

THE EFFECTS OF RELIGIOUS FREEDOM LAWS ON EMPLOYMENT,  
SMALL-MINORITY-OWNED BUSINESSES AND  
MINORITY POPULATIONS

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## **Abstract**

Twenty states have now passed religious freedom laws to protect religious practices and beliefs. While many individuals and groups believe these laws are necessary to protect them from government intervention that may take away their rights, there are others who fear that these laws can be used by businesses to discriminate against the LGBT community in the name of religion. In a recent case in Indiana, several large corporations voiced their dissent over the state's impending religious freedom law, causing the Governor to sign a new version of the bill. The purpose of this paper is to determine how these religious freedom laws have affected employment, small-minority-owned businesses and minority populations. Using regression analysis it was found that county employment was not affected by these state laws but there were fewer Asian firms and fewer Hispanics in counties in states with these laws. Moreover, the African American population was larger in counties in states with such laws. To overcome the negative views and opinions associated with religious freedom laws, states with those laws may also need to pass laws that ban discrimination against the LGBT community.

**Keywords:** religious freedom laws, discrimination, employment, small-minority-owned businesses, minority populations, LGBT community

## THE EFFECTS OF RELIGIOUS FREEDOM LAWS ON EMPLOYMENT, SMALL-MINORITY-OWNED BUSINESSES AND MINORITY POPULATIONS

### 1. Introduction

In 1993, President Clinton signed the Religious Freedom Restoration Act (RFRA) to safeguard religious practices and ensure religious freedom. Several states have introduced their own versions of this Act which became known as “religious freedom laws.” Some believe that these laws would allow businesses to discriminate against the LGBT community and deny them service since their lifestyle goes against the religious beliefs of some business owners. Other groups such as social conservatives and those who are pro-business (Coontz 2015) believe that these religious freedom laws are needed to protect them from government regulations and laws that are infringing upon their religious and personal freedoms.

In April 2015, Governor Mike Pence of Indiana came under fire for his support of a religious freedom bill, Senate Bill 101. As Cook (2015) stated, “Senate Bill 101 would prevent state and local governments from “substantially burdening” a person’s exercise of religion unless the government can prove it has a “compelling interest” and is doing so in the “least restrictive” means.” Many felt that this bill would allow businesses to use their religious beliefs as a way to discriminate against those customers they did not want to serve such as same-sex couples. As a result of this proposed bill, “...the threat of boycotts and other retaliation was swift, from groups as diverse as the National Collegiate Athletic Association, the Indiana Pacers, Walmart, Eli Lilly, Apple and even the Marriott International hotel chain” (Coontz 2015). It had become apparent that there was a growing belief among many in the business community that any form of discrimination either real or perceived, was bad for business. In response to this reaction, on April 2, 2015, Governor Pence signed a revised freedom of religion bill for the State of Indiana

which clarified that businesses could not use the law to discriminate based on a person's sexual orientation (Lowery 2015).

The purposes of this paper are to determine the effects of state religious freedom laws on county employment, small-minority-owned businesses, and minority populations. Have firms chosen to locate in states without religious freedom laws, leading to lower levels of employment in states with these laws? On the other hand, some firms may have chosen to locate in a state with religious freedom laws since those laws tend to mirror the beliefs and views of these particular businesses. In such cases, there may be an increase in employment. The final possibility is that these laws have little or no effect on county employment.

Are small-minority-owned businesses affected by state religious freedom laws? In particular, are the numbers of African American-owned, Hispanic-owned, Asian-owned, or women-owned businesses in a county affected by the state's law? It may be that minority-owned businesses are more sensitive to discrimination and intolerance and more willing to establish a company in a state without religious freedom laws. Similarly, African Americans and Hispanics who are not even business owners may be more willing to relocate to states without these laws.

While state religious freedom laws met very little resistance 15 or 20 years ago, the general feeling of the public now is that any law that could even possibly be perceived as discriminatory in nature to any group, cannot be left unchallenged. According to Coontz (2015), "Businesses seeking to develop brand loyalty among younger consumers have a special incentive to highlight their rejection of anti-gay-bias. A CNN poll taken in February found that 72% of millennials nationwide believe that same-sex couples have the right to have their marriages recognized as valid." Perhaps the incentives for businesses to speak out against religious

freedom laws have changed and this may very well affect employment in all states with or without these laws if it has not already done so.

The outline of this paper is as follows. A brief history of the Religious Freedom Restoration Act which gave rise to religious freedom laws will be discussed in section 2. Section 3 provides a review of the literature on employment models which gives rise to the employment model and other models used in this paper in section 4 to determine the economic effects of religious freedom laws. Section 5 presents the data and empirical results, followed by the conclusions.

