-3.3E+09	1.04E+10
Idaho	33	1656905	-5921.55	-63231	Illinois	33	8.77E+08	78250566	1.13E+08
Idaho	34	1319520	135231.3	-91954.9	Illinois	34	6.09E+08	51924014	-1858526
Indiana	01	448146.6	-817798	2088338	Iowa	01	10269434	-9208238	24828215
Indiana	02	61489356	-1.8E+07	27933883	Iowa	02	2.37E+08	-7.4E+07	54527511
Indiana	03	910276	-246715	-2362555	Iowa	03	20665792	-1.9E+07	23106385
Indiana	04	2924829	-2119600	1786063	Iowa	04	44079702	-3.1E+07	16152216
Indiana	05	914132.6	-352935	-350990	Iowa	05	10623186	-2879493	-6281920
Indiana	06	3.03E+08	-1.3E+07	81748078	Iowa	06	1.13E+08	-1.1E+07	19815968
Indiana	07	3319338	-1960340	2085102	Iowa	07	33223418	-2.2E+07	35812405
Indiana	08	24885788	610746.4	5948988	Iowa	08	1.61E+08	10632515	36500996
Indiana	09	17472646	-4213893	5360720	Iowa	09	38089097	-1.2E+07	-2.2E+07
Indiana	10	10954044	3264154	6883679	Iowa	10	1.99E+08	31565719	31507739
Indiana	11	1363435	305470.2	1669463	Iowa	11	27976778	8758022	8524081
Indiana	12	18459333	4014545	3288928	Iowa	12	1E+08	21226437	24974117
Indiana	13	79280684	1.11E+09	-8E+08	Iowa	13	10706922	1.34E+08	-1.1E+08
Indiana	14	11488701	-4305205	4670693	Iowa	14	1.02E+08	-3.4E+07	4508422
Indiana	15	1146993	-761129	985427	Iowa	15	11995944	-7388790	7926755
Indiana	16	1130492	-1788807	-30710.5	Iowa	16	15554666	-2.7E+07	4855619
Indiana	17	8146743	-3566236	7584383	Iowa	17	65897749	-3E+07	20789520
Indiana	18	13392233	-9258476	4038824	Iowa	18	1.01E+08	-7.1E+07	28760658
Indiana	19	675669	-114768	196316	Iowa	19	18020565	-5239506	26145933
Indiana	20	568918.2	-352519	67325.46	Iowa	20	11571370	-9058001	7135717
Indiana	21	12273869	-5644814	6137428	Iowa	21	1.19E+08	-5.1E+07	16573363
Indiana	22	30291449	-7168561	12868147	Iowa	22	1.03E+08	-2.5E+07	3131324
Indiana	23	16287969	16247832	3179325	Iowa	23	1.48E+08	1.78E+08	8146446

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Indiana	24	44432364	53135008	-5.7E+07	Iowa	24	1.01E+08	1.19E+08	-2.3E+08
Indiana	25	27817962	-1.7E+07	11084046	Iowa	25	2.71E+08	-1.8E+08	74569197
Indiana	26	11322086	-5224140	6667101	Iowa	26	1.08E+08	-5.8E+07	58702105
Indiana	27	6644647	-1725818	3528510	Iowa	27	67194557	-1.6E+07	12436870
Indiana	28	10029818	12539368	7748807	Iowa	28	1.54E+08	2.47E+08	71841980
Indiana	29	7498154	674923.6	2965274	Iowa	29	32161030	4051869	-2.2E+07
Indiana	30	2499501	-3078564	3423043	Iowa	30	1.65E+08	-7.7E+07	42762251
Indiana	31	21861301	11811963	3156774	Iowa	31	1.9E+08	1.54E+08	5519450
Indiana	32	37222496	-3.2E+07	98125831	Iowa	32	76546604	-3.3E+07	54966190
Indiana	33	2.1E+08	15322091	35690440	Iowa	33	89399697	3179632	12245450
Indiana	34	12856896	1538673	3320811	Iowa	34	72692853	5086386	16596727
Kansas	01	9399344	-5307043	15969619	Kentucky	01	1931015	542861.6	3887771
Kansas	02	2.37E+08	-8.6E+07	-8.3E+07	Kentucky	02	1E+08	-3.4E+07	-5.6E+07
Kansas	03	13939988	-7698416	-7963522	Kentucky	03	4975512	-2827729	-690954
Kansas	04	58397759	-1.3E+07	-8.2E+07	Kentucky	04	11622435	-8812518	3421809
Kansas	05	22103208	-5761661	-2.1E+07	Kentucky	05	4216508	609421	-5572898
Kansas	06	1.25E+08	-1.2E+07	-7.2E+07	Kentucky	06	46664182	-5594386	-3.6E+07
Kansas	07	28779813	-1.7E+07	-839441	Kentucky	07	11566954	-5889478	-5694736
Kansas	08	2.28E+08	-7056522	-1.3E+08	Kentucky	08	70589480	-2469447	-5.4E+07
Kansas	09	1.16E+08	-4.4E+07	27931375	Kentucky	09	15261204	-3210420	-6574660
Kansas	10	1.14E+08	21821167	48908632	Kentucky	10	64287959	12031647	-2.3E+07
Kansas	11	66693988	25620402	-9.4E+07	Kentucky	11	11365388	5790980	-1.1E+07
Kansas	12	1.24E+08	21588877	-1.1E+08	Kentucky	12	34371329	6856565	-2.6E+07
Kansas	13	1.89E+08	3.8E+09	-3.9E+09	Kentucky	13	23278291	1.72E+08	-1.8E+08
Kansas	14	1.21E+08	-3.8E+07	-1.3E+08	Kentucky	14	43512573	-1.3E+07	-2.7E+07
Kansas	15	1.9E+08	-2.2E+08	1.34E+08	Kentucky	15	2962434	-1587794	3997535
Kansas	16	22892840	-4E+07	339035.8	Kentucky	16	5399556	-9413455	-3062550
Kansas	17	63314825	-3E+07	-2.2E+07	Kentucky	17	20090689	-9684584	-8156843
Kansas	18	88213926	-6.1E+07	-4.9E+07	Kentucky	18	46854257	-3.3E+07	-2.5E+07

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Kansas	19	23677029	-2494567	-1.7E+07	Kentucky	19	3967863	-652711	1195700
Kansas	20	6512209	-3260204	-3226195	Kentucky	20	2876171	-1506023	-2606870
Kansas	21	1.22E+08	-6.4E+07	-7.4E+07	Kentucky	21	50868780	-2.6E+07	-2.9E+07
Kansas	22	1.23E+08	-3.9E+07	-5E+07	Kentucky	22	45759322	-1.4E+07	-2.2E+07
Kansas	23	2.25E+08	1.91E+08	-1.8E+08	Kentucky	23	62879471	54833682	-6.6E+07
Kansas	24	2.96E+08	3.76E+08	-2.3E+07	Kentucky	24	26189017	32904418	-2.5E+07
Kansas	25	2.36E+08	-1.4E+08	-1E+08	Kentucky	25	1.13E+08	-6.7E+07	-1.9E+07
Kansas	26	1.75E+08	-8.8E+07	-1.1E+08	Kentucky	26	43346327	-2E+07	-1.5E+07
Kansas	27	91152488	-1.6E+07	-7.1E+07	Kentucky	27	26896469	-4838330	-6940045
Kansas	28	2.77E+08	3.61E+08	-3.9E+08	Kentucky	28	49465770	66942281	-3.6E+07
Kansas	29	74532572	3818293	-8728320	Kentucky	29	11641494	2054675	-5130994
Kansas	30	10094264	-3851533	120612.9	Kentucky	30	6998143	-3040771	-802418
Kansas	31	2.73E+08	1.58E+08	-2E+08	Kentucky	31	76055334	44580933	-6.2E+07
Kansas	32	2.03E+08	-8.5E+07	65029646	Kentucky	32	41962999	-1.3E+07	56480731
Kansas	33	1.39E+08	-8271390	-8.6E+07	Kentucky	33	41549067	1739319	-1.7E+07
Kansas	34	84441327	8594781	-6.8E+07	Kentucky	34	24263867	2347056	-1.2E+07
Louisiana	01	513177	-43108.4	137365.9	Maine	01	642769.5	-151138	-3746678
Louisiana	02	18949739	-5810663	12982239	Maine	02	44384300	-2.9E+07	-1.5E+08
Louisiana	03	1424792	-838702	-316451	Maine	03	927721.3	135876	-3726556
Louisiana	04	1467193	-978808	846691.9	Maine	04	3898937	1108694	-2.4E+07
Louisiana	05	361606.9	-76179.8	-287020	Maine	05	1314238	652529.7	-7524119
Louisiana	06	8335549	-770014	6329161	Maine	06	22231700	-1.5E+07	-9.1E+07
Louisiana	07	1011677	-749261	2223205	Maine	07	4967133	-8158696	-3E+07
Louisiana	08	12273055	996068	9067702	Maine	08	27585165	-1.3E+07	-1.2E+08
Louisiana	09	1652040	-441222	11922674	Maine	09	12615772	1397120	-4.2E+07
Louisiana	10	6408626	2967949	7198809	Maine	10	16494159	-4326884	-3.7E+07
Louisiana	11	986305.8	762243.2	-896719	Maine	11	11461833	19973511	-1.1E+08
Louisiana	12	6431335	1487808	4044050	Maine	12	14190770	6819542	-6.4E+07
Louisiana	13	16395968	1.52E+08	-1.4E+08	Maine	13	6714978	64937793	-7.8E+07

