Looking For Work:
A Study of Depression Era Migration in New Jersey

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In

Economics

by

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Abstract:

This paper considers the push and pull factors which influenced the migration decisions of New Jersey residents during the Great Depression, with the intent to clarify the economic pressures of the time. Through linking individual's responses from the 1930 and 1940 census manuscripts, I observe individuals' locations in 1930, 1935, and 1940. The 1940 census also provides additional information on income and occupational outcomes of interest. Results suggest that those individuals which migrated earlier experienced greater income gains relative to those who stayed. However, I do not find any evidence that this income gain occurred though any occupational upgrading.

Introduction:

The Great Depression is widely considered one of the most trying and influential eras in American history. Very few were spared from the widespread effects of the economic depression which gripped the nation and the world. Gaining insight into the Great Depression's effect individuals is pertinent to gaining a more comprehensive understanding of the time. Anecdotal evidence suggests that there was widespread migration during this period, but the empirical evidence is sparse. Through coupling the information captured in the 1930-1940 census with county level economic data, I seek to create detailed econometric models which estimate prepotency to migrate and income gains which may result.

It is fortunate that the methodologies required to accomplish the goal of this paper are well explored by several researches, and I rely on them greatly throughout. I am able to employ their use of linking datasets to generate my own for use in this study. By distinguishing the relevant push and pull factors, I pinpoint an individual's propensity to migrate and the economic gains resulting from migration which they may have incurred. Historical first person accounts also aid in building a more comprehensive narrative on the relevant factors which may have influenced decision making during The Great Depression era.

It is surprising that there is no current study on regional migration during this time period given the likely connection which may exist between migration and the economic climate. There is considerable value in an intraregional study for better understanding the era in more regional context, gaining insight into how the economic climate effects individuals differently within a defined area, and how the effects influence subsequent years. In that respect, this study is just as foundationally imperative to historical studies as its interregional

counterparts. It contributes to the historical narrative by approaching the same questions from a different, more localized, perspective.

Anecdotal and Historical Background:

The roaring 20's were a period of unprecedented prosperity, and The Great Depression which followed spurred one of the most defining periods in American history. The economic downturn, which lasted the better part of a decade, was a catalyst for social, political, and economic reform in America that shaped generations. Firsthand accounts of the period describe a theme of constant fear of the unknown, and individuals and entire communities alike simply waiting for answers. Most were faced with the option to either stay where they were, and attempt to wait out the storm, or relocate in hopes of finding opportunities elsewhere. Shortly after Franklin D. Roosevelt's inauguration in 1933, federal aid programs would finally begin reaching those who desperately needed it. Unfortunately, by this time, it had already been several years since the depression first began; providing ample time for the full effects to set in.

The market crash of October of 1929 was the beginning of the end for the economic boom of the 1920s. America would be gripped by crippling unemployment, and millions of people would become dependent on government welfare programs up until the beginning of the Second World War. Early on, many believed that the market would eventually rebound, even as the unemployment rate continued to skyrocket, and the Hoover administration was relatively idle. Some small towns had no idea a market crash had occurred or what it really even meant. Eventually, even small town economies began to feel the ripple effects. Ed Paulson

describes his experience leaving a small town early on in the depression to find work in San Francisco stating, “I tried to get a job on the docks….but there just wasn’t any work. Already by that time, if you were looking for a job at a Standard Oil Service Station, you had to have a college degree. It was that kind of market”(Terkel p18). He also goes on to describe several places in the city where thousands of men would be gathered daily vying for only a few available positions (Terkel p18).

As the nation’s economic situation, and its overall morale, only became worse, it became easier to oust Hoover from the presidency in favor of Roosevelt in the 1932 election. Roosevelt wasted little time, creating the Agricultural Adjustment Administration, the Civilian Conservation Corps, the Federal Deposit Insurance Corporation, the Federal Emergency Relief Administration, and the Public Works Administration that same year. Over the following years, and while also dealing with failing banks, Roosevelt would also create the Security Exchange Commission, the Works Progress Administration, and the Social Security Act, to name just a few. These became the staple elements of his “New Deal” policies aimed at aiding those suffering most.

Anecdotal evidence suggests that these aforementioned programs and grants gave some the means to stay put, but encouraged others to leave. Worth noting is the reoccurring theme of extreme apprehension and dismay present on the topic of relief money in the firsthand accounts. Many felt it was admission of failure to accept such help, and avoided it at all costs or altogether. Ben Isaacs explains in length, “Lotta people committed suicide, pushed themselves out of buildings and killed themselves, ‘cause they couldn’t face the disgrace’… Believe me, when I was forced to go to the office of relief, the tears were running out of my

eyes. I couldn't bear to take money from anybody for nothing" (Terkel p12-13). He was just barely able to support his wife and kids on relief of 45 dollars a month, 30 of which went to rent. They were able to stay put in the city on relief alone, not finding any work until 1939. Even with limited work, they still would not have made ends meet without the relief money (Terkel p411-414).

When faced with no local opportunity, relocating with the hope of finding work was a viable option for many people. Blackie Gold enlisted into the Civilian Conservation Corps in 1937 at the age of seventeen. Being one of seven, his single mother could not afford to feed another child and there was no work available. At the cost of relocating, the Civilian Conservation Corps gave him opportunity to support himself, he describes, "I was at CCC's for six months, I came home for fifteen days, looked around for work, and I couldn't make 30 a month, so I enlisted back in the CCC's and went to Michigan" (Terkel p45). His experience also suggests that some may have chosen to rely on public programs rather than chance perusing work in the uncertain private sector. Blackie Gold was guaranteed work with the CCC, but it is worth noting that throughout my research accounts of relocation based on as little as rumor were also not uncommon.

Literature Review:

The topic of historical migration has been well explored by economists and social scientists alike. Migration itself is a very worthy topic of research, and it has also played a valuable role in the furthering research on population agglomeration, labor markets and skill diffusion, and generational mobility to name just a few. Through linking census manuscripts, researchers have the ability to track individuals, and thus data on individuals, across periods of

time. Studies use this individual level data to explore relationships at an accuracy which was not previously possible. I draw on the methodologies developed by Collins and Wannamaker (2013), as well as those of Ferrie and Long (2016), and their work involving linking individuals across generations in the U.S. and Great Britain.

