

# Topic Analysis of United States' Democratic and Republican Presidential Platforms from 2000-2016

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## Abstract

In the political arena, analysts and voters use political text, such as party platforms, to analyze the positions of different political actors. Existing research into Latent Dirichlet Allocation (LDA) topic modeling does not distinguish between the positions of two political parties with respect to a specific topic. In this paper, we propose a method to analyze and compare documents according to a set of predefined topics that are based on the Latent Dirichlet Allocation (LDA) model. In order to further enhance our knowledge about relevant topics we use the technique of bootstrapping to understand the positions of political parties by expanding on the topics shortlisted. To this end, we use textual data, namely Democratic and Republican presidential electoral manifestos from 2000-2016, in order to automatically acquire the positions of political actors and parties, respectively. Using LDA models, we identified the topics in each document and compare the topics the Democratic and Republican platforms discuss to find topics that are mentioned by both parties. After choosing several topics, we used bootstrapping to examine the viewpoints of both parties. We also used bootstrapping to look at the evolution of the viewpoints of the parties on certain topics. Although we were able to identify some topics using LDA, the topics produced were too broad.

*Keywords:* bootstrapping, Latent Dirichlet Allocation, politics, topic model, text analysis

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# **Introduction**

## **Motivation**

Considering the upcoming elections in 2020, we believe it is important for voters and political analysts to understand the positions or agendas of political parties, in order to understand which political parties they align with. An effective way to do this is by analyzing political text, such as party platforms, to identify topics each party discussed in past elections and their stance on these topics. As data becomes readily available, it becomes more difficult to find needed information, thus, tools are needed to help discover, organize and understand volumes of data. The goal of this project is to analyze the positions of political parties in the United States, using topic analysis. Therefore, by identifying the topics each political party explored, we can highlight the issues that stood out and how these issues were addressed. Topic modeling, being an unsupervised learning technique, can be used to discover the abstract “topics” in a document. A topic model that will be utilized in this project is Latent Dirichlet Allocation (LDA). LDA is a generative probabilistic model that classifies text in a document to a topic. Existing research into Latent Dirichlet Allocation (LDA) topic modeling does not distinguish between the positions of two political parties with respect to a specific topic. After identifying the topics, we will use bootstrapping to find the sentences that correspond with a topic to determine the stance of the party for that election year. Bootstrapping provides an alternative to manual annotation by searching for patterns in unannotated data and using a specific pattern to find more related terms in the same data.

## **Problems**

This paper will work on solving the following problems: What are the topics discussed in the party platforms for each year? Which topics do both Democrats and Republicans discuss?

Where do they diverge on similar topics? Have the parties changed their stance on certain topics through the years?

## **Data**

The Manifesto Project site contains a collection of political parties' electoral manifestos from over 1000 parties of over 50 countries from 1945 to today (2019). For our project, we focused on the United States' Democratic and Republican presidential platform manifestos from 2000-2016. With only 5 presidential elections since 2000, there were 10 manifestos analyzed, in total.

Source: <https://manifesto-project.wzb.eu/>

## **Methods**

### **Data Cleaning and Preprocessing**

Before any analysis could be done on the documents, we had to ensure that the text was normalized and only the relevant text would be used for modeling and any further analysis. To do this, Spacy was imported for data preprocessing. First, the words were separated via unique space character, by means of word tokenization. Next, the punctuation marks, numbers and white spaces were removed. The standard set of stop words, as well as a custom set of irrelevant words in the text were then excluded, to decrease feature dimensionality, which allowed us to analyze only content-bearing words. The inflectional endings of the tokens were removed at this point, so as to return the base or dictionary form of words, known as lemmas. Additionally, the lowercase of the tokens were added to the final tokens list for each document.

