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## **A Theoretical and Empirical Investigation of Poverty in Rural Georgia Counties**

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## **ABSTRACT**

This paper investigates poverty in rural Georgia Counties for the years 2000 and 2009. Analysis from 2000 concluded unexpected results from the female head of household and percent black variables. The 2009 results were more consistent with expectations but the percent white and out migration variables produced unexpected results.

Key Words: Rural Poverty, Poverty, Southern States, Georgia, Minorities, Unites States, Women

### **I. Introduction**

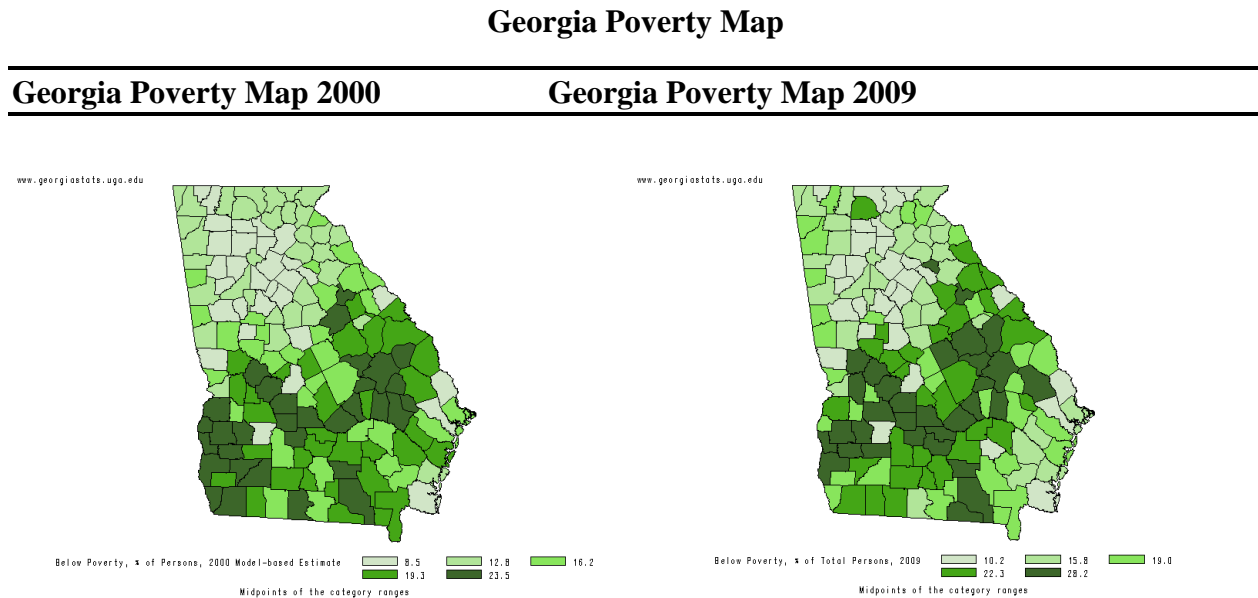
Rural Georgia harbors some of the most poverty stricken populations in the country. Many families are struggling to survive. As the recent economic downturn has impacted the United States and the World, the already economically weak societies have experienced the impact on a magnified level. Many factories that employed a majority of the rural populations have closed down, or moved overseas for cheaper labor. This has left many individuals of the rural population out of work and uncertain on how to provide for themselves and their families. The recurrent problem of poverty has plagued the United States and the rest of the world for centuries. In the United States, the government has implemented a variety of policies to combat the “War” on Poverty, but the poverty level remains unmitigated, with perennial increases now and then. In 2009, 1.77 million people were below the poverty line (Schneider, September). The official poverty rate was 14.3 percent; this was an increase from the 2008 rate of 13.2 percent (U.S. Census Bureau, 2010). This was the highest it has been since 1994 (U.S. Census Bureau, 2010). A great deal of study on poverty has been done, but majority of the study mainly focuses on urban poverty. Rural poverty has been constantly been overshadowed by urban poverty.

