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**The Social Cost of Growing-Up  
in Rural America:  
Rural Development and Social Change  
during the Twentieth Century**

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## **EXECUTIVE SUMMARY**

*One of the most prominent transformations in U.S. social history has been the farm-to-city migration pattern. This trend has largely been predicated on the improved social opportunities available to people in urban areas. Many Federal programs and initiatives have been designed to “develop” rural areas in order to mitigate the deficits that would accrue to rural residents. Fuguitt et al.’s (1989) recent contention that there is a “persistent importance” of rural residence in the United States is but the latest round in this long-term scholarly debate. The question of whether or not any observable social contrast between rural and non-rural places implies a significant difference in the life chances of individuals residing there, however, has not received the empirical attention that it deserves, especially in light of the immense amount of public policy attention that rural development has received since the turn of this century.*

*This report reviews the research on rural differentiation and the history of major federal rural development policy initiatives to compensate for social deficits experienced by rural residents. We empirically examine the extent and process by which rural origins may affect socioeconomic attainments in adulthood and how these “costs” may have changed during this century in the U.S. Two primary databases are used: the NORC GSSs, 1972-1994 [reorganized to reflect the six major periods of rural development policy-making (categorized as: 1900-1920; 1921-1932; 1933-1940; 1941-1952; 1953-1966; and 1967-1980) when GSS respondents were age sixteen] and the NLS-1972 panel survey of high school seniors who were traced into mid-adulthood. We then examine how rural origins may affect socioeconomic achievements later in adulthood, using the NLS-72 database to estimate a social psychological model of status attainment. Finally, we examine whether rural-origin youth can “migrate away” from the social costs associated with their residential origins by re-estimating status attainment models with the addition of migration variables measuring rural-to-urban and urban-to-rural migration from age 16 to adulthood.*

*The results show a clear decline in the deficits associated with rural origins in completed education by major period of rural development during this century. Moreover, education is the conduit by which rural origins influence occupational status. However, family income continued to show evidence of social costs related to rural origins, especially for those of a rural non-farm background. The process by which educational and occupational status consequences are realized by rural youth is through the reduced expectations of parents and friends which results in lower educational plans, completed schooling, and occupational status. Trends in migration effects are inconsistent, except for the results using the most recent NLS-72 data. These results show that rural-to-urban migration results in higher occupational status and family income, whereas urban-to-rural movement has the opposite set of outcomes. Public policy issues involving rural development programs are discussed in light of these results and the current debate over the scope and meaning of rural development in the context of agricultural legislation.*

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## FOREWORD

At the beginning of this century, Americans lived predominantly on farms, in the open country or in small towns. Their traditions and perspectives, and some would say the national character, had evolved from and had been shaped by a strong rural heritage. As the twentieth century progressed, the nation changed from a rural-oriented country to a mass culture, urban-dominated society. The great migration streams from Appalachia, the agricultural South and most other rural areas of the country contributed significantly to the growth of large metropolitan and suburban population centers. In spite of these changes, rural America is and will continue to be a highly important, if smaller, part of our nation. While urban areas have grown faster, rural populations have also increased. Current census estimates indicate there are almost 70 million rural Americans, an all time high. Clearly, the one-in-four Americans now living in rural areas constitute a population of sufficient magnitude to deserve continued scientific investigation.

*The Social Cost of Growing-Up in Rural America* is an ambitious, intellectual enterprise that assesses the complexities and consequences of rural origins on status attainment in adulthood. It is empirical research played out on a grand temporal and spatial scale. The scope of the analyses spans both the time frame of the twentieth century and the entire cross-section of the American population. Taken collectively, the report contributes to our understanding of a very American commodity: individual opportunity.

Dr. Frank M. Howell and his associates, Mr. Yuk-Ying Tung and Ms. Cynthia Wade-Harper, have selected and combined information from extant social surveys, thereby providing new and important insights into the dynamics of American achievement. They have then interpreted these data within the context of changing rural and agricultural development policies and initiatives. The authors have skillfully organized data from the NORC General Social Surveys and from the National Longitudinal Survey of the High School Class of 1972 into an effective research tool for quantitatively estimating the consequences of ruralness. From this strategic research vantage point, they pose and respond to such questions as: *Do rural origins depress the level of attainment opportunities? Through what social and psychological processes do rural origins transmit their impact upon attainment? Have the depressing effects of ruralness varied by historical period? Are the consequences different for farm and nonfarm rural youth? What part does migration play? What have been the impacts of rural and agricultural development policies on the life chances of rural youth?*

The report is both thorough and well written. The reader should be aware, however, that the research utilizes relatively sophisticated, quantitative social science techniques which can be quite challenging for the statistically uninitiated. The authors should be recognized for the selection and definition of this important research problem and for the new knowledge they bring to our understanding of rural America.

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# ***The Social Cost of Growing-Up in Rural America: Rural Development and Social Change during the Twentieth Century\****

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One of the most prominent transformations in United States social history has been the farm-to-city migration pattern, the “rural-to-urban turnaround” of the 1970s notwithstanding (Fuguitt 1985). This long-term trend has largely been predicated on the notion that better social opportunities are available in urban areas. As a consequence, many public policy initiatives and programs have been designed to “develop” rural areas in order to alleviate the deficits that accrue to residents of “underdeveloped” rural areas of the U.S. The scholarly debate over whether social, cultural, and economic deficits experienced by rural Americans still exist in the latter half of this

century has ranged from Dewey’s (1960) famous declaration that they are “real, but relatively unimportant” to the more recent contention by Fuguitt et al. (1989) that there is a “persistent importance” of rural residence in the United States.

The question of whether or not any observable social contrast between rural and non-rural places actually occurs also implies a significant difference in the social opportunities of individuals residing there. However, this key question has not received the attention that it deserves, given the massive public and private investment that has been made toward “developing” rural America. The

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life-chances of those growing-up in rural areas today may be commonly thought to equal those of urban center residents. At worst, this logic might argue, given an eventual migration to the city upon reaching adulthood, the life chances of rural-origin persons might be viewed as being on par with everyone else in the nation, *ceteris paribus*. While complex patterns of commuting may have created the appearance that, by now, the U.S. reflects a level of spatial permeability (Svalastoga 1959) so as to neutralize any size-of-place inequalities in the opportunities afforded young adults, there remain substantial variations in social differentiation among communities of various sizes. As Fuguitt et al. (1989: 421) stated in summarizing their recent study of Census data:

*“Once more size of place has been confirmed as an important source of community variation. Such a result is hardly surprising. Indeed, more than thirty years ago Duncan and Reiss noted that the sheer physical contrast between a large urban center and a town of 2,500 is so striking that we would be amazed if there were not important social contrasts. Our findings for 1980 and 1970 tend to be quite consistent with theirs based on the 1950 census...it is important to underscore the fact that such differentials ... continue to be found despite the fact that many recent demographic and organizational changes over the past thirty years have contributed to a blurring of rural-urban distinctions.” (1989: 421)*

As their conclusions suggest, rural and urban America have moved closer to one another in a number of ways during recent decades but some important socioeconomic cleavages remain. Moreover, one important element of what we do not understand very well is the consequences of rural origins for one’s life chances in the United States. While a few studies have examined some contemporary short-term effects of rural origins on socioeconomic and other outcomes (e.g., Pollard and O’Hare 1990), we believe that it is important to examine them in more detail over some period of time so that an historical context to rural development programs can be observed.