### **Latent Dirichlet Allocation**

After preprocessing, we ran a LDA model on each document. We first created a bag of words using all the documents. The bag of words contains the number of times a word appears in

the documents. Next, we created a term document matrix, which for each document, reports how many words and how many times those words appear. We created an LDA model using Gensim with `num_topics = 80`, `random_state = 100`, `update_every = 100`, `chunksize = 100`, `passes = 100`, `alpha = 'auto'`, `eta = 'auto'`, `iterations = 100`, `eval_every = None`, and `per_word_topics = False`. For each model, we also calculated the coherence score with `c_v`. We ran the model with all the documents, as well as, on each of the documents, resulting in 11 models, altogether. For each model, topics were produced using the tokens in the documents. Next, we interpreted the main topics for each model.

### **Bootstrapping**

Based on the results of the LDA models, we shortlisted specific topics common to each election year and political party. The shortlisted words were run across each manifesto using the bootstrapping technique and the results produced POS tags along with sentence extracts. We further refined the results listing out a pattern of POS tags which produced sentences associated with those selected topics. We then manually circled parts of the sentences that related to the specified topic.

### **Evaluation**

We evaluated the models based on 3 techniques. First, we calculated the coherence score for each model. The coherence score is the score for the topics based on the words semantic similarity. Second, we compared the topics produced from each model to the main topics in the Table of Contents of their corresponding platform manifesto. Third, we compared the main topics of each year to the main events that occurred around the years of that specific election year.

## Results

Generally, the topics discussed in all the manifestos include administration, family, healthcare, education, community, government, employment, protection, among other topics, as shown in figure 1 in the Appendix. Considering which election year these topics were discussed, in 2000, the Democrats discussed topics such as security, employment, education and energy. The Republicans, in 2000, discussed economic policies, taxes, health, among other topics. In 2004, the Democrats discussed terrorism, taxes, trade and energy, whilst the Republicans discussed security, leadership, weapons and businesses. In 2008, topics such as health, employment, school(education), weapons, community, energy, among other topics were discussed by the Democrats and the Republicans discussed government, change, taxes, healthcare, among other topics. Also, in 2012, the Democrats discussed economic policies, security, health and employment, whilst the Republicans discussed security, government, law and public administration. In 2016, Democrats discussed topics, such as health care, job security, education, Korea, and Guantánamo Bay. On the other hand, Republicans discussed US security and religion in 2016. The LDA model results can be seen in the Appendix, figures 2-11. The coherence scores for all the models range between 0.22 and 0.33, as shown in Table 1 in the Appendix.

Based on these results, it can be observed that many topics are discussed almost every election year by both political parties, although the approach may differ. For our project we focused on comparing the Democrat and Republican viewpoints on health care in 2008 and jobs in 2012. We also looked at the evolution of the Democratic viewpoint on energy from 2000 and 2016. Additionally, we examined the evolution of the Republican viewpoint on the economy from 2000 and 2016.

Using bootstrapping, we were able to analyze the Democratic and Republican views on Healthcare in 2008, shown in figures 12 and 13 in the Appendix. The Democrats focused on health insurance options, public and private plans, that individuals could choose from. The Republicans, on the other hand, do not emphasize on any insurance plans despite talking about insurance.

In 2012, due to the economic downturn, American Jobs were a major topic of discussion. From figures 14 and 15 in the Appendix, we saw that the Republicans discussed insurance coverage portability from one job to another for an individual. The Democrats discussed improving economic growth and job creation by expanding access to refinancing for families.

On the evolution of the Democratic view on Energy for the years 2000 & 2016, a shift in policy as well as terminology was noticed, shown in figures 16 and 17 in the Appendix. In 2000, the Democrats associate energy with global warming. The Democrats, under Al Gore, talk about using clean energy in order to reduce the effects of Global Warming. In 2016, more elaborate policies regarding climate change are in place with the enforcement of the Paris Agreement in 2015. The Democrats elaborate on climate change policies such as tax breaks and incentives for organizations using clean energy.

On the evolution of the Republican view on the Economy for the years 2000 & 2016, the Republicans discuss reducing taxes that stifle innovation. In 2016, they elaborate on moving towards a digital economy as well as the protection of intellectual property which was an extension of the American Invent's Act (AIA) signed during the Obama era. The Republican stance on economic growth disregarded any policy associated with climate change by talking about their willingness to market coal to boost economic growth. This can be seen in figures 18 and 19 in the Appendix.



