CIVIC ENGAGEMENT ISSUES IN AGRICULTURAL ECONOMIES

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Abstract

The relationship between farm structure and community well-being has been frequently researched. Conclusions were drawn that rural communities had better socioeconomic conditions when small to medium family farms were prevalent. Other research reported civic engagement had greater impact on rural well-being than farm structure and farm structure was correlated with civic engagement. The research objective of this study was to determine the relationship between civic engagement and farm structure.

The study population consisted of farming dependent counties in the Corn Belt Region of the United States. These counties had an average population loss of 2% between 1990 and 2000, an average population density of 6 people per square kilometre, and an average farm size of 233 hectare.

Six variables representing farm structure and four demographic variables were included in the regression model as independent variables. A hierarchal regression model was used to determine the relationship between civic engagement and farm structure. Voting participation and church membership were proxies for civic engagement and used as the dependent variable in two separate models.

For both voting participation and church membership, the hypothesis of no relationship between farm structure and civic engagement was rejected. The model containing the dependent variable voting participation had three variables relatively important with an adjusted R^2 of .31. The important variables were home ownership, part-time farmers, and off-farm residence. The complete model containing the dependent variable church membership had an adjusted R^2 of .58 and contained six relatively important variables. These variables were small businesses per capita, home ownership, part-time farmers, off-farm residence, not sole proprietors, and hired farm workers.

Community leaders need to understand the dynamics of the changing farm structure at work in their communities and find solutions aimed at increasing civic engagement levels. University educators, elected officials and community can affect civic engagement by encouraging the development and retention of small sustainable agricultural and non-agricultural businesses and developing programs that promote home ownership in rural communities.

Key Words: Civic Engagement; Leadership; Farm Structure; Education

Introduction

Rural communities across the United States Corn Belt have experienced many changes during the past few decades. Many communities have experienced population losses (McGranahan & Beale, 2002), decreases in civic engagement levels (Putnam, 1995), and structural changes in the agricultural industry (Carlin & Saupe, 1993). As the agricultural industry adapted to economic and technology changes, many farms adopted industrial production practices, more complicated business structures, and hiring practices to meet their businesses needs. Concurrently, there was an increase in off-farm labour opportunities for farmers not adopting these changes, adding to the population of part-time farmers. During this transformation, researchers examined the plight of the

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small rural communities to determine what effect the changing farm structure had on rural socioeconomic conditions (Lobao, 1990). The purpose of this research was to add to the understanding of this relationship by examining farm structure changes and civic engagement levels of citizens in the United Sates Corn Belt's farming dependent counties. Specifically, the relationship between farm structure and the civic engagement measures of voting participation and church membership were examined.

Research Methods

One hundred forty-two farming dependent counties, dispersed throughout remote areas in nine states in the United States Corn Belt region (Bogue & Beale, 1961), were identified and included in this study. The counties were very rural with an average population of 8,902 people. In addition to low population numbers, these counties experienced an average population loss of 2% between 1990 and 2000. Agriculture was the predominate industry, with the average farm size of 576 acres per farm.

Farm structure, defined through six measures, varied in these farm-dependent counties. The six farm structure variables were quantified through data collected from the 1992 Census of Agriculture (United States Census of Agriculture, 2004). These variables included farm size, farmland rented, residence location of the farm owner, hired labour, part-time farmers, and business structure of the farm. Farm size was measured as the percent of farms with annual gross sales of $500,000 or more (United Stated Department of Agriculture, 2004). There was a substantial difference in farm size among the study population. On the average, these counties had about one-fourth (26%) of their farms classified as large farms. Some counties were populated with many large farms with the highest percent being almost four-fifths (79%) of the farms being large. Conversely, there were counties where very few large farms existed with the lowest percent at 4% large farms.

The existence of a population of absentee farmland owners who may not live or be connected to local community was identified as a possible detriment to civic engagement. The percent of farmland rented in a county was selected to measure this phenomenon. In the study counties, an average of 85% of the farmland was owned and operated by the farmers. Some counties had almost all of its farmland owned by the farm operators while other counties had almost one-third of the acres rented. Similar to absentee land owners, the existence of absentee farm owners was believed to be detrimental to local communities. Not only was the owner not physically present to become involved in the community, but the profits from the business were being exported to the community where the owner lived. Examination of the data showed that 23% the farm business owners did not live at the location of their business. There was some variation with 36% being the most and 13% being the least number of farm operators living away from the farm location.