In their two studies, Collins and Wanamaker used a small sample of a cross-section datasets from IPUMS. In each study, they limited the data being retrieved to males of specific race depending on the objective of the study. Individuals were matched by searching ages, names, and birth locations on indexed hand written manuscripts found on Ancestry.com. A match was only successful if all the criteria were met by exactly one other individual. Surnames were cross-referenced with a SOUNDEX algorithm, which provides alternate spellings of the same last names, and limited it only to exact matches with no significant changes in match rate.

Similarly, during their 2016 study, Ferrie and Long worked with SPEDIS functions to find phonetic proximity of potential matches. The SPEDIS function assigns a distance value to the phonetic similarity between two matches, and this value allows potential matches to be accepted or rejected via a manually designated value limit. Unlike Collins and Wanamaker, Ferrie and Long included this in their matching criteria along with basic personal information to generate potential matches. They also limit ages to within ±3 years of their target matches, further narrowing their search.

Collins and Wanamaker (2013) sought to explain the economic convergence of blacks and whites between 1910 and 1930. They explore how and why individuals became migrants, the economic implications of migration, and to what extent economic gains could be attributed to migration. Linked datasets provided information on individuals before and after The Great

Migration period, making it possible to establish if any economic gains resulted as an externality of migration and if there was any divergence in economic equality between races. They do conclude that migration was a contributing factor in closing the wage gap between blacks and whites, and that income gains were substantial.

The Great Migration from the south is revisited again by Collins and Wanamaker (2015). Through linking census manuscripts, they again explore the affected populous, their motives, and the externalities. This study differs from their 2013 study in that it also includes data on whites in the hope determining whether there were differences in the forces which pushed individuals of different race towards migration, their destinations, and their economic impact. Their results included interstate and interregional migration, tendencies in choice of destination and occupation, and a comparison of how individuals differed based on their preexisting characteristics.

Establishing an accurate representation of individual level characteristics is the foundation to studies which require linking in order to be conducted. However, developing a comprehensive portrait of migration requires the addition of data which can also describe the immediate regional economic climate, and its impact on individuals, as well. Fishback, Horrace, and Kantor (2001) uses retail sales data from 1929 to 1939 to measure the economic impact of the New Deal. Their study and data provides a framework for the portion of my paper which focuses on the impact local economies may have had on county level migration.

New Deal activity was, in part, aimed at providing aid to those most in need of economic assistance. The presence of New Deal aid could result in a fairly visible response from the local retail sales, giving my paper a way to gauge an area's economic health on a county level. This is

precisely what the trio concluded, stating: “When I control for the endogeneity using 2SLS, the results suggest that New Deal public works and relief grants indeed stimulated local economies”(Fishback, Horrace, Kantor p19). Their study brings valuable insight into local economic conditions, and gives my study on migration county level economic data to pair with individual level data to explore what role this may have played in stimulating county level migration.

The social welfare of the New Deal also has drawbacks in the inability to control for all externalities of the New Deal grants. Margo (1990) found that the long term unemployed were stagnated in finding full employment by work relief programs. Blackie Gold’s experience, mentioned in the historical background section of this paper, provides anecdotal support of this concern. The instability and inaccessibility in the job market gave incentive for unemployed individuals to stay in WPA programs, leading to higher unemployment rates. The high levels of unemployment did not decline until WWII, when the demand for labor in manufactures vastly outweighed any advantages of staying in work relief and the draft began.

Data and Methodology:

According to The United States Census Bureau, the approximate total population in New Jersey was 4.07 million in 1930, 4.08 million in 1935, and 4.18 million in 1940 (US Census Bureau 1996). At this time period it was one of the most populous states in the country, providing an opportunity to explore regional migration with a wide variety of occupational and economic backgrounds. The individual level data used for the study is present in the census

manuscripts, and the county level is imported directly from Fishback, Horrace, and Kantor's 2001 paper. Summary statistics are available in table 1 and table 2 in the appendix section.

As aforementioned, to observe both pre-migratory characteristics and post-migratory outcomes for individuals, this study employs use of linked datasets. The methodology used to generate matches for the dataset is derived directly from the studies cited in the literary review portion of this paper. The only significant difference is the software used to determine the phonetic standardization score. The 1940 census manuscripts were retrieved from the Minnesota Population Center, then cross referenced with Family Search indexes to link individuals with their responses in the 1930s manuscripts. The 1940s census also includes data on residence in 1935, giving this paper a third period of time to observe individual's locations. Due to the complexity of tracing women over time, resulting from name changes associated with marriage or divorce, this work focuses only on men. Because this paper considers labor market outcomes, I also include only those between the ages of 27 and 60 in 1940. Individuals are matched based on their name, age, and race.

Since the potential for transcription errors is high, from both the original taking of the censuses and the digitization of the manuscripts, it is necessary to allow for approximate matches in first name and surname. This is done using phonetic standardization (following the New York State Identification and Intelligence System, or NYSIIS) and a string edit distance score (Jaro-Winkler) to capture name similarity. For each New Jersey-born individual recorded in the 1940 census all potential matches were found in the 1930 census; only unique matches were kept. This left the final number of observations at 81,170.

The models were developed with a focus to determine what effect county level economic factors effected migration, then discover if relationship existed between migration and changes in wage income. I chose similar economic data to Fishback, Horrace, and Kantor (2001), using retail sales, change in retail sales, and the log of retail sales to gauge local economic health and activity. Lastly, occupational score is tested as a dependent in the same model as wage income to test for a relationship between changes in occupational score and migration. As controls, individual descriptors including fixed effects for marital status, age, ancestry and race are included in all the models.

Early analysis concluded that the models were heteroskedastic, but it is unclear whether this is a result of omitted variable bias or dependence. I re-estimated the models using robust standard errors and compared to the original models. To keep the study as unbiased as possible, the final estimates used for the study are those resulting from the robust models which resulted in higher overall standard errors but relatively unaffected coefficients. The models are shown below:

$$Migration_{iac} = \theta_a + \beta_1 ReliefSpending + \beta \ln RetailSales + \beta \Delta RetailSales + \gamma X_{ic} + \varepsilon_{iac}$$

$$lnIncome_{iac} = \theta_a + \beta_1 ReliefSpending + \beta \ln RetailSales + \beta \Delta RetailSales + \beta Migration + \gamma X_{ic} + \varepsilon_{iac}$$

$$Occscore_{iac} = \theta_a + \beta_1 ReliefSpending + \beta \ln RetailSales + \beta \Delta RetailSales + \beta Migration + \gamma X_{ic} + \varepsilon_{iac}$$

There are some limitations present in this paper, but subsequent research may be able to address most concerns. The relief spending data used in this paper is measured on a per capita level, leaving an inability to determine if there is some dual causality present between migration numbers and relief spending in counties. Similarly, population growth is also not greatly explored, which could also contribute to the aforementioned possibility that changes in

county population affected relief spending. Fishback, Horrace, and Kantor (2001) address this by including demographic and local economic data. This paper follows the same logic, and I believe the use of larger aggregated data periods, which range several years, can minimize at least some of the volatility which might exist when studying more isolated time periods.