## **II. Problem Statement**

“Preoccupation with urban poverty follows a long tradition in American social science” (Tickamyer & Duncan, 1990). “Poverty was viewed as one of much social pathology associated with urbanization, mass immigration, and industrialization” (Tickamyer & Duncan, 1990). According to the United States Census Bureau, Georgia had more than 300,000 people fall into poverty from 2008-2009, making Georgia ranked second after Mississippi (Schneider, September). Rural poverty has always been most severe and most heavily concentrated in the South, a fact recognized by both the New-Deal and War-on-Poverty policymakers (Tickamyer & Duncan, 1990).

The issue of rural poverty especially in Georgia is very important to study because it affects so many rural Georgia residents. Poverty in Georgia is at a high rate and many rural counties are currently experiencing persistent poverty. In 2000, an estimated 1,006,329 people, which accounted for 12.3 percent of Georgia’s residents, were living in poverty (Georgia Statistics System). In 2009, an estimated 1,585,116 people, which equaled 16.6 percent of Georgia’s residents, were living in poverty. This was a 4.3 percent change from almost 10 years prior (Georgia Statistics System). Table I show a tabulation of Georgia poverty rates from 2000 and 2009. Although there have been policies to combat poverty, poverty still exists and is constantly growing. Nonmetropolitan poverty rates are higher than that of metropolitan areas. Interestingly, nonmetropolitan poverty has received considerably less attention in the literature (Levernier, Partridge, & Rickman, 2000).

**Table I**



### III. Objective

The objective of this paper is to determine significant factors that aggravate or diminish rural poverty conditions. This study specifically focuses on Georgia counties as a cursory analysis of the state’s economic conditions and reveals the concentration of poverty conditions among rural counties located in the southern part of the state. In this paper, we consider a number of different demographic, structural and economic factors that may influence socio-economic conditions and cause increases in poverty rates in certain communities. This study intends is to bring awareness to rural poverty and offer suggestions to further address it.

### IV. Theoretical Framework

Levernier, Partridge, and Rickman (2000) conducted a study using U.S. county-level data to explore the potential explanations for the observed regional variation in the rates of poverty, in their paper, *The Causes of Regional Variations in U.S. Poverty: A Cross-County Analysis*. This allowed the study to examine both nonmetropolitan and metropolitan areas. In the

past many studies focused on the decline in low-wage rate, on the demand side, the loss of manufacturing jobs, a shift in labor demand towards high-skilled occupants, and the decline of unions. Levernier, Partridge, & Rickman looked at a number of studies to determine what variables were important in the analysis of poverty in the United States. Regarding person-specific characteristics, poverty rates are relatively higher nationally for most minority groups (Levernier, Partridge, & Rickman, 2000). In a study conducted by Kirschenman and Neckerman (1991); Ihlanfeldt and Young (1996) it was suggested that minority poverty may be as a result of or racial preferences in hiring. Another study conducted by Mead (1992) argued that that reservation wages of blacks lead them to not accept available jobs. Other studies like the one conducted by Blank and Hanratty (1992) looked at the increased number of families headed by females and associated it with the increase of poverty. Blank and Hanratty (1992) found that poverty rates also are higher for female-headed families across all racial groups. Blank and Hanratty (1992) reasoned that besides being the sole potential wage earner for the family, female family heads are disproportionately young, lesser educated and less skilled. Moreover, child care constraints can further hinder job performance. Thus, female heads receive lower wage rates and are less likely to participate in the labor force. Blank and Hanratty (1992) also suggested that some of the relative increase in U.S. poverty in the 1980s compared to Canada was the relative increase in U.S. female headed households (Levernier, Partridge, & Rickman, 2000).