## Discussion

The coherence scores of the models were low, however, this might not be a great indicator of the performance of the model since this score only measures the coherence of one topic while there are many topics in all of the documents. Although all of the topics produced from the models were in the manifestos' Table of Contents, not all of the main topics shown in the Table of Contents were produced by the models. The topics from the models were broad and difficult to interpret, while the topics in the Table of Contents were more specific. We were also able to compare the more specific topics produced by the models to events that occurred in the United States around the same time. In addition to the events mentioned previously in the Results, terrorism was a main topic in 2004 which correlates with the September 11 attacks in 2001. Also, around 2015, one of the main news headlines was North Korea threatening the United States which is reflected in the 2016 Democratic model results. In that same model, Guantánamo Bay was also mentioned which relates to Barack Obama wanting to close Guantánamo Bay since 2009 and Donald Trump signing an Executive Order to keep it open in 2018. If we were able to get more specific topics from the models, we may have been able to create greater connections between the party platforms and main events in the US at those times.

Though cleaning and preprocessing were done, there was still noise in the documents, while conducting LDA and bootstrapping. The cleaning and preprocessing had to be modified and improved multiple times to get more interpretable topics. Since the topics from the final model are still difficult to interpret due to the high frequency of irrelevant words, more time is needed to thoroughly clean and preprocess the documents. Also, the number of topics chosen, in addition to other parameters, may not have produced the best models. Furthermore, the interpretation of the results was subjective as there are several ways to decipher topics produced by LDA. With more

time, we hope to be able to obtain clearer results from the LDA models by having cleaner data and comparing more topics between the Democratic and Republican presidential platforms using a variety of techniques, such as bootstrapping and sentiment analysis.

## **Conclusion**

In conclusion, the most relevant topics discussed by the political parties (Democrats and Republicans) are apparent, although the documents are based on numerous topics. Both political parties have different agendas, but it is evident that key issues such as healthcare, education, employment, climate, among other key issues, are of tremendous concern. Despite the flaws observed, our analysis worked to a large extent, in comparison to the Table of Content of the presidential electoral manifestos.

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## Appendix

Topic: 71	Words: government world nation new right federal need work administration education
Topic: 44	Words: government work family right federal community country program provide health
Topic: 33	Words: work country government need law public family nation federal ensure
Topic: 60	Words: new government need health work right nation family world administration
Topic: 8	Words: government health right country federal care protect work family community
Topic: 21	Words: health new government work care nation need help congress bush
Topic: 62	Words: bush applaud congress provide terrorist terror effort pass hiv endorse
Topic: 37	Words: government federal right law program current country public state nation
Topic: 3	Words: new health work care government nation united world administration child
Topic: 66	Words: work health right community new job need family continue worker

Figure 1. Results of topics in all Manifestos

Topic: 44	Words: new economy worker provide need help prosperity high child world
Topic: 73	Words: gore new work need unchecked unconditional undemocratic underperform unavailable turbine
Topic: 4	Words: unchecked undemocratic tribes tropical trustworthy turbine turning unavailable traumatic unconditional
Topic: 36	Words: new gore time job help need provide public community security
Topic: 42	Words: unchecked undemocratic tribes tropical trustworthy turbine turning unavailable traumatic unconditional
Topic: 59	Words: work new need school gore child worker security right al
Topic: 5	Words: new work school need continue gore worker right al help
Topic: 1	Words: work gore school new al right need worker continue help
Topic: 64	Words: new child school work need gore right al worker continue
Topic: 66	Words: new work need gore school child al worker continue help