The methods used to obtain the dataset used for this study aids in generating a relatively random sample, but I haven't cross checked my dataset with other random samples from the New Jersey population like other similar research has. I cannot rule out selection bias, but believe that the sample in my dataset is randomized. Despite this limitation, the study and its results are still valuable. The dataset may not be completely representative of the overall population, but the intense and widespread effects of the Great Depression on the whole of the population should mean that the estimates in this paper can still prove to be useful. Also worth note, is the possibility county out migration may be biased by social or cultural factors which are not totally accounted for in their entirety. It may prove beneficial for subsequent research to explore what impact cultural, social, and ethnic makeup may have on migration, or their effect on the economic forces which influence migration, to build on this study.

Results:

Migration results are separated out by time period in Table 3 of the appendix. There are noticeable differences between the variable significance levels between the timelines. More variables in of the 1930-1940 period much closer to 99% confidence, and seem to be much more similar to the 1935-1940 period than 1930-1935. The sign on the pertinent economic variables remain consistent throughout the study and their relationship to migration is intuitive.

An increase in relief spending and retail sales results in a negative effect on migration, while the coefficient on the change of retail sales positively effects out migration due to its negative trend. People residing in locations with weak economies and no jobs would be pushed elsewhere and pulled to places with higher wages and where there were still jobs being offered.

The 1930-1940 period is a mixture of the two shorter periods in this study, so it can be expected that the estimates in this period might exhibit an "averaging" effect. This data for this period consisted of 16,658 migrants, or 20.5 percent of the overall dataset. A change in the standard deviation of the change in retail sales (7.035) results in an increase in migration of .24 percentage points. This is an approximate increase in out migration of 194 individuals. The log of retail sales brought comparatively significant negative returns, equating to a -6.17 percent effect on migration. Local economic health proves to be a significant negative influence on out migration, affecting approximately 5,000 individuals. Relief spending also decreases out migration. Changed one standard deviation (47.541), results in a -.92 percentage point affect. This is approximately 746 people.

The 1930-1935 results differ considerably from the other periods. The shock of the depression, and its effect on the total of the populous, is illustrated in the varying significance of the results and the lowest R-squared of the migration models. All of the indicators seem less efficient for estimating migration at this time. There was a much smaller stock of migrants, only 3,946 individuals or 4.86 percent. Similar examinations of the variables reveal much smaller effects on migration. The change in retail sales only effects migration .15 percent, and relief spending -.44 percent. The log of retail sales in this period also only accounted for a change in migration of -1.4 percent. It seems as though less people were willing to relocate earlier on in

the depression, and that the forces acting on potential migrants were not intense enough to increase the prepotency to migrate versus a non-migrant.

The 1935-1940 period more closely resembles the overall period of the Depression. The stock of migrants is much higher than the earlier period, 15,582 individuals migrated during this time. That is approximately 19.20 percent of the dataset. Likewise, the effects on migration are much higher than the other periods. The change in retail sales resulted in a .38 percent change in migration, and relief spending effected migration by -.94 percent. The larger stock of migrants suggests that people in this era were much more willing to relocate than I the previous time period. There is a much greater effect being exhibit on migration from the variables, and people were actively willing to relocate to anywhere the economic climate was better. The log of retail sales were highly effective, resulting in a -5.08 percentage change in migration and can be considered a significant county pull factor for potential migrants.

The varying differences in the change in county retail sales and received relief spending creates different county level scenarios. Focusing on just a few counties, especially ones with contrasting effects or population composition, can help clarify these scenarios. To do this, I have included maps which aggregate and display county level means. A county like Camden was comprised of a largely urban population, experienced a comparatively small change in retail sales for the Great Depression period, and received a large amount of federal relief funding. Out migration in Camden was low and constant over the entire time period. Bergen County is another county with a large urban population, but its residents received considerably less federal aid and experienced moderate changes in retail sales. As a result, out migration was one

of the highest. Gloucester County is largely rural. It experienced a large change in retail sales and received low levels of relief aid. Out migration for this county is high across every period.

Worth note, is the change in retail sales maps show that counties which had the largest initial changes in retail sales were the ones which had the highest positive change later. There seem to be relatively no gains, and only some recovery. The lack of healthy regional economies is expected for the era. The maps on the log of retail sales across the period, Figures 7, 8, and 9, illustrate that no matter the relief spending present in the county, there are few changes going on in the log of retail sales. Very little of the grant money is able to trickle into and effect the local economies positively.

Table 4 shows the results of the models which included the log of wage income as the dependent variable. The study finds that those who moved earlier seem to have expierenced higher income gains than those who moved at a later period. The stock of early migrants is small, but seems to have taken most of the available high paying positions. By the latter period, when the stock of migrants is almost 5 times the size of the previous one, the wage income gains fall significantly. All dollar amounts were adjusted to 1940 dollars, as the data imported shows them in 1967 dollars. The amounts in brackets were adjusted for 2016 dollars. Those who migrated experienced income gains of 5.49(93.38) dollars in the 1930-1940 period. The other periods migrants expierenced gains of 6.44(109.54) and 3.02(51.37) dollars in 1930-1935 and 1935-1940, respectively. Table 5 indicates that occupational income score's effect on migration is not significant, and that those who were migrants did not receive any gains from changing occupation.

Conclusion:

This paper seeks to elaborate on the push and pull factors influencing individuals during the Great Depression time period in New Jersey. I rely heavily on the methodology of other similar research to complete my goal, and in particular used their work with linking dataset for their own research to model my own. The limitations which exist in this study can be expanded upon and possibly overcome in subsequent research, only further solidifying and honing the accuracy of their results. Despite the limitations, I believe my finding are still valuable as a foundation for study of migration in New Jersey. I found that migration was heavily affected by the local economy health and relief spending. Change in retail sales, the log of retail sales, and relief spending proved to be significant contributing factors to migration during all three time periods. Using this data to construct county level maps, it becomes clearer how counties differed from one another—having their own scenarios being acted out. Using the data presented in this paper, it is my intention that each county can be examined closer to discover what residents are experiencing compared to one another. Income gains for those who migrated seem to be heavily weighted in the earlier period. Those who moved early expierenced gains much higher than those waited, most likely due to lack of opportunity. The stock of migrants was much larger as the depression wore on and opportunity dwindled, lowering the potential to find work anywhere. The occupational income score results suggest the migrants were not upgrading their job prospects from migration, they were only increasing their wage income.