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Louisiana	14	7646068	-3022484	6446249	Maine	14	17917310	-1877382	-8.7E+07
Louisiana	15	817880.5	-505778	940179.2	Maine	15	1175724	-353313	-3048486
Louisiana	16	1179056	-2259838	1473788	Maine	16	3578768	-3927478	-2.2E+07
Louisiana	17	4734182	-2145248	4107605	Maine	17	7204103	-5210473	-2.2E+07
Louisiana	18	8175130	-6223080	7660372	Maine	18	23720840	-1.9E+07	-6.4E+07
Louisiana	19	1996227	-314716	-194330	Maine	19	2241245	381301.4	-8477493
Louisiana	20	705394.8	-397962	-201074	Maine	20	1077479	-229343	-7789591
Louisiana	21	7622110	-3532009	8546300	Maine	21	20964177	-2.3E+07	-9.2E+07
Louisiana	22	6498071	-1931468	4410982	Maine	22	17942725	-8612116	-8.5E+07
Louisiana	23	11035102	12331184	3993298	Maine	23	25815713	12260385	-1.1E+08
Louisiana	24	3764892	8981045	13599407	Maine	24	17837998	31860477	-1.1E+08
Louisiana	25	17156170	-1.2E+07	10742355	Maine	25	44517910	-2.3E+07	-1.6E+08
Louisiana	26	9209638	-5291219	3911899	Maine	26	19455124	-2974965	-6.5E+07
Louisiana	27	3990185	-941458	3831149	Maine	27	9515909	857490.6	-4.3E+07
Louisiana	28	11675909	19405923	-6275183	Maine	28	15376791	35338318	-6.4E+07
Louisiana	29	2199399	1012545	6526879	Maine	29	6468629	508213	-1.8E+07
Louisiana	30	1223164	-381941	1328627	Maine	30	1398832	-1151524	-895596
Louisiana	31	16441694	11227868	-1366841	Maine	31	36234897	13602175	-1.1E+08
Louisiana	32	5234033	-1.1E+07	98505068	Maine	32	34994123	15880153	-1.3E+08
Louisiana	33	6529962	557253.1	2354214	Maine	33	13810030	-664927	-5.9E+07
Louisiana	34	4148333	532784.6	2308471	Maine	34	9361142	949178.5	-3.8E+07
Maryland	01	2.27E+08	-1.9E+07	-1.4E+08	Massachusetts	01	3.34E+08	-2.2E+08	3.42E+08
Maryland	02	1.55E+09	-4.6E+08	-1.6E+09	Massachusetts	02	1.05E+10	-3.5E+09	23161224
Maryland	03	71909633	-3.8E+07	-3.9E+07	Massachusetts	03	3.69E+08	-2.3E+08	65951292
Maryland	04	3.36E+08	-2.3E+08	-1.6E+08	Massachusetts	04	1.47E+09	-1E+09	3.24E+08
Maryland	05	1.55E+08	-1.6E+07	-7.1E+07	Massachusetts	05	5.78E+08	-2E+08	-2.9E+08
Maryland	06	9.06E+08	-4.7E+07	-7.1E+08	Massachusetts	06	5.86E+09	-6.5E+08	2.59E+08
Maryland	07	1.44E+08	-6.8E+07	-6177880	Massachusetts	07	1.63E+09	-9E+08	-5.1E+08
Maryland	08	1.52E+09	91983337	-7.5E+08	Massachusetts	08	7.67E+09	1.64E+08	7.78E+08

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Maryland	09	61760565	-1.7E+07	-1.4E+07	Massachusetts	09	7.18E+08	-2E+08	-1.1E+08
Maryland	10	7.86E+08	2.42E+08	-3.6E+08	Massachusetts	10	4.92E+09	1.08E+09	2.5E+08
Maryland	11	4.76E+08	98889734	-1.6E+08	Massachusetts	11	1.44E+09	2.24E+08	-8.2E+07
Maryland	12	1.48E+09	2.64E+08	-1.1E+09	Massachusetts	12	4.4E+09	8.96E+08	4.54E+08
Maryland	13	1.18E+08	7.61E+08	-8.4E+08	Massachusetts	13	4.77E+09	4.42E+10	-4.4E+10
Maryland	14	1.03E+09	-3.2E+08	-7.4E+08	Massachusetts	14	4.79E+09	-1.7E+09	-4.1E+07
Maryland	15	36772904	-1.6E+07	-6916310	Massachusetts	15	3.23E+08	-2E+08	48286542
Maryland	16	1.28E+08	-2.2E+08	-2.4E+08	Massachusetts	16	6.7E+08	-1.2E+09	1.28E+08
Maryland	17	5.68E+08	-3.7E+08	-2.4E+08	Massachusetts	17	2.54E+09	-1.2E+09	1.77E+08
Maryland	18	7.51E+08	-5E+08	-9.9E+08	Massachusetts	18	4.73E+09	-3.4E+09	1.49E+08
Maryland	19	1.64E+08	-2.5E+07	-1.5E+08	Massachusetts	19	4E+08	-7E+07	70548776
Maryland	20	41300269	-2.2E+07	-3.5E+07	Massachusetts	20	2.09E+08	-1.3E+08	11550989
Maryland	21	8.27E+08	-3.6E+08	-7.2E+08	Massachusetts	21	5.25E+09	-2.5E+09	1.39E+08
Maryland	22	8.36E+08	-1.9E+08	-4.6E+08	Massachusetts	22	4.93E+09	-1.5E+09	7.95E+08
Maryland	23	1.8E+09	1.95E+09	-4.8E+08	Massachusetts	23	7.48E+09	7.63E+09	1.2E+08
Maryland	24	59192992	90715243	-4.2E+07	Massachusetts	24	5.91E+08	7.73E+08	-7.9E+08
Maryland	25	1.51E+09	-9E+08	-1.8E+09	Massachusetts	25	1.19E+10	-7.4E+09	-2.9E+08
Maryland	26	1.06E+09	-4E+08	-1.4E+09	Massachusetts	26	5.24E+09	-2.7E+09	7.61E+08
Maryland	27	6.57E+08	-9.2E+07	-7.1E+08	Massachusetts	27	3.59E+09	-7.9E+08	1.63E+08
Maryland	28	2.85E+09	4.27E+09	-1.8E+09	Massachusetts	28	9.28E+09	1.31E+10	-7.2E+07
Maryland	29	1.49E+08	24987252	-2.4E+08	Massachusetts	29	9.6E+08	1.37E+08	-3.9E+08
Maryland	30	4.28E+08	-2E+08	-4.7E+08	Massachusetts	30	1.45E+09	-6.6E+08	78846496
Maryland	31	2.08E+09	1.24E+09	-7.4E+08	Massachusetts	31	9.58E+09	5.5E+09	-1.4E+08
Maryland	32	4.59E+08	-1E+08	-3.7E+08	Massachusetts	32	3.56E+09	-9E+08	-1E+09
Maryland	33	8.77E+08	96255223	-7.6E+08	Massachusetts	33	4.36E+09	99759920	3.19E+08
Maryland	34	5.89E+08	72141533	-4.3E+08	Massachusetts	34	2.91E+09	2.36E+08	1.42E+08
Michigan	01	2160197	112709.7	14282.62	Minnesota	01	27932760	-1.3E+07	-2.5E+07
Michigan	02	1.47E+08	-5E+07	-5.6E+07	Minnesota	02	8.86E+08	-3.2E+08	-3.3E+08
Michigan	03	7702991	-4036244	-2316471	Minnesota	03	25559505	-1.2E+07	-1.4E+07