Figure 2. Results of topics in Democratic Manifesto, 2000

Topic: 79	Words: new health government administration federal governor individual country right increase
Topic: 70	Words: administration government need care health new federal unavailable undemocratic turning
Topic: 71	Words: system congress administration law economic policy world health right public
Topic: 32	Words: government health new governor country administration u.s. threat promote individual
Topic: 12	Words: government health new administration care united need nation federal law
Topic: 26	Words: new administration government health federal united care need system nation
Topic: 20	Words: government federal health administration new united family need tax program
Topic: 37	Words: government administration federal new care world tax reform child health
Topic: 3	Words: dangerous chemical facility voluntary rely major ladder operate look arm
Topic: 68	Words: government new health administration federal united need care family program

Figure 3. Results of topics in Republican Manifesto, 2000

Topic: 71	Words: unchecked undemocratic tribes tropical trustworthy turbine turning unavailable traumatic unconditional
Topic: 79	Words: unchecked undemocratic tribes tropical trustworthy turbine turning unavailable traumatic unconditional
Topic: 70	Words: unchecked undemocratic tribes tropical trustworthy turbine turning unavailable traumatic unconditional
Topic: 58	Words: unchecked undemocratic tribes tropical trustworthy turbine turning unavailable traumatic unconditional
Topic: 36	Words: family work world administration health new turning underemployment unconditional unchecked
Topic: 68	Words: work health family need job new child strong world government
Topic: 16	Words: work new job strong care world john protect school child
Topic: 66	Words: work world new job strong family need security government care
Topic: 5	Words: work new health john need job administration strong good security
Topic: 15	Words: work new health strong family job security world need care

Figure 4. Results of topics in Democratic Manifesto, 2004

Topic: 79	Words: bush provide law terrorist high opportunity world child act congress
Topic: 70	Words: new bush health care unconditional trustworthy turbine turning unavailable unchecked
Topic: 8	Words: bush health world care work nation effort tax government congress
Topic: 36	Words: bush health work world nation help congress united new child
Topic: 31	Words: bush congress care trade effort government help work health world
Topic: 6	Words: bush nation effort work provide health congress united new help
Topic: 20	Words: bush congress work health nation world help government united provide
Topic: 5	Words: bush effort congress health nation work new provide government help
Topic: 37	Words: bush world government congress nation care effort new tax applaud
Topic: 62	Words: bush health nation work congress new government effort world help

Figure 5. Results of topics in Republican Manifesto, 2004

Words: government|unconditional|underemployment|tropical|trustworthy|turbine|turning|unavailable|unchecked|treatable  
 Words: work|policy|include|provide|need|help|ensure|nation|job|education  
 Words: nation|job|security|need|provide|country|help|community|ensure|family  
 Words: right|work|health|lead|restore|increase|law|leadership|include|weapon  
 Words: work|care|business|school|provide|woman|public|reform|new|good  
 Words: work|care|health|new|need|security|provide|job|family|help  
 Words: work|care|ensure|government|world|right|provide|security|new|education  
 Words: work|health|government|provide|new|right|need|country|family|ensure  
 Words: work|new|care|government|ensure|provide|health|program|job|help  
 Words: work|health|new|government|care|provide|ensure|right|country|security

Figure 6. Results of topics in Democratic Manifesto, 2008

Words: government|unconditional|underemployment|tropical|trustworthy|turbine|turning|unavailable|unchecked|treatable  
 Words: health|care|family|right|need|federal|system|government|undemocratic|unchecked  
 Words: right|health|system|need|care|federal|government|commitment|treatment|community  
 Words: federal|care|right|family|government|health|need|nation|work|change  
 Words: health|government|nation|care|federal|need|individual|party|remain|new  
 Words: health|care|government|federal|nation|right|law|business|family|need  
 Words: government|care|federal|family|health|nation|right|need|law|tax  
 Words: care|government|right|health|need|tax|federal|nation|family|law  
 Words: care|government|right|program|health|federal|tax|child|nation|education  
 Words: government|care|health|right|federal|tax|family|law|need|nation