## 2. History of the Religious Freedom Restoration Act

In 1990, the Supreme Court ruled in a 5-4 decision that the use of peyote as part of a religious ceremony was not protected under the First Amendment as engaging in freedom of religion. In response to the 1990 Supreme Court ruling, the Religious Freedom Restoration Act (RFRA) of 1993 was passed by Congress and signed by President Clinton. The purpose of the Act was to protect religious freedoms. In 1997, the Supreme Court ruled that the RFRA did not apply to states, giving way to the passage of several state versions of the RFRA. The Supreme Court has, however, continued its support of the RFRA at the federal level. In 2014 for example, the Supreme Court ruled in favor of Hobby Lobby when the company chose to not provide coverage for contraception as part of the health care provided their employees, due to religious beliefs. (Groppe 2015).

In recent months, several states began to ratify or eliminate amendments to state constitutions that ban gay marriages and on June 16, 2015, the Supreme Court made same-sex marriage legal in all fifty states. In part, as a reaction to this movement, many states have

responded with their own version of the RFRA (Von Drehle, p. 34). There are now 20 states that have passed religious freedom laws (Johnson and Steinmetz, 2015). They are, Connecticut (1993), Rhode Island (1993), Florida (1998), Illinois (1998), Alabama (1998), Arizona (1999), South Carolina (1999), Texas (1999), Idaho (2000), New Mexico (2000), Oklahoma (2000), Pennsylvania (2002), Missouri (2003), Virginia (2007), Tennessee (2009), Louisiana (2010), Kentucky (2013), Kansas (2013), Mississippi (2014), and Indiana (2015).

Some states have also passed laws that prohibit discrimination based on sexual orientation when it comes to using public accommodations such as restaurants, theaters and hotels. According to the National Center for Transgender Equality (2014), “Federal nondiscrimination laws covering public accommodations cover only race, color, religion, national origin, and disability. Federal law does not prohibit discrimination based on sex, gender identity or sexual orientation in public accommodations... Many states and localities also explicitly prohibit discrimination based on gender identity and sexual orientation in public accommodations. The following 17 states have explicit protections: California, Connecticut, Colorado, Delaware, Hawaii, Illinois, Iowa, Maryland, Maine, Minnesota, Nevada, New Jersey, New Mexico, Oregon, Rhode Island, Vermont, and Washington State, as well as the District of Columbia. More than 200 cities and counties also explicitly prohibit gender identity discrimination even if their state does not.”

Some states like New Mexico and Illinois have passed religious freedom laws and have also passed laws that prohibit discrimination in housing, public accommodations, and employment, based on sexual orientation. These states may be trying to walk the fine line between satisfying social conservatives and satisfying that part of the community which is against any form of discrimination. Other states such as California, Oregon, Washington, and

Maine have laws that prohibit discrimination in housing, public accommodations, and employment, based on sexual orientation and have no religious freedom laws. There are also states such as Texas, Louisiana, Alabama, Mississippi, and Florida that do not have laws that prohibit discrimination in housing, public accommodations, and employment, based on sexual orientation, but do have religious freedom laws (Von Drehle 2015).

In the next section, a review of employment models will be presented. These models will be used to develop other models that can be used in determining the economic effects of state religious freedom laws.

### 3. A Review of Employment Models

Many researchers have developed employment models to analyze the economic effects of different policies. Haughwout (1999) analyzed the effects of the U.S. Department of Commerce's Economic Development Administration public works program investments on county employment. In his model, public works investments could affect county employment by 1) increasing the marginal product of labor, 2) increasing wages which would in turn affect employment, and 3) changing land values which could affect employment. To determine these effects, the author specified a regression model in which the log of employment for a county was used as the dependent variable and several independent variables were chosen which included the percent of the county's firms with less than 10 employees, the percent of the county's firms with more than 1,000 employees, an urban dummy variable, the percent of the county's population that was black, the county's median house value, and the amount of public investments received by the county from the EDA program. He found that the presence of large firms in a county, the county being an urban county, the median value of housing, employee

compensation, and the EDA grant received by a county, were positively related to county employment.

Wu (2012) examined how local taxes affected employment in northeastern Illinois counties. Wu (p. 352) stated,

A variety of economic indicators have been used as benchmarks in state and local economic development programs, including (but not limited to) new plant openings, new branch plants, employment and population growth, foreign direct investment, changes in personal income, and so on. It is noteworthy that, for most development programs, business employment expansion remains the top priority for policymakers.