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Michigan	04	12832073	-5541974	-5944980	Minnesota	04	1.05E+08	-5.6E+07	-3E+07
Michigan	05	6057618	-1401466	-6182405	Minnesota	05	50098297	-3.3E+07	16205177
Michigan	06	65324266	-6194023	-3.6E+07	Minnesota	06	4.73E+08	-8.7E+07	-1.7E+08
Michigan	07	12244942	-5903517	-6849392	Minnesota	07	78541400	-4.3E+07	-1.8E+07
Michigan	08	93372652	-1993201	-4E+07	Minnesota	08	7.01E+08	-7.7E+07	-2.5E+08
Michigan	09	49978326	-1E+07	15485446	Minnesota	09	2.07E+08	-8.4E+07	72944891
Michigan	10	90443075	15211134	-3.9E+07	Minnesota	10	4.06E+08	-8088373	-2.1E+07
Michigan	11	9160514	5991510	-1E+07	Minnesota	11	1.45E+08	13567579	-6.2E+07
Michigan	12	57598971	10742678	-2.9E+07	Minnesota	12	4.06E+08	42311003	-2E+08
Michigan	13	1.53E+08	-1.2E+09	1.07E+09	Minnesota	13	1.38E+08	1.12E+09	-1.2E+09
Michigan	14	1.2E+08	-3.9E+07	-2.1E+07	Minnesota	14	4.28E+08	-1.6E+08	-2.1E+08
Michigan	15	3771306	8041365	-1.1E+07	Minnesota	15	35593509	-2E+07	-2.7E+07
Michigan	16	8309685	-1.6E+07	-3783197	Minnesota	16	59404236	-1E+08	-8930725
Michigan	17	82518529	-4.9E+07	-3.8E+08	Minnesota	17	2.9E+08	-1.5E+08	-3.9E+07
Michigan	18	76222305	-5.4E+07	-2.1E+07	Minnesota	18	3.93E+08	-2.8E+08	-1.4E+08
Michigan	19	5764818	-646122	-1955758	Minnesota	19	53018854	-9430077	-1.5E+07
Michigan	20	4274045	-2135515	-3525380	Minnesota	20	25875213	-1.6E+07	-4322724
Michigan	21	68793274	-3.3E+07	-3.1E+07	Minnesota	21	4.93E+08	-2.5E+08	-1.4E+08
Michigan	22	59464634	-1.7E+07	-3.4E+07	Minnesota	22	4.48E+08	-1.5E+08	-1.3E+08
Michigan	23	91018914	82400121	-6.8E+07	Minnesota	23	6.38E+08	4.66E+08	-2.3E+08
Michigan	24	84781376	1.19E+08	-2E+07	Minnesota	24	2.54E+08	1.64E+08	86131686
Michigan	25	1.86E+08	-1.1E+08	-5.6E+07	Minnesota	25	7.25E+08	-4.5E+08	-3.2E+08
Michigan	26	73496539	-3.7E+07	-1.1E+07	Minnesota	26	4.58E+08	-2.1E+08	-1.9E+08
Michigan	27	41081632	-6535082	-1.9E+07	Minnesota	27	2.76E+08	-5.2E+07	-1.3E+08
Michigan	28	86649638	1.28E+08	-7.1E+07	Minnesota	28	8.01E+08	9.58E+08	-5.8E+08
Michigan	29	24211693	4341207	2386853	Minnesota	29	1.48E+08	-4995322	7441422
Michigan	30	8951759	-2728018	-4528850	Minnesota	30	1.07E+08	-6.4E+07	-9190455
Michigan	31	1.25E+08	72869001	-8.2E+07	Minnesota	31	8E+08	3.78E+08	-3E+08
Michigan	32	2.68E+08	-6.2E+07	-8.4E+07	Minnesota	32	1.74E+09	-5.1E+08	-1.3E+09

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Michigan	33	49528940	2656954	-1.6E+07	Minnesota	33	3.94E+08	-1.7E+07	-1.1E+08
Michigan	34	36743135	4356905	-1.9E+07	Minnesota	34	2.71E+08	12143756	-1.1E+08
Mississippi	01	177492.7	571809	-1237083	Missouri	01	13751471	-1.3E+07	14473101
Mississippi	02	2310262	-950342	-1716723	Missouri	02	4.71E+08	-1.5E+08	-1.3E+08
Mississippi	03	120963.2	-34277.4	-169075	Missouri	03	18654183	-1.1E+07	-1.4E+07
Mississippi	04	306581.9	-114478	-396636	Missouri	04	64767736	-3.6E+07	-2.1E+07
Mississippi	05	163589	76725.86	-306126	Missouri	05	27365340	-5710303	-2.3E+07
Mississippi	06	1118682	-270553	-973088	Missouri	06	2.24E+08	-2.2E+07	-3.6E+07
Mississippi	07	403555.9	-244552	-324781	Missouri	07	34387661	-1.8E+07	-6616056
Mississippi	08	1402118	-205872	-1402193	Missouri	08	3.11E+08	8123528	-4.5E+07
Mississippi	09	924217.1	-34222.7	-226074	Missouri	09	3.14E+08	-8.3E+07	59431194
Mississippi	10	439398	-21715.5	-247332	Missouri	10	1.98E+08	39546753	-1.1E+08
Mississippi	11	568046.6	-38485.6	-691222	Missouri	11	68499000	32770320	-4.4E+07
Mississippi	12	1617340	102432.9	-2365729	Missouri	12	1.98E+08	46240459	-5989691
Mississippi	13	281154.2	4345111	-4348470	Missouri	13	-3.7E+10	-1.2E+11	1.56E+11
Mississippi	14	1407268	-521804	-1142411	Missouri	14	1.77E+08	-5.6E+07	-8.5E+07
Mississippi	15	179613.5	-136376	1728.448	Missouri	15	21769124	-1.7E+07	30936760
Mississippi	16	478919.5	-705971	-405464	Missouri	16	34440945	-5.5E+07	8763647
Mississippi	17	879180.6	-476218	-1254616	Missouri	17	1.27E+08	-6.1E+07	-4418882
Mississippi	18	888559.4	-604699	-355976	Missouri	18	2.24E+08	-1.6E+08	-1.7E+07
Mississippi	19	468159.6	-81199.2	-481029	Missouri	19	26291659	-4098529	-1018232
Mississippi	20	587415.9	-281321	-389388	Missouri	20	15206626	-9425159	1728240
Mississippi	21	1449220	-762717	-1775256	Missouri	21	2.14E+08	-1E+08	-2.4E+07
Mississippi	22	726678.2	-273331	-674127	Missouri	22	2.01E+08	-5.5E+07	-4.3E+07
Mississippi	23	1558857	755916.3	-2299978	Missouri	23	2.94E+08	3.17E+08	-3.3E+07
Mississippi	24	1700177	1218344	8027331	Missouri	24	5.59E+08	8.26E+08	-4.9E+08
Mississippi	25	2536359	-1372305	-1651594	Missouri	25	4.57E+08	-2.8E+08	70931227
Mississippi	26	1997656	-1002399	-2159486	Missouri	26	2.81E+08	-1.4E+08	-6.7E+07
Mississippi	27	1170228	-216070	-1353823	Missouri	27	1.61E+08	-3.5E+07	3926945

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Mississippi	28	3075429	2560364	-5988405	Missouri	28	3.91E+08	6.03E+08	-3.2E+07
Mississippi	29	489020.6	46621.08	521875.2	Missouri	29	1.41E+08	40890196	-1.1E+07
Mississippi	30	202603.4	-99326.8	-124047	Missouri	30	59119475	-2.7E+07	-2.1E+07
Mississippi	31	2608997	655619.1	-3501583	Missouri	31	4.51E+08	2.75E+08	-1.1E+08
Mississippi	32	2569737	-909601	-1889560	Missouri	32	3.81E+08	-1.2E+08	2.15E+08
Mississippi	33	1006867	-79166.8	-1030643	Missouri	33	1.69E+08	8529641	-2.1E+07
Mississippi	34	1103716	34512.38	-1328967	Missouri	34	1.43E+08	15649885	-1.8E+07
Montana	01	183075.4	-59376.7	205845.5	Nebraska	01	11819391	-1.4E+07	20703095
Montana	02	10550860	-4653576	24094923	Nebraska	02	6.32E+08	-2E+08	1.6E+09
Montana	03	470183.2	-205986	-375700	Nebraska	03	14721894	-1.1E+07	20541848
Montana	04	886894	-591536	1426877	Nebraska	04	35508577	-3.5E+07	41165522
Montana	05	216517.5	207887.2	-121668	Nebraska	05	8623190	-3536683	2534945
Montana	06	5130591	-982872	10198587	Nebraska	06	2.07E+08	3156983	2.55E+08
Montana	07	1050154	-387036	614218.8	Nebraska	07	39818672	-2.1E+07	25647945
Montana	08	7340320	-916320	14567265	Nebraska	08	5.21E+08	1376115	-1.6E+08
Montana	09	1471214	472854.2	5329053	Nebraska	09	55105472	-1.4E+07	-4.7E+07
Montana	10	7400383	1183116	12602712	Nebraska	10	1.31E+08	48038670	-6755946
Montana	11	963500.5	1303652	-521850	Nebraska	11	13415456	5594898	-2298112
Montana	12	3418853	478270.9	5697314	Nebraska	12	1.52E+08	56733676	3.11E+08
Montana	13	1852045	11824009	19194171	Nebraska	13	7.35E+08	1.7E+09	-1.5E+09
Montana	14	3798576	-1098361	5130364	Nebraska	14	43873435	-6950716	-3.9E+07
Montana	15	818579.9	-447213	147144.4	Nebraska	15	9335200	-3655508	-1251782
Montana	16	789659.3	-1427175	688034.9	Nebraska	16	31609867	-5.4E+07	-1.7E+07
Montana	17	1594640	-962783	8414476	Nebraska	17	22153865	-6914755	18762402
Montana	18	7036239	-5214708	7615356	Nebraska	18	4.25E+08	-3.1E+08	-1.2E+07
Montana	19	577021.8	-89128.2	199845.5	Nebraska	19	6752460	-925895	-702424
Montana	20	274629.6	-125739	-17178.3	Nebraska	20	2922350	-2110810	2696228
Montana	21	5453270	-2463375	9224002	Nebraska	21	3.04E+08	-1.4E+08	4.23E+08
Montana	22	5914777	-1551331	10617931	Nebraska	22	6.5E+08	-2E+08	2.68E+08