A great body of Federal legislation and

initiatives exists that is aimed at improving the level-of-living and social opportunities available to rural residents and we overview some of them below. Given this fact, however, surprisingly little empirical research links evolving rural development policy with the social stratification of rural origins in the United States. The U.S. General Accounting Office recently released the results of a study of rural development legislation and extant programs (U.S. GAO 1994). The conclusions of this study by the GAO suggest that, while it is “difficult to gauge the impact that federal expenditures have had on rural areas...” (1994: 6), it is also apparent that “federal agencies have made only limited efforts to evaluate the impact of federal rural development programs.” (1994: 6). This same GAO report finds that federal rural development programs, policies, and initiatives have been “too narrowly focused” and are poor substitutes for an “integrated federal approach” to economic development in rural America. It is indeed beyond the scope of a single study to evaluate the impact of rural development programs or initiatives, but a more criterion-based approach is within reach. If one part of rural development is to improve the opportunities for social and economic success in rural areas, then one social indicator of the results of this development activity is the decline in the influence of rural origins on the life chances of such residents over the period of rural development initiatives.<sup>1</sup>

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<sup>1</sup> This argument emphasizes human capital factors to the general exclusion of organizational or macro-level ones. It is important, for instance, to understand the characteristics of labor markets as well as individual workers and the interdependence of these multiple dimensions of society constitutes the social bond. For a similar argument focusing on rural schools and rural youth, see Howell (1989).

## SCOPE AND PURPOSE

This study estimates trends in the effects of rural origins on the socioeconomic attainments of adults in the United States during this century. We first overview existing theory and research as to why rural America might differ from non-rural areas. Using the work of several agricultural historians, we then present a classification of major periods of Federal and state-level rural development programs and initiatives during the twentieth century. Thirdly, trends in the size and scope of the rural population are examined to see how this segment of the U.S. population has declined during this century. Focusing on education, occupational status, and family income as key outcomes of the stratification of socioeconomic opportunity, we then examine how living on a farm or in a rural non-farm setting at or about age sixteen is linked to attainments in adulthood using the NORC General Social Survey database. In the first phase, the effects of rural origins on these outcomes—termed the “social costs”—are estimated for each major period of rural development. Using data from a fourteen-year panel study of a single high school senior-year class (1972), these estimates are supplemented for the most recent period of rural development since NORC GSS members of the recent period of rural development are early in their work careers. In the second phase, we examine, through the panel data on the senior class of 1972, how the social deficits of rural origins observed in the first phase of analysis are manifested through a critical part of the achievement process: the formation of aspirations and their translation into attainments during adulthood. A third phase of this analysis addresses the role of rural-urban migration between adolescence and adulthood in shaping the social “costs” of rural origins. Essentially, this part of the analysis assesses whether rural youth who migrate to cities overcome their “origins” through migration to urban areas of the U.S.

More specifically, we first empirically examine the extent and process by which rural

origins may affect socioeconomic attainments in adulthood and how these costs may have changed during this century in the United States. Two primary databases are utilized: the cumulative NORC General Social Surveys, 1972-1994 (GSS) and the National Longitudinal Survey of the High School Class of 1972 (NLS-72) panel study of high school seniors who were traced into mid-adulthood. Using the traditional Blau-Duncan model of status attainment (Blau and Duncan 1967) as a point of departure, the cumulative GSS data are reorganized to reflect the period when GSS respondents were age 16 and corresponding to six landmark periods of rural development policy: 1900-1920; 1921-1932; 1933-1940; 1941-1952; 1953-1965; and 1966-1980. Because GSS respondents born during the most recent period (1965-1980) had not collectively reached career peaks in their life course, a second database was also used to supplement the analysis. The NLS-72 panel data were used to estimate a similar model for a more recent cohort of youth who have reached mid-adulthood.

A second phase of the analysis utilizes the NLS-72 database to extend the Blau-Duncan model to approximate the Wisconsin model of status attainment (see Otto and Haller 1979) in order to more fully understand the individual-level (human capital) process of how rural origins may affect socioeconomic attainments in adulthood. In this case, we focus on rural origins’ influence through the formation of educational and occupational aspirations and their translation into achievements.

A third issue examined in this study is the question of whether rural youth can “migrate away” from the social costs associated with their origins. This is addressed by comparing these two status attainment models for subgroups of respondents, in both the GSS and NLS-72 datasets, who reported different migration patterns between adolescence and adulthood.

## THEORIES OF RURAL DIFFERENTIATION AND STRATIFICATION

We begin by reviewing the theory and research on rural differentiation, briefly summarizing work involving how and why rural America has been distinct from urban America. In order to provide a context for how rural areas have fared in the public policy arena, a brief history of major federal rural development initiatives, most designed to compensate for "social deficits" experienced by rural residents, is then presented. This review borrows heavily from previous work of agricultural historians (Lapping et al. 1989; Rasmussen 1985; Carlson et al. 1981; McGovern 1967; Effland 1993). Finally, the role that migration has played in socioeconomic attainment levels of adults from rural origins is reviewed.

### **Rural-Urban Differences in America**

The study of social differentiation between rural and urban people is a long-standing object of inquiry for both urban and rural sociologists (see Carlson et al. 1981). Establishing the patterns of social differences between rural and urban areas has been a continual focus in this body of literature. Of the many issues considered in these studies, perhaps the major debate has been whether or not there are distinct cultures, or "ideologies," existing within rural and urban areas (Miller and Luloff 1981). In essence, the question has amounted to whether or not distinctive rural and urban "ideologies" exist at opposite ends of a continuum where their respective values and beliefs are separated by a "cultural gap". Willits et al. (1982) have concluded that rural-urban differences represent "small, but persistent" patterns of social differentiation, in contrast to Dewey's (1960) earlier contention that the small observable differences are "real, but relatively unimportant."

One of the persistent problems giving rise to these generalizations is how to define who is rural or urban. Both physical characteristics of a geographic location and the attributes of the

people living in those areas have been used to describe "rural" and "urban" populations. Miller and Luloff (1981) have argued that there seems to be three main definitions or conceptualizations of ruralness. They are: (1) the ecological, (2) occupational, and (3) sociocultural dimensions.

The ecological dimension of ruralness is defined as dealing with the causes and effects of the distribution of the population. This is characterized as a geographic area with a small population, relatively isolated from urban areas (Miller and Luloff 1981). This definition is the one most frequently understood by the public. It is in keeping with the U.S. Bureau of the Census definition of rural; that is, places with a population of 2,500 or less.

The occupational dimension refers to those occupations most commonly associated with rural areas e.g. agriculture, fishing, mining, forestry, and other extractive industries (Miller and Luloff 1981). This definition is very limited in scope. With the diffusion of urban industry into more rural areas, a more careful interpretation of this definition is needed. This definition is problematic because those who impose an occupational definition to "rural" have trouble keeping within the specific boundaries set forth, coupled with the empirical reality of large-scale farm production where "farmers" do not actually live on farms (see Fuguitt et al. 1989: Chapter 10).

The sociocultural dimension is more abstract and difficult to define. Not only does this dimension encompass behavior, it also incorporates the structured values and attitudes which serve as the normative guidelines for the behavior (Miller and Luloff 1981). It refers to "the culture and/or behavior of people defined as "rural" in regard to ecology or occupation rather than some distinctive cultural or interactional form" (Bealer et al. 1965: 264). Rural people are seen as being traditional in their orientations, slow to accept change, ideologically and religiously conservative, and so forth. (Miller and Luloff 1981;

Willits et al. 1982; Ford 1978). Urban people, however, are seen as quite the opposite: less traditional and more liberal in their ideologies (Willits, et al. 1982; Ford 1978). Sociocultural ecologists suggest that one needs to include values and culture with the ecological approach in order to fully understand rural population growth (Lyon 1987).

Given these three conceptual distinctions, rural and urban areas may exist at opposite ends of a physical, economic and sociocultural continuum. The problem with defining rural lies in the fact that there is no one dimension that can be singled out to comprehensively represent the concept. It has been suggested that a composite definition, including each of these three dimensions, would be appropriate (Bealer et al. 1965; Miller and Luloff 1981). Nonetheless, such a composite definition lacks an operational consensus in the literature to date (see Falk and Pinhey 1978). Partially out of practical convenience, the size-of-place definition is by far the most often used operational measure in research and it is the one we adopt in this study, for the same reason.