Levernier, Partridge, and Rickman (2000) wanted to shed further light on national poverty trends and regional patterns of poverty. The authors examined all counties in 48 states in 1990, which gave them 3000 observations. The study examined the extent to which differences in county poverty rates can be explained by various economic and demographic factors (Levernier, Partridge, & Rickman, 2000). The study also focused on whether counties that

experienced recent employment growth have lower poverty (Levernier, Partridge, & Rickman, 2000). Levernier, Partridge, & Rickman (2000) found that poverty was associated with single-female family headship and lower educational attainment levels. After controlling for these and other factors, poverty was found to be higher for non-African-American minorities, but not for African-Americans (Levernier, Partridge, & Rickman, 2000). Employment growth on average did not reduce the poverty rate; however, employment growth did reduce poverty among African Americans (Levernier, Partridge, & Rickman, 2000). Levernier, Partridge, & Rickman (2000) also concluded that structural change increased poverty in the short run, with its effects disappearing within five years; but structural change relatively hurt African-Americans and those without high school degrees. Higher labor-force participation, particularly among females, was associated with lower poverty rates (Levernier, Partridge, & Rickman, 2000).

In 1999, the Family Economics and Nutrition Review conducted a study looking at the different aspects of rural poverty and well-being in the United States in the article, *Poverty and Well-Being in Rural America*. This study focused on the rural poverty rate, socio-economic well-being of rural children, levels of food insecurity in rural households, and housing problems. The article revealed that rural minority poverty rates were substantially higher than the rates of the rural white population (USDA, 1999). Poverty rates were highest for rural Blacks, followed by Rural Native Americans, followed by rural Hispanics (USDA, 1999). Another factor mentioned about rural poverty was that female-headed households had higher poverty rates than other households (USDA, 1999). The article mentioned that rural minorities had on average less education than rural whites; it also disclosed that even among minorities with similar educational backgrounds to whites, minority poverty was still about twice as high as rural whites (USDA, 1999).

Lichter and McLaughlin (1995) conducted a study in their article *Changing Economic Opportunities, Family Structure, and Poverty in Rural Areas*. The objective of the study was to examine the etiology of changing spatial inequality between and within metropolitan and non metropolitan areas, as measured by increasing or decreasing county poverty rates . The study used data from the 1980 to 1990. The research found that poverty rates increased more rapidly in nonmetropolitan areas than it did in metropolitan areas in the 1980s. They also found that poverty rates tended to decline in nonmetropolitan counties with traditionally high poverty rates, which provided counter-evidence to arguments suggesting that the gap between poor and non-poor individuals in non metropolitan counties has widened. The authors also found that spatial differences in poverty rates and relative increases in county poverty rates over the 1980s were most strongly associated with women's employment and headship status.

Based on prior research, different factors are important in analyzing the strong prevalence of rural poverty in Georgia. The independent variables that are important to analyzing the poverty rates of the Georgia Counties are: households with women as head of the household, family assistance, race, unemployment rate, median age, outmigration, rural farm % and rural nonfarm %, education, amount of paved highways, and religion.

## **V. Model Specification**

The statistical methodology used to test the determinants that significantly affect rural poverty in Georgia Counties is the OLS estimation model. The model will be in the form of the following linear equation:

$$\begin{aligned} \text{RRLPVRTY}_i = & \beta_1 + \beta_2\text{FMLHH} + \beta_3\text{NOHS} + \beta_4\text{HSMR} + \beta_5\text{OUTMIGA} + \\ & \beta_6\text{OUTMICO} + \beta_7\text{BLK} + \beta_8\text{WHT} + \beta_9\text{RRLFRM} + \beta_{10}\text{RRLNONFRM} + \beta_{11}\text{FDSTMPS} + \\ & \beta_{12}\text{HWYPVD} + \beta_{13}\text{RLGN} + e_i \end{aligned}$$



RRLPVRTY<sub>i</sub>= dependent variable representing the percent of rural Georgia Residents that are below the poverty line for the year 2000 and 2009.