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Montana	23	7018096	6254909	12593767	Nebraska	23	1.75E+08	2.38E+08	1.31E+08
Montana	24	2549411	9259253	36510877	Nebraska	24	1.23E+08	1.18E+08	-1.7E+08
Montana	25	9891193	-5596682	11207364	Nebraska	25	7.52E+09	-4.8E+09	3.7E+09
Montana	26	5536652	-3233395	10535703	Nebraska	26	89319618	-1.2E+08	1.75E+09
Montana	27	2610261	-280899	4301301	Nebraska	27	1.11E+08	-5.5E+07	6.95E+08
Montana	28	3330602	4539998	10073479	Nebraska	28	76102886	2.43E+08	1.25E+09
Montana	29	1841229	508247.3	16159951	Nebraska	29	54175792	17798823	21383879
Montana	30	265408.8	-65981.5	934213.8	Nebraska	30	1382621	-425803	3925230
Montana	31	10563647	5888054	16270505	Nebraska	31	83794149	1.99E+08	1.2E+09
Montana	32	2973382	-16458.2	14467611	Nebraska	32	1.98E+08	-2.9E+08	1.84E+09
Montana	33	4099722	302193.1	7707052	Nebraska	33	2.03E+08	14535900	2.54E+08
Montana	34	2179519	421054.4	3777077	Nebraska	34	80527781	-1.7E+07	8.53E+08
Nevada	01	176347.4	-147858	-59940.1	New Hampshire	01	273658.7	-132805	-1176.03
Nevada	02	6108131	-2623386	-3886023	New Hampshire	02	19223334	-6758510	2784370
Nevada	03	342129.7	-16795.7	-1402073	New Hampshire	03	1475828	-970432	-679676
Nevada	04	649125.4	382084	-3606768	New Hampshire	04	2088256	-1162809	-803066
Nevada	05	364547.2	-201672	-759179	New Hampshire	05	2212359	473051.1	-3018834
Nevada	06	1728690	-71587.8	-2800012	New Hampshire	06	8158778	-1098723	82252.62
Nevada	07	361676	-120901	-444228	New Hampshire	07	2224858	-1389405	782336.4
Nevada	08	4369289	-217094	-6589099	New Hampshire	08	12381565	-807063	-2048606
Nevada	09	3118877	-1028579	1583352	New Hampshire	09	3402424	-2149006	18950206
Nevada	10	1168126	356913.5	623868.3	New Hampshire	10	11486125	98699.85	-2264359
Nevada	11	318777.4	446379.8	-1200691	New Hampshire	11	1493674	768415.7	-2493075
Nevada	12	1369249	373079.2	-3348530	New Hampshire	12	6743926	725933.3	-2183787
Nevada	13	3357452	28812079	-2.9E+07	New Hampshire	13	2432407	30462344	-3.1E+07
Nevada	14	1695409	-428235	-2615293	New Hampshire	14	6908887	-2347902	-2154621
Nevada	15	163372.6	54513.26	-539370	New Hampshire	15	849052.4	-327579	-346830
Nevada	16	237323.2	-441640	-612954	New Hampshire	16	1442176	-2365467	-322285
Nevada	17	1143465	-691621	-1342023	New Hampshire	17	6595428	-3139460	-706146

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Nevada	18	2049232	-1571696	-5701647	New Hampshire	18	9140887	-6692307	3220507
Nevada	19	275675.7	-59015.9	-690033	New Hampshire	19	830799.5	-168630	-469045
Nevada	20	114707	-55902.4	-136391	New Hampshire	20	549876.6	-376992	-278174
Nevada	21	1365447	-844058	-1129413	New Hampshire	21	7961151	-3873394	-293856
Nevada	22	1558925	-343577	-4338919	New Hampshire	22	7872661	-2464693	-3182659
Nevada	23	2754046	2665712	-4117093	New Hampshire	23	12982374	9717534	-7058523
Nevada	24	1734343	2413419	-937215	New Hampshire	24	4198620	10553566	25033237
Nevada	25	4248404	-2779146	-1016334	New Hampshire	25	16445399	-9858414	-3030239
Nevada	26	3274880	-1966377	-4842742	New Hampshire	26	10121924	-5386111	-680418
Nevada	27	1103048	121708.6	-3321251	New Hampshire	27	4501354	-1035019	-794150
Nevada	28	2438641	5266609	-5814784	New Hampshire	28	11272390	14005852	-9841582
Nevada	29	907241.9	146703.7	345724.9	New Hampshire	29	3312762	560922.1	1731786
Nevada	30	405395.7	-203002	-918835	New Hampshire	30	1513830	-604537	-108953
Nevada	31	5410745	5115508	-1.3E+07	New Hampshire	31	18737475	9121286	-1E+07
Nevada	32	21980596	-4488336	21151354	New Hampshire	32	5240179	-5465191	44529838
Nevada	33	3029516	766007.2	-9629690	New Hampshire	33	6553580	-349973	283783.9
Nevada	34	1020662	243890.9	-2368752	New Hampshire	34	4610261	20566.44	-806654
New Jersey	01	35160319	-1.9E+07	1751922	New Mexico	01	1715403	1037761	-4392909
New Jersey	02	7.22E+08	-2.1E+08	-5.3E+08	New Mexico	02	47613815	-1.6E+07	-3.7E+07
New Jersey	03	34835809	-2E+07	-7370316	New Mexico	03	5671325	3560346	-3.7E+07
New Jersey	04	1.2E+08	-6.1E+07	-9.9E+07	New Mexico	04	12623194	-6461033	-6414908
New Jersey	05	64419418	-2.9E+07	-4.5E+07	New Mexico	05	1578532	620317.4	1795985
New Jersey	06	3.5E+08	-6.3E+07	-2.5E+08	New Mexico	06	26426353	-2768518	-2.5E+07
New Jersey	07	62978073	-2.5E+07	-5.2E+07	New Mexico	07	8019997	-4542915	-4440032
New Jersey	08	4.98E+08	-3.3E+07	-3.2E+08	New Mexico	08	50506935	-2552182	-4.8E+07
New Jersey	09	1.5E+08	-7E+07	-1.3E+08	New Mexico	09	437148.3	117669.7	2677460
New Jersey	10	3.09E+08	49219525	-2.6E+08	New Mexico	10	19579700	1514094	-1.8E+07
New Jersey	11	1.55E+08	55205009	61713263	New Mexico	11	31111969	34997087	-1.4E+08
New Jersey	12	2.78E+08	46518421	-2E+08	New Mexico	12	21374512	3520531	-2.1E+07

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New Jersey	13	1.23E+08	1.24E+09	-1E+09	New Mexico	13	1186536	9265527	-1.2E+07
New Jersey	14	3.29E+08	-1E+08	-2.6E+08	New Mexico	14	16839320	-4780722	-1.5E+07
New Jersey	15	29577747	-1.4E+07	-2351616	New Mexico	15	5726034	-4610117	5092336
New Jersey	16	62822265	-9.9E+07	-4.5E+07	New Mexico	16	4768434	-6530390	-5238990
New Jersey	17	1.83E+08	-8.3E+07	-1.1E+08	New Mexico	17	20278877	-8324075	-792392
New Jersey	18	3.04E+08	-2.1E+08	-2E+08	New Mexico	18	15415639	-1.1E+07	-3.1E+07
New Jersey	19	37897917	-6239811	-3.3E+07	New Mexico	19	1660737	-225748	-1896719
New Jersey	20	29757681	-1.6E+07	-2.2E+07	New Mexico	20	1267659	-669011	-1034603
New Jersey	21	3.82E+08	-2E+08	-2.9E+08	New Mexico	21	38009796	-1.7E+07	-1.7E+07
New Jersey	22	3.41E+08	-9.8E+07	-2.5E+08	New Mexico	22	32300437	-7776912	-6.1E+07
New Jersey	23	4.53E+08	3.74E+08	-3.2E+08	New Mexico	23	37796385	29206111	-6.9E+07
New Jersey	24	1.57E+08	1.68E+08	-2E+08	New Mexico	24	305543.1	335422.2	7017502
New Jersey	25	7.45E+08	-3.6E+08	-6.7E+08	New Mexico	25	28973905	-1.7E+07	-2.5E+07
New Jersey	26	3.52E+08	-1.2E+08	-2.6E+08	New Mexico	26	26029742	-9306938	-2.7E+07
New Jersey	27	2.07E+08	-2.6E+07	-1.7E+08	New Mexico	27	18359589	-2977702	-9755821
New Jersey	28	5.15E+08	6.7E+08	-3E+08	New Mexico	28	35378044	49040554	-4.1E+07
New Jersey	29	81953237	9957135	-8.3E+07	New Mexico	29	6579326	821533.3	-6971029
New Jersey	30	1.12E+08	-6E+07	-6.6E+07	New Mexico	30	5721282	-1391676	-4736792
New Jersey	31	5.88E+08	3.12E+08	-4E+08	New Mexico	31	40344117	20656757	-5.5E+07
New Jersey	32	6.5E+08	-1.2E+08	-1.1E+09	New Mexico	32	8077895	475617.2	-7506811
New Jersey	33	2.77E+08	3888256	-2.1E+08	New Mexico	33	19148737	530053.5	-2.8E+07
New Jersey	34	2.01E+08	32885971	-1.7E+08	New Mexico	34	13274163	1532167	-7995730
New York	01	7.69E+08	-6.6E+08	6.1E+08	N. Carolina	01	19983169	-513657	15995113
New York	02	9.82E+09	-5.7E+09	1.13E+10	N. Carolina	02	7.1E+08	-3.2E+08	8.64E+08
New York	03	6.66E+08	-5.5E+08	4.6E+08	N. Carolina	03	18386092	-6652221	6525549
New York	04	2.39E+09	-1.8E+09	8.26E+08	N. Carolina	04	64210048	-5.7E+07	72389638
New York	05	1.77E+09	-1.2E+09	8.7E+08	N. Carolina	05	72056633	-8.3E+07	1.3E+08
New York	06	5.08E+09	-1.4E+09	5.4E+09	N. Carolina	06	3.31E+08	-5.6E+07	4E+08
New York	07	1E+09	-7.2E+08	8.49E+08	N. Carolina	07	99977387	-1E+08	66333060

