North Dakota's Oil Boom and its Effect on North Dakota Politics

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Abstract

North Dakota's oil boom is causing some of its countries to experience significant population increases. I study the effect this is having on the politics of North Dakota. To assess the effect of increased oil production on the population of counties and its effect on the politics of those counties I gathered statistics at the county level in the areas of oil production, populations including total, black, Hispanic, white, and male populations, and voting behavior (Republican or Democrat) from the United State Census, the North Dakota Secretary of State, and the North Dakota Industrial Commission, Department of Natural Resources. My hypothesis is that the increased populations of oil boom counties will cause those counties to vote more Republican. An early finding is that there are significant increases in oil production in some counties as well as significant population increases. Next steps will include looking more into the demographic profile of these population changes and how these profiles effect voting behaviors.

Introduction

The relationship oil booms have on politics is a topic not thoroughly studied by social scientists. Much of the literature focuses around energy development causing rapid increases in population and boomtowns. The literature focuses on the social results of rapid population growth. Increases in the demands on crime and health care and increased diversity are cited as results of boomtowns. The need for government services including welfare and infrastructure are also results of boomtowns.

My research focuses on the counties of North Dakota between the years of 1992 and 2012. I seek to determine the relationship between the increase in oil production and voting behavior in North Dakota counties. Since this particular question does not seem to be answered directly by the research, I theorize about voter behavior and party identification by interpreting the literature.

I use changes in the demographics of race and gender to help draw my conclusions. After examining the literature, my hypothesis is that in a comparison of North Dakota counties, increases in oil production will cause North Dakota counties to become more Democratic. I'll test my hypothesis by using SPSS to determine the effect oil production has on population change. Then I test how that population change affected the vote share of the Democratic and Republican party in North Dakota counties.

Literature Review

Social Disruption

Many rural communities have seen considerable population increases as a result of energy development causing boomtowns. The social impact assessment of boomtowns has been an objective of social scientists. The assessment is to determine how boomtowns effect individuals, groups, communities, and other social units. (Finsterbusch 1982) Dramatic changes in economics and demographics resulting from energy development are the basis of the "social disruption" perspective. (Smith 2001) The social disruption perspective theorizes that boomtowns disrupt social patterns. (Wirth, 1938) Changes in economics and demographics result in a diminishing social structure which harms social well-being.

The social disruption perspective closely relates to conventional theories of urbanization. Population growth results in the urbanization of rural "boomtown" communities. With urbanization, small communities lose their stability. (Murdock 1979) Their ways of life, behavior expectations, and social organizations are disrupted by the increased heterogeneity of a once homogeneous community. (Gilmore 1974)

Gillette Syndrome

One of the first boomtowns studied was Gillette, Wyoming. Gillette became a boomtown as a result of mining development. Mental health center cases increased 857 percent along with increases in depression, criminal activity, and mental disorders. The negative consequences of boomtowns became to be known as the "Gillette Syndrome". (Kohr 1974)

Diversity

The demographics of the new population are important factors in evaluating the social effects of boom towns. Culturally and ethnically, the social characteristics of homogenous rural communities are effected by population increase emerging from energy development. (Albrecht 1976) Communities are becoming more demographically and culturally diverse due to increases in population emerging from energy development. The tradition, culture, and values of the long-term residents are threatened by new residents with different traditions, cultures, and values. (Gilmore 1974) After rapid growth has stopped and post-boom population decline begins, the community experiences still more social change. Post-boom communities continue to have larger, more diverse populations. (Smith 2001)

Crime

Lantz and McKeown studied boomtowns in Colorado. They gathered data from the sheriff and police departments. Their findings showed a 222 percent increase in crimes against property in the studied boomtowns. Sheriff and police department cases increased 394 percent. (Lantz 1974) Dixon's study of the boom in Fairbanks, Alaska resulting from the construction of a pipeline reports a substantial increase in crime. Complaints to the police department increased 93 percent, with robbery increasing 195 percent and disorderly conduct increasing 188 percent. (Dixon 1978) Similarly, Campbell County experienced an increase in total crime by 144 percent during its boom years. In addition, the amount of calls to the police department in Rock Springs, Wyoming, increased from 8,000 calls per year to 36,000 calls per year during boom years. (Albrecht 2001) Williston, North Dakota, had to prioritize calls because of the soar in the crime rate. "The Williston Police Department is getting more calls now in a month than it used to in a

year." Violent crime has risen to a couple cases a day in Williston compared to a couple calls a month like it was before the oil boom. (Minneapolis 2012)

Health

In Colorado, Lantz and McKeown found that substance abuse went up 623 percent and inpatient hospital cases went up 143 percent in boom towns. (Lantz 1974) In the boomtown of Craig, Colorado, the caseload of their mental health facility went up 62 percent in the beginning of the boom and increased to 189 percent in the height of the boom. (Freudenburg 1982) The boomtown of Platte, Wyoming, reported a 198 percent increase in their mental health problems during boom years. (Thompson 1979) Rock Spring, Wyoming, increased its mental health center caseload by 857 percent. (Gilmore 1976)

Rural communities already have trouble obtaining suitable health care facilities to begin with. With the rapid increases in populations, their already inadequate facilities are strained and have more difficulty meeting demand. In Sweet Water, Wyoming, in just four years the doctor patient ratio went from 1: 1,800 to 1: 3,700. Reliance on emergency rooms increased as a result of long wait to see a doctor. (Gilmore 1974)

Public Services and Housing

Long-term residents have a harder time adjusting to the boom. Supply and demand drives up the cost of living, including drastic increases in housing costs. The cost of rent has tripled in western North Dakota counties, forcing those on fixed incomes and those who don't work for the oil industry out of their homes. In some cases, senior citizens that are on fixed incomes went from paying $300 a month to $3,000, forcing them out of their homes.