FMLHH= explanatory variable representing the percent of households headed by women with no husband present for each county for the year 2000 and 2009.

NOHS= explanatory variable representing the percent of residents in each Georgia county who do not have a high school diploma for the year 2000 and 2009.

HSMR= explanatory variable representing the percent of residents in each Georgia county who have attained a high school diploma or higher for the year 2000 and 2009.

OUTMIGA= explanatory variable representing the percent of residents in each Georgia County that moved from that specific county out of the State of Georgia for the year 2000 and 2009.

OUTMICO= explanatory variable representing the percent of residents in each Georgia county that moved from that specific county to a different Georgia County for the year 2000 and 2009.

BLK= explanatory variable representing the percent of residents in each Georgia county that are Black for the year 2000 and 2009.

WHT= explanatory variable representing the percent of residents in each Georgia county that are White for the year 2000 and 2009.

RRLFRM= explanatory variable representing the percent of each Georgia county that is considered a rural farm area for the year 2000.

RRLNONFRM= explanatory variable representing the percent of each Georgia county that is considered a rural nonfarm area in the year 2000.

FDSTMPS= explanatory variable representing the percent of the monthly average recipients of food stamps for the year 2000 and 2009.

HWYPVD= explanatory variable representing the percent of highway mileage that is paved for the year 2000 and 2009.

RLGN= explanatory variable representing the percent of the Georgia county population that has religious adherents for the year 2000.

The data for the listings for rural counties in Georgia was obtained from the United States Census Bureau for the year 2000. The data for the dependent and independent variables were obtained from Georgia Statistics System using the county-by-county database. Urban Georgia counties were removed to focus on the rural Georgia population using the listing obtained from the United States Census Bureau.

Given the selected variables, the coefficient signs of each variable could be predicted. The percent of households headed by women with no husband present is predicted to have a positive relationship with rural poverty. The expectation is that higher percent of the population who have households that are headed by females with no husbands present will have a higher percentage of rural poverty. The assumption for this is that in a single parent household, only one income is reflected; also women on average make less than their male counterparts. The percent of residents in each Georgia county who do not have a high school diploma is expected to have a positive relationship with rural poverty: the higher the population with no high school diploma the higher rural poverty will be. The assumption for this is that a person lacking a high school diploma may have a harder time finding employment than a person with a high school diploma or higher. They may also make on average much less than a person with a high school diploma or higher. The percent of the residents in each Georgia county who have attained a high school

diploma or higher are expected to have a negative relationship with rural poverty: the higher the population with a high school diploma or more, the lower rural poverty in that area will be. The assumption for this is that an individual with a high school diploma or higher will have an easier time, obtaining a higher paid job than a person without a high school diploma, which will also allow them to live a more comfortable life. The percent of residents in each Georgia county that moved from that specific county out of the State of Georgia is expected to have a negative relationship with rural poverty. The assumption for this is that the more the people move from that county out of state, more jobs will become available for the remaining population of the county. The percent of residents in each Georgia county that moved from that specific county to a different Georgia County will also have a negative relationship with rural poverty. The assumption for this is that as more people leave an area, more jobs will become available for the remaining population, causing more money to be distributed amongst a smaller population. The percent of residents in each Georgia county that are Black is expected to have a positive relationship with rural poverty. The assumption for this comes from the historical data and research that has concluded that the Black population has the highest rate of poverty in the United States. The percent of residents in each Georgia county that are White is expected to have a positive relationship with rural poverty. The assumption for this comes from the historical data and research that have concluded that the White population has the lowest poverty rate compared to minorities. The percent of each Georgia county considered a rural farm area is expected to have a negative relationship with rural poverty. The assumption for this is that the more farm land in the area, the more agricultural activities occur, causing a higher income for the residents. The percent of each Georgia county that is considered a rural nonfarm area is expected to have a positive relationship with rural poverty. The less farm land in an area, the less agricultural