An effective economic development program requires a thorough understanding of the factors that may affect location and expansion of businesses. Economic logic suggests that any factors that alter business profitability are likely to affect location of business activities (establishment, employment, etc.).

The author specified a regression model in which the dependent variable was employment for six northeastern Illinois counties (in different years: 2004, 2005 ..., 2008) and the independent variables included local tax variables (2003), municipal population (2000), and per capita income (1999). Wu included population as a regressor to measure the demand for goods which would then affect employment. He used per capita income as a regressor since “Per capita income, as a measure of a community’s wealth, may help control for some relevant factors such as quality of life, local schools, and so on, because a wealthier locality is likely to have better schools and higher quality of life. In addition, wealthier communities are more attractive to businesses because they tend to have stronger consumer demand for private commodities and services” (p. 355). Wu found that per-capita income did not have a significant effect on employment when looking at all industries, while population had a significant positive effect. He also found that some tax rates affected employment in certain years but not others.

Goetz and Rupasingha (2013) analyzed those factors affecting the growth in self employment from 2000 to 2009. In their study they formed a regression model in which the



dependent variable was the change in the ratio of self-employed jobs to wage jobs over time by county. Some of their independent variables included the median age of the population, an ethnic diversity index, firm size, a measure of education, population growth, growth in per-capita income, percent of owner-occupied homes, and employment shares of different industries. Among the authors' findings, median age, ethnic diversity, population density, income, and a higher percent of high-school drop outs, were positively related to growth in self employment.

While there is not one specific employment model used by all researchers, certain variables are common to most studies. In the next section, models will be developed that take into account these major variables used in the majority of studies.

#### 4. Models of the Effects of State Religious Freedom Laws on County Employment, Small-Minority-Owned Businesses, and Minority Populations

Using variables that past researchers have used, the following employment model was estimated to determine the effects of state religious freedom laws.

$$(1) \quad \text{employment}_i = \beta_1 + \beta_2(\text{population}_i) + \beta_3(\text{income}_i) + \beta_4(\text{age}_i) + \beta_5(\text{education}_i) + \beta_6(\text{AfricanAm}_i) + \beta_7(\text{Hispanic}_i) + \beta_8(\text{housing}_i) + \beta_9(\text{rural}_i) + \beta_{10}(\text{popdensity}_i) + \beta_{11}(\text{manufacturing}_i) + \beta_{12}(\text{retail}_i) + \beta_{13}(\text{RFL}_i) + \varepsilon_i,$$

where the variables are defined as follows. *Employment* is the number of individuals employed in county *i*, *population* is the county's population, *income* is per-capita income, *age* is represented by the resident population eighteen years and over as a percent of the total population, *education* is the percent of high school graduates, *AfricanAm* is the percent of African American individuals in the county, *Hispanic* is the percent of Hispanic individuals, *housing* is the valuation of new private housing units, *rural* is the rural population as a percent of the total population, *pop-density* is population per square mile, *manufacturing* is the number of

manufacturing establishments in the county per 100,000 inhabitants, *retail* is the number of retail establishments per 100,000 inhabitants, *RFL* is a qualitative variable taking on the value of 1 if the county is located in a state with a religious freedom law and 0 if not, and  $\varepsilon_i$  is the random disturbance term for the county.

In equation (1) the independent variables that should be positively related to employment in a county include, population, income, manufacturing, retail, education, housing, age and population density. Greater values of population, income, housing, and population density represent a greater demand for business products and a more profitable environment for businesses which should lead to higher levels of employment. A larger number of manufacturing and retail firms in a county is also consistent with higher levels of employment. Furthermore, those individuals with higher levels of education will also be able to find jobs more easily and those counties with a larger resident population aged eighteen and older will have higher levels of employment than those counties with a larger resident population under eighteen years of age.

Those independent variables in equation (1) that should be negatively related to employment include, AfricanAm, Hispanic, and rural. According to Bureau of Labor Statistics (2015), the unemployment rate for African Americans, sixteen and older, was 10.4% in the first quarter of 2015. For Hispanics the rate was 7.3% and for whites it was 5.1%. Since population is held fixed in equation (1) when looking at the effects of the African American and Hispanic populations, those counties with a relatively larger African American and Hispanic population with higher unemployment rates, could have lower employment rates and the coefficients of the African American and Hispanic variables could be negative. The coefficient of the rural variable should also be negative since rural areas tend to have a lower population density.