(Gunderson 2012) Even workers can't afford the housing and mobile parks often spring up in the boomtowns that don't have proper water facilities. (Gray 1974)

The educational system is affected by boomtowns. The rapid population growth outgrows the school's capacity. Other buildings are often converted into temporary schools and class sizes are become larger. (Albrecht 1976) At the same time, the school system is trying to adapt to the new heterogeneity of the community, including their new heterogeneous student body.

Environment

Rural communities try to attract big industry. Rural communities even go as far as providing property tax exemptions for big industry. (Albrecht 1976) As rural communities' population density increases, the support for environmental regulation increases. Industrial development tends to have an effect on the public response to the environment. (Lewis 1975)

Changing demographics tend to affect public policy regarding environmental regulations. Changing demographics in boomtowns result in changing Black and Hispanic populations. Black, Hispanics, and other minorities are historically pro-environment, thus increases in minority populations provide more support for environmental regulations. (Kahn 2002) The Black Caucus has a higher rating of conservationism than other Democrats. (Dowie 1975) However, new populations of energy boomtowns include the manufacturing workers of the energy companies. These manufacturing workers are largely opposed to environmental regulations. (Kahn 2002) North Dakota instituted new regulations costing the oil industry $400 million a year. (Gunderson 2012)

Politics

Determining the relationship between boomtowns and voting is not addressed in the literature directly. My research focuses on the political relationships stemming from North Dakota's oil boom. North Dakota will soon produce the second most oil of any U.S. sate. (Gunderson 2012) At best, conclusions can be drawn between aspects of social disruption and voting behavior which is the strongest indicator of party identification. Environmental issues and government action may indicate party identification as well.

Great diversity in boomtowns may indicate that traditional voting behavior may change due to a once homogeneous community turning into a heterogeneous community. The new culture, politics, and values of new community members are likely to cause social disruption impacting local politics by showing less support for the party that had the most support previously. It's not that the community will hold the original dominant party responsible for the problems with the boom, but more so that new community members will bring new ideas thus changing the political atmosphere.

Increases in crime rates may indicate the community will become more Republican. Conventional wisdom is that Republicans are more likely to crack down on crime. It is reasonable to predict that the community would disapprove of the increase in crime and demand that the city crack down on crime. With large increases in crime, crime would likely be an important political issue influencing voters to vote more Republican.

The increase in health care problems may have the opposite relationship than crime had on voting behavior. The overcrowding of health care facilities, long waits to see the doctor, and reliance on emergency rooms may drive the community to demand more government spending

on health care. Since the Demographic Party is associated with more government spending, the Democrats may receive more of a share of a vote than they did in elections before the boom.

The demographics of the newly heterogeneous community will likely have an impact on voting behavior. Blacks, Hispanics, and minorities are more likely to support environmental issues and they typically lean Democratic. The increase in minorities will increase the Democratic share of the votes. On the other hand, the increased manufacturing workers who oppose environmental regulation are likely to vote Republican because costs of regulation will directly effect their employer.

The gender demographics will determine the change in voting behavior in boomtowns. Women vote more Democratic than men and the Democratic share of the women vote is growing with each election. (Roper 1996) Even including the variable of parental influence, women still vote more Democratically than men. (Trevor 1999) This growing difference between men and women voting behavior, particularly the increase in women voting for Democrats is known as the "gender gap" (Trevor 1999) We can predict that if there are more men moving to boomtowns than the Republican share of the vote will have more support but if more women move to boomtowns than the vote share will likely have more Democratic support.

The increased demand for the government to provide for social welfare programs, health care, education, and housing may indicate voting behavior. Taxes must be raised to fund these programs and Democrats are more associated with raising taxes. The need of state and federal support to subsidize the local tax base may cause the population to vote Democratic, not just at the local level, but at the state and federal level.

Hypothesis

It is my hypothesis that boomtowns will increase the Democratic share of the vote in North Dakota. Increases in the minority population will likely have a positive relationship with the share of the Democratic vote. Demand for more government spending on programs and services will likely result in the Democrats receiving a higher share than during boom years than before the boom. Also, if women are coming into the area at the same rate as men, than the gender gap would indicate that there will be an increase in Democratic votes. Increases in minority populations, demand for more government programs, and the women vote should outweigh the possible increase in Republican support as a result of increases in crime.

Methods and Analysis

In order to determine the relationship oil production increase have on population increase, I gathered oil production data from the North Dakota Industrial Commission, Department of Natural Resources. I used the U.S. Census to gather population change data.