References

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APENDIX:

Summary Statistics:

Variable	Mean	SD	Min	Max	Description
Age 1940	42.110	8.620	30.00	60.000	Age in 1940
Ln(Retail Sales)	6.767	0.224	6.340	7.217	Log of retail sales 1929 in 1967 dollars
Change in Retail Sales	-17.864	7.035	-39.669	-6.069	Change in retail sales 1935-1929
Population Percentage Urban	80.021	23.400	0.00	100.000	Percentage of population urban 1930
Proportional Population Percentage Farmer	22.233	20.153	1.653	71.741	Percentage of land on farms 1929
Population Percentage Voted	38.515	4.528	34.614	54.188	Presidential voters in 1928/population in 1930.
Population Growth Rate	0.249	0.136	0.007	0.549	Growth rate in population 1920 to 1930, difference in logs
Relief Spending	98.581	47.541	43.216	276.090	Per capita public works and relief spending, 1933-1935 adjusted to 1967 dollars
Percentage of Population in Manufacturing	17.843	7.346	1.890	30.897	Percentage of Manufacturing employees 1929/adult population in 1930
Percentage of Population Church Members	74.544	18.129	38.783	99.680	Percentage of Church Members in 1926/population in 1930
Ln(Income and Wage)	7.768	2.016	0.000	13.816	Log of wage and salary income
OccScore	27.444	11.523	0.000	80.00	Occupational income score

**Table 1 Summary Statistics. Total of 81,170 observations for all variables except Ln(Income and Wage) which is 68,858.*

Summary Statistics Continued:

Variable		Frequency	percentage	Description
Marriage Status 1930:				Marital Status 1930
	Married	50,383	62.17	
	Divorced	400	0.49	
	Widowed	973	1.2	
	NM/SGL	29,285	36.14	
Race:				Race reported in 1930
	White	80,295	98.92	
	Black	875	1.08	
County Migration 1930-1935:				Migratory status 1930-1935
	Stayed	77,224	95.14	
	Moved	3,946	4.86	
County Migration 1935-1940:				Migratory status 1935-1940
	Stayed	65,558	79.48	
	Moved	15,582	20.52	
County Migration 1930-1940:				Migratory status 1930-1940
	Stayed	64,512	79.48	
	Moved	16,658	19.2	
First Generation:				First generation individual
	No	51,691	63.68	
	Yes	29,479	36.32	
Half Generation:				Half generation individual (one parent native)
	No	71,011	87.48	
	Yes	10,159	12.52	
Veteran of WWI :				Veteran of WWI
	No	80,840	99.59	
	Yes	330	0.41	

**Table 2 Summary Statistics. Total of 81,170 observations for all variables.*

Table 3 Migration Results:

Variable	Migration 1930-1935	Migration 1935-1940	Migration 1930-1940
Marriage Status 1930			
Divorced	0.00385 (0.0113)	0.02213 (0.0209)	0.03303 (0.0202)
Widowed	0.01203* (0.0068)	0.07365*** (0.0151)	0.08266*** (0.0140)
Single/Never Married	0.00748*** (0.0023)	0.02763*** (0.0041)	0.03482*** (0.0042)
Black	-0.02570*** (0.0057)	-0.05472*** (0.0127)	-0.06164*** (0.0123)
Half Generation	-0.00558** (0.0025)	-0.01717*** (0.0049)	-0.02118*** (0.0046)
First Generation	-0.01803*** (0.0018)	-0.03674*** (0.0035)	-0.04408*** (0.0033)
Veteran of WWI	0.02344* (0.0078)	0.03681** (0.0131)	0.03770*** (0.0133)
Change in Retail Sales	0.00043 (0.0003)	0.00055** (0.0004)	0.00034 (0.0005)
Ln(Retail Sales)	-0.01429** (0.0051)	-0.05216*** (0.0090)	-0.06366*** (0.0104)
Population Percentage Urban	-0.00002 (0.0001)	0.00045** (0.0002)	0.00017** (0.0002)
Proportional Population Percentage Farmer	-0.00417 (0.0001)	-0.00058*** (0.0001)	-0.00071*** (0.0001)
Population Percentage Voted	0.00104** (0.0005)	0.00165** (0.0008)	0.00238*** (0.0009)
Population Growth Rate	0.06770*** (0.0100)	0.09186*** (0.0159)	0.09267*** (0.01624)
Relief Spending	-0.00012*** (0.0000)	-0.00020*** (0.0000)	-0.00019*** (0.0000)
Percentage of Population in Manufacturing	-0.0002 (0.0002)	-0.00112*** (0.0004)	-0.00159*** (0.0004)
Percentage of Population Church Members	0.00021** (0.0000)	0.00072*** (0.0002)	0.00105*** (0.0002)
Constant	0.14158* (0.0436)	0.46823*** (0.0768)	0.47224*** (0.0790)
N = 81,040	R^2 = 0.0079	R^2 = 0.0132	R^2 = 0.0142

Table 3 Migration Results. Fixed effects for Age 1940 not shown. Statistical significance is shown at 99%(***), 95%(**), and 90%(*) level.