The idea that hired labour has weaker ties to the local community, compared to business owners is not new (Boehlje, 1990; Goldschmidt, 1947). In the study population, just over half (51%) of the farm labour was hired. The county with the highest percent had 75% and the county with the lowest percent had 27% of the farm labour hired. The effect on civic engagement of a population of part-time farmers, with off-farm employment, relative to a population of full-time farmers was examined. Some counties still were populated with mostly full-time farmers with only 13% being part-time, while other counties had almost half (49%) of the farmers classified as part-time. The average part-time farmer population was 25% among the counties included in this study.

The final measure of farm structure was how the farm business was legally organized. Historically, most farms were organized as sole-proprietor businesses but many business structures are available such as Limited Liability Companies and Corporations. The percentage of farms that were organized as something other than sole-proprietorships ranged from 7% to 34% within the counties studied.

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The demographic variables of median age, home ownership, small businesses per capita, and population change were identified in the literature review and included in the regression model as independent variables. Median age ranged from a low of 27.9 to a high of 46.3 with the average median age being 40.7 in the counties. Because of the substantial association with other variables, the variable of median age created collinearity problems and therefore was excluded from the regression model.

Population change was determined by examining the 1990 and 2000 population figures by county and determining what percent of population a county gained or lost. Population change varied from a 14% loss to a 17% gain within the study population. Counties included in the study lost an average of 2% of their population during the 1990's. Home ownership percentages represented the number of occupied housing units that were owned by the occupant. The average percent of home ownership was 77% with the range being 65% to 85% of the units being owner occupied. The final demographic measure included was the number of non-farm small businesses per 1000 capita in a county. The average number of businesses was 2.7 with the range being 1.3 to 3.9 businesses per 1000 people.

The percent of voters voting in the general election and church membership levels were collected for the year 2000. Church membership enhances civic skills and communications networks (Schwadel, 2005). This measure had the greatest variability among the study population, ranging from 38% to 126%[46] with the average church membership being 81% of the people. Voting is considered an act of civic engagement (Adler & Goggin, 2005) and participation in the 2000 general election varied from 56% to 82% in the study counties, with the mean being 70% participation.

The change in R2 between the first model containing only the demographic variables and the second model containing all independent variable was statistically significant when the dependent variable of voting in the election was used. This indicates that the addition of the farm structure variables to the regression model was relatively important in predicting voting participation levels. The independent variables in this regression model that had relative importance were home ownership (Beta = .34), part-time farmers (Beta = -.33), and off-farm residence of the farm operator (Beta = -.20).

Examination of the regression results, using church membership as the dependent variable, reveals that the change in R2 between the first model containing only the demographic variables and the second model containing all independent variable was statistically significant. This indicates that the addition of the farm structure variables to the regression model was important in predicting church membership levels. The independent variables that had relative importance were small businesses per capita (Beta = .40), home ownership (Beta = .34), part-time farmers (Beta = -.26), off-farm residence of the farm operator (Beta = -.20), farm not organized as a sole-proprietorship (Beta = -.18) and hired farm workers (Beta = .16).

Important Research Findings

The demographic variables of small business per capita and home ownership had a greater relative importance in the church membership model than the farming structure variables. The existence of small non-farm business had the highest relative importance of all the independent variables in the church membership model. This relationship indicated that as the number of small businesses in a county increase so does church membership. The variable of home ownership had a high relative importance, indicating that as home ownership rates increased so did membership in the churches.

[46] Church membership percentages were calculated by dividing each country's reported church membership by the country's population. If a church drew people from surrounding countries, the percentage could be greater than 100.

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The model that included the dependent variable of voting in the election had similar results. The demographic variable of home ownership had the highest standardized Beta coefficient, indicating that voting participation increased as home ownership increased. No other demographic variables had relative importance in the model.
Farm structure variables were also important in predicting the different measures of civic engagement. Results of this research supported the theoretical concept that in farming dependent counties, farm structure changes have a detrimental effect on civic engagement. In the study population, counties that had a greater occurrence of farms with absentee owners and greater levels of part-time farmers in 1992, experienced lower levels of civic engagement, measured in 2000 as voting participation and church membership. This is consistent with previous research findings that examined farm structure and civic engagement (Lyson et al, 2001).