(Figure 1 Here)

Figure 1 represents the change in oil production from 1992-2012 in North Dakota oil producing counties with increase in oil production and its effect on the population change on North Dakota oil producing counties from 1992-2012. The X-Axis, Oil Production Change from 1992-2012, is operationalized by subtracting the total number of barrels of oil produced in 1992 from the total number of barrels produced in 2012. The Y-Axis, Population Change form 1992-2012 is operationalized by subtracting the total county population of 1992 from the total county population of 2012.

I chose a scatter plot to display the relationship between the Oil Change from 1992-2012 with the population change from 1992-2012 in North Dakota oil producing counties because the variables are interval and scatter plots compare interval data. The numbers used to represent the difference in oil production are in raw numbers, the variable increases by one every time a barrel of oil produced is increased by one. The numbers used to represent the different of the county population are interval because they are represented as raw numbers, for every person lost or gained the variable increases or decreases by one.

The effect that the change in oil production has on population change in oil producing counties of North Dakota is a weak relationship. The R2 value of .231 represents a weak

relationship. The line of regression is positive but weak. The scatter plot indicates that oil is not driving up the population of Stark County. The scatterplot shows that among North Dakota counties that have increases in oil production, only Williams and Mountrail County are having population growth as a result of increased oil production. It is surprising that a majority of North Dakota counties that had increased oil production actually decline in population. Dunn Country dropped in population by about five hundred people despite producing 30 million more barrels of oil.

(Figure 2 Here)

Figure 2 represents the population change from 1992-2012 in North Dakota oil producing counties with increased oil production and its effect on the share of the Democratic vote in counties that have increased oil production form 1992-2012. The X-Axis, Population Change from 1992-2012 is operationalized by subtracting the population of oil producing counties in 1992 from the total population of the same counties in 2012. Only counties that increased oil production are included in this figure. The Y-Axis, Change of the Democratic share of the vote from 1992-2012 in oil producing counties is found by first computing the average Democratic share of the vote in 1992. I computed the average Democratic share of the vote by adding the percentage of the vote for President, Governor, and U.S. Representative and computing the average. The same process is done for 2012. Subtract the Democratic share of the vote in 1992 from 2012 to get the change in the Democratic share.

I chose a scatter plot to display the relationship between the population change from 1992-2012 in oil producing counties with the change of the Democratic share of the vote from 1992-2012 in oil producing counties because the variables are interval. The Y-Axis, change in

the Democratic share of the vote form 1992-2012 is represented as a change in the percentage of the vote. For example, if the Democrats gained a half percent of the total share of the vote, the variable would increase by a half percent.

The effect the population change from 1992-2012 has on the change of the Democratic share of the vote is a weak negative relationship. The R2 value of 21.8% represents a weak relationship. The line of regression has a weak downward slope indicating a weak negative relationship. This means that the new populations in oil producing counties have a slight effect on the counties becoming more Republican. The scatter plot shows that regardless of population change, all counties that have increased oil production are becoming less Democratic since there is not a single county with a positive change in the Democratic share of the vote.

After analyzing the North Dakota counties that have increases in oil production and their population change's effect on the Democratic change through scatter plots, I used Bivariate Correlation to further analyze oil production's relationship with the population and Democratic change. The correlation shows the significance of the relationship between oil production change, total population change, and white, Hispanic, black, and male population changes. Changes in demographics may help predict voting behavior.

(Figure 3 Here)

The only counties represented in the correlation are counties that had an increase in oil production. Oil production, population, and Democratic vote changes are operationalized the same as Figure 1 and 2. The change in the black population is found by subtracting the black population of 1992 in oil producing counties from the black population in 2012 of the same counties. The change in the Hispanic and white vote is operationalized the same way. The

change in the population of males is found by taking the guy to girl ratio of 2012 and subtracting the ratio from 1992. I chose a Bivariate correlation because all the data was interval and Bivariate Correlation measures the significance of interval data. The variables are significant with one another if the two-tailed value is less than .05. If the variable is significant, the value for pearson's correlation identifies if it is a positive or negative relationship. The close the value is to one the stronger the relationship. Figure 3 tells us that there is a positive significance in population change and its relationship on the black, Hispanic, and White population increases. However, the ratio of males to females is not significantly effected. For my research, figure 3 shows an important correlation, the effect the change of the white population has on the democratic share of the vote. The white population change has a strong significance of .017 and moderately strong pearson value. The pearson value is a negative showing a negative relationship. This means that white increases in population in North Dakota counties which have increases in oil production have a significant relationship on a declining share of the Democratic vote.

(Figure 4 Here)

Figure 4 represents the population change from 1992-2012 in North Dakota counties that do not produce oil and its relationship on the change of the Democratic share of the vote in counties that don't produce oil form 1992-2012. The relationship the population change has on the Democratic share of the vote is very weak, represented by a very low R2 value of .010 and slightly upward slope of the line of regression. The reason the regression line is slightly positive because Cass County had a population growth of about 50,000 people and had a stable Democratic vote whereas the county that had the second most growth only increased by 20,000 and the county in third place was less than 5,000. In other words, Cass County is holding up the

share of Democratic vote in non-oil producing counties, but just barely. This analysis shows that only five counties that don't produce oil became more Democratic. Furthermore, all five counties that are becoming more Democratic are located in the eastern half of the state which doesn't produce oil.