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New York	08	7.57E+09	-9.1E+08	8.94E+09	N. Carolina	08	5.35E+08	14216272	6.43E+08
New York	09	2.74E+09	-1E+09	7.22E+08	N. Carolina	09	1.53E+08	-2.1E+08	8.92E+08
New York	10	5.4E+09	33127500	6.29E+09	N. Carolina	10	2.78E+08	1.18E+08	2.68E+08
New York	11	2.78E+09	2.31E+08	1.65E+09	N. Carolina	11	31530153	-3.5E+07	2.57E+08
New York	12	4.73E+09	8.69E+08	4.47E+09	N. Carolina	12	2.16E+08	82810233	2.86E+08
New York	13	5.41E+09	3.99E+10	-4.5E+10	N. Carolina	13	1.27E+08	1.87E+09	-1.7E+09
New York	14	5.61E+09	-3E+09	6.05E+09	N. Carolina	14	3.15E+08	-1.8E+08	3.87E+08
New York	15	1.18E+09	-7.5E+08	1.57E+08	N. Carolina	15	21895507	-4.6E+07	303336
New York	16	9.46E+08	-1.9E+09	6.11E+08	N. Carolina	16	33855353	-9.9E+07	41136851
New York	17	4.53E+09	-3.2E+09	2.95E+09	N. Carolina	17	1.92E+08	-1.2E+08	2.77E+08
New York	18	4.41E+09	-4.1E+09	4.52E+09	N. Carolina	18	2.68E+08	-2.6E+08	3.45E+08
New York	19	5.78E+08	-1.1E+08	4.45E+08	N. Carolina	19	16896131	306802.7	25809328
New York	20	3.26E+08	-2.8E+08	2.89E+08	N. Carolina	20	12799463	-9371830	13464456
New York	21	5.31E+09	-3.8E+09	5.48E+09	N. Carolina	21	3.5E+08	-1.9E+08	4.27E+08
New York	22	5.5E+09	-2.7E+09	5.28E+09	N. Carolina	22	2.97E+08	-1.1E+08	4.05E+08
New York	23	7.91E+09	7.5E+09	8.76E+09	N. Carolina	23	4.08E+08	5.36E+08	5.43E+08
New York	24	2.04E+09	2.25E+09	4.59E+08	N. Carolina	24	-4.8E+07	7.46E+08	2.47E+09
New York	25	1.09E+10	-9.3E+09	1.14E+10	N. Carolina	25	6.94E+08	-3.6E+08	5.96E+08
New York	26	5.57E+09	-3.5E+09	5E+09	N. Carolina	26	2.62E+08	-1.3E+08	2.73E+08
New York	27	3.31E+09	-1.1E+09	2.98E+09	N. Carolina	27	1.59E+08	-3.7E+07	2.81E+08
New York	28	1.04E+10	1.52E+10	8.16E+09	N. Carolina	28	3.12E+08	5.62E+08	7.71E+08
New York	29	1.21E+09	1.54E+08	8.47E+08	N. Carolina	29	1.47E+08	96943456	8.69E+08
New York	30	2.1E+09	-1.6E+09	1.29E+09	N. Carolina	30	52621736	-8815510	60254656
New York	31	9.85E+09	4.31E+09	1.01E+10	N. Carolina	31	4.46E+08	2.8E+08	6.5E+08
New York	32	3.63E+10	-1.6E+10	-7.3E+09	N. Carolina	32	2.55E+09	-1.5E+09	-2.7E+09
New York	33	4.46E+09	-1.9E+08	4.44E+09	N. Carolina	33	2.45E+08	35299573	3.48E+08
New York	34	3.27E+09	-1.6E+08	2.83E+09	N. Carolina	34	1.52E+08	8970382	2.54E+08
N. Dakota	01	639028.8	-293012	-412307	Ohio	01	15209064	-4198367	8188331
N. Dakota	02	6156603	-1600131	-1373420	Ohio	02	6.57E+08	-2.2E+08	-3E+08

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N. Dakota	03	245487.8	-130695	-134747	Ohio	03	19767708	-1.2E+07	-5744261
N. Dakota	04	668897.9	-261063	-339777	Ohio	04	62580442	-3.9E+07	-1312754
N. Dakota	05	167328.7	19056.41	-287372	Ohio	05	23527944	-3097149	-2.3E+07
N. Dakota	06	2547959	-484860	-444305	Ohio	06	3E+08	-3.6E+07	-1.4E+08
N. Dakota	07	1254761	-732378	-95717.6	Ohio	07	46540234	-2.4E+07	-1.4E+07
N. Dakota	08	3672777	-196223	-963246	Ohio	08	4.39E+08	-1.7E+07	-1.8E+08
N. Dakota	09	3147258	-398273	-3697124	Ohio	09	2.31E+08	-6.8E+07	-5.8E+07
N. Dakota	10	1836329	394338.6	368875.3	Ohio	10	3.08E+08	69448158	8132000
N. Dakota	11	385753.3	267583.3	-863036	Ohio	11	35172551	24532620	-3.9E+07
N. Dakota	12	1584096	185631.6	-354490	Ohio	12	2.22E+08	43930130	-9.4E+07
N. Dakota	13	82625.42	607320.1	-598370	Ohio	13	4.97E+08	6.76E+09	-2.4E+09
N. Dakota	14	2642843	-803104	-1754629	Ohio	14	2.71E+08	-8.5E+07	-1.1E+08
N. Dakota	15	1196430	-989495	-308548	Ohio	15	23173849	-1.2E+07	-2.1E+07
N. Dakota	16	1010475	-1928787	-132353	Ohio	16	31152171	-5.7E+07	1741983
N. Dakota	17	2752679	-921483	-1661989	Ohio	17	2.42E+08	-1.1E+08	-1.2E+08
N. Dakota	18	1961902	-1213246	-250046	Ohio	18	2.83E+08	-1.9E+08	-6.5E+07
N. Dakota	19	98166.53	-12773	-42312.1	Ohio	19	25053650	-2524155	-6905029
N. Dakota	20	131346.1	-51806.4	-198629	Ohio	20	15707746	-9027727	282948.3
N. Dakota	21	2382819	-903648	95285.19	Ohio	21	3.16E+08	-1.5E+08	-1E+08
N. Dakota	22	1998752	-508955	-373073	Ohio	22	2.8E+08	-8.3E+07	-1.1E+08
N. Dakota	23	2657065	2049659	-537185	Ohio	23	3.99E+08	3.56E+08	-2.3E+08
N. Dakota	24	9063817	8808280	-1.1E+07	Ohio	24	2.52E+08	3.58E+08	-1.2E+08
N. Dakota	25	5611054	-2159930	-1036589	Ohio	25	6.47E+08	-3.6E+08	-3.6E+08
N. Dakota	26	2501619	-838437	-1304138	Ohio	26	2.93E+08	-1.3E+08	-1E+08
N. Dakota	27	1270016	-193554	-362729	Ohio	27	1.66E+08	-2.8E+07	-4.8E+07
N. Dakota	28	2105185	2020558	-191905	Ohio	28	3.52E+08	4.95E+08	-1.1E+08
N. Dakota	29	2969723	149085.5	-2565770	Ohio	29	1.16E+08	15033255	-4.2E+07
N. Dakota	30	332203.4	-159968	26159.61	Ohio	30	75764328	-3040554	-4.9E+07
N. Dakota	31	3346024	1184567	479592.4	Ohio	31	5.25E+08	2.89E+08	-2.7E+08

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N. Dakota	32	12380570	-4340753	31397899	Ohio	32	3.63E+08	-9.7E+07	-1.4E+07
N. Dakota	33	1107807	68879.61	-39726.4	Ohio	33	2.27E+08	15031917	-8.4E+07
N. Dakota	34	1250342	164118.5	-611601	Ohio	34	1.55E+08	17796271	-6.3E+07
Oklahoma	01	222597.8	-316418	455427.6	Oregon	01	1270780	-610802	1034499
Oklahoma	02	13457094	-4325072	2399340	Oregon	02	93777018	-3.5E+07	43893510
Oklahoma	03	329933.5	-310115	828611.8	Oregon	03	2572303	-1718506	538150.2
Oklahoma	04	734261.4	-719972	2251434	Oregon	04	5952672	-4425364	3839077
Oklahoma	05	-97977.5	-817282	2246025	Oregon	05	3262398	-202840	-3469034
Oklahoma	06	4884505	-732607	877281.8	Oregon	06	48172127	-4736530	10304744
Oklahoma	07	860385.8	-515646	736846	Oregon	07	7613331	-5254567	6083246
Oklahoma	08	5818246	108147.9	3701046	Oregon	08	68504380	-304315	16758101
Oklahoma	09	3207053	-1229154	917911.7	Oregon	09	8801248	-1931914	9255302
Oklahoma	10	5303116	1369718	3969726	Oregon	10	48577855	8853890	1273664
Oklahoma	11	581662.9	-28540.2	1588853	Oregon	11	5933259	5499319	-9661886
Oklahoma	12	3605725	814881.7	1724811	Oregon	12	31146427	9362162	9857007
Oklahoma	13	3766935	29851508	-3.2E+07	Oregon	13	3.78E+08	6.68E+09	-6E+09
Oklahoma	14	4111194	-1402147	1703477	Oregon	14	38229291	-1.3E+07	12439999
Oklahoma	15	1835309	-853165	1248553	Oregon	15	931922.5	-685485	691354.1
Oklahoma	16	1059584	-2356399	-766054	Oregon	16	3609836	-7034729	2959774
Oklahoma	17	2832163	-1215181	-452032	Oregon	17	18726053	-9976107	24358479
Oklahoma	18	3143684	-2252244	1197268	Oregon	18	69048281	-5.5E+07	12047976
Oklahoma	19	661637.5	-73064.8	216368.3	Oregon	19	3724742	102309.2	-686162
Oklahoma	20	321022	-210756	161937.6	Oregon	20	1718866	-1326177	1593639
Oklahoma	21	4222274	-1981960	3419181	Oregon	21	43132428	-2.3E+07	32669224
Oklahoma	22	3719893	-1055827	968773.8	Oregon	22	38426405	-1.4E+07	18918242
Oklahoma	23	5521073	5638893	2740274	Oregon	23	73776967	75924560	-2.1E+07
Oklahoma	24	5244969	5687557	-2291100	Oregon	24	22885929	33223563	-1.4E+07
Oklahoma	25	11216707	-6987965	4428833	Oregon	25	87874658	-6.5E+07	39277314
Oklahoma	26	5535780	-2542567	512229.5	Oregon	26	49402767	-2.5E+07	26285047