Table 4 Ln(Income and Wage) Results:

Variable	Ln(Income and Wage) 1930-1935	Ln(Income and Wage) 1935-1940	Ln(Income and Wage) 1930-1940
Corresponding year County Migration	0.14290*** (0.0363)	0.06963*** (0.0196)	0.12311*** (0.0195)
Marriage Status 1930			
Divorced	-0.08300 (0.1295)	-0.08293 (0.1295)	-0.08486 (0.1294)
Widowed	-0.17660** (0.0776)	-0.18022** (0.0776)	-0.18511** (0.0776)
Single/Never Married	0.00730*** (0.0213)	0.13187*** (0.0213)	0.12907*** (0.0213)
Black	-0.53052*** (0.0899)	-0.53025*** (0.0898)	-0.52583*** (0.0898)
Half Generation	-0.00453 (0.0240)	-0.00428 (0.0240)	-0.00303 (0.0240)
First Generation	-0.09439*** (0.0176)	-0.09468*** (0.0176)	-0.09176*** (0.0176)
Veteran of WWI	0.05215 (0.0627)	0.05291 (0.0629)	0.05106 (0.0629)
Change in Retail Sales	-0.00607** (0.0025)	-0.00607** (0.0025)	-0.00610** (0.0025)
Ln(Retail Sales)	0.09810* (0.0506)	0.10015** (0.0506)	0.10407** (0.0505)
Population Percentage Urban	-0.00005 (0.0011)	-0.00008 (0.0011)	-0.00010 (0.0011)
Proportional Population Percentage Farmer	-0.00317 (0.0007)	0.00013 (0.0007)	0.00445 (0.0007)
Population Percentage Voted	-0.04265*** (0.0048)	-0.04275*** (0.0048)	-0.04304*** (0.0048)
Population Growth Rate	0.10876 (0.0916)	0.11172 (0.0916)	0.10637 (0.0916)
Relief Spending	0.00190*** (0.0002)	0.00190*** (0.0002)	0.00192*** (0.0002)
Percentage of Population in Manufacturing	-0.01897*** (0.0022)	-0.01890*** (0.0022)	-0.01884*** (0.0022)
Percentage of Population Church Members	-0.00195* (0.0010)	-0.00197* (0.0010)	-0.00205** (0.0010)
Constant	8.62117*** (0.4655)	8.60776*** (0.4655)	8.58359*** (0.4653)
N = 68,751	R^2 = 0.0135	R^2 = 0.0134	R^2 = 0.0138

Table 4 Ln(Income and Wage) results. Fixed effects for Age 1940 not shown. Statistical significance is shown at 99%(***), 95%(**), and 90%(*) level.

Table 5 Occscore Results:

Variable	Occscore 1930-1935	Occscore 1935-1940	Occscore 1930-1940
Corresponding year County Migration	0.14645 (0.1986)	0.10190 (0.1039)	-0.06811 (0.1022)
Marriage Status 1930			
Divorced	-2.10823*** (0.5468)	-2.10833*** (0.5467)	-2.10641*** (0.5466)
Widowed	-1.89979*** (0.3774)	-1.90593*** (0.3775)	-1.89202*** (0.3773)
Single/Never Married	-1.23872*** (0.1021)	-1.24100*** (0.1020)	-1.23484*** (0.1020)
Black	-8.57787*** (0.2993)	-8.57565*** (0.2995)	-8.58663*** (0.2993)
Half Generation	0.08217 (0.1224)	0.08289 (0.1224)	0.08000 (0.1225)
First Generation	-0.81959*** (0.0888)	-0.81886*** (0.0888)	-0.82523*** (0.0888)
Veteran of WWI	0.54106 (0.3412)	0.54066 (0.3412)	0.54707 (0.3410)
Ln(Income and Wage)	-0.22390*** (0.0302)	-0.22393*** (0.0302)	-0.22332*** (0.0302)
Change in Retail Sales	-0.01536 (0.0115)	-0.01537 (0.0115)	-0.01533 (0.0115)
Ln(Retail Sales)	0.46909* (0.2431)	0.47339* (0.2432)	0.46171* (0.2431)
Population Percentage Urban	0.02580*** (0.0047)	0.02573*** (0.0047)	0.02587*** (0.0047)
Proportional Population Percentage Farmer	-1.10747*** (0.0034)	-1.10276*** (0.0034)	-1.11175*** (0.0034)
Population Percentage Voted	-0.16251*** (0.0223)	-0.16268*** (0.0223)	-0.16215*** (0.0223)
Population Growth Rate	1.93565*** (0.3624)	1.93818*** (0.3623)	1.94648*** (0.3623)
Relief Spending	-0.00758*** (0.0100)	0.00760*** (0.0011)	0.00754*** (0.0011)
Percentage of Population in Manufacturing	0.02730*** (0.0011)	-0.02723*** (0.0100)	-0.02729*** (0.0100)
Constant	30.28365*** (2.1368)	30.25100*** (2.1377)	30.33932*** (2.1379)
N = 68,751	R2 =0.0319	R2 =0.0319	R2 = 0.0319

Table 5 Occscore results. Fixed effects for Age 1940 not shown. Statistical significance is shown at 99%(***), 95%(**), and 90%(*) level.