### **Three Perspectives on Rural-Urban Social Change**

There are three specific perspectives on social and cultural change among rural and urban areas in the United States. Each attempts to understand how and why rural and urban places differ from each other and how this differentiation has changed over time. Two of them suggest a decrease in the differences between rural and urban areas. The third indicates that there has been a restructuring in the social and economic organization of rural and urban settings, reversing any trend toward rural-urban similarity, and moving toward a growing divergence between the two ecological areas. These perspectives are: (a) the massification hypothesis, (b) convergence theory, and (c) the economic restructuring of rural America.

**Massification Hypothesis.** The massification hypothesis originated in the 1930s as the impact of the emerging mass media on the United States and Europe was being felt. Massification is a term denoting the

creation of a “mass” society with respect to values, beliefs and attitudes as well as increased exposure to a more “urban” way of life (Glenn 1963). The basic idea underlying the massification hypothesis is that diversities existing with respect to ethnicity, region, and class are destroyed by the emergence of a critical “mass” of standardized culture and experiences. Due to increased exposure to mass media across different social classes, combined with the processes of urbanization and industrialization, extant cultural diversities are reduced to relative cultural homogeneity (Peterson and DiMaggio 1975).

The massification theorists propose that a “mass culture” is being created where values and tastes are relatively similar. “Mass culture,” according to MacDonald,

*is a dynamic, revolutionary force, breaking down the old barriers of class, tradition, taste, and dissolving all cultural distinctions. It mixes and scrambles everything together, producing what might be called homogenized culture...It thus destroys all values, since value judgments imply discrimination. Mass Culture is very, very democratic: it absolutely refuses to discriminate against, or between, anything or anybody (1957: 62).*

The first factor that is said to have contributed to the “massification” of society is an increase in exposure to the mass media. The mass media are considered to be the center of American leisure time (Wilensky 1964). We know that rural people are increasingly being exposed to the same newspapers, magazines, television shows, movies at the cinema, and so forth, that are available to urban people (Willits et al. 1982). Youth in both residential areas are being exposed to the same contemporary popular culture. Advertising agencies directly target youth, thereby creating a virtual mass youth consumer market. Howell (1989) has tied advertising and the consumption of popular culture to residential location among youth in the following way:

*The penetration of television into virtually all homes in the United States, coupled with the increase in mass-circulation teen magazines, has put rural youth on par in popular culture*

*with their peers virtually anywhere in the country. The increasing presence of satellite dish antennas in rural areas also suggests that rural youth are increasingly consumers of information geared toward this mass youth market (1989:11).*

This creates a common bond shared by youth all over the United States. Since we know that youth are indeed influenced by what they see on television (Greenson and Williams 1986), we would expect that this exposure to "popular culture" would lead to similarities in the behaviors and attitudes of youth, regardless of place of residence.

This line of reasoning means that television viewing has introduced an "awareness" of diverse (urban) ways of life to rural youth that they might not have been exposed to otherwise. However, media exposure may not be as influential in its "massification" ability as was once thought. Being exposed to similar television programs and magazines does not necessarily mean a convergence in values. Individuals can be selective in what they view and read. They may expose themselves only to materials that are in keeping with their own values and beliefs (Willits et al. 1982).

However, with the increasing sophistication in communications technology coupled with the increasing availability of this technology across most rural and urban areas, all types of information may be transmitted to rural areas at the same time and as easily as they are to urban areas (Dillman 1983). Thus, mass media exposure contributes to the "massification" of society by reducing the relative "cultural isolation" of rural youth.

A second contributor to "massification" is the process of urbanization. Kasarda (1980) pointed out that the nonmetropolitan population turnaround of the 1970's was partly a result of urbanization. What were previously considered as primarily urban occupations have spread to the more rural areas. One source of the urbanization of rural areas is the growth and access to interstate highways (Fuguitt 1985). Improvement in transportation gives ready access to and from rural and urban areas. Urbanization reduces the physical isolation as well as the cultural

isolation of rural residents from urban residents, thereby creating a "mass" society. A consequence of this process is the decline of attitudes and values that might have once been considered traditional. Research evidence, for instance, points to only a slight negative association between size of community and traditionalism (Fischer 1975).

The trend toward the industrialization of rural areas has also contributed to the process of "massification". Since the late 1950's, a technological shift has occurred in agricultural and other extractive industries (Ford 1978; Lyson 1989). Manufacturing spread to the rural areas, creating a decline in the farm employment sector. By the 1970's, approximately 17% of those employed were employed in manufacturing industries. Urban technology has been expanding into rural areas, creating relative occupational similarities. The 1970s showed a diffusion of "industrial and service activities" especially in areas where recreational activities are important and retirement communities are present. These occupational similarities have contributed to the reduction of rural and urban differences (Ford 1978).

**Convergence Theory.** A second theoretical perspective that may aid in the understanding of change in rural-urban differences is the convergence model. This model of change is derived from a human and urban ecology perspective. The redistribution of the population has prompted ecologists to hypothesize that there has been a convergence between rural and urban areas. Kasarda (1980) refers to this convergence as simply an extension of the process of urbanization. He proposed several reasons for the "nonmetropolitan population-turnaround". They are as follows:

- (1) the extension of the interstate highway system through many remote areas and the expanded all-weather surfacing of rural roads;
- (2) the expansion and linkage of locally owned telephone companies into the Bell system;
- (3) the extension of power lines and other public utilities and services, such as new, centralized, rural water systems, throughout most nonmetropolitan counties;
- (4) telecommunication advances, including cable TV;
- (5) the proliferation of nationally standardized con-

*sumer goods and service establishments in nonmetropolitan counties; (6) dual residences associated with rising real incomes and increased leisure time; (7) a growing footloose retirement population; and (8) life-style changes oriented to more bucolic, less densely settled environments (1980:381).*

Illustrated by Wilson (1984), the convergence model suggests that several factors have contributed to the decrease in the divergence of rural and urban areas. Wilson (1984) summarizes these factors as, first, an increase in "personal affluence" and an associated increased emphasis on time spent in leisure activities and, second, a lower retirement age with its corresponding increase in the number of retirement communities across the U.S. The fastest growing communities in the 1970's were those found to have facilities for recreation and retirement communities (Carlson et al. 1981). A third factor in the decrease of diversities of rural and urban areas is the diffusion of what has traditionally been considered urban occupations and services to the more remote rural areas. With the improvement in transportation, rural areas are more easily accessible (Carlson et al. 1981). This enables businesses to expand, thereby, increasing the population in rural areas. The improvement of transportation and communication has also made interactions between rural and urban areas much easier.

In summary, urban ecologists view the convergence of rural and urban areas as creating a balance, or a "state of equilibrium," regarding the concentration of the U.S. population. This is essentially a result of the existence of new technological breakthroughs as well as the modification of existing technologies.

***Economic Restructuring of Rural America.*** While the massification hypothesis and convergence theory both depict rural and urban youth becoming more homogeneous, the growing literature on the recent economic restructuring of rural America suggests a different set of expectations. In the last decade, rural areas have been experiencing a type of "economic distress" resulting from two prominent factors (Dewitt et al. 1988).