After determining the relationship between population changes in non-oil producing North Dakota counties, I further analyze voting behavior in non-oil producing counties by using bivariate correlation. The correlation shows the relationship between total population change, Democratic change, and black, Hispanic, white, and male population changes.

(Figure 5 Here)

Figure 5 shows that there is a significantly positive relationship between population change and black, Hispanic, and white population changes. Neither total, racial, nor gender population change have a significant relationship on the share of the Democratic vote. All we can determine from this figure is that the population growth in North Dakota non-oil producing counties is having increasing in white, black, and Hispanic populations, and that the guy to girl ratio does not having a significant relationship with the change of the Democratic vote or the changes of population.

Now that I've analyzed the relationship population increases have on the change of the Democratic vote in oil producing counties and non-oil producing counties, I will analyze the relationship at a state level.

(Figure 6 Here)

Figure 6 shows a very slight positive correlation between population increases and the Democratic share of the vote. The relationship is very weak with a R2 value of .013. By having the largest population increase of any North Dakota County and a stable Democratic vote, Cass County is just holding up the statewide change of the Democratic share of the vote. After analyzing Figure 6, I notice that all the counties that have an increase in the Democratic share of the vote are eastern counties and that 48 of North Dakota's 53 counties became less Democratic.

(Figure 7 Here)

Figure 7 tells us that the increased populations of North Dakota yield significant increases in white, black, and Hispanic populations. However, population increases did not significantly effect the guy to girl ratio in North Dakota. The most important significance Figure 7 shows is that oil production and the Democratic share of the vote have a moderately significant negative relationship on each other. As oil production goes up, the state wide share of the Democratic vote goes down.

Conclusion

The analysis shows a difference between counties that are having increases in oil production, counties that do not produce oil, and the state as a whole. Figure one shows that there is a positive relationship between oil production and population growth in counties that are increasing oil production. Figure two shows that when we compare those population changes as a result of oil growth, every county that produces oil is becoming less Democratic whether they are gaining or losing population, contrary to my hypothesis. Figure 3 further explains the relationship between increases in population and voting behavior. Contrary to my hypothesis, increasing minorities don't have a significant relationship with the share of the Democratic vote. What can be concluded by Figure 3 is that increases in the white population have a significant relationship on the counties becoming less Democratic.

Figure 4 shows that all but five North Dakota non-oil producing counties are becoming more Democratic and figure 5 shows that the changes in total, gender, and racial populations are not significantly effecting the change of the Democratic vote.

Figure 6 shows that North Dakota as a whole is technically becoming slightly more Democratic than Republican but only because North Dakota's largest county, Cass County, is had the largest population increases and had a stable Democratic vote. Figure 7 displays the statewide relationship between oil production and the Democratic share of the vote as a significantly negative relationship. This means that when we compare all the counties of North Dakota, the oil production in western North Dakota is causing the state as a whole to vote more Republican.

My hypothesis was supported in counties that don't produce oil but was not supported in oil-producing counties. It is my conclusion that North Dakota oil producing counties are becoming more Republican. If you take the average change in the Democratic vote based on population of all North Dakota non-oil producing counties, my conclusion is that they will become slightly more Democratic. However, if you don't take the average according to population but just compare how many counties are becoming more Republican to the counties becoming more Democrat, North Dakota counties are becoming much more Republican. Overall according to population measures, North Dakota is becoming more Democratic but that is only because of the high population of Cass County. If we just compare the amount of North Dakota counties voting more Republican as opposed to Democratic, a super majority of North Dakota counties are becoming more Republican. Furthermore, it is the white population in the oil producing counties that are causing the counties to vote more Republican, and it's the oil that is causing more North Dakota states, oil producing or non, to vote more Republican.