activities occur; agriculture historically is the basis of many rural communities. The percent of the monthly average recipients of food stamps is expected to have a positive relationship with rural poverty. The assumption for this is that the higher the population who is receiving government assistance such as food stamps, the higher rural poverty in that area will be. The percent of highway mileage that is paved is expected to have negative relationship with rural poverty. The assumption for this is that the more highways that are paved in the area the more outside county activity the county will receive due to the easiness of getting to the county; this will bring more money to the county and will also bring more jobs. The percent of the Georgia County population that has religious adherents is also expected to have a positive relationship with rural poverty. The assumption for this is, the idea many people turn to religion for hope to alleviate their problems and in many religious institutions, many attendees are of less fortunate circumstances.

## **V. Empirical Results and Interpretation**

Using the regression model above, there was a high amount of correlation between Female Head of House and both the Black and White variables. There was also high correlation with the No High School variable and the High School or more variable; and between the Outmigration from Georgia and Outmigration from the County to another Georgia County. Due to the high correlation between the variables, certain variables were removed to avoid biased results resulting from multicorrelation. Below is the new regression model:

$$\text{RRLPVRTY}_i = \beta_1 + \beta_2 \text{FMLHH} + \beta_3 \text{NOHS} + \beta_4 \text{OUTMICO} + \beta_5 \text{BLK} + \beta_6 \text{RRLFRM} + \beta_7 \text{FDSTMPS} + \beta_8 \text{HWYPVD} + \beta_9 \text{RLGN} + e_i$$

Although there was correlation between the Female Head of Household variable and the Black variable, the two variables were still retained in the model because they are both important

variables. The regression results of Rural Poverty by percent and actual numbers are presented below in Table II.

**Table II.**

**Regression Coefficients Estimated for Rural Poverty Comparison**

| <b>Dependent Variable</b> | <b>RRLPVRTY 2000</b>   | <b>RRLPVRTY 2009</b>      |
|---------------------------|------------------------|---------------------------|
| <b>Intercept</b>          | 24.10228<br>(5.33519)  | -5.195127<br>(17.0133)    |
| <b>FMLHH</b>              | -0.544652<br>(0.28065) | 0.0331776<br>(0.0997467)  |
| <b>NOHS</b>               | 0.25267<br>(0.09940)   | 0.01914516<br>(0.0694197) |
| <b>OUTMICO</b>            | -0.02582<br>(0.03506)  | 0.1278107<br>(0.0461037)  |
| <b>BLK</b>                | -0.34613<br>(0.10430)  | 0.3109196<br>(0.2363823)  |
| <b>WHT</b>                | N/A<br>(N/A)           | 0.1643266<br>(0.1670895)  |
| <b>RRLFRM</b>             | -0.58664<br>(0.35005)  | N/A<br>(N/A)              |
| <b>FDSTMPS</b>            | 0.25907<br>(0.13879)   | 0.5727614<br>(0.0688331)  |
| <b>HWYPVD</b>             | -0.14949<br>(0.4420)   | -0.2062218<br>(0.1061886) |
| <b>RLGN</b>               | 0.00704<br>(0.03580)   | N/A<br>(N/A)              |
| <b>R<sup>2</sup></b>      | 0.6435                 | 0.8060                    |
| <b>F*</b>                 | 17.60                  | 45.11                     |

Standard errors are in parenthesis

The Female Head of Household variable was expected to have a positive relationship with Rural Poverty, meaning when the percent of Female Head of Household increased it would also increase Rural Poverty. Based on the regression results, this variable had a negative relationship with rural poverty. The negative coefficient of 54.4 indicates that a 1% increase in percentage of female-controlled households will result in a 54.4% reduction in rural poverty rates, with all other variables held constant. This result may be due to the strong economic health of the United States, during 1999. Unemployment was at extremely low and women were entering the labor force at a faster rate than men.