The variable RFL could be positively or negatively related to employment. If the coefficient of RFL in equation (1) is negative and significant, there is evidence that religious freedom laws are having an adverse effect on county employment. Businesses may be relocating elsewhere and taking their jobs with them, or perhaps businesses are not relocating but consumer demand and support for these businesses has waned. If the coefficient is positive, there is some evidence that either businesses with socially conservative attitudes are attracted to states with these laws resulting in higher levels of employment, or consumer spending in support of these laws and existing businesses is leading to more jobs.

To determine the effects of religious freedom laws on the number of small businesses in a county a similar model will be estimated which is given is equation (2).

$$(2) \quad AfricanAmfirms_i = \beta_1 + \beta_2(population_i) + \beta_3(income_i) + \beta_4(age_i) + \beta_5(education_i) + \beta_6(AfricanAm_i) + \beta_7(Hispanic_i) + \beta_8(housing_i) + \beta_9(rural_i) + \beta_{10}(popdensity_i) + \beta_{11}(manufacturing_i) + \beta_{12}(retail_i) + \beta_{13}(RFL_i) + \varepsilon_i,$$

where the dependent variable *AfricanAmfirms* is the number of small African American-owned businesses in the county and the independent variables are the same ones used in equation (1).

These independent variables have been used in similar studies that have analyzed the determinants of self employment. Bogan and Darity (2008) estimated a probit model where their dependent variable was 1 or 0 for being self employed or not. Their independent variables included race, age, and industry variables. Fairlie, and Meyer (1996) also estimated a probit model for self employment that included education, race, marital status, and date of immigration. A study for the New York State Department of Economic Development by NERA Economic Consulting (2010) found,

After years of comparative neglect, research on the economics of entrepreneurship—especially upon self-employment—has expanded in the last twenty years. There is a

good deal of agreement in the literature on the micro-economic correlates of self-employment. In the U.S., it appears that self-employment rises with age, is higher among men than women and higher among non-minorities than African-Americans. The least educated have the highest probability of being self-employed. However, evidence is also found in the U.S. that the most highly educated also have relatively high probabilities. On average, however, increases in educational attainment are generally found to lead to increases in the probability of being self-employed (p. 139).

Equation (2) will also be estimated for Hispanic-owned businesses, Asian-owned businesses, and women-owned businesses.

In equation (2), the relationships between the independent variables and the dependent variable should be similar to equation (1). Those independent variables that represent a greater demand for business products should be positively related to the number of minority-owned businesses. What is different, however, in equation (2), is that the independent variable AfricanAm is expected to be positively related to the number of African American-owned small businesses since a larger African American population in a community provides a larger source of African American entrepreneurs.

If the coefficient of RFL is negative and significant in equation (2) and for the other equations like (2) where the dependent variable is the number of Hispanic-owned, Asian-owned, or women-owned small businesses, there is evidence that religious freedom laws are reducing the number of small minority-owned businesses in counties in states with religious freedom laws. This could occur if minority owners of businesses believe that these laws are not consistent with their own beliefs or if their businesses could be more successful elsewhere.

As stated earlier, it may also be the case that religious freedom laws are not just affecting minority-owned businesses, but all African Americans and Hispanics in a county could be affected if they feel that that these laws in general, are a reflection of attitudes towards minorities. To test this hypothesis the following equation will be estimated.

$$(3) \quad AfricanAmpop_i = \beta_1 + \beta_2(population_i) + \beta_3(income_i) + \beta_4(age_i) + \beta_5(education_i) + \beta_6(AfricanAm_i) + \beta_7(Hispanic_i) + \beta_8(housing_i) + \beta_9(rural_i) + \beta_{10}(popdensity_i) + \beta_{11}(manufacturing_i) + \beta_{12}(retail_i) + \beta_{13}(RFL_i) + \varepsilon_i,$$

where the size of the African American population in the county is the dependent variable. A similar equation will be estimated where the dependent variable is the size of the Hispanic population.

The independent variables used in equation (3) are similar to those used in several other papers that have estimated regression models where the dependent variable is the size of a minority population. Barcus (2006) analyzed the determinants of the Hispanic population in counties in Kentucky. Her independent variables included the size of the Hispanic population in an earlier date, the percent of county jobs in manufacturing, the percent of county jobs in construction, the percent of jobs in sales, tobacco acreage, and a dummy variable for urban status. Gimpel (1999) estimated a model using data for California counties where his dependent variable was the change in the size of a population group such as the Mexican population. His independent variables included the group population, the unemployment rate, the change in median family income, population density, and the percent of college students.