Appendix

Figure 1

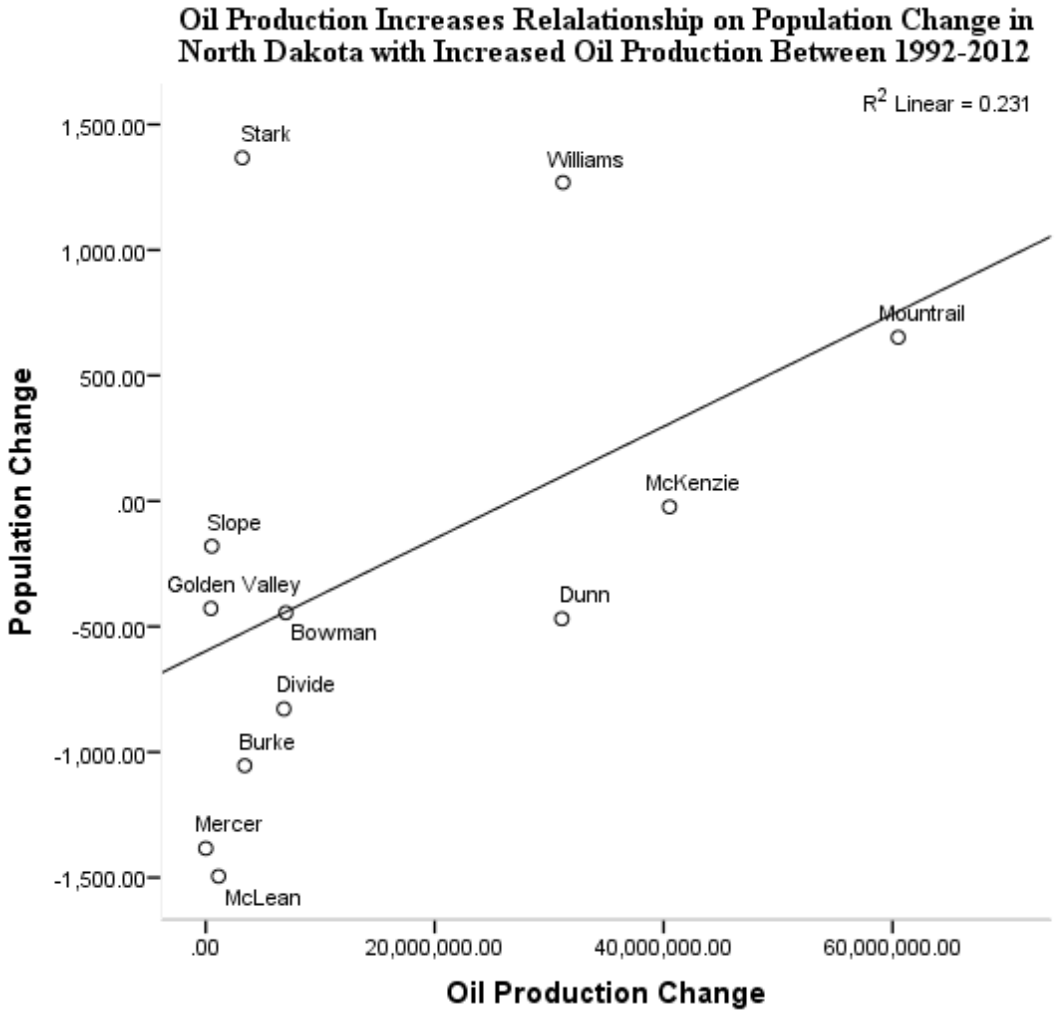
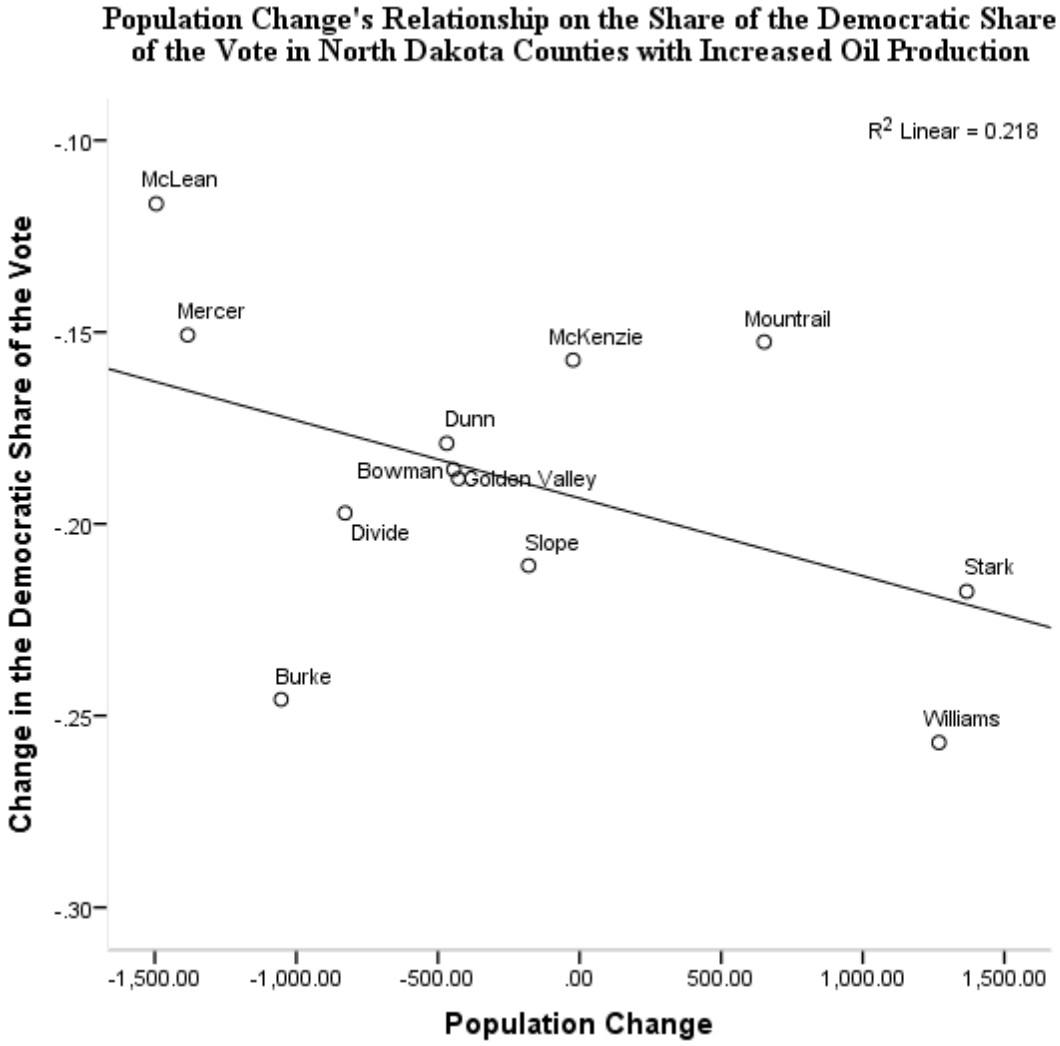