The No High School variable was hypothesized to have a positive relationship with Rural Poverty, meaning when the percent of people with No High School Education increased it would also increase Rural Poverty. The regression results for this variable were consistent with the hypothesis, a 1% increase in the no high school diploma variable increased rural poverty by 25.3 percent all other variables held constant. Historically people without high school diplomas are more susceptible to economic hardship than those with high school diplomas or better.

The Outmigration from county to another County variable was expected to have a negative relationship with Rural Poverty, meaning when the percentage of outmigration increased it would decrease Rural Poverty. This variable had expected results as it decreased rural poverty by 2.6 percent all other variables held constant.

The Black variable, it was expected to have a positive relationship with Rural Poverty, meaning when the percentage of the population that is black increased it would also increase Rural Poverty. The regression results were not as expected, the population black variable decreased rural poverty by 34.6 percent all other variables held constant. Like the female head of household variable, the unexpected results may be from the strong economic health of 1999.

For the Rural Farm variable, it was hypothesized that this variable will have a negative relationship with Rural Poverty, meaning when the percentage Rural Farm areas increased it would decrease Rural Poverty. Based on the regression results, the Rural Farm variable, holding all other variables constant, decreased rural poverty by 58.7 percent, this was consistent with expectations all other variables held constant.

The Food Stamps variable, it was expected to have a positive relationship with Rural Poverty, meaning when the percentage Food Stamps recipients increased it would increase Rural Poverty. The regression results concluded that the food stamps variable did have a positive relationship with rural poverty, increasing it 25.9 percent, while holding all other variables constant, this was consistent with expectations.

For the Highway Paved variable, it was hypothesized that this variable will have a negative relationship with Rural Poverty, meaning when the percentage Highways paved in the county increased it would decrease Rural Poverty. After conducting the regression analysis, the Highway Paved variable decreased rural poverty by 14.9 percent, holding all other variables constant.

Lastly the Religion variable, it was expected to have a positive relationship with Rural Poverty; meaning when the percentage Religious Adherents in the county increased Rural Poverty would also increase. Based on the regression results, religious adherent's variable increased rural poverty by .07 percent, holding all other variables constant.

It was also concluded, using the  $R^2$  that 64.54% of the rural poverty was explained by this model. An F-Test was also conducted to see if there was significance in the full updated model. The F-Value for the regression model was 17.60. The F-Critical value was 2.02 (Hill, Griffiths,

& Lim, 2008). Based on this test, the null hypothesis was rejected and it was concluded that the model has at least one variable that has significant explanatory power.

Data was also obtained for the year 2009, for a more updated analysis. The rural farm area variable and the religious adherent's variable were removed from the analysis due to the lack of data available. The percent of the population that is white variable was introduced back to the model. Regression results are listed in table II.

$$\text{RRLPVRTY}_i = \beta_1 + \beta_2\text{FMLHH} + \beta_3\text{NOHS} + \beta_4\text{OUTMICO} + \beta_5\text{BLK} + \beta_6\text{WHT} + \beta_7\text{FDSTMPS} + \beta_8\text{HWYPVD} + e_i$$

Unlike the 2000 results, the 2009 coefficients coincided better with the predictions for each variable, with some exceptions. An F-test analysis using and F-Critical value of 2.95 was also conducted to confirm the validity of the model. The female head of household variable like predicted had a positive relationship with rural poverty, meaning as the percent of single parent household with females being the head of the household increases, rural poverty will also increase by 3.32 percent. The no high school diploma variable also had a positive relationship with rural poverty, which consistent with the initial prediction for this variable. Based on the model, this variable increased rural poverty by 1.95 percent. The outmigration to another county variable had a positive relationship with rural poverty, which was inconsistent with the initial prediction, this variable actually increased rural poverty by 12.8 percent. This is probably due to a concept known as the brain drain where there is a migration of valuable citizens from rural to urban communities. People are moving from poverty stricken areas to more urban areas where they can find work and more opportunities. The county is now lacking the income from those that moved away. The percent black variable was consistent with the predicted outcome, having a positive relationship with rural poverty, increasing rural poverty by 31.1 percent. The percent