The variable of part-time farmers was the farm structure variable with the most relative importance in the both models. Examining relative importance of the part-time farmer variable with church membership and voting in the election revealed a negative relationship with both measures of civic engagement. Counties that are experiencing a shift away from full-time farm operators are also experiencing decreased levels of civic engagement.

The business model large farms are adopting is similar to other industries where the owner is no longer supplying the physical labour for the production side but instead providing the management and leadership for the business. They no longer need, or desire, to be located at the production facility, but instead live within a reasonable commute to the business. This lack of local presence of the owner reduces the population of people likely to become civically involved in the community (Putnam, 1995).

In addition to part-time farmers and off-farm residence, farm business organization other than a sole-proprietor and the presence of hired workers were also relatively important in predicting church membership. Increased levels of complex farm business structures were associated with lower levels of church membership in the county. The percent of hired farm labour relative to the labour provided by the principal owner did not have a negative relationship with civic engagement as hypothesized. Civic engagement levels, measured as church membership, increased as the percent of hired labour increased in these rural farming dependent counties.

Examination of the data provided some insights to why this may have occurred. The Census of Agriculture (United States Census of Agriculture, 2004) included paid family members in the data set. There was no way to delineate hired family labour from non-family labour in the data set. Examination of the correlation analysis between the farm structure variables provides some additional insights into how the structural changes are occurring. The variable of hired labour had a moderate association with the variable of large farm sales indicating that farms with high levels of gross sales were more likely to hire employees. With the industrial business model adopted by many large farms, there exists a population of middle management positions in addition to physical labour.

Many large farms, whose owners may live away from the business operations, have hired local farmers or recent college graduates from the community to provide this middle management. Employing people from the local community in semi-professional positions would be expected to positively influence civic engagement.

Additionally, the variables of large farm sales and part-time farmers had a moderate negative association indicating that these two structural changes tend not to happen at the same time in the same county. Counties with a high population of large farms did not tend to have large populations of part-time farmers. Further examination of correlations revealed the variables of part-time farmers and hired farm workers had a moderate negative association while the variables of large farm sales and hired farm workers had a moderate positive association. Knowing that hired farm workers have

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a positive association with church membership, this finding would indicate that part-time farmers are less desirable than large farms. This does not mean that large farms are desirable because the structural changes associated with them, measured in the variables of off-farm residence and not sole-proprietors, were negatively associated with civic engagement.

Conclusions

In the 1940's, Walter Goldschmidt (1947) published a report connecting large, industrial like farms with poorer socioeconomic conditions for the people in those communities. Goldschmidt (1947) made the inference that farm structure affected the civic fibre of the community with smaller family farms being better for communities. This research has attempted to quantify the existence and magnitude of that relationship.

This research supports that the changes in farm structure are affecting the civic engagement levels of rural farming dependent communities in the United States Corn Belt. This relationship, noted by Goldschmidt (1947) and later by Lyson et al (2001) was confirmed, showing a reduction in civic engagement as farm size and the frequency of the structural changes associated with large farms increased. This reduction in civic engagement levels was present with civic engagement measured as participation in voting and church membership. With the trend toward larger farms expected to continue, this finding is disconcerting for community leaders, especially where agriculture is the predominate economic activity of the county.

The implication for communities affected by this trend in agriculture could be momentous. If the local population becomes civically-disengaged, lower income levels, increased poverty, and higher unemployment levels would be expected (Tolbert et al, 1998). Local community leaders cannot control the structural changes that are occurring in agriculture. Instead, they will need to focus on the literature that relates to increasing civic engagement of the population that remains in their communities.

Recommendations

The changing farm structure and its effect on local community civic engagement levels should be disconcerting for many people. The following recommendations are designed to assist groups working with rural communities to assist the communities in developing strategic plans to address declining civic engagement. The groups that should be involved with rural communities include government leaders, University and Extension Educators, farm organizations, and local churches and civic organizations. The following recommendations are not presented in order of importance and are based on the results of this and other research relevant to rural community well-being.