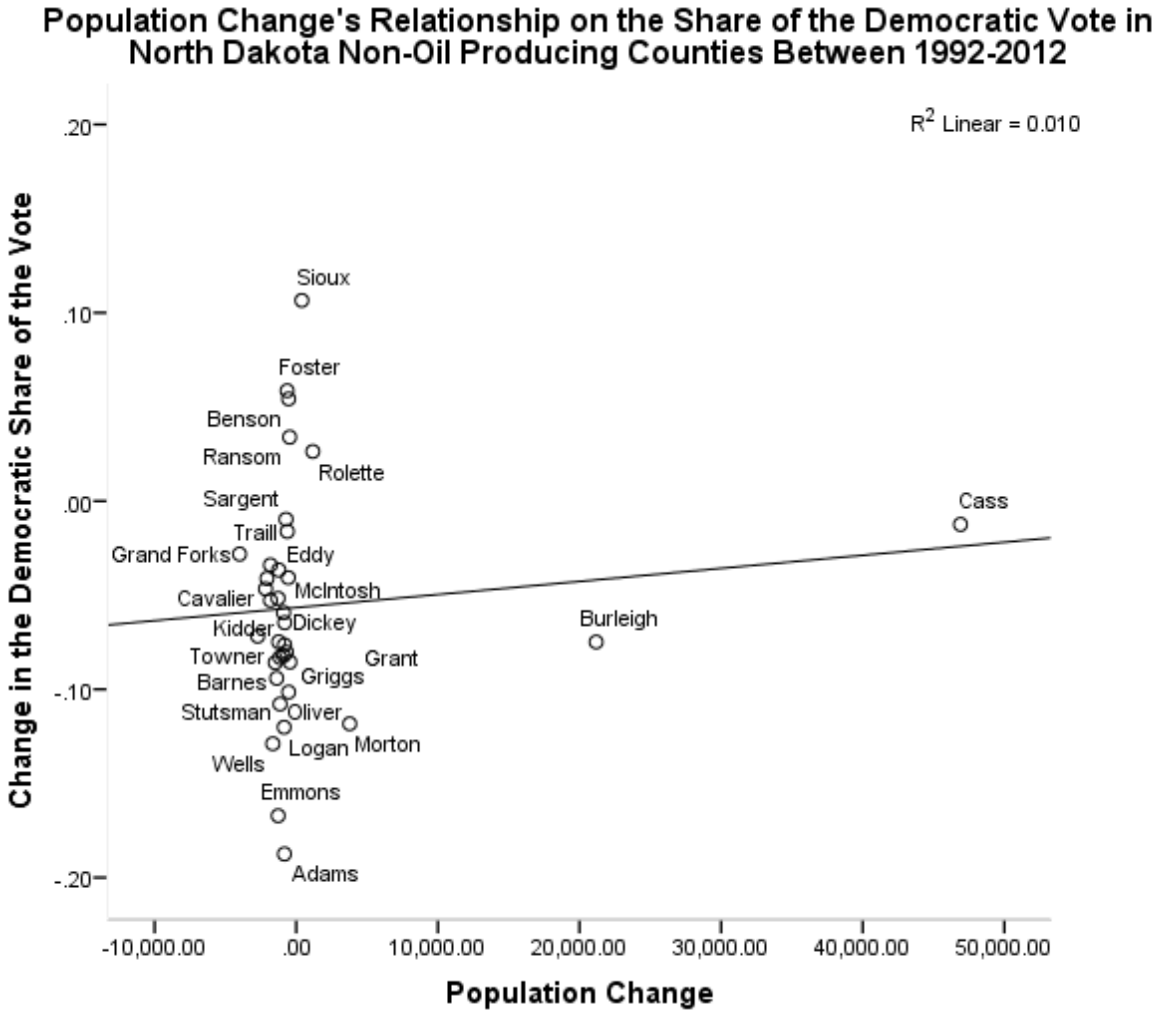
Figure 2


Population Change's Relationship on the Share of the Democratic Share of the Vote in North Dakota Counties with Increased Oil Production
R^2 Linear = 0.218
Change in the Democratic Share of the Vote
-.10
-.15
-.20
-.25
-.30
McLean
Mercer
McKenzie
Mountrail
Dunn
Bowman
Golden Valley
Divide
Slope
Stark
Burke
Williams
-1,500.00
-1,000.00
-500.00
.00
500.00
1,000.00
1,500.00
Population Change