The same independent variables in equation (2) that were directly related to the number of minority-owned businesses in a county should also be directly related to the size of the minority population in equation (3). A larger population, higher incomes, a more educated society which may be older, a strong housing market, a high population density, and a vibrant manufacturing and retail sector, should attract a higher minority population. If the rural population as a percent of the total population is higher in a county, then the minority population may be higher or smaller, depending on the types of employment that are available for

minorities. If minorities are looking for agricultural related jobs, minority employment could be higher in rural counties.

If the coefficients of RFL in equation (3) for African Americans and Hispanics are negative and significant, religious freedom laws are leading to smaller minority populations in counties in those states with these laws. If, however, the coefficients of RFL are positive and significant in the employment, small business equations, and minority population equations, then religious freedom laws may be drawing in businesses, minorities, and consumer demand in support of these businesses, to those regions where religious freedom is held in high esteem.

## 5. Data and Empirical Results

To estimate equations (1) through (3), employment data for the third quarter of 2014 was collected from the Bureau of Labor Statistics (BLS) by county. Per-capita income and population for 2013 by county were collected from the Bureau of Economic Analysis' (BEA) website and all remaining variables came from the U.S. Census Bureau's website. Data were collected for 3,110 counties.

In the employment, small-minority-business and minority population equations, there may be feedback in that not only do the independent variables affect the dependent variable, but the dependent variable could also affect the independent variables. As an example, in the employment equation, income affects employment. However, the level of employment also affects county income. This could lead to simultaneous equation bias in which ordinary –least squares results in biased estimates of the parameters. To avoid this problem, a common solution used in the literature is to use lagged or prior values of the independent variables. If employment in 2014 is used as a dependent variable and income in 2013 or earlier is used as the independent

variable, then income in 2013 can affect employment in 2014 but employment in 2014 cannot affect income in 2013. Thus lagged values of all independent variables were used in this study. Furthermore, values of some of the independent variables were only available for certain dates when surveys were taken. The most recent figures available for small-minority-owned businesses for example, are for 2007 and the results of the 2014 survey are yet to be released. Therefore equation (1) was estimated using the following variables in Table 1. The small-minority-owned-business models and minority population models were estimated using the variables in Table 2.

The minority population models were estimated when 1) the dependent variable was the size of the African American population in 2010 (AfricanAmpop), and 2) the dependent variable was the size of the Hispanic population in 2010 (Hispanicpop). The same independent variables used in the small-minority-owned-business models were used in the minority population models except the number of manufacturing and retail firms were collected for 2007 (from Table 1). The RFL variable was also redefined to be 1 if the county was from a state with a religious freedom law in 2010 or earlier and 0 otherwise.

## Findings

The estimates of the employment model are presented in Table 3. In the employment model, White's general heteroscedasticity test indicated the presence of heteroscedastic errors. To correct for this, White's robust standard errors were used in the calculation of the t-statistics. The variance-inflation factors (VIFs) associated with ten of the twelve independent variables were less than five given the first set of estimated coefficients, but two of the VIFs were large and above five, indicating the presence of multicollinearity. In the second set of coefficient estimates, the retail variable was dropped from the equation and again, robust standard errors

Table 1. Variables and Descriptive Statistics in the Employment Model

<b>Variable</b>	<b>Description</b>	<b>Mean</b>	<b>Standard Deviation</b>
employment	Average county employment in the 3 <sup>rd</sup> quarter, 2014	43,055.00	152,291.4
population	County population, 2013	101,657.6	324,082.1
income	Per-capita income, 2013	39,188.84	10,115.05
age	Percent of the county population over 18 years old, 2010	76.54	3.35
education	Percent of county population who were high-school graduates, 2009	83.25	11.94
AfricanAm	African Americans as a percent of county population, 2010	8.78	14.40
Hispanic	Hispanics as a percent of county population, 2010	8.30	13.24
housing	Valuation of new private housing units authorized by building permits, 2010	32,717.97	98,747.19
rural	Rural population as a percent of county population, 2000	60.31	30.66
pop-density	County population per square mile, 2010	261.46	1,751.18
manufacturing	Manufacturing establishments with 20+ employees, per 100,000 population, 2007	97.92	385.77
retail	Retail trade: general merchandise stores, establishments with payroll per 100,000 population, 2007	119.46	462.92
RFL	1 if the country came from a state with a religious freedom law in 2014 or earlier, 0 otherwise	0.47	0.50



Table 2. Variables and Descriptive Statistics in the Small-Minority-Owned Business Models and the Minority Population Models