Figure 7. Results of topics in Republican Manifesto, 2008

Words: unchecked|undemocratic|tribes|tropical|trustworthy|turbine|turning|unavailable|traumatic|unconditional  
 Words: continue|community|work|help|job|administration|middle|build|effort|ensure  
 Words: work|include|effort|help|ensure|economy|nation|job|economic|build  
 Words: party|work|government|economic|family|administration|continue|health|obama|security  
 Words: obama|work|united|health|continue|economy|country|job|worker|world  
 Words: obama|continue|work|job|security|right|country|administration|world|government  
 Words: obama|work|continue|job|security|health|administration|right|party|create  
 Words: work|obama|job|continue|care|new|economy|country|government|economic  
 Words: argue|legal|northern|communities|bush|size|coalition|destroy|osama|mercury  
 Words: work|obama|continue|job|family|country|health|economic|administration|security

Figure 8. Results of topics in Democratic Manifesto, 2012

Words: government|right|federal|future|protect|act|education|reform|great|public  
 Words: nation|world|need|public|administration|country|u.s.|family|right|job  
 Words: current|law|government|public|federal|life|encourage|party|security|future  
 Words: government|federal|program|right|policy|current|nation|need|private|country  
 Words: federal|government|program|need|service|u.s.|administration|job|nation|law  
 Words: government|federal|current|law|right|program|need|job|administration|service  
 Words: government|federal|nation|law|program|current|administration|job|public|right  
 Words: government|federal|nation|need|right|program|public|job|current|law  
 Words: government|current|program|federal|job|right|administration|protect|u.s.|nation  
 Words: government|federal|current|right|program|law|administration|nation|need|job

Figure 9. Results of topics in Republican Manifesto, 2012

Words: unchecked|undemocratic|tribes|tropical|trustworthy|turbine|turning|unavailable|traumatic|unconditional  
 Words: build|high|security|public|create|live|provide|family|strong|indian  
 Words: ensure|job|family|student|access|public|provide|help|need|expand  
 Words: health|good|pay|housing|indian|provide|build|public|new|right  
 Words: health|country|work|need|ensure|education|community|service|right|protect  
 Words: work|care|health|ensure|job|right|public|include|pay|program  
 Words: health|work|community|right|country|need|public|pay|access|service  
 Words: families|democrats|laboratory|allegation|inflation|tuition|guantánamo|body|claw|pledge|abolish  
 Words: korea|medicine|outdoors|track|certain|duty|walk|veterans|simple|away  
 Words: health|community|work|right|country|public|ensure|include|protect|fight

Figure 10. Results of topics in Democratic Manifesto, 2016

Words: government|country|federal|right|growth|protect|advance|market|u.s.|security  
 Words: government|new|time|provide|amendment|public|act|create|protect|family  
 Words: federal|country|government|policy|congress|party|nation|protect|right|administration  
 Words: country|federal|government|law|nation|administration|need|right|state|public  
 Words: government|right|country|federal|policy|administration|state|nation|law|congress  
 Words: federal|government|country|law|right|state|nation|congress|religious|security  
 Words: government|federal|right|law|administration|state|congress|country|need|public  
 Words: government|federal|right|protect|law|policy|public|state|need|nation  
 Words: government|federal|right|current|country|protect|administration|new|congress|public  
 Words: government|federal|right|law|country|congress|administration|state|protect|public

Figure 11. Results of topics in Republican Manifesto, 2016

FOUND MATCH  
[of, health, insurance, plans]  
Families and individuals should have the option of keeping the coverage they have or choosing from a wide array of **health in insurance plans**, including many private health insurance options and a public plan.  
[[of, health, insurance, plans]]  
FOUND MATCH  
[in, health, care, and]  
For families making more than \$250,000, we'll ask them to give back a portion of the Bush tax cuts to **invest in health care** and other key priorities.  
FOUND MATCH  
[of, health, care, and]  
Instead, we must strengthen our public programs by **bringing down the cost of health care and reducing waste** while making strategic investments that emphasize quality, efficiency, and prevention.  
FOUND MATCH  
[to, health, care, and]  
We will **expand access to health care and nutrition for women and reduce the burden of maternal mortality**.  
[[in, health, care, and], [of, health, care, and], [to, health, care, and]]