The Relationship Changes in Oil Production, Total Population, Democratic Votes, and Black, Hispanic, White, and Male Populations Have on Each Other in Dakota Oil Producing Counties Between 1992-2012

Figure 3		Oil Production Change	Population Change	Democratic Vote Change	Change Black	Change Hispanic	Change White	Change Male
Oil Production Change	Pearson Correlation	1	.480	.142	-.099	.413	.220	-.059
	Sig. (2-tailed)		.114	.661	.760	.182	.493	.856
	N	12	12	12	12	12	12	12
Population Change	Pearson Correlation	.480	1	-.467	**.669***	**.836****	**.921****	.101
	Sig. (2-tailed)	.114		.126	**.017**	**.001**	**.000**	.755
	N	12	12	12	**12**	**12**	**12**	12
Democratic Vote Change	Pearson Correlation	.142	-.467	1	-.324	-.247	**-.673***	-.078
	Sig. (2-tailed)	.661	.126		.304	.440	**.017**	.810
	N	12	12	12	12	12	**12**	12
Change Black	Pearson Correlation	-.099	**.669***	-.324	1	**.708***	**.620***	-.166
	Sig. (2-tailed)	.760	**.017**	.304		**.010**	**.032**	.607
	N	12	**12**	12	12	**12**	**12**	12
Change Hispanic	Pearson Correlation	.413	**.836****	-.247	**.708***	1	**.645***	-.116
	Sig. (2-tailed)	.182	**.001**	.440	**.010**		**.024**	.719
	N	12	**12**	12	**12**	12	**12**	12
Change White	Pearson Correlation	.220	**.921****	**-.673***	**.620***	**.645***	1	.183
	Sig. (2-tailed)	.493	**.000**	**.017**	**.032**	**.024**		.569
	N	12	**12**	**12**	**12**	**12**	12	12
Change Male	Pearson Correlation	-.059	.101	-.078	-.166	-.116	.183	1
	Sig. (2-tailed)	.856	.755	.810	.607	.719	.569	
	N	12	12	12	12	12	12	12

Figure 4


Population Change's Relationship on the Share of the Democratic Vote in North Dakota Non-Oil Producing Counties Between 1992-2012
R^2 Linear = 0.010
Change in the Democratic Share of the Vote
.20
.10
.00
-.10
-.20
Sioux
Foster
Benson
Ransom
Rolette
Sargent
Traill
Grand Forks
Eddy
McIntosh
Cavalier
Kidder
Dickey
Towner
Grant
Barnes
Griggs
Stutsman
Oliver
Logan
Morton
Wells
Emmons
Adams
Cass
Burleigh
-10,000.00
.00
10,000.00
20,000.00
30,000.00
40,000.00
50,000.00
Population Change

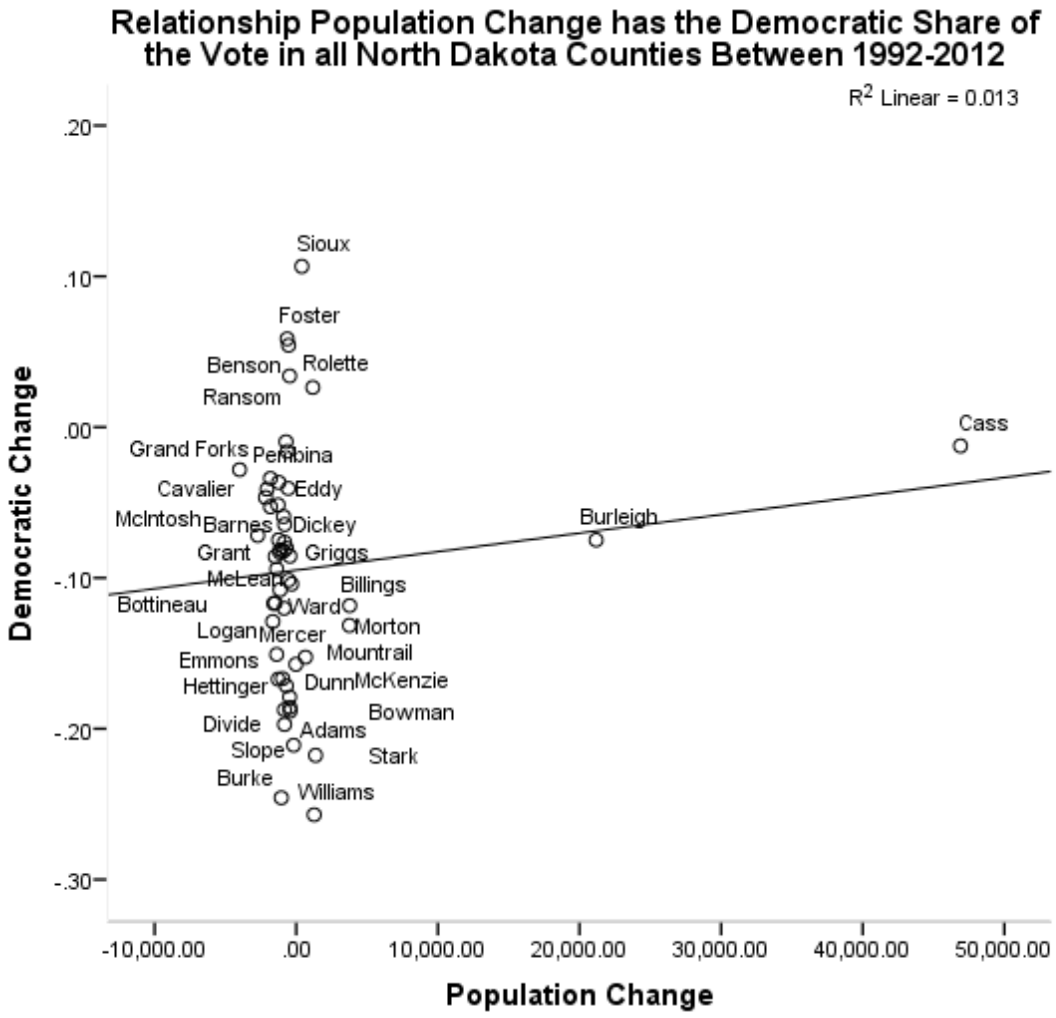
The Relationship Change in Total Population, Democratic Votes, and Black, Hispanic, White, and Male Populations Have on Each Other in North Dakota Non-Oil Producing Counties