<b>Variable</b>	<b>Description</b>	<b>Mean</b>	<b>Standard Deviation</b>
AfricanAmfirms	Number of African American-owned firms, 2007	568.98	3,365.57
Hispanicfirms	Number of Hispanic-owned firms, 2007	688.38	6,900.70
Asian-firms	Number of Asian-owned firms, 2007	470.24	4,351.26
Women-firms	Number of Women-owned firms, 2007	2,405.63	9,536.56
AfricanAmpop	African American population, 2010	12,473.22	54,699.47
Hispanicpop	Hispanic population, 2010	16,212.17	116,207.4
population	County population, 2006	95,920.1	309,107.7
income	County per-capita income, 2006	28,471.93	7,513.69
age	Percent of county population over 18 years old, 2000	74.20	3.87
education	Percent of county population who were high-school graduates, 2000	77.40	8.73
AfricanAm	African Americans as a percent of county population, 2000	8.63	14.40
Hispanic	Hispanics as a percent of county population, 2000	6.15	12.11
housing	Valuation of new private housing units authorized by building permits, 2006	93,304.74	317,659.7
rural	Rural population as a percent of county population, 2000	60.29	30.66
pop-density	County population per square mile, 2000	227.10	1,661.09
manufacturing	Manufacturing establishments with 20+ employees, per 100,000 population, 2002	75.94	631.55
retail	Retail trade: general merchandise stores, establishments with payroll per 100,000 population, 2002	40.45	179.77
RFL	1 if the county came from a state with a religious freedom law in 2007 or earlier, 0 otherwise	0.32	0.47

Table 3. Employment Model

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Dependent Variable: Employment

<u>Variable</u>	<u>Coefficient</u>	<u>Coefficient</u>
constant	-48,842.44 (-1.689)†	-49,383.70* (-1.71)
population	0.398*** (20.832)	0.398*** (20.833)
income	0.787*** (4.496)	0.786*** (4.490)
age	633.15*** (2.756)	640.997*** (2.803)
education	-399.12* (-1.883)	-398.678* (-1.881)
AfricanAm	23.458 (0.245)	22.234 (0.232)
Hispanic	-258.9*** (-2.988)	-258.45*** (-2.985)
housing	0.111* (1.932)*	0.111* (1.933)
rural	1.182 (0.024)	1.986 (0.041)
pop-density	11.98 (1.326)	11.98 (1.326)
manufacturing	-29.250* (-1.948)	0.036 (0.051)
retail	24.432* (1.943)	
RFL	777.14 (0.568)	689.99 (0.509)
R-squared	0.9324	0.932
Adjusted R-squared	0.9321	0.932
AIC statistic	24.019	24.02
observations	3, 110	3,110

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† t statistics appear in parentheses  
\*\*\* Indicates significance at the 1% level  
\*\* Indicates significance at the 5% level  
\* Indicates significance at the 10% level

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were used in the t-statistics. All of the remaining VIFS were below five, indicating the absence of multicollinearity. The coefficients of the independent variables were basically unchanged. The coefficient of the manufacturing variable, however, became positive but insignificant.

The variables population, income, age, and housing, were all positively related to employment as expected. A larger, older population with higher incomes is able sustain a higher level of employment. In particular, if per-capita incomes in a county increase by \$1000, then 787 more jobs should be supported. It has also been suggested in the literature that a higher valuation of housing in a county should lead to higher levels of employment which is verified in this study. A higher value of housing represents a greater accumulation of wealth and an increased ability to borrow.

The coefficient of the Hispanic variable was negative and significant, indicating a decrease in employment when population is held fixed and there is a larger percent of the population that is Hispanic. This would be expected given that the Hispanic unemployment rate is above the national average. The coefficient of the education variable was also negative and significant showing a decrease in employment associated with a larger percent of the population being high-school graduates. This unexpected result may be partly due to those high-school graduates who continue on with their education in college instead of immediately seeking employment.

The coefficient of the religious freedom variable (RFL) was insignificant. There appears to be no difference in employment in those counties in states with these laws and those without them, holding population, income, age, education, ethnic and racial diversity, population density, and number of manufacturers constant.

The estimates of the small-minority owned business models are presented in Table 4.