Figure 12. Democratic view on Health Care, 2008

FOUND MATCH  
[of, health, care, to]  
Our plan to return control of **health care** to patients and providers will benefit small business employers and employees alike.  
FOUND MATCH  
[of, health, care, in]  
The American people rejected Democrats' attempted government takeover of health care in 1993, and they remain skeptical of politicians who would send us down that road.  
FOUND MATCH  
[of, health, care, throughout]  
We offer a detailed program that will **improve the quality, cost, and coverage of health care throughout the nation**, and we will turn that plan into reality.  
FOUND MATCH  
[of, health, care, as]  
Frivolous lawsuits also drive up the cost of health care as health care providers are forced to practice defensive medicine, such as ordering unnecessary tests.  
[[of, health, care, to], [of, health, care, in], [of, health, care, throughout], [of, health, care, as]]

Figure 13. Republican view on Health Care, 2008

FOUND MATCH  
[create, one, million, jobs]  
But Republicans in Congress blocked other provisions that independent analysis said could **create one million jobs**.  
[[create, one, million, jobs]]  
FOUND MATCH  
[investing, in, job, creation]  
By investing in job creation, clean energy, agriculture, and education, **Democrats have built a stronger rural economy** where future generations can enjoy the rural way of life.  
[[investing, in, job, creation]]  
FOUND MATCH  
[economic, growth, and, job]  
Even as President Obama remains committed to working with both parties, he and his cabinet pursued a series of executive actions to help spark economic growth and job creation, including expanding access to refinancing for families who have stayed current on their mortgages, challenging Community Health Centers to hire veterans, accelerating permitting for transportation projects, cutting waste and reducing improper payments, and enabling student loan borrowers to cap their payments at a percentage of income.  
[[economic, growth, and, job]]

Figure 14. Democratic view on Jobs, 2012



FOUND MATCH  
 [sustainable, jobs, and, economic]  
 Energy, Agriculture and the EnvironmentWe are the party of sustainable jobs and economic growth - through American energy, agriculture, and environmental policy.  
 [[sustainable, jobs, and, economic]]  
 FOUND MATCH  
 [determined, to, create, jobs]  
 We are determined to create jobs,spur economic growth,lower energy prices,and strengthen our energy industry.  
 [[determined, to, create, jobs]]  
 FOUND MATCH  
 [from, job, to, job]  
 Today's highly mobile work force requires portability of insurance coverage that can go with them from job to job.  
 [[from, job, to, job]]  
 FOUND MATCH  
 [related, to, job, opportunities]  
 It is time to get back to basics and to higher education programs directly related to job opportunities.  
 [[related, to, job, opportunities]]

Figure 15. Republican view on Jobs, 2012

FOUND MATCH  
 [changes, in, the, energy]  
 America is blessed with abundant low-cost sources of coal, petroleum, and natural gas, but we must use them wisely and ensure that changes in the energy sector promote a workforce whose skills are expanded, utilized, and rewarded.  
 [[changes, in, the, energy]]  
 FOUND MATCH  
 [deployment, of, clean, energy]  
 Democrats believe that with the right incentives to encourage the development and deployment of clean energy technologies, we can make all our energy sources cleaner, safer, and healthier for our children.  
 [[deployment, of, clean, energy]]