white variable had an unexpected positive relationship with rural poverty, increasing it by 16.4 percent. This may be due to the 2007-2009 recession, during this period, the whole country experienced economic hardship. Like expected, the food stamps variable had a positive relationship with rural poverty, increasing it by 57.3 percent. Finally the highway paved variable had a negative relationship with rural poverty, which was consistent with the initial prediction. This variable decreased rural poverty by 20.6 percent.

Based on the  $R^2$  the 80.60 percent of the rural poverty variable was explained by this model. The F-Value for the regression model was 45.11. The F-Critical value was 2.02 (Hill, Griffiths, & Lim, 2008). Based on this test, the null hypothesis was rejected and it was conclude that the model has at least one variable that has significant explanatory power.

## **VI. Discussion**

The beginning of 1999 was welcomed in by an economic growth of 5.9 percent from 1998 (Waller, 2000). Gas prices were low and inflation rates were low. The unemployment rate, in 1999 started off at a low 4.3 percent and decreased to 4.1 percent by the end of the year (Waller, 2000). With low unemployment rates, job security was at a high. Low unemployment rates and high job security allowed people to save less because they felt comfortable in their economic situations. The United States also experienced a large inflow of income and savings from other countries and economies. In addition the Federal Reserve Bank reduced interest rates which allowed consumers to borrow heavily at low interest rates. The strength of the US economy in 1999 affected the statistics of 2000 due to a lag effect. This may explain the unexpected results of some of the variables relationships with rural poverty in 2000. The female head of household variable and the percent black variable both had a negative effect on rural poverty which was unexpected. This could possibly be due to the strong economic health, with

high job security and availability to liquid assets. People were more comfortable and probably able to secure jobs allowing them to take care of their families, or multiple jobs. Also by 2000, the number of women in the work force had significantly grown, while male participation declined (Maloney and Shumer, 2010). Although historically minorities were always at an economic disadvantage, due to the overall economic strength, they also experienced a more comfortable standard of living. By 2009 the United States economy had experienced a number of economic blows. From 2007 to 2009, the United States experienced a recession. During this period, unemployment reached 10.0 percent. Minorities especially African Americans and Latinos experienced a much higher rate than their Caucasian counterparts (BLS, 2012). The unstable economy ultimately played a large role in the impact the specific variables had on rural poverty, as rural economies are hit harder during times of instability and turmoil.

## **VII. Conclusion**

This research was conducted to see the different attributes to rural poverty. Eight independent variables for the year 2000 were tested using a simple regression model to see the significance of each proposed cause of Rural Poverty. The variables used were the percent of households headed by females per county, the percent of the county population that did not have a high school diploma, the percent of the people that moved from that specific county to another Georgia county, the percent of the county population that is black, the percent of the county that is considered rural farm area, the average percent of the county population that received food stamps, the percent of the county that has paved highways, and the percent of the county's population that are religious adherents.

An OLS analysis using a simple linear model was used to analyze the data. Initially the model consisted of twelve variables, but due to high correlation between the variables four

variables were removed. The test of the updated model was conducted and proved that the assumptions theorized were inconsistent with the actual results. The percent of female head of household decreased rural poverty which went against what was hypothesized. This was unexpected because prior studies concluded that female head of households contribute to the poverty level. Also the religion variable also fell into the acceptance region of the  $H_0$  although the actual variable was positive. All other variables established correlation as hypothesized.

After running different tests and updating the initial model the results were better, but correlation still existed at Female Head of Household and the Black variable. The  $R^2$  proved that 64.35 % of the model explained rural poverty. F-test also proved that the model used was significant. Another regression analysis was conducted; this was done using a panel data format for the year 2009. Due to the lack of data for certain variables, the model was revised; the rural farm area variable and the religious adherent's variable were removed from the model and the percent white variable was introduced into the model. This new updated model had an  $R^2$  of 80.6 percent, and was more consistent with the expectations that were hypothesized.