Table 4. Small-Minority-Owned-Business Models

<u>Variables</u>	<u>African American Firms</u>	<u>Hispanic Firms</u>	<u>Asian Firms</u>	<u>Women Firms</u>
constant	-2,058.49*** (-2.932)†	-1,401.54 (-0.732)	-976.04* (-1.877)	-4,117.72*** (-6.743)
population	0.008*** (4.633)	0.017*** (4.682)	0.016*** (4.809)	0.031*** (21.937)
income	-0.033*** (-2.675)	-0.066*** (-3.081)	-0.005 (-0.3)	0.042*** (4.25)
age	-3.064 (-0.504)	13.49 (0.547)	-0.967 (-0.159)	16.591** (2.206)
education	26.97*** (4.16)	-8.112 (-1.103)	-5.217 (-1.021)	0.298 (0.083)
AfricanAm	33.389*** (6.344)	-7.364 (-1.5)	-9.546*** (-3.368)	1.125 (0.455)
Hispanic	5.203 (1.412)	65.436*** (3.426)	5.993* (1.823)	13.526*** (2.839)
housing	-0.0 (-0.228)	0.001 (0.376)	-0.004** (-2.518)	-0.001 (-0.813)
rural	7.376** (2.413)	27.575*** (4.084)	17.825*** (4.376)	17.55*** (7.399)
pop-density	0.497*** (2.858)	-0.044 (-0.215)	0.132 (0.786)	0.375** (2.238)
manufacturing	0.296 (0.616)	-1.948*** (-2.994)	-1.309*** (-2.637)	-0.134 (-0.644)
retail	0.549 (1.167)	0.706 (1.207)	0.705*** (3.051)	0.486** (2.047)
RFL	74.126 (0.889)	-159.617 (-1.394)	-214.32*** (-2.659)	-85.941 (-1.431)
R-squared	0.693	0.588	0.772	0.971
Adjusted R-squared	0.692	0.586	0.771	0.971
AIC statistic	17.907	19.638	18.126	17.636
observations	3,110	3,110	3,110	3,110

† t statistics appear in parentheses

\*\*\* Indicates significance at the 1% level

\*\* Indicates significance at the 5% level

\* Indicates significance at the 10% level

All of the VIFs associated with the independent variables used in the small-minority-owned business models were below 5, indicating that multicollinearity was not a problem. However, White's test indicated the presence of heteroscedastic errors for all four business models. Thus White's robust standard errors were used in the calculation of all t-statistics.

The results in Table 4 indicate that higher population centers and counties that have a greater rural population as a percent of their total population have more small-minority-owned businesses. More African American-owned and Hispanic-owned businesses are formed in lower-income areas, while more women-owned businesses are found in higher income areas. A larger number of African American-owned firms are situated in counties with a larger African American population and a larger number of Hispanic-owned firms are located in counties with a larger Hispanic population as expected.

The only small-minority-owned firms significantly affected by religious freedom laws were Asian-owned firms. On average, there were 214 fewer Asian-owned firms in counties in states with religious freedom laws compared to counties in states with no such laws. Why would Asian-Americans be opposed to religious freedom laws? In a survey of Asian-Americans in California (MercuryNews.com, 2008), 57 percent opposed the reversal of a Supreme Court ruling that recognized same-sex marriages. According to the report, "Many Asian-Americans have faced discrimination and even, in the case of Japanese-Americans during World War II, been thrown into internment camps...noted Janelle Wong, a member of the survey's research team who teaches at the University of Southern California. As a result, many Asian-Americans tend to be more sensitive than other Americans to laws that exclude certain groups, said Karthick Ramakrishnan of UC-Riverside, also a member of the research team." "If there is one community that is extraordinarily sensitive to the dangers of the government treating one group

differently than another, it would be the Asian-American community, said Steve Smith, manager of the statewide campaign opposing Proposition 8.” In part, because of these opinions of Asian-Americans, it would be expected that they would establish fewer firms in those counties in states that were less tolerant of certain groups including the LGBT community.

The estimates of the minority population models are presented in Table 5. In both minority population models, all of the VIFs associated with the independent variables were below 5. Heteroscedastic errors were detected in both models and thus White’s standard errors were again used in the calculation of t-statistics.

The results show that both the African American and Hispanic populations increase when the overall county population increases, with the Hispanic population growing faster. The African American and Hispanic populations are smaller, holding total population constant, in higher income counties, while the African American population is larger in counties with a larger percent of high-school graduates. A larger percent of the county’s population being African American in the past, has also led to a larger current African American population and a smaller current Hispanic population. Similarly, a larger percent of the county’s population being Hispanic in the past, has led to a larger current Hispanic population. The results also show a larger Hispanic population on average, in those counties that have a larger rural population as a percent of the county’s total population.