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Oklahoma	27	2595844	-473308	724802.6	Oregon	27	24547277	-6002543	8590682
Oklahoma	28	5717704	9063761	2136575	Oregon	28	43805890	77747098	3193998
Oklahoma	29	2263827	170871	159423.4	Oregon	29	13444682	2324420	-740756
Oklahoma	30	558437.1	-293794	1326979	Oregon	30	4251657	-2743545	3879752
Oklahoma	31	7465796	4099298	1733804	Oregon	31	1.13E+08	63997739	-1.6E+07
Oklahoma	32	6844984	-3967143	13077563	Oregon	32	20917902	-7256875	25242203
Oklahoma	33	3482318	-330961	2544925	Oregon	33	38611411	2252958	12407665
Oklahoma	34	2167857	187191.8	877663	Oregon	34	22564621	1639672	7731065
Pennsylvania	01	45376300	-1.5E+07	-1.9E+07	Rhode Island	01	128140.4	-246263	356224.4
Pennsylvania	02	1.62E+09	-5.9E+08	-1.1E+09	Rhode Island	02	25081765	-7891872	2026235
Pennsylvania	03	63984326	-2.8E+07	-6.2E+07	Rhode Island	03	317692.7	-188764	102653.2
Pennsylvania	04	1.95E+08	-1.1E+08	-7.1E+07	Rhode Island	04	2379222	-1342319	-445236
Pennsylvania	05	1.1E+08	-8.5E+07	16329115	Rhode Island	05	926021.7	37549.88	-1144729
Pennsylvania	06	6.6E+08	-7.9E+07	-5.7E+08	Rhode Island	06	11563535	-1056574	-2555454
Pennsylvania	07	1.21E+08	-6.1E+07	-4504717	Rhode Island	07	2385907	-1266517	42935.96
Pennsylvania	08	9.35E+08	10338975	-1.1E+08	Rhode Island	08	15176330	220283.4	1222579
Pennsylvania	09	6.24E+08	-2.2E+08	-5.7E+08	Rhode Island	09	6600003	-1861714	3518604
Pennsylvania	10	5.27E+08	1.1E+08	-5.4E+07	Rhode Island	10	10118132	3151299	2871365
Pennsylvania	11	2.6E+08	-324807	3.36E+08	Rhode Island	11	1203626	782375.8	-1158880
Pennsylvania	12	6.03E+08	1.56E+08	1.85E+08	Rhode Island	12	7224261	1527739	1307038
Pennsylvania	13	1.37E+09	1.06E+10	-1E+10	Rhode Island	13	48464988	4.33E+08	-4E+08
Pennsylvania	14	6.84E+08	-2.2E+08	34457190	Rhode Island	14	9146882	-3123682	2797491
Pennsylvania	15	2.35E+08	-1.3E+08	1.62E+08	Rhode Island	15	849713	-695172	-294760
Pennsylvania	16	97835528	-1.9E+08	-4409742	Rhode Island	16	1102851	-2060093	-211266
Pennsylvania	17	5.79E+08	-2.8E+08	-1E+08	Rhode Island	17	8134337	-3649727	2669983
Pennsylvania	18	4.74E+08	-3.3E+08	-2.2E+08	Rhode Island	18	10974271	-7545686	3923846
Pennsylvania	19	43455535	-5233302	-1.4E+07	Rhode Island	19	891074.9	-37088	-2072781
Pennsylvania	20	33135898	-1.8E+07	-1.4E+07	Rhode Island	20	210850.6	-126772	58379.5
Pennsylvania	21	7.12E+08	-3.4E+08	-4.4E+08	Rhode Island	21	11112247	-4943807	803162.1

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Pennsylvania	22	5.68E+08	-1.6E+08	-2.6E+08	Rhode Island	22	10195085	-2428934	47204.7
Pennsylvania	23	9.54E+08	1.05E+09	1.64E+08	Rhode Island	23	13189446	13241116	-76687.7
Pennsylvania	24	4.08E+08	5.96E+08	-2.6E+08	Rhode Island	24	5976625	10289763	1485175
Pennsylvania	25	2.01E+09	-1.2E+09	-1.4E+09	Rhode Island	25	24726357	-1.4E+07	-2704739
Pennsylvania	26	8.54E+08	-4.2E+08	-5.4E+08	Rhode Island	26	10612296	-5033395	3109083
Pennsylvania	27	4.79E+08	-6.8E+07	-3.2E+08	Rhode Island	27	6081336	-863230	-969176
Pennsylvania	28	1.58E+09	2.71E+09	1.19E+09	Rhode Island	28	9636323	13241353	5784851
Pennsylvania	29	1.89E+08	34041282	-7.3E+07	Rhode Island	29	3624018	668143.8	238478.3
Pennsylvania	30	2.72E+08	-1.3E+08	-1.2E+08	Rhode Island	30	2317130	-504144	-1102978
Pennsylvania	31	1.29E+09	7.56E+08	-1E+09	Rhode Island	31	18641298	11288928	262359.1
Pennsylvania	32	9E+09	-3.5E+09	-7.6E+09	Rhode Island	32	43919364	-1E+07	9813092
Pennsylvania	33	5.17E+08	25433217	-1E+08	Rhode Island	33	7429451	779999.6	3538469
Pennsylvania	34	4.39E+08	55426554	-3.2E+08	Rhode Island	34	5763338	779684.6	-950905
S. Carolina	01	279567.9	-183809	1214068	S. Dakota	01	159143	-58112.7	243533.6
S. Carolina	02	27840777	-7375042	56618574	S. Dakota	02	19563247	-5198318	15371227
S. Carolina	03	485113.3	-538868	1097895	S. Dakota	03	542404.5	-382959	586784.2
S. Carolina	04	2597910	-2315129	4076840	S. Dakota	04	2200440	-2098355	3636817
S. Carolina	05	851146	-339975	296736.8	S. Dakota	05	1028812	-344171	101277.2
S. Carolina	06	14082128	-2442060	21979812	S. Dakota	06	9437565	399302.5	6055975
S. Carolina	07	4894984	-3262915	4340363	S. Dakota	07	1395801	-915843	1671033
S. Carolina	08	20193855	876899.5	35648403	S. Dakota	08	13454592	1165607	7855803
S. Carolina	09	28459300	-1.5E+07	1.37E+08	S. Dakota	09	4697606	-802640	5546779
S. Carolina	10	16536102	3085267	24075056	S. Dakota	10	11749611	2861638	11965894
S. Carolina	11	2347286	-965374	5612719	S. Dakota	11	1032531	100294.3	526256.8
S. Carolina	12	9040812	2158325	21870198	S. Dakota	12	5979430	1677650	4143034
S. Carolina	13	39435356	-5137951	-2E+08	S. Dakota	13	3625595	21194336	-2.1E+07
S. Carolina	14	11321711	-5784411	26477442	S. Dakota	14	8688426	-3265111	4878185
S. Carolina	15	10457747	-5794366	2344465	S. Dakota	15	238737.1	-100793	-108260
S. Carolina	16	1395088	-2293865	1870120	S. Dakota	16	1934492	-3346748	4244677