Figure 16. Democratic view on Energy, 2000

FOUND MATCH  
 [new, investments, in, energy]  
 Democrats will fight to make sure these workers and their families get the benefits they have earned and the respect they deserve, and we will make new investments in energy-producing communities to help create jobs and build a brighter and more resilient economic future.  
 [[new, investments, in, energy]]  
 FOUND MATCH  
 [the, clean, energy, superpower]  
 Democrats believe that climate change poses a real and urgent threat to our economy, our national security, and our children's health and futures, and that Americans deserve the jobs and security that come from becoming the clean energy superpower of the 21st century.  
 FOUND MATCH  
 [the, clean, energy, superpower]  
 We will promote collaborative stewardship of our natural resources, while developing clean fuels that will grow our economy, lower our energy bills, combat climate change, and make America the clean energy superpower of the 21st century.  
 FOUND MATCH  
 [a, clean, energy, economy]  
 We will take bold steps to slash carbon pollution and protect clean air at home, lead the fight against climate change around the world, ensure no Americans are left out or left behind as we accelerate the transition to a clean energy economy, and be responsible stewards of our natural resources and our public lands and waters.  
 FOUND MATCH  
 [a, clean, energy, future]  
 Democrats believe the tax code must reflect our commitment to a clean energy future by eliminating special tax breaks and subsidies for fossil fuel companies as well as defending and extending tax incentives for energy efficiency and clean energy.  
 FOUND MATCH  
 [a, clean, energy, economy]  
 Democrats believe that carbon dioxide, methane, and other greenhouse gases should be priced to reflect their negative externalities, and to accelerate the transition to a clean energy economy and help meet our climate goals.  
 FOUND MATCH  
 [the, clean, energy, transition]  
 During the clean energy transition, we will ensure landowners, communities of color, and tribal nations are at the table.

Figure 17. Democratic view on Energy, 2016

FOUND MATCH  
[the, new, economy, .]  
The old liberal approach - using the threat of stifling regulations to redistribute wealth and opportunity - will work no better than it ever has, and perhaps much worse, in the new economy.  
FOUND MATCH  
[the, global, economy, ,]  
In recognition of its growing importance in the global economy, we support Taiwan's accession to the World Trade Organization, as well as its participation in the World Health Organization and other multilateral institutions.  
[[the, new, economy, .], [the, global, economy, ,]]  
FOUND MATCH  
[the, new, economy, and]  
These initiatives are grounded in a steadfast commitment to open markets, to minimal regulations, and to reducing taxes that snuff out innovation - principles at the heart of the new economy and our party.  
[[the, new, economy, and]]  
FOUND MATCH  
[a, global, economy, without]  
Now we will bring it to completion: U.S. leadership of a global economy without limits to growth.  
[[a, global, economy, without]]

Figure 18. Republican view on Economy, 2000

FOUND MATCH  
[the, global, economy, .]  
That equation governs our policies regarding U.S. corporations in the global economy.  
FOUND MATCH  
[the, global, economy, .]  
We encourage public-private partnerships to provide predictable support for connecting rural areas so that every American can fully participate in the global economy.  
FOUND MATCH  
[our, new, economy, .]  
Today they are the entrepreneurs, independent contractors, and small business men and women of our new economy.  
FOUND MATCH  
[the, new, economy, .]  
They are attacking the franchise model of business development, which is essential to the flexibility and creativity of the new economy.  
FOUND MATCH  
[the, digital, economy, .]  
These increased privacy protections have become crucial to the digital economy.  
FOUND MATCH  
[the, digital, economy, .]  
With the rise of the digital economy, it has become even more critical that we protect intellectual property rights and preserve freedom of contract rather than create regulatory barriers to creativity, growth, and innovation.  
FOUND MATCH  
[a, vibrant, economy, .]  
Sensible regulations can be compatible with a vibrant economy.  
[[the, global, economy, .], [the, global, economy, .], [our, new, economy, .], [the, new, economy, .], [the, digital, economy, .], [the, digital, economy, .], [a, vibrant, economy, .]]  
FOUND MATCH  
[a, free, economy, without]  
We support the development of all forms of energy that are marketable in a free economy without subsidies, including coal, oil, natural gas, nuclear power, and hydropower.  
[[a, free, economy, without]]

Figure 19. Republican view on Economy, 2016

Documents Used in Model	Coherence Score
All documents	0.24
Democratic 2000	0.32
Republican 2000	0.22
Democratic 2004	0.33
Republican 2004	0.25
Democratic 2008	0.30
Republican 2008	0.29
Democratic 2012	0.31
Republican 2012	0.26
Democratic 2016	0.32
Republican 2016	0.25

Table 1. Coherence scores of all LDA models