In counties in states with religious freedom laws, the African American population is higher by around 3,332 individuals, holding total population, income, age, education, industry variables and other socio-economic variables constant. The Hispanic population is lower by around 5,302 individuals. Why do these laws have such different effects on these two groups? According to a survey by the Pew Research Center, 56% of Latinos are either in favor or

Table 5. Minority Population Models

<u>Variables</u>	<u>African American Population</u>	<u>Hispanic Population</u>
constant	-34,322.38*** (-3.493)	21,265.53 (1.339)
population	0.130*** (3.941)	0.370*** (5.134)
income	-0.528*** (-2.597)	-1.270*** (-3.801)
age	7.295 (0.084)	-228.81 (-1.417)
education	502.03*** (5.068)	-195.22 (-1.607)
AfricanAm	782.34*** (9.327)	-239.04*** (-3.579)
Hispanic	-22.44 (-0.516)	1,106.46*** (7.752)
housing	-0.004 (-0.217)	0.002 (0.061)
rural	6.999 (0.135)	460.75*** (5.061)
pop-density	6.517* (1.828)	-4.434 (-1.154)
manufacturing	4.218 (0.677)	-30.102*** (-3.457)
retail	5.127 (1.051)	4.099 (1.125)
RFL	3,332.84** (2.486)	-5,302.91*** (-3.195)
R-squared	0.700	0.845
Adjusted R-squared	0.699	0.844
AIC statistic	23.46	24.31
observations	3,110	3,110

† t statistics appear in parentheses  
\*\*\* Indicates significance at the 1% level  
\*\* Indicates significance at the 5% level  
\* Indicates significance at the 10% level

strongly favor gay marriage (NBCLatino, 2015). On the other hand, Saletan (2008) pointed out that 70% of African Americans voted for Proposition 8 in California to ban gay marriage. The African American population has also been against gay marriage in Florida, Maryland, and New Jersey. Saletan states that the NBJC (National Black Justice Coalition) report concludes: “African-Americans are virtually the only constituency in the country that has not become more supportive over the last dozen years, falling from a high of 65% support for gay rights in 1996 to only 40% in 2004.” Saletan also provided evidence from surveys that show most whites believe that homosexuality is a trait that cannot be changed. African Americans, however, respond in these polls that homosexuality is more of a choice that could be changed and perhaps it is this difference in beliefs that is driving many African Americans to support bans on gay marriage. The results in Table 4 are consistent with surveys that report that more African Americans are against same-sex marriage and more Hispanics are in favor of it. The African American population tends to be higher in counties in states with religious freedom laws while the Hispanic population tends to be lower.

## 6. Conclusions

The controversy over religious freedom laws reached a new high in April 2015 when Indiana’s governor Mike Pence gave his support for a bill that was viewed by many to have negative consequences for the LGBT community. Several large corporations and groups voiced their dissatisfaction over the impending bill, causing Governor Pence to sign a revised bill. The purpose of this paper was to determine the effects of state religious freedom laws on employment, small-minority-owned businesses, and minority populations. It was found that these laws have no significant effect on county employment. However, counties in states with



these laws have fewer Asian firms and fewer Hispanics. These results are consistent with many national surveys and polls that show that the majority of Asians and Hispanics are against bans on same-sex marriage and thus these groups may be settling in counties in states without religious freedom laws that many perceive are discriminatory in nature towards the LGBT community. It was also found that the African American population was larger in counties in states with religious freedom laws. Surveys have shown that the majority of African Americans feel that being gay is a choice and not something that an individual has no control over. Furthermore, the PEW research center (Hot Air, 2015) reported results from a May 2015 survey which showed that 59% of whites favored allowing gays and lesbians to marry legally, while 56% of Hispanics favored it and only 41% of African Americans favored it. Thus religious freedom laws may not be turning away as many in the African American population as it has in the white, Hispanic, and Asian populations.

On June 26, 2015, the Supreme Court made same-sex marriage legal in all fifty states (CNN.politics, 2015). Some have suggested that this may add fuel to the debate over religious freedoms and government action. Will there be a push for even more religious freedom laws to be passed by states? According to Masci (2015), “Virtually everyone agrees that the First Amendment to the U.S. Constitution offers some protections for religious groups. For example, most (even among gay rights advocates) believe the Constitution protects clergy from being required to officiate at marriages for same-sex couples and churches from being forced to allow gay and lesbian couples to marry in their sanctuaries.” Perhaps states who wish to avoid the backlash from one group or another, will have to strive to maintain the delicate balance between equality for all and religious freedoms. New Mexico and Illinois for example, have religious freedom laws and they have also passed laws that prohibit discrimination in housing, public

accommodations, and employment, based on sexual orientation. Such a balanced approach may keep states from losing customers, firms, and minority populations.

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