First, this decline is marked by a decrease in the rural population. The 1970s showed a

nonmetropolitan population turnaround where rural areas were increasing in size more rapidly than metropolitan areas (Fugitt 1985). However, the 1980s showed a population decline similar to the one experienced in the 1950s (U.S. Department of Agriculture 1987). The net migration rate between the years 1985 and 1986 was estimated to be approximately 500,000. This rate increased tremendously to approximately three-quarters of a million the next year (Dewitt et al. 1988). One source of the increased net migration from rural to urban areas is those residents with a college education. College-educated individuals are more likely to migrate to metropolitan areas, resulting in a "brain-drain" in rural areas. Between the years 1985-1986, "net migration from rural to urban areas was two and one-half times higher for college graduates...than for high school students" (Dewitt et al. 1988: 3). However, the most recent population estimates from the U.S. Census suggests that there has been a significant increase in the nonmetropolitan population since 1990, largely due to net in-migration (Johnson and Beale 1995).

Second, the rural economic decline is marked by high unemployment rates, slow job growth and the weakening of already existing industries which are creating a financial crisis in rural areas (Dewitt et al. 1988; U.S. Department of Agriculture 1987). Unemployment in rural areas, many of which have high poverty rates, has increased. Those rural areas dependent upon the mining and energy industries have had employment cutbacks and increased unemployment rates ranging anywhere from 10-15 percent between the years 1982-1985 (Dewitt et al. 1988). These low unemployment rates are a result of low job growth in rural areas. Industries showing low rates of growth are the "natural resource and goods-producing industries" (U.S. Department of Agriculture 1987). Moreover, manufacturing industries that are slightly growing are providing low-skill, low-wage jobs (Dewitt et al. 1988; Lyson 1989; Lyson and Falk 1993). Since these industries have traditionally been seen as the dominant ones in rural areas, we can see why a deterioration of the rural economy is evident.

***Brief Summary of Theoretical Perspectives.*** In short, little doubt exists that the urbanization process in the United States is reaching the point to where new forms of cities are emerging (e.g., Garreau 1991). A massification of social life has occurred such that both rural and urban people are largely exposed to a fairly common culture and a social awareness, fostered by a prevalent, although diverse, system of media and consumer-related standards of cultural symbols and meanings (see Howell 1989a). Finally, the restructuring of the rural economic fabric underlying small towns and rural communities has fostered a reorganization of social opportunities within these settings (Fuguitt et al. 1989). How the life chances of individuals residing today in rural America will fare in the long-term remains to be seen, but the prospects appear bleak for those who do not wish to migrate from rural communities which do not share a strategic proximity to metropolitan areas. It may be that the recent economic restructuring of rural America during the previous two decades has put in place a reversal of the commonality of social experiences for rural and urban individuals. As we note in the following section, the massification hypothesis and convergence theory perspectives are consistent with the goals of rural development. That is, both perspectives articulate an increasingly homogeneous social organization and culture between rural and urban America which is consistent with the goals of a set of Federally-based initiatives whose purpose is to “develop” rural areas to be somewhat similar to urban ones. The economic restructuring perspective, pointing to a recent period of change in rural America, suggests trends which run counter to these rural development goals.

### **Rural-Urban Migration in Socioeconomic Attainment**

According to the push-pull theory of migration, some people move because they are attracted to someplace, whereas others move because they are pushed out of their former living areas (Weeks 1993). According to a life-course perspective, the underlying motivations

for migration may vary, depending upon the stage in the life course. Children migrate along with their parents due to their dependency upon adults. Many teenagers “migrate” away to college or to find employment; their first move away from home might be the most important determinant of size-of-place migration, especially among rural youth (Howell and Frese 1983). On the other hand, it seems clear that rural youth are more likely to be school dropouts, owing to greater experiences with an impoverished background (Lichter et al. 1993). While migration represents an individual choice, comprised of a multitude of economic and non-economic factors (Williams 1981), an issue important for this study is whether rural residents must migrate in order to become successful according to some common standards of achievement in American society.

Previous empirical work on the role of migration in the socioeconomic achievement process shows that migration to larger population centers may be associated with positive economic returns. For example, Long and Heltman (1975), using data from the 1970 census, found that migrants from rural-to-urban areas had better socioeconomic achievement than nonmigrants. Wang and Sewell (1980) tested the effects of migration on personal earnings based on data from the Wisconsin longitudinal study of 1957 high school seniors using the 1964 follow-up survey. Their definition of migrant was simply that a person lived in different communities between 1957 and 1964. In Wang and Sewell’s model, which was a respecification of the Wisconsin model of status attainment, migration and place of current residence were specified as being partly determined by a respondent’s educational attainment, but were themselves determinants of occupational achievement and earnings (1980: 192). Wang and Sewell’s results indicated that current residence has a significant effect on individuals’ earnings, controlling for residence during the high school senior year. This finding suggests that migration itself is linked to higher personal earnings among men in the Wisconsin panel.

More recently, Wenk and Hardesty (1993) used data from the NLSY panel to examine the effects of rural-to-urban migration from 1980 to 1988 on poverty status. Their results

showed that women moving from rural areas to urban areas improved their economic condition, but this was not the case for men. Wenk and Hardesty (1993) explained that women in urban areas had more employment opportunities than in rural areas.

Pollard and O'Hare (1990) studied the High School and Beyond (HSB) database regarding metropolitan and non-metropolitan seniors in 1980 and how they fared socioeconomically as of 1986. They found that about equal proportions of metro and non-metro seniors migrated from their hometowns as of six years after high school. Their educational attainments were approximately equal but migration seemed to play an important role in shaping the occupational and earnings achievements of non-metropolitan ("rural") youth early in their career. Migrants were more likely to be in white-collar jobs (53 to 42 percent) with non-migrants more likely to hold blue-collar positions (35 to 27 percent). In terms of income, non-migrants were making only 79 percent of the average 1985 income of migrants. While these patterns do not adequately deal with the differential age-income curves prevalent in many occupations, they do indicate that in the short-term, rural youth who migrate from their home communities fare better at occupational and income attainments than their peers who stay behind.

In a companion study, Pollard et al. (1990) examined the selectivity factors related to HSB seniors migrating away from their hometowns. Personal and community factors,

such as being schooled in a college preparatory curriculum in high school and if the nearest college or university was "far-off," proved important. However, local labor market factors proved very important as well: low per-capita income of the home county and (paradoxically) the amount of expenditures the local community invested in their school systems were factors that tended to drive seniors to other locales as of six years after high school.

Thus, studies of the process of individual socioeconomic achievement find that migration, especially away from rural areas, plays a significant role in adulthood attainments. While the structure of socioeconomic opportunities in rural communities has been on the decline in recent years (e.g., Lyson 1989; Barkley 1993), the logical extension that rural youth *must* migrate in order to forego the relative deficits associated with continuing to live in places of their origin is an important element of the stratification of place in the United States. Migration is important, both for individuals, in terms of the likelihood of their personal attainments, and for rural communities, which must compete with non-rural areas for economic growth, stability, and, for some, survival. The question of whether or not rural youth can "migrate away" from the social costs of their origins is a compelling hypothesis, for both research and public policies related to rural development (Glenn and Hill 1977; Fuguitt et al. 1989: Chapter Two; Lichter et al. 1993).

## **HISTORY OF MAJOR FEDERAL POLICY INITIATIVES FOR RURAL DEVELOPMENT**

In this section, a brief history of major rural development programs and initiatives at the Federal level during this century is presented. It is organized by era, based on our integration of historical characterizations by McGovern (1967), Carlson et al. (1981), Rasmussen (1985), Lapping et al. (1989), and, most recently, Effland (1993). In addition we

identify some important factors influencing rural development programs since circa 1980 which affect the current state of Federal policy-making (Flora and Flora 1990; Effland 1993; GAO 1993, 1996). These policies are classified into six distinct periods, as shown in Figure 1.