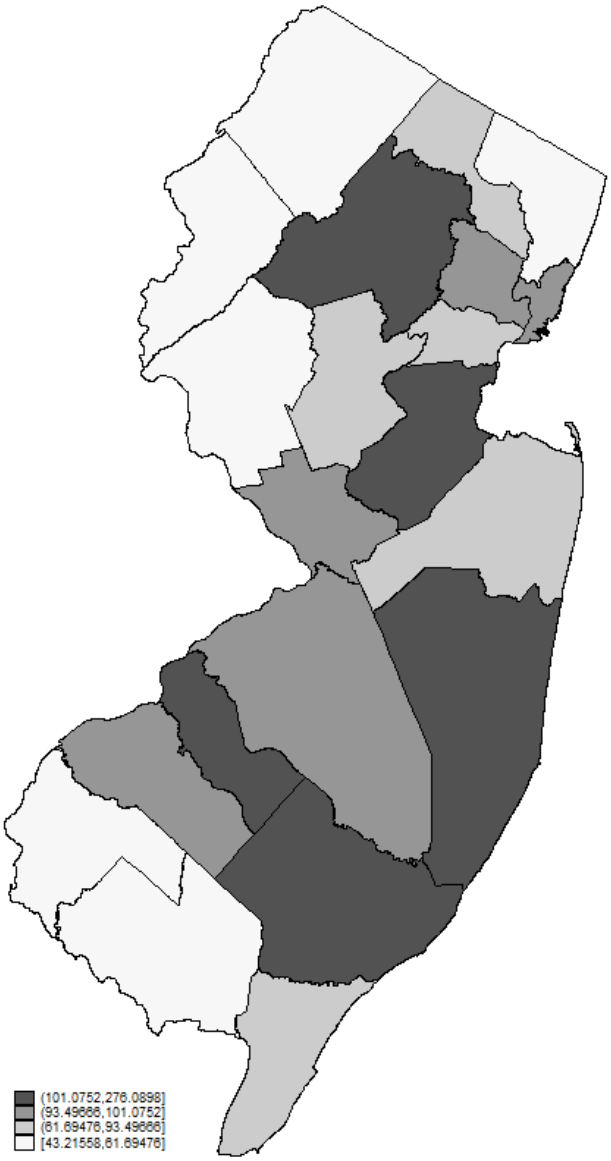

Figure 1 Average Relief Spending by County

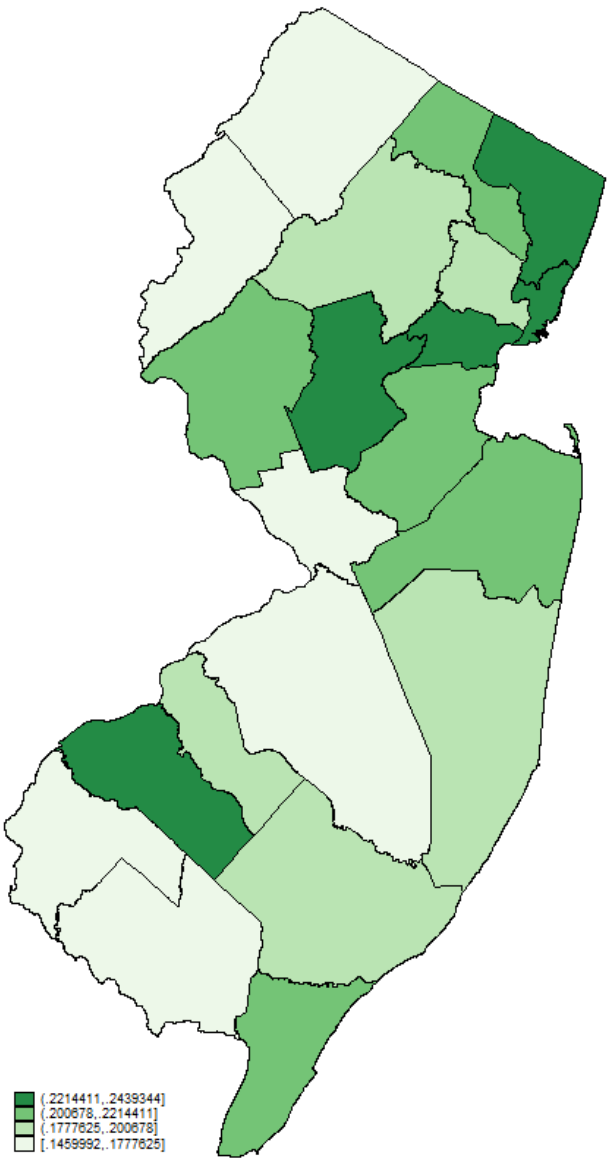

Figure 2 Migration 1930-1940 by County

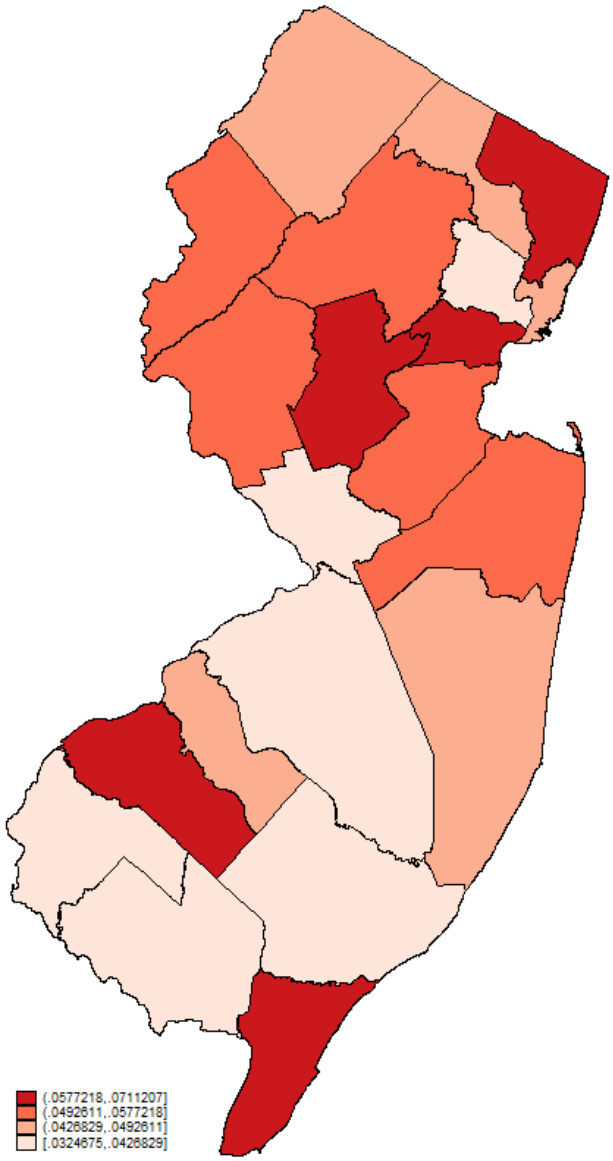

Figure 3 Migration 1930-1935 by County