Due to the lack of data a more extensive evaluation of poverty in rural Georgia was not able to be conducted. Given more time and more resources a more descriptive analysis which would allow a better insight on the causes of rural poverty can be executed. Rural poverty is an area often overlooked. As policy makers make decisions on enhancing economic growth, they must also remember the rural communities. Unlike urban areas, these communities may not be able to fight for more resources as easily. Although the internet and social media has been used to bring light to problems, many rural areas are not equipped with these resources. It is important for those making decisions to visit areas that are normally forgotten and identify areas in need of enhancement.

## References

- Bureau of Labor Statistics. "BLS Spotlight on Statistics: The Recession of 2007-2009" (February 2012). Internet Site:  
[http://www.bls.gov/spotlight/2012/recession/pdf/recession\\_bls\\_spotlight.pdf](http://www.bls.gov/spotlight/2012/recession/pdf/recession_bls_spotlight.pdf)
- Frank, R.H., *Microeconomics and Behavior*. McGraw-Hill 6ed, 2006.
- Hill, R.C., W.E Griffiths, and G.C. Lim. *Principles of Econometrics*. New York, Wiley & Sons, 2008.
- Kriesel, Warren. "Georgia Statistics System". Internet Site:  
<http://www.georgiastats.uga.edu/crossection.html>
- Levernier, W., M.D. Patridge, and D.S. Rickman. "The Causes of Regional Variation in U.S. Poverty: A Cross-County Analysis." *Journal of Regional Science* 40(3), 2000. Internet Site: <http://www.sre.wu-wien.ac.at/ersa/ersaconfs/ersa98/papers/13.pdf>
- Lichter, D.T., and D.K. McLaughlin . "Changing Economic Opportunities, Family Structure, and Poverty in Rural Areas." *Rural Sociology*, 60(4), 688-706, 1995.
- Maloney, C.B. and C.E. Schumer. "Women and the Economy 2010: 25 Years of Progress But Challenges Remain", 2010. Internet Site:  
[http://www.jec.senate.gov/public/?a=Files.Serve&File\\_id=8be22cb0-8ed0-4a1a-841b-aa91dc55fa81](http://www.jec.senate.gov/public/?a=Files.Serve&File_id=8be22cb0-8ed0-4a1a-841b-aa91dc55fa81)
- Schneider, C. "Census Report Shows Georgia Poverty Increase" ,2010. Internet Site:  
<http://www.ajc.com/news/news/local/census-report-shows-georgia-poverty-increase/nQkHN/>
- Tickamyer, A.R, & C.M. Duncan. "Poverty and Opportunity Structure in Rural America." *Annual Review of Sociology*, 16, 1990.  
Internet Site: <http://www.annualreviews.org/doi/abs/10.1146/annurev.so.16.080190.000435?journalCode=soc>
- U.S. Census Bureau,. "Highlights", 2010. Internet Site:  
<http://www.census.gov/hhes/www/poverty/about/overview/index.html>
- U.S. Department of Agriculture , Family Economics and Nutritional Review.. Washington, DC. *Center for Nutrition and Policy*, Pub. 12 (3/4), 93, 1999. Internet Site:  
<http://www.cnpp.usda.gov/Publications/FENR/V12N3and4/fenrv12n3and4.pdf>
- Waller, C.J. "...And the Band Played on: The U.S. Economy in 1999", 2000. Internet Site:  
<http://cber.uky.edu/Downloads/waller00.htm>

Waller, C.J. "What is Really New about the 'New' U.S. Economy", 2001. Internet Site:  
<http://cber.uky.edu/Downloads/Waller01.htm>

Wetzstien, M.E. "Microeconomic Theory". South-Western, 2005.