McGovern (1967) divided rural development policy in the United States into five

different periods: The Golden Age (1900-1920); The Farm Depression (1921-1933); The New Deal (1933-1940); World War II and New Horizons (1941-1952); and The Crisis and the Opportunity of Abundance (1953-1965). Later, Carlson and his co-workers (1981) called the period from 1966 to 1980, A Broader Rural Perspective (see Figure 1). Effland (1993) organized major Federal policy efforts by Presidential administration but these effectively operate as subsets of the McGovern-Carlson et al. scheme. We briefly overview the rationale for this historical classification scheme, followed by some consideration of how these periods of rural development initiatives may have influenced the life chances of rural youth.

During the Golden Age, thirty-eight percent of those employed participated in agriculture (McGovern 1967). From 1900 to 1920, the prices of farm products rose faster than those of industrial production. The federal government focused on constructing material infrastructure in rural areas, for example the Office of Public Roads was organized in 1905. The Country Life Commission, appointed in 1908, tried to solve the needs and problems of families in rural areas and the Federal Highway Act (1916) initiated the beginnings of a long-distance transportation system for the nation.

In the Depression era, rural development was somewhat arrested in the United States, although a number of initiatives were established. McGovern (1967) reported that by the end of 1921, farm earnings decreased by forty percent. The main purpose of federal rural development programs during this period was to maintain farm incomes by controlling farm prices. For example, the Agricultural Marketing Act in 1929 fostered the federal program to purchase farm surpluses to sustain the price of United States farm products.

Following the general trend in the country during the period, New Deal rural development policies were very eventful programs, serving as catalysts to try to improve the quality of rural life (and enhance the life chances of rural children) which was ravaged by the Great Depression (see, for instance, Elder 1977). Lapping et al. (1989) reported

that the goals of these policies and programs included increasing rural incomes by manipulating farm prices and building a great deal of the new infrastructure in rural areas. In fact, McGovern (1967) declared that "the basic structure of American farm legislation was established in the 1930's" (1967: xxvi). The New Deal introduced the national concept of planning and societal guidance which "cultivated" rural areas to become more modernized and led to their increasing pattern of urbanization.

In World War II and the subsequent period of "New Horizons" (1941-1952), the U.S. government primarily focused on increasing farm production as a mechanism for rural development. This was based on the belief that "food will win the war" (Carlson et al. 1981: 45). Between 1942 and 1943, the emergency Price Control Act was passed to maintain the price of farm products. The Food Production and Distribution Administration was established to improve the quantity and quality of farm production. However, there were other actions that undoubtedly led to a continuance of the betterment of the physical infrastructure in rural areas. The beginnings of the communications system in rural America was launched through the Rural Telephone Loan Program. This initiative, coupled with the authorization of the Tennessee Valley Authority and the Federal Highway Act during previous periods of rural development (see Figure 1), complemented the rise of better communications and transportation capacity for rural communities across the country. This era might be characterized as one of great strides in the enhancement of basic "access" to rural America and *from* rural areas to the rest of the country, from an urban-centric perspective. Thus, while crop production was a targeted venue of Federal rural development from a policy-making point of view, several important other initiatives continued the development of rural America to have access to the rest of the Nation and vice-versa.

During the period from 1953 and 1966, Federal rural development efforts have been characterized as the "Crisis and Opportunity of Abundance." Following the Korean Conflict, the Federal government not only continued to improve the physical infrastructure in rural

Figure 1. History of Major Federal Programs for Rural Development by Period

The Golden Age (1900-1920)		Farm Depression (1921-1932)		The New Deal (1933-1940)		World War II & New Horizons (1941-1952)		The Crisis and the Opportunity of Abundance (1953-1966)		A Broader Rural Perspective (1967-1992)	
1905	Office of Public Roads (USDA) organized	1921	Capper-Volstead Act created rural co-ops.	1933	Tennessee Valley Authority established	1942	Emergency Price Control Act approved	1953	National Agricultural Advisory Commission established	1969	Presidential Task Force on Rural Development
1908	Country Life Commission appointed	1923	Agricultural Credits Act approved	1933	The Agricultural Adjustment Act enacted	1943	Food Production and Distribution Administration established	1953	Interstate Highway System receives first appropriations	1970	USDA Committees for Rural Development set up in each state
1912	Office of Public Roads (USDA) receives appropriations to supervise building of rural post roads	1926	Division of Co-operative marketing established in Department of Agriculture	1933	The Farm Credit Act passed	1949	Rural Telephone Loan program begun	1954	Agricultural Trade Development and Assistance Act approved	1971	Rural Development Service organized
1914	Smith-Lever Act established Cooperative Extension Service	1929	National Chamber of Agricultural Co-operatives established	1935	Rural Electrification Administration organized			1955	Rural Development Committees organized	1971	First Regional Rural Development Center Established
1916	Federal Highway Act approved	1929	The Federal Farm Board established	1935	Resettlement Administration organized			1959	Interdepartmental Committee on Rural Development established	1972	Rural Development Act enacted
1916	Federal Farm Loan Act approved	1929	Agriculture Marketing Act approved	1936	Soil Conservation and Domestic Allotment Act passed			1961	Rural Development Committees replaced by Rural Area Development	1973	Congressional Rural Caucus organized
1920	American Farm Bureau Federation organized			1937	Market Agreement Act Enacted			1964	Economic Opportunity Act passed	1978	USDA Rural Development Service merged into FmHA
								1965	Housing and Urban Development Act passed	1980	Rural Development Policy Act Passed
								1965	Office of Rural Areas Development replaced by Rural Community Development Service	1980	National Advisory Council on Small Community and Rural Development establish
								1966	National Advisory Commission on Rural Poverty	1981	USDA Office of Rural Development Policy establish
										1985	Food Security Act
										1990	Presidential Institute
										1992	Rural Development Administration funded
										1992	State Rural Development Council formed

Sources: McGovern, G. 1967. *Agricultural Thought in the Twentieth Century*. New York: The Bobbs-Merrill. p. XV-XIVI  
 Rasmussen, W. D. 1985. "90 Years of Rural Development Programs." *Rural Development Perspectives*. Oct. p. 2-9.  
 Carlson, J. E., M. L. Lassey, and W. R. Lassey. 1981. *Rural Society and Environment in America*. New York: McGraw-Hill. p. 37-53.  
 Lapping, M. B., T. L. Daniels, and J. W. Keller. 1989. *Rural Planning and Development in the United States*. New York: The Guilford Press. p. 22-44.  
 Effland, Anne B. W. 1993. "Federal Rural Development Policy Since 1972." *Rural Development Perspectives* 9:8-13.

areas but also focused attention on rural unemployment and poverty. The former was to ameliorate the degree of rural isolation that existed while the latter was geared to solve the more directly human problems of differences in personal well-being. For example, the Rural Areas Development Office was charged with reducing and managing rural unemployment. Moreover, the goal of the Economic Opportunity Act was to end rural poverty (Rasmussen 1985). In this period, one might observe that there was the shift in the direction of federal programs, from a singular focus on the development of rural areas, per se, to comparisons of their level of development relative to urban areas. This distinction is important because it renders somewhat of a "baseline" for assessing the ultimate goals of Federal-based rural development programs. These goals became two-fold: (a) equalizing the comparative opportunity for success by rural Americans to their urban counterparts; as well as (b) equality in the objective standards of socioeconomic development across these spatially different rural-urban areas of the country.

In the period classified by agricultural historians as a "Broader Rural Perspective" (1967-1992), Federal efforts in rural development primarily focused on promoting the overall socioeconomic development of rural areas.<sup>2</sup> These actions were highlighted by the authorization of the first monies for the Interstate Highway System, passing the Economic Opportunity Act and the Agricultural Trade Development and Assistance Act. New industrial development extended into rural areas during this period but there was

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<sup>2</sup> The schema developed by Carlson et al. (1981) ends with 1980 as the conclusion of the "Broader Rural Perspective" era. However, this closure was essentially a function of bringing this period to the then-present day. We have used the work of Flora and Flora (1989) and Effland (1993) to extend this period to the "present day" of circa 1992. In doing so, this may not adequately reflect the opinions of these authors and, as such, this organization of events involving Federal rural development policy should not be attributed to them.

also the negative effect of foreign exports on the price of U.S. farm products (Carlson et al. 1981). The federal government also coordinated the organization of rural development programs within states themselves (Rasmussen 1985), a somewhat signal event. In this period, Carlson et al. (1981: 46) characterized these actions as reflecting "new policies .. which take into greater account the broadening base of rural occupations and communities."