Figure 5		Population Change	Democratic Change	Black Change	Hispanic Change	White Change	Male Change
Population Change	Pearson Correlation	1	.100	.946**	.864**	.996**	-.087
	Sig. (2-tailed)		.566	**.000**	**.000**	**.000**	.618
	N	35	35	35	35	35	35
Democratic Change	Pearson Correlation	.100	1	.103	.108	.074	.150
	Sig. (2-tailed)	.566		.557	.536	.675	.390
	N	35	35	35	35	35	35
Change Black	Pearson Correlation	.946**	.103	1	.899**	.934**	-.064
	Sig. (2-tailed)	**.000**	.557		**.000**	**.000**	.717
	N	35	35	35	35	35	35
Change Hispanic	Pearson Correlation	.864**	.108	.899**	1	.827**	.296
	Sig. (2-tailed)	**.000**	.536	**.000**		**.000**	.084
	N	35	35	35	35	35	35
Change White	Pearson Correlation	.996**	.074	.934**	.827**	1	-.156
	Sig. (2-tailed)	**.000**	.675	**.000**	**.000**		.372
	N	35	35	35	35	35	35
Change Male	Pearson Correlation	-.087	.150	-.064	.296	-.156	1
	Sig. (2-tailed)	.618	.390	.717	.084	.372	
	N	35	35	35	35	35	35

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Figure 6


Relationship Population Change has the Democratic Share of the Vote in all North Dakota Counties Between 1992-2012
R2 Linear = 0.013
Democratic Change
.20
.10
.00
-.10
-.20
-.30
Sioux
Foster
Benson
Rolette
Ransom
Grand Forks
Pembina
Cavalier
Eddy
McIntosh
Barnes
Dickey
Grant
Griggs
McLean
Billings
Bottineau
Ward
Logan
Mercer
Morton
Emmons
Mountrail
Hettinger
Dunn
McKenzie
Bowman
Divide
Adams
Slope
Stark
Burke
Williams
Cass
Burleigh
-10,000.00
.00
10,000.00
20,000.00
30,000.00
40,000.00
50,000.00
Population Change

Relationship Changes in Oil Production, Total Population, Male, White, Black, Hispanic, and Democratic Votes Have on Each Other in All North Dakota Counties.

Figure 7		Oil Change	Population Change	Male Change	White Change	Black Change	Hispanic Change	Democratic Change
Oil Change	Pearson Correlation	1	-.013	.140	-.022	-.047	.006	**-.348***
	Sig. (2-tailed)		.925	.317	.875	.740	.966	**.011**
	N	53	53	53	53	53	53	**53**
Population Change	Pearson Correlation	-.013	1	-.075	.995**	.944**	.832**	.114
	Sig. (2-tailed)	.925		.593	**.000**	**.000**	**.000**	.417
	N	53	53	53	53	53	53	53
Male Change	Pearson Correlation	.140	-.075	1	-.124	-.068	.188	-.094
	Sig. (2-tailed)	.317	.593		.377	.627	.179	.502
	N	53	53	53	53	53	53	53
White Change	Pearson Correlation	-.022	.995**	-.124	1	.933**	.785**	.090
	Sig. (2-tailed)	.875	**.000**	.377		**.000**	**.000**	.523
	N	53	53	53	53	53	53	53
Black Change	Pearson Correlation	-.047	.944**	-.068	.933**	1	.850**	.130
	Sig. (2-tailed)	.740	**.000**	.627	**.000**		**.000**	.354
	N	53	53	53	53	53	53	53
Hispanic Change	Pearson Correlation	.006	.832**	.188	.785**	.850**	1	.105
	Sig. (2-tailed)	.966	**.000**	.179	**.000**	**.000**		.455
	N	53	53	53	53	53	53	53
Democratic Change	Pearson Correlation	**-.348***	.114	-.094	.090	.130	.105	1
	Sig. (2-tailed)	**.011**	.417	.502	.523	.354	.455	
	N	**53**	53	53	53	53	53	53

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

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