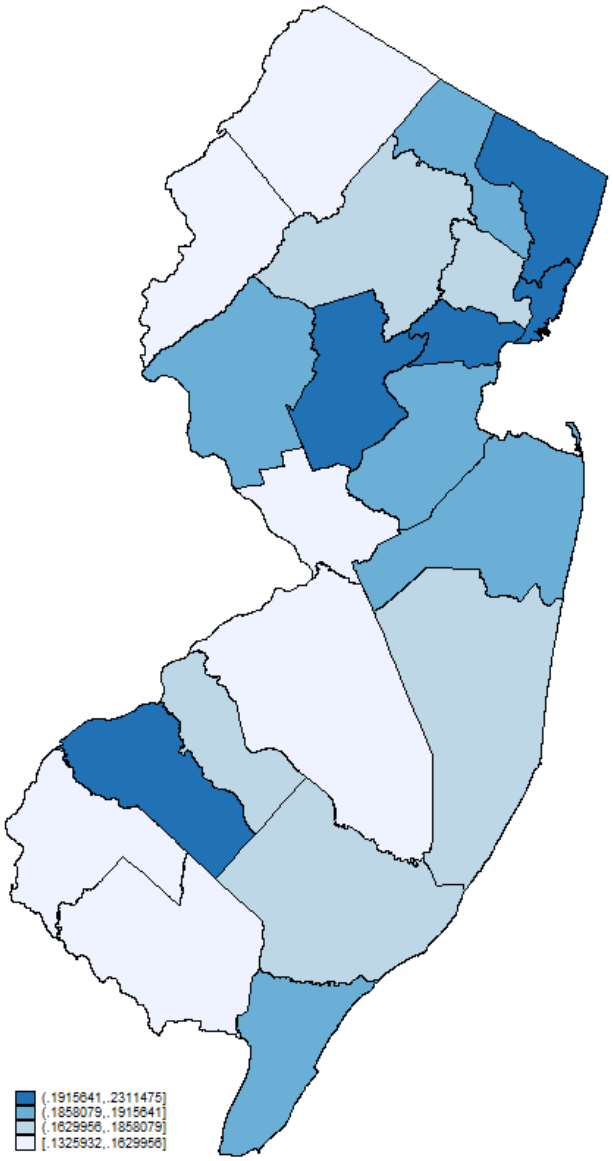

Figure 4 Migration 1935-1940 by County

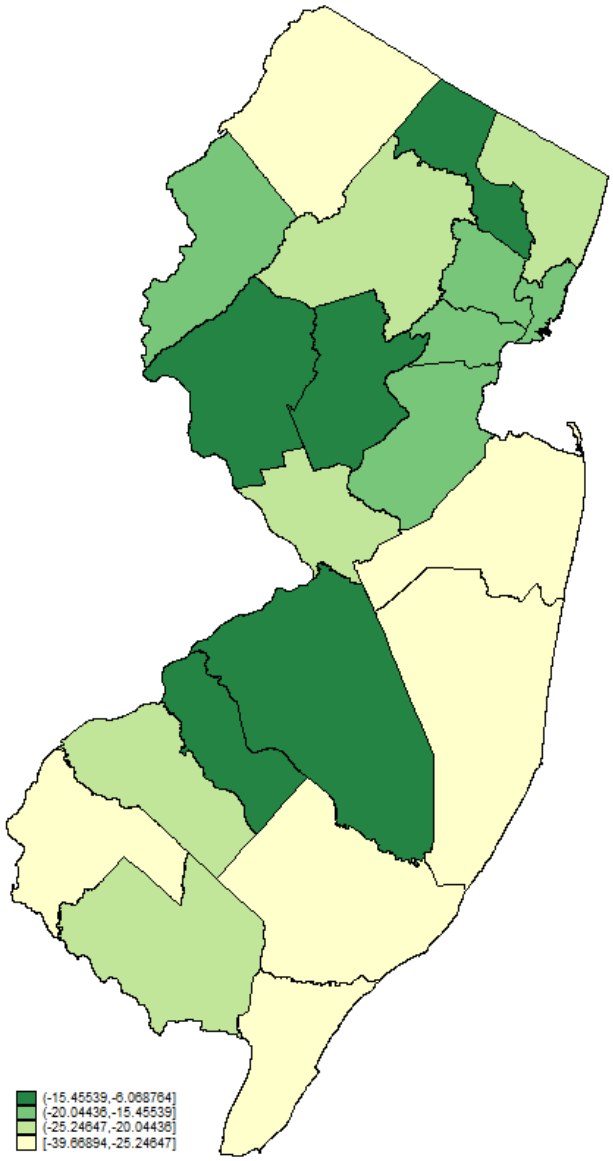

Figure 5 Change in Retail Sales 1929-1935

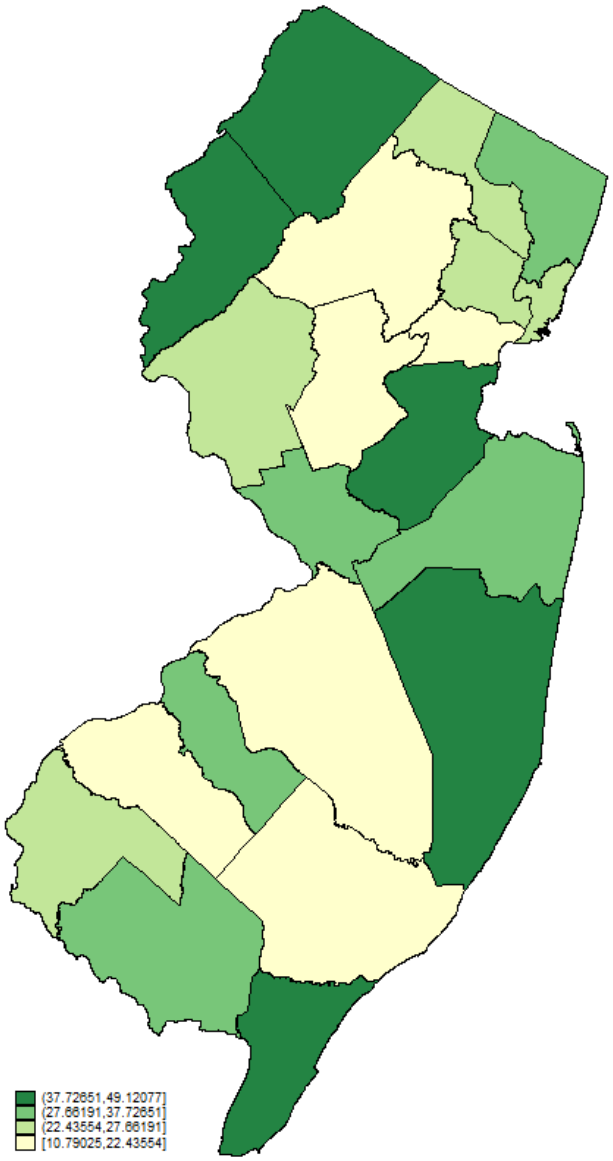

Figure 6 Change in Retails Sales 1935-1939