This historical schema offered by our integration of Carlson et al. (1981) with various others formally ends with circa 1980. We have not yet seen precisely how the events of the previous decade or so will fit into the mosaic of rural development history (for a global perspective, see Flora 1990). However, we can borrow from Flora and Flora's (1989) accounting of federal policy during the decade and its effect on rural America. Effland (1993) also gives us some accounting of Federal rural development policy-making during this period.

Flora and Flora (1989) have identified five types of policies which have *restricted* the development of rural areas during the 1980s: inappropriate cost assessments; deregulation; relaxation of anti-trust laws; tax laws covering capital investments, and the demise of formula-based funding.

First, federal government reimbursements for rural communities have been inappropriately based on the assumption that living costs in rural areas were less than those in urban areas. As a result, there was the unequal level of government reimbursement between rural and urban areas. Rural communities always obtained fewer resources from the federal government than did urban communities.

Second, due to the policy of deregulation, there was the economic disadvantage in rural communities because of monopoly capital. Flora and Flora argued that "Deregulation has aided large corporations by allowing them to drop services in marginally profitable places" (1989: 51). This situation negatively influenced the quality and availability of semi-public services in rural communities.

Third, the relaxation of Anti-Trust Laws allowed large companies to take over small companies, which frequently created jobs by locating in rural areas, and shifted capital from productive investment to speculative

enterprises. Small companies have been gradually merged with larger firms, decreasing both production capacity and local employment. Consequently, the options of economic development in rural areas became limited because of confinements imposed by higher capital costs.

Fourth, the change in tax laws in the early 1980s favored urban and suburban development, but disadvantaged rural development. "The Economic Recovery Tax Act of 1981 encouraged capital-intensive development in large metropolitan areas by providing more rapid cost recovery for certain types of real estate development" (1989: 52).

Finally, the shift away from formula-based funding fostered a change to competitive grants which required writing skills for funds. Urban communities were able to obtain many grants because of a greater likelihood of having a college or university in the area. However, rural areas tended to lack necessary technical-writing talent due largely to the economy-of-scale required to keep such a position fully employed. Flora and Flora (1989) also reported that "many states have used these funds to support state bureaucracies, not rural communities" (1989: 52). Zuiches (1991) discusses the viability of rural communities along these same lines and concludes that one strategic asset not accessible in these communities is a "think-tank" capacity for assessment and planning. He argues that the changing social and physical landscapes in rural America require such capacity to be economically viable in today's marketplace of commerce and that the land-grant system is one mechanism that needs "reinventing" for delivering this type of asset (e.g., the Cooperative Extension Service).

Effland (1993) provided another view of post-1980 events that have shaped rural development efforts. One is the antagonistic relationship between alternate ideologies gauging the nature of "successful" development. That antagonism occurs when rural areas appear to show signs of improvement, there are social interests who argue that rural America needs no further Federal attention. On the other hand, there are counter-interests who advocate an even stronger role by Federal policy toward rural areas because of the "demonstrated positive effects" that previous

efforts have created. This dialectic has fueled the debate over rural development initiatives for about 15 years. She notes that a hallmark event occurred during the Carter administration in that it was concluded that "Federal rural development effort consisted of *programs*, rather than *policy*" [emphasis ours] (Effland 1993: 10). Subsequent Carter directives produced an attempt at a comprehensive policy during 1979. "This new policy...combined the poverty focus of the Kennedy/Johnson rural policy with the state and local direction of the Nixon/Ford New Federalism" (1993: 10-11). With this apparent new vista in how the Federal government approached rural development, the next administration lost interest in this strategy, resulting in a 50-percent reduction in rural development programs in USDA during the 1980's. Moreover, the end of local revenue sharing in 1986 produced another cut in Federal aid to rural America. To conclude, Effland's analysis observed that "Rural development policy since 1972 has followed a rather frustrating path, repeatedly reaching a comprehensive set of national goals and a coordinated strategy for achieving them, only to find a new set of political and economic circumstances as attempts at implementation begin...the early 1990's have witnessed further weakening of the national economy. " (1993: 13).

This era of rural development began to recognize the increasing differentiation in the rural population, both in terms of industrial and occupational composition and in the attractiveness of rural areas to city dwellers (Brown and Wardwell 1980). Moreover, it had to grapple with the increasingly divergent issues of crop production economics and rural non-farm development. In short, the review of federal policies of the 1980s and into the 1990s suggests that the economic restructuring of rural America has been at least partially induced as a consequence of actions taken on the basis of other policy agendas: a type of indirect rural "un-development" scenario. The reality that the farming sector represents only one element of rural America's social and economic development and, yet, constitutes an undeniably irresistible focal point for Federal policy perhaps best represents the dialectic which has characterized rural

development from circa 1980 until the present day (e.g., see Thurow's argument with Comstock's rebuttal; Thurow 1991; Comstock 1991).

To conclude this section on the history of Federal rural development efforts, there are two distinctive elements of federal policy: one directed at agriculture and the other at non-farm, rural development. Lapping et al. (1989) summarized the scope and purpose of federal policies for rural development during the twentieth century in the following way:

*Federal planning policy for rural America has featured four broad themes: the distribution and management of land; the development of human resources and physical infrastructure support for farmers; and the alleviation of poverty in peripheral regions (1989: 22).*

A few years later, Wimberley's (1993) analysis of what he called agricultural sustainability policy sorted such actions into three types: (a) *social*, reflecting the interests of society at-large; (b) *agricultural sector*; and (c) *rural people and places*. He argues that agricultural policy is often a substitute for rural policy which serves as an inadequate mechanism to serve any one, or all, of the three sectors. Wimberley states that *all* three policy types deserve appropriate attention in the policy arena for *any* of them to be well-attended in the political process.

This evolution of federal rural development

policy, from land-use management to the development of human resources, and from agricultural sector-policy to societal sustainability, is particularly important for the examination of the relationship between rural origins and socioeconomic attainments in adulthood. How the physical infrastructure of rural America has benefited the farming population has been well-documented by these agricultural historians and policy analysts but much less is known about the linkage of rural development policies and initiatives on human resources and the life chances of individuals bounded by space and place in the United States. While we can probably agree with the general hypothesis that one outcome of Federal rural development programs would be the reduction of rural-origin deficits during this century, it is nearly impossible to deduce specific testable hypothesis about the effects of these programs on individuals. However, in the spirit of the recent GAO report on Federal rural development initiatives (GAO 1994), this should not preclude the attempt to gauge the impact of these programs on their constituents. Given our organization of rural development initiatives into major historical periods, the general research hypothesis is that rural-origin "costs" have declined over these periods. On the other hand, we are left to inductively discover when and how these presumptive declines occurred across these major periods of rural development.

## **DEMOGRAPHIC TRENDS IN SIZE AND SHARE OF RURAL U.S. POPULATION**

Perhaps the most prominent demographic trend in the United States has been the growth of urban centers, fueled by a steady rural-to-urban migration stream. While the "rural turnaround" (Brown and Wardwell 1980) of the 1970s represented a surprising moment in this long-term pattern, the clearest public image of the U.S. population is one of an increasingly urbanized people with a declining

share that might be classified as rural. As the book by Fuguitt et al. (1989) documents in more detail, there are two elements of rural demography that render contrasting implications about the rural population. One is the "share" of the U.S. population that lives on farms and in small towns and communities classified as rural, while the other is the absolute size of the rural population.