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S. Carolina	17	9526073	-4110920	28487479	S. Dakota	17	2953638	-604707	2496295
S. Carolina	18	13399239	-9916106	16528936	S. Dakota	18	8022575	-5190246	7843452
S. Carolina	19	1045212	-275909	193673	S. Dakota	19	312614.8	-29178.7	299007
S. Carolina	20	467694.3	-383211	742861.9	S. Dakota	20	460714.7	-249256	500158.2
S. Carolina	21	13235701	-6422986	20160607	S. Dakota	21	13181663	-4662694	8450917
S. Carolina	22	12370830	-4633527	17183387	S. Dakota	22	11237961	-3449523	10324522
S. Carolina	23	18579957	19906905	34673779	S. Dakota	23	13528335	13419648	1624605
S. Carolina	24	64999261	1.04E+08	3.21E+08	S. Dakota	24	2817244	3714071	-353282
S. Carolina	25	29168538	-2.2E+07	56599688	S. Dakota	25	26602451	-1.5E+07	26087041
S. Carolina	26	13999135	-6004680	25902406	S. Dakota	26	9826556	-6036237	13239346
S. Carolina	27	8616266	-2901746	18604814	S. Dakota	27	5983614	-1365339	4991014
S. Carolina	28	11016599	16318337	69859097	S. Dakota	28	7129742	9459435	10957042
S. Carolina	29	14046971	7693111	87992732	S. Dakota	29	1415709	275603.2	414516.5
S. Carolina	30	1157230	-684432	3445663	S. Dakota	30	365567.3	-75953.2	887408.7
S. Carolina	31	24647677	10505747	40549185	S. Dakota	31	17728026	10730584	8826451
S. Carolina	32	70831364	-6.2E+07	4.21E+08	S. Dakota	32	4993037	-3017533	57999408
S. Carolina	33	11265034	74292.35	17540002	S. Dakota	33	8106210	-295425	5858757
S. Carolina	34	7490156	-470324	15057793	S. Dakota	34	4605206	758431.2	3075912
Tennessee	01	1756199	-2587033	5254179	Texas	01	3.41E+08	-3.2E+08	-2.5E+08
Tennessee	02	99487774	-3.4E+07	74503142	Texas	02	1.47E+09	-4.9E+08	-6E+08
Tennessee	03	9714344	-1E+07	10640539	Texas	03	93418358	-6.2E+07	41001444
Tennessee	04	16034951	-1.2E+07	15198016	Texas	04	2.23E+08	-1.6E+08	69745198
Tennessee	05	10144740	-2106303	-6467754	Texas	05	1.57E+08	-9.2E+07	22524018
Tennessee	06	45619530	-2403601	25342246	Texas	06	7.34E+08	-8.3E+07	-3.7E+08
Tennessee	07	27976040	-1.6E+07	20853633	Texas	07	1.25E+08	-7.3E+07	73514375
Tennessee	08	65324451	3300183	51493564	Texas	08	1.07E+09	-3.4E+07	-5.9E+08
Tennessee	09	25757343	-5498561	7568172	Texas	09	1.67E+08	-4.3E+07	-2.5E+08
Tennessee	10	75338176	15007424	-7E+07	Texas	10	5.25E+08	1.47E+08	84101188
Tennessee	11	15289945	11794409	-2.4E+07	Texas	11	1.43E+08	67360557	-3.2E+07

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Tennessee	12	41412749	6927764	15267071	Texas	12	5.04E+08	95831272	-2.3E+08
Tennessee	13	57928661	5.28E+08	-5.3E+08	Texas	13	-2.5E+09	-8.2E+09	1.08E+10
Tennessee	14	43339472	-1.9E+07	31611141	Texas	14	7.08E+08	-2.3E+08	-2.7E+08
Tennessee	15	40829244	-3.4E+07	54210482	Texas	15	3.19E+08	-1.9E+08	-7.2E+07
Tennessee	16	12686291	-2.3E+07	-905131	Texas	16	1.17E+08	-2.2E+08	49965260
Tennessee	17	27649873	-1.3E+07	23133891	Texas	17	4.76E+08	-2.2E+08	-1.3E+08
Tennessee	18	48285357	-3.9E+07	27161712	Texas	18	6.53E+08	-4.6E+08	-3.5E+07
Tennessee	19	7786386	-4485644	-1248691	Texas	19	54905636	-8382940	5997503
Tennessee	20	17082130	-1.6E+07	-5071635	Texas	20	75437547	-4.6E+07	8922992
Tennessee	21	46122282	-2.1E+07	36759090	Texas	21	9.71E+08	-4.6E+08	-4.3E+08
Tennessee	22	44407842	-1.3E+07	25019586	Texas	22	8.31E+08	-2.4E+08	-2.6E+08
Tennessee	23	64144837	69348181	20914146	Texas	23	8.65E+08	7.69E+08	-6.6E+08
Tennessee	24	38818414	55596530	-2.5E+07	Texas	24	89871564	2.44E+08	67997464
Tennessee	25	1.04E+08	-7E+07	1.11E+08	Texas	25	1.77E+09	-1E+09	-4.5E+08
Tennessee	26	47359812	-3E+07	43229210	Texas	26	5.65E+08	-2.6E+08	-8.4E+07
Tennessee	27	29935900	-7296566	16910999	Texas	27	3.62E+08	-6.9E+07	-9.3E+07
Tennessee	28	67755559	99175174	24633971	Texas	28	6.88E+08	9.21E+08	-2.8E+08
Tennessee	29	13991660	2772402	7532541	Texas	29	1.8E+08	20124599	-1.3E+08
Tennessee	30	8019101	-2825609	13309388	Texas	30	1.92E+08	-8.5E+07	59330032
Tennessee	31	80894102	49219755	31642975	Texas	31	1.06E+09	5.96E+08	-7.2E+08
Tennessee	32	66978480	-2.9E+07	40541966	Texas	32	1.48E+09	-3.3E+08	-8E+08
Tennessee	33	46961197	3588688	-1811310	Texas	33	5.33E+08	13231916	-1.9E+08
Tennessee	34	30676093	1990616	9438069	Texas	34	3.59E+08	37527614	-1.4E+08
Utah	01	802456.8	-267763	-838987	Vermont	01	369437.7	358884.5	404930.6
Utah	02	34301492	-1.2E+07	-6683092	Vermont	02	22074540	-6111661	-2.7E+07
Utah	03	1024392	-848716	2548893	Vermont	03	632883.1	-242368	-868783
Utah	04	4724728	-2980643	833812.9	Vermont	04	2286460	-952081	-86533.2
Utah	05	2948719	-1042188	-890699	Vermont	05	1115420	358875.8	-2544248
Utah	06	15046040	-1187187	-4162071	Vermont	06	15323648	-1101022	-1.8E+07

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Utah	07	2285370	-1208466	598197.2	Vermont	07	3433712	-1124379	-6589648
Utah	08	20394444	-85363.1	-6090017	Vermont	08	17080750	-1003519	-2.5E+07
Utah	09	3176733	-837107	3958202	Vermont	09	7000483	341245.9	-5690574
Utah	10	35793195	9628473	-5164648	Vermont	10	8378433	1109104	-8557238
Utah	11	4977424	1210377	-174178	Vermont	11	2059827	1734047	-4176060
Utah	12	12755843	2690660	-3608293	Vermont	12	9772950	1645011	-1.1E+07
Utah	13	15768302	87457112	-1E+08	Vermont	13	29747264	1.95E+08	-1.8E+08
Utah	14	12069327	-4114765	-32226.5	Vermont	14	13338798	-2786789	-1.9E+07
Utah	15	841548.3	-625595	80828.77	Vermont	15	464767	-302774	-122154
Utah	16	2635705	-4993923	-2729278	Vermont	16	1739652	-3591510	-1882667
Utah	17	8010146	-4970927	-6029554	Vermont	17	7763835	-3431266	-1.3E+07
Utah	18	14427914	-1E+07	2504983	Vermont	18	17248574	-1E+07	-1.2E+07
Utah	19	8106030	-1117965	474926.8	Vermont	19	7849046	-238213	-864844
Utah	20	1594060	-1007875	-121604	Vermont	20	3047891	-1358704	-1342140
Utah	21	15671371	-7957014	-7699946	Vermont	21	10165922	-3903041	-1.2E+07
Utah	22	14095842	-3890700	-6011906	Vermont	22	11021594	-1872090	-1.6E+07
Utah	23	21276367	20259556	-9808110	Vermont	23	14981948	10441290	-2.7E+07
Utah	24	3742822	6701283	7322342	Vermont	24	2402923	3432137	-969186
Utah	25	40927082	-2.4E+07	9267648	Vermont	25	22979728	-1E+07	-3.2E+07
Utah	26	19009524	-8908125	-3895327	Vermont	26	12770159	-5137650	-1.4E+07
Utah	27	10945083	-1706983	-3092565	Vermont	27	7634964	-684269	-7604786
Utah	28	23963237	34511076	-3734369	Vermont	28	8430177	10227749	-1.1E+07
Utah	29	3984011	394421.3	-22770	Vermont	29	3477467	529949	-2601412
Utah	30	2881008	-1034281	660090.5	Vermont	30	511179.4	-222108	-174538
Utah	31	30980194	19583900	-1.5E+07	Vermont	31	22778739	12567406	-3.7E+07
Utah	32	10286577	-3171088	57131186	Vermont	32	29586358	-1.1E+07	56984515
Utah	33	11335619	745512.3	-5153159	Vermont	33	10998249	518296.7	-1.6E+07
Utah	34	9549660	1068816	-3078730	Vermont	34	6861867	1210686	-6426970
Virginia	01	16486773	-5778376	7243728	Washington	01	21528654	-7892551	3211146