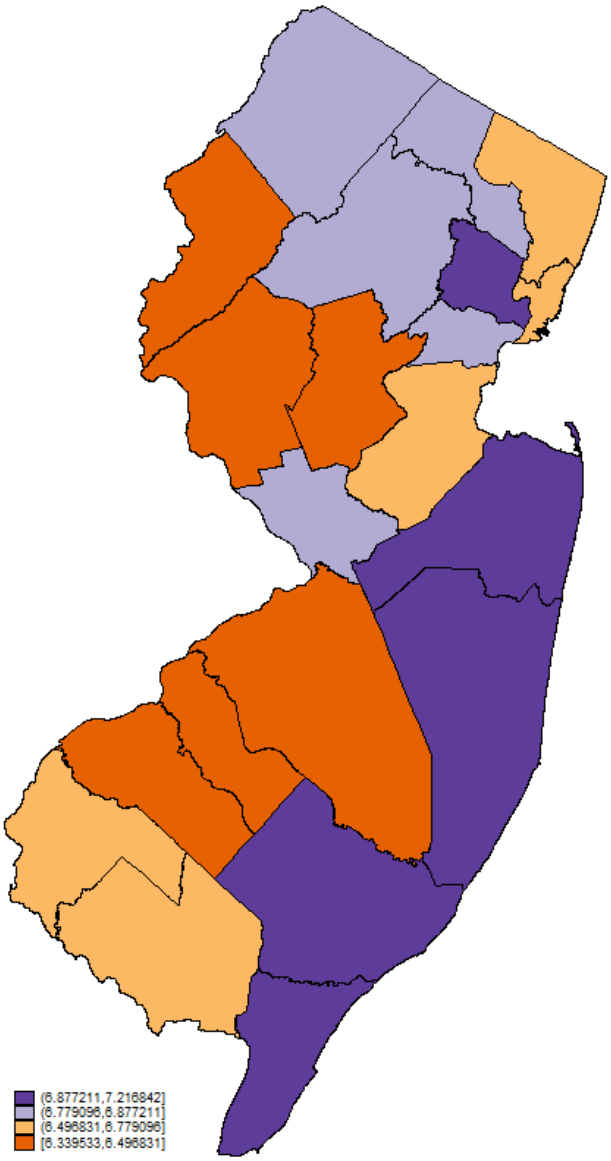

Figure 7 Log of Retail Sales 1929

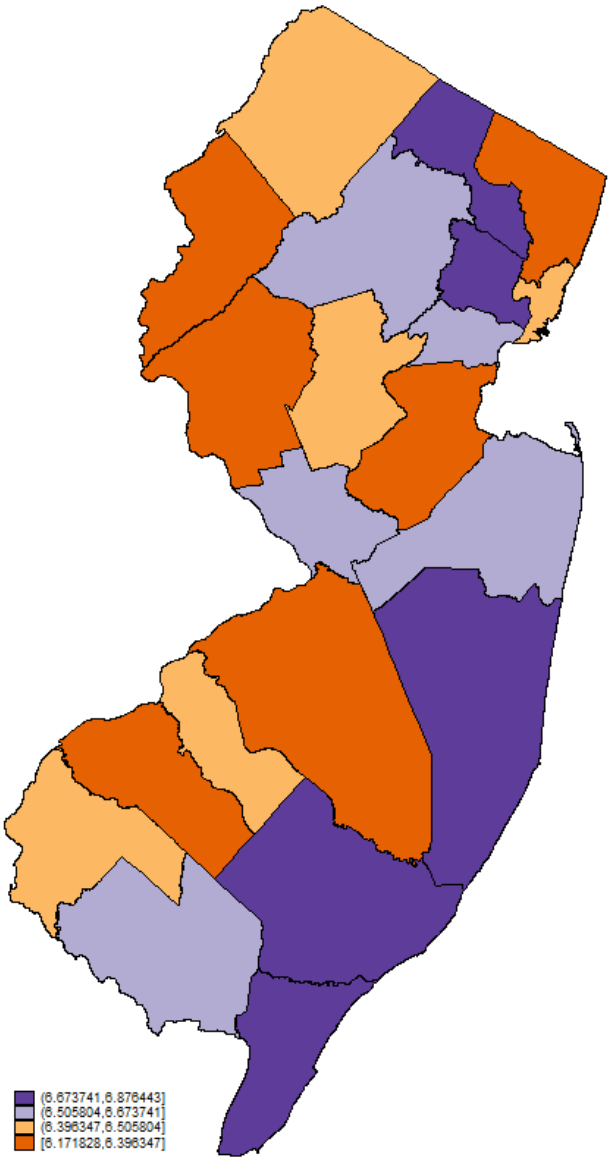

Figure 8 Log of Retail Sales 1929

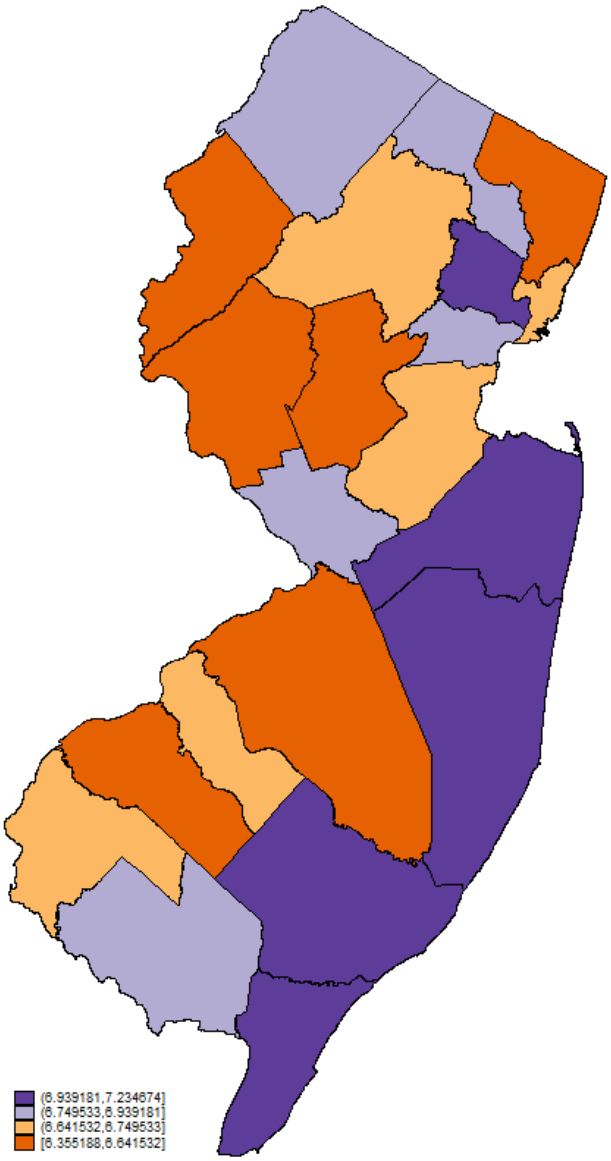

Figure 7 Log of Retail Sales 1939