Government Leaders – Federal and State
Government officials are elected to represent the people and make decisions to improve lives of their constituents. One group of government leaders are the Senators and Representatives elected to Congress, both at the state and national levels. These elected officials need to find a balance between the current farm trends toward large "megafarms" and rural community prosperity. The following recommendations are made for this group of political leaders.

- Examining and adopting good policies that discourage large farms or at least create a business environment that encourages full-time farm businesses might be a viable rural development strategy. Such policies may slow down the farm structure transformation and loss of civic engagement in the residents of rural Corn Belt communities.
- Examine all current funds going to rural economic development initiative to determine if a different distribution of funds would create an environment where small business assistance

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(even farm businesses) in rural areas can be supported. This approach can create local social capital that has been reported to be critical to rural development (Lyson et al, 2001)

Government Leaders – Local

Other government leaders are the local township trustees, county commissioners, and mayors of the cities and villages. These leaders need to understand the relationship of farm structure to civic engagement levels of the population. Decreases in civic engagement will require local governments to hire more workers to complete jobs, such as roadside litter pick-up, that were often done by volunteers. Decreases in civic engagement will also result in fewer people willing to serve as local elected officials, potentially lowering the quality of the pool of candidates. The following recommendations are for local officials.

- Facilitate activities and events to engage the population. Many people will not take the initiative to become involved in their communities. Local government leaders can increase civic engagement levels by removing as many barriers to entry as possible.
- Local officials should work closely with University Extension and civic leaders to develop leadership training programs. Teaching the skills necessary for leadership to a larger base of citizens will increase the pool of future government leaders in a community.
- Local officials should adopt policies and provide incentives for entrepreneurial activity such as a revolving loan fund where small business starts can receive low interest or no interest loans.

University and Extension Educators

Many Universities, including their Extension efforts, have been adopting a balanced, multidisciplinary approach to how community issues and problems are approached. One example of this is the The Ohio State University, College of Food, Agriculture, and Environmental Sciences adoption of a Social Responsibility Initiative. This model included a focus on social responsibility along with the more traditional foci of production efficiency, economic viability, and environmental compatibility. This type of initiative implies that University and Extension Educators need to balance what is good for agriculture and what is good for communities.

Recommendation for University and Extension Educators include:

- University and Extension Educators need to monitor demographic data on the farm population. Farm structure trends identified from the demographic data will determine if the agricultural structure is changing. Potential impact on civic engagement levels could then be estimated and provided to local leaders.
- University and Extension Educators need to find methods to engage the existing population in the civic matters of the community. This is especially critical in communities where the population of small and mid-sized farm operators has been replaced with large farms or reduced to a population of part-time farm operators.
- University and Extension Educators should embrace programming that fosters entrepreneurial activity resulting in an increase of small self-employed businesses. One example of this might be a small business incubator. This is essential in communities facing a loss of a civically-engaged population due to farm structural changes.

Agricultural Organizations

Farm Bureau, Farmers Union, and the National Farmers Organization are three of the more predominate agricultural organizations. These organizations have typically served in the role of political lobbying and pooled marketing for their members. However, their role needs to change to assist rural communities in the future.

- Agriculture organizations need to work with farm owners and operators to assist them in understanding how changes in farm structure are influencing the rural places they reside. One

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possible method to increase awareness of the issue would be to design programs to educate their members on how farm structural changes influence rural communities.
- Agriculture organizations need to work with their members to develop a program that encourages employees to become involved in their local community.

Church and Civic Organizations

Brown (2002) reported on the church closings that are occurring in many rural places in the Corn Belt due to lack of people. The few remaining people could not provide the money necessary to continue operations. Civic groups such as Rotary, Kiwanis, and Lions are experiencing the same problems and many groups are disbanding.

- Civic groups and churches need to become active ambassadors to the life of their communities, changing their focus from serving the community to leading the community.
- These groups may need to combine forces to remain a significant force in the community. This might result in two churches becoming one congregation or two or more civic organizations working together on one cause. Although decisions to join forces are sometimes difficult, the ability of the larger groups focused on community issues should result in better outcomes.

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