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Virginia	02	2.44E+08	-7.6E+07	-6713180	Washington	02	8.07E+08	-2.8E+08	2.1E+08
Virginia	03	15356817	-1.1E+07	11335148	Washington	03	30118302	-714545	-5625007
Virginia	04	35539357	-1.8E+07	4799412	Washington	04	76974678	-4.6E+07	-1.2E+07
Virginia	05	17009759	-5351666	4441816	Washington	05	27340785	-6295273	-1.9E+07
Virginia	06	1.47E+08	-1.6E+07	-1.1E+07	Washington	06	3.38E+08	-4.4E+07	56971141
Virginia	07	32632288	-1.8E+07	11882646	Washington	07	1.69E+08	-9.5E+07	-6.2E+07
Virginia	08	2.21E+08	-6518054	-8.4E+07	Washington	08	5.54E+08	-1.1E+07	1.2E+08
Virginia	09	1.72E+08	-4.3E+07	-7.9E+07	Washington	09	1.36E+08	-3.7E+07	53903449
Virginia	10	2.13E+08	40378831	11253513	Washington	10	1.61E+09	2.31E+08	-8E+08
Virginia	11	2.51E+08	58246721	-1.3E+08	Washington	11	2.28E+08	28585122	99166910
Virginia	12	2.1E+08	34114985	-1.4E+08	Washington	12	2.72E+08	49501671	58444991
Virginia	13	3.18E+08	1.64E+09	-4.4E+09	Washington	13	64709682	8.03E+08	-8.1E+08
Virginia	14	1.52E+08	-5.3E+07	-3802064	Washington	14	2.55E+08	-8.8E+07	17925023
Virginia	15	10227639	-5626847	-3826595	Washington	15	28817338	-9062862	-2.8E+07
Virginia	16	19646383	-3.5E+07	-8407004	Washington	16	32781959	-5.9E+07	9027445
Virginia	17	62926963	-2.3E+07	11992035	Washington	17	1.32E+08	-6.1E+07	-8715267
Virginia	18	1.19E+08	-8.4E+07	11971003	Washington	18	2.98E+08	-2.2E+08	96773787
Virginia	19	22821472	-3764294	10654680	Washington	19	25464254	-4071825	-8284815
Virginia	20	12133764	-6735398	-2861700	Washington	20	17810074	-1E+07	-2248018
Virginia	21	1.17E+08	-5E+07	19063776	Washington	21	3.73E+08	-1.9E+08	1.1E+08
Virginia	22	1.42E+08	-4.4E+07	-4.5E+07	Washington	22	4.08E+08	-1.3E+08	1.52E+08
Virginia	23	2.79E+08	2.38E+08	-1.8E+08	Washington	23	6.02E+08	5.35E+08	-1E+08
Virginia	24	1.42E+08	2.06E+08	-3.1E+07	Washington	24	1.84E+08	2.73E+08	71850903
Virginia	25	2.44E+08	-1.4E+08	58351307	Washington	25	6.99E+08	-4.5E+08	1.8E+08
Virginia	26	2.06E+08	-1E+08	-7.8E+07	Washington	26	3.04E+08	-1.6E+08	2E+08
Virginia	27	1.23E+08	-2.1E+07	-6.6E+07	Washington	27	1.83E+08	-3.8E+07	11664528
Virginia	28	6.71E+08	8.97E+08	-1.1E+09	Washington	28	5.93E+08	8E+08	12369868
Virginia	29	77095349	12746955	5801562	Washington	29	83317040	14220907	14528652
Virginia	30	26913986	-1.1E+07	28725201	Washington	30	84700547	-4.2E+07	-2.2E+07

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
Virginia	31	3.59E+08	1.93E+08	-1.8E+08	Washington	31	6.5E+08	3.17E+08	1.82E+08
Virginia	32	2.51E+08	-6.6E+07	61797599	Washington	32	2.07E+08	-7.4E+07	2.03E+08
Virginia	33	1.78E+08	-2254391	-6.6E+07	Washington	33	3.08E+08	2845067	68068925
Virginia	34	78217396	7382635	-1481516	Washington	34	1.64E+08	13513353	23835992
West Virginia	01	97985.3	3612.588	4462.831	Wisconsin	01	21666501	-1.8E+07	9399430
West Virginia	02	3703907	-1126345	-718544	Wisconsin	02	3.25E+08	-1E+08	-6E+07
West Virginia	03	149386.4	-137407	-53025.3	Wisconsin	03	17842784	-1.4E+07	32559254
West Virginia	04	555030.8	-399983	333844.1	Wisconsin	04	49801672	-3.5E+07	55151881
West Virginia	05	128869.5	-60170.5	-11391.7	Wisconsin	05	18091555	-8551750	24028585
West Virginia	06	1955848	-139164	-279863	Wisconsin	06	1.99E+08	-1.1E+07	16000519
West Virginia	07	348826.7	-161534	-422529	Wisconsin	07	56578662	-3E+07	-2746932
West Virginia	08	2328487	26699.68	-552601	Wisconsin	08	2.56E+08	1109370	-8.5E+07
West Virginia	09	2019195	-925634	-742678	Wisconsin	09	1.28E+08	-2.5E+07	73210353
West Virginia	10	1255023	230875	-151631	Wisconsin	10	4.26E+08	65615435	-3.5E+08
West Virginia	11	513417.7	58585.25	-220597	Wisconsin	11	1.43E+08	64552289	-1.4E+08
West Virginia	12	1196963	225468.6	-67238.9	Wisconsin	12	1.58E+08	31950244	-2.7E+07
West Virginia	13	347813.8	9334625	-7549217	Wisconsin	13	18528142	2.62E+08	-2.4E+08
West Virginia	14	1958212	-661208	-176089	Wisconsin	14	1.48E+08	-5E+07	-2.6E+07
West Virginia	15	271167.3	-176233	-171258	Wisconsin	15	7919136	-5332817	24585871
West Virginia	16	232841.8	-437087	92031.26	Wisconsin	16	32841566	-6E+07	-1.7E+07
West Virginia	17	963936.2	-422112	-160306	Wisconsin	17	85512326	-3.5E+07	17298625
West Virginia	18	2052698	-1379657	537315.7	Wisconsin	18	1.98E+08	-1.4E+08	-2.7E+07
West Virginia	19	146677.9	-25266.9	-36469	Wisconsin	19	41346727	-6965357	-3.5E+07
West Virginia	20	125356.3	-77040.4	64389.28	Wisconsin	20	13656334	-6825578	-1.4E+07
West Virginia	21	1533428	-671002	-91652.9	Wisconsin	21	1.88E+08	-8E+07	-2.1E+07
West Virginia	22	1403508	-383124	-477835	Wisconsin	22	2.12E+08	-5.3E+07	-9.8E+07
West Virginia	23	1968578	1830170	-520851	Wisconsin	23	2.78E+08	2.58E+08	-1.8E+08
West Virginia	24	2074258	2950252	-1886173	Wisconsin	24	2.17E+08	3.12E+08	3.38E+08
West Virginia	25	3098763	-1941618	1326836	Wisconsin	25	3.29E+08	-2.1E+08	-2.1E+07

State	Topic	NSik	IMik	RSik	State	Topic	NSik	IMik	RSik
West Virginia	26	1579239	-848841	198316.4	Wisconsin	26	1.88E+08	-9.2E+07	-2.5E+07
West Virginia	27	1137768	-229474	433839.3	Wisconsin	27	1.13E+08	-2.4E+07	26697643
West Virginia	28	1894387	2348650	276073.3	Wisconsin	28	2.73E+08	3.46E+08	-2.6E+07
West Virginia	29	1161867	153740	-787604	Wisconsin	29	57033267	11475579	28853651
West Virginia	30	196012.3	-72456.9	-18936	Wisconsin	30	27894647	-9807681	20010546
West Virginia	31	2821152	1533477	-681316	Wisconsin	31	3.71E+08	2.16E+08	-9.5E+07
West Virginia	32	5481522	-2064232	9017639	Wisconsin	32	4.63E+08	-9.3E+07	19156304
West Virginia	33	1437628	8434.802	172849.2	Wisconsin	33	1.55E+08	7708896	-3.9E+07
West Virginia	34	967412.9	93856.26	-68505.2	Wisconsin	34	1.09E+08	9804064	-6731052
Wyoming	01	13462348	-6538222	20614262					
Wyoming	02	995774.3	-755729	3882659					
Wyoming	03	151783.1	-94880.7	-226438					
Wyoming	04	745468.9	-270388	-698218					
Wyoming	05	251148.1	-211971	-97919.6					
Wyoming	06	1112000	-39299.4	835616.3					
Wyoming	07	68709.84	-60809	208482.3					
Wyoming	08	1251775	369182.3	3534857					
Wyoming	09	27859.37	-34075.4	3067604					
Wyoming	10	568128.2	734669.6	4350483					
Wyoming	11	347917.2	41691.89	298876.4					
Wyoming	12	2172835	401192.3	1397079					
Wyoming	13	3831341	50186029	-4.7E+07					
Wyoming	14	810739	-389239	1261213					
Wyoming	15	44397.11	-80343.8	432717.4					
Wyoming	16	310771.8	-393854	-342774					
Wyoming	17	102419.6	-104040	856054.7					
Wyoming	18	789654.5	-623850	898864.1					
Wyoming	19	380684.6	-38640.6	-673380					
Wyoming	20	256597.9	-162058	-40785.5					

State	Topic	NSik	IMik	RSik
Wyoming	21	739157.3	-336679	335366.6
Wyoming	22	982616.5	-318187	1479011
Wyoming	23	1487998	2615364	4856816
Wyoming	24	-933559	2146056	17534686
Wyoming	25	354006	-964394	3464845
Wyoming	26	1238465	-938109	561354.8
Wyoming	27	878990.3	-127326	411479.9
Wyoming	28	4090227	8064984	-1908986
Wyoming	29	123239.1	132569.3	2575145
Wyoming	30	214830.8	-11101.5	-518897
Wyoming	31	2301061	2245317	1966424
Wyoming	32	35275.43	-83161.8	3200369
Wyoming	33	1210649	-59776.8	613593.3
Wyoming	34	1037103	92142.19	105684.3

State	Topic	NSik	IMik	RSik
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