To illustrate these points, Figure 2 contains a graph of the size and share of the rural population in the United States from 1900 to 1990. These data include both the adult population and, for the 1950-90 period, the youth population, defined as individuals less than 25 years of age. We have placed this data series as an overlay to the six major periods of rural development policy in the U.S. for a contextual sense of how population size and share correspond to major Federal rural development initiatives.

The share of the country's population classified as rural declined systematically from about 1940 to around 1970, where it has stabilized at about one-quarter. Since 1950, the share of the youth population that is rural declined until 1970 where it, too, leveled-off at about 25 percent. Thus, these data show that fully one-quarter of the total U.S. population lives in areas small enough to be classified as rural by the Census Bureau.

In terms of the absolute size of the rural population, this figure shows that the rural population has grown in a fashion that parallels that of the total U.S. population (Fuguitt et al. 1989: 16). Since 1900, the size of the rural population grew until just before the second World War (1940), where it reached a plateau of between 50 and 60 million. In 1970, however, there has been a noteworthy growth in the size of the rural population to just under 70 million. The rate of this twenty-year growth appears to be on par, if not exceeding, that observed from 1900 to 1940. In other words, there are more people living in rural America today than ever before and the share that rural people are of the total U.S. population is not declining. While the growth in absolute numbers is partly due to the growth trend of

the entire U.S. population, the fact remains that the largest growth in the number of rural Americans during this century occurred in the past twenty years. While we do not provide any projections of the rural population into the future, the latest population estimates suggest that there have been clear population gains, due largely to net in-migration, in the non-metropolitan sector of U.S. counties since 1990 (see Johnson and Beale 1995).

One reviewer of this report in draft form suggested that we substitute non-metropolitan net migration rates for population size and focus instead on the rural-to-urban and urban-to-rural migration patterns within each major period of rural development policy. While this approach would indeed emphasize the loss of rural people to urban locations, and, sporadically, the converse (see Fuguitt et al. 1989), it would ignore the simpler, yet equally important, point that the sheer size of the rural population has been on the increase, right along with the rest of the country.

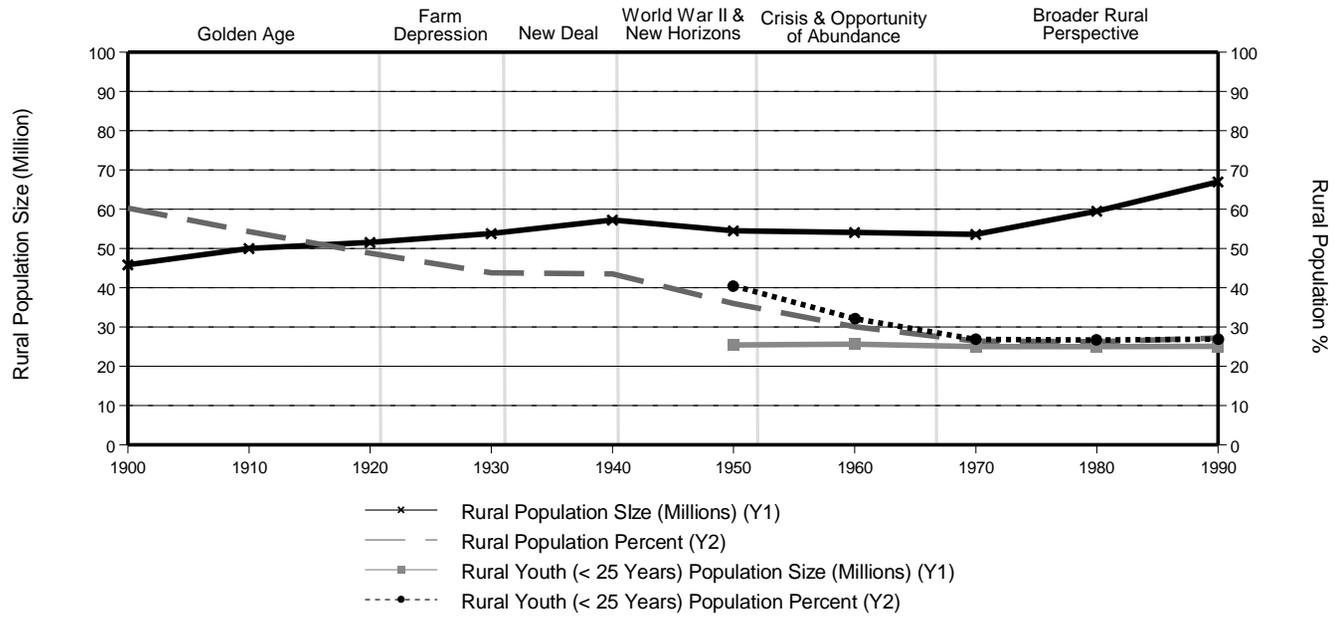
To summarize, the demographic trends in the size and share of the rural U.S. population suggest that it is riding along with the overall growth in the nation's increase in size. The share of the country's population that is classified as rural appears to be stable at around one-quarter of the total. The numbers of persons who are classified as rural, however, seems to be on a twenty-year growth trend that is as strong as any other period during this century. Our impression of the social and political discourse regarding rural development and policy-making in the recent past is that it virtually ignores the demographic growth in the *size* of the rural population. Instead, the typical focus is on the declining farm population and "shrinking" rural economy.

## RESEARCH METHODOLOGY

This section describes the research objectives, sources of data, the measurement of variables, and the models and methods of analysis used in the study. The research

objectives are to examine the effects of rural residential origins on socioeconomic attainments during adulthood and to investigate the role of migration in shaping this process. We

Figure 2. Size and Share of the Rural Population in the United States, 1900-1990



Sources: U. S. Bureau of the Census, 1960 United States Census of Population, General Population Characteristics.  
 U. S. Bureau of the Census, Census of the Population: 1970.  
 U. S. Bureau of the Census, 1980 Census of Population General Population Characteristics.  
 U. S. Bureau of the Census, Residents of Farms and Rural Areas: 1990.

make use of one theoretical perspective on the process of socioeconomic achievement, that of status attainment (Blau and Duncan 1976; Otto and Haller 1979), to the exclusion of a number of others which are more structurally-oriented. This decision is based largely on pragmatic grounds, because it would be important to incorporate dual-economic or neo-Marxist conceptualizations into this study. Nonetheless, the requisite data are not available to us in order to render a trend study in the long-term linkage of rural origins to socioeconomic outcomes in adulthood.

### Sources of Data

This study uses data from the cumulative NORC General Social Surveys (GSS), conducted from 1972 to 1994. GSS data in this study are organized into six cohorts, corresponding to the major periods of rural development identified in Figure 1. Unfortunately, the youngest cohort only contains a small subsample of GSS respondents who were born between 1945 and 1964. Moreover, the GSS data do not allow the examination of important details in the status attainment process (e.g., the formation of aspirations). The National Longitudinal Study of the High School Class of 1972 (NLS-72) is also used in this study. This large panel dataset provides an additional coverage of this most recent period of rural development. In addition, it facilitates a more detailed examination of a social psychological view of socioeconomic attainment (Otto and Haller 1979).

**NORC General Social Surveys, 1972-94.** The cumulative 1972-1994 GSS were conducted by the National Opinion Research Center at the University of Chicago. A total of 32,380 English-speaking persons 18 years of age or over were surveyed from 1972 to 1994 with the exceptions of 1979, 1981, and 1992. A modified probability sample was used for the 1972 through 1974 data but a full probability sample design was employed in the 1975 to 1994 surveys. The average rate of response over the 22-year period was 76.8 percent (for more details, see Davis and Smith 1994).

The data were reorganized into six periods, which matched the major periods of rural

development policy (see Figure 1 above) when GSS respondents were age sixteen. These periods and the sample sizes for each are as follows: 1900-1920 [ $n_1=6,030$ ]; 1921-1932 [ $n_2=5,242$ ]; 1933-1940 [ $n_3 = 3,595$ ]; 1941-1952 [ $n_4 = 8,064$ ]; 1953-1966 [ $n_5=7,519$ ]; and 1967-1976 [ $n_6=1,137$ ]. A small proportion of cumulative GSS respondents failed to report their ages [ $n=793$ ] and were omitted from the analysis.

**NLS-1972.** Sponsored by the National Center for Educational Statistics, the National Longitudinal Study of the High School Class of 1972 (NLS-72) consisted of a base-year (1972) survey, gathered by the Educational Testing Service; the first follow-up (1973), second follow-up (1974), third follow-up (1976), and the fourth follow-up (1979) surveys, collected by the Research Triangle Institute; and the fifth follow-up (1986) survey conducted by the National Opinion Research Center. The NLS-72 traced students for fourteen years, from their senior year in high school until 1986, when most respondents were in their early thirties (see Riccobono et al. 1981; Tourangeau et al. 1987). Using the set of NLS-72 variables described below resulted in an unweighted sample size of  $n = 8,729$  respondents over the five waves.<sup>3</sup>

### Measurement of Variables

In the GSS data, the variables included measures of measures of family socioeconomic background, residential location and migration experiences, and socioeconomic achievement in adulthood. Besides comparable

<sup>3</sup> Data collection from 1972 to 1979 was conducted using a stratified random sample. The fifth follow-up to the NLS-72 was also a stratified two-stage probability sample conducted in 1986. The fifth follow-up sample was an unequal probability subsample of the 14,489 students, who participated in at least one of the five previous waves of NLS-72, and was stratified by: type of school, geographic region, enrollment size, higher educational system, minority group, income level, and degree of urbanization (Tourangeau et al. 1987:8).

versions of these variables, the NLS-72 indicators also included measures of academic ability, grades, significant others' influences for schooling, and educational aspirations.

**NORC GSS.** For personal and family background, gender (GENDER) was scored 0=male or 1=female. Number of years of formal schooling completed was used to measure father's (FAED) and mother's education (MOED). Father's occupational status (FOCC) was in Duncan SEI scores. To measure residential origins, respondents were asked in what type of place they lived at 16 years of age. The responses were collapsed into dummy variables (1=yes; 0=no) for rural farm (FARM16) and rural non-farm (RNF16) areas. Region of origin at age 16 was also coded into dummy variables (1=yes; 0=no). These included: New England (NE16), foreign (FRG16), Middle Atlantic (MA16), East North Central (ENC16), West North Central (WNC16), South Atlantic (SA16), East South Central (ESC16), West North Central (WNC16), and Mountain (MTN16), with the Pacific region omitted as the reference category. The adequacy of family income (FINCOM16) when the respondent was 16 years old was based on the question, "Thinking about the time when 16 years old, compared with American families in general then, would you said your family income was?" The response choices were scored as: 1=far below average, 2=below average, 3=average, 4=above average, and 5=far above average. (Parental income per se was unavailable, so this variable, at best, represents a subjective recall estimate of the relative income of the respondent's family at age 16.)

Migration was measured by comparing where respondents lived at age 16 and place of current residence at the time of the interview. Migration included three dummy variables, each scored 1=yes and 0=no: from farm-to-city (FARMCITY), from non-farm-to-city (RNFCITY), and from city-to-rural area (CITYRUR).

The number of years of schooling completed was used to measure the respondent's education (EDUC). Respondents' occupational status (OCCSEI) was also Duncan SEI scores. Total family income (FINC) was collected in income ranges and was recoded to the midpoint of the original income categories (for example, less than \$1,000=\$500, etc.) To

adjust for inflation during the 1972-94 period, the Consumer Price Index was used to transform family income into constant 1993 dollars (U.S. Bureau of the Census 1993).

**NLS-72.** Gender (GENDER) was coded as a dummy variable (0=male or 1=female). Five levels of education were used to measure father's (FAED) and mother's education (MOED). These included: 1=did not complete high school, 2=finished high school, 3=some college, 4=finished four years college, 5=obtained a graduate or professional degree. Father's occupational status (FOCC) was in Duncan SEI scores. Respondent's residence in their senior year was collapsed to a dummy variable indicating whether or not it was rural (1=rural; 0=otherwise).<sup>4</sup> Family income (FINCOM) was given by respondents with a set of dollar categories as possible response choices. These responses were recoded to the midpoint of the income categories (for example, less than \$3,000=\$1,500, etc.). Region in 1972 was collapsed into a set of dummy variables (1=yes; 0=no): Northeast (NEAST), North Central (NCENT), South (SOUTH), with the West as the omitted category.

Migration consisted of two dummy variables (scored 1=yes; 0=no): a person moved from a rural to an urban location (RURCITY), and a respondent moved from an urban to a rural area (CITYRUR). Respondents not meeting these conditions constitute the reference category for these two dummy variables (i.e., one who did not change from rural-to-urban or from urban-to-rural). Unfortunately, this migration period compared 1972 with 1979 (the fourth follow-up) instead of 1986 (the fifth and final follow-up) because the NLS-72 instrument for 1986 did not include an item for residence and the public-use version of this database does not otherwise facilitate a size-of-place identification for the final wave.

For the academic performance variables, the measurement of mental ability (ABIL) consisted of the first principal component of the following test scores: vocabulary formula score, reading formula score, letter groups

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<sup>4</sup> The rural non-farm versus farm distinction was unavailable in the NLS-72 dataset.

formula score, and mathematics formula score (see Riccobono et al. 1981). High school grades (HSGPA) were reported by the respondent and scored into the following categories: 8=mostly A, 7=about half A and half B, 6= mostly B, 5=about half B and half C, 4=mostly C, 3=about half C and half D, 2=mostly D, and 1=mostly below D.

For significant-other influences, father's (FSOI) and mother's (MSOI) educational expectations for students, were each scored as: 1=wants me to quit high school without graduating, 2=wants me to graduate from high school and stop here, 3=wants me to graduate from high school and then go to a vocational, technical, trade, or business school, 4=wants me to go to a two-year or junior college, 5=wants me to go to a four-year college or university, and 6=wants me to go to a graduate or professional school. For teacher's educational expectations (TSOI), the response categories were: 1=discouraged me, 2=didn't try to influence me, and 3=encouraged me. For peers' plans, the question, "Will your friends plan to go to college?" was used to construct a dummy variable (1=yes; 0=no) for friends' educational plans (FPLAN).

Respondents' educational plans were measured as the highest education the student planned (EDEX) to attain. Responses included: 1=less than high school, 2=graduate from high school only, 3=go to a vocational or technical school, 4=go to a junior college, 5=go to a four-year college, and 6=go to a graduate or professional school.

For socioeconomic achievement in adulthood, the following variables were measured in the 1986 follow-up. Respondent's occupational status (OCCSEI) was in Duncan SEI scores. Education (EDUC) completed as of the 1986 was scored in the following categories: 1=some high school, 2=high school diploma, 3=two-year college, 4=some college, 5=college graduate, 6=master degree, and 7=Ph.D. or M.D. Total family income (PINC) was in actual dollars for the year 1985.

## Models and Methods of Analysis

Two versions of the status attainment model are used: modified versions of the

original Blau-Duncan model and the subsequent social psychological Wisconsin model.

### ***Blau-Duncan status attainment model***

Shown graphically in Figure 3 below, we specify social background factors, such as father's and mother's education, father's occupational status, and parent's (relative) income level, as exogenous variables along with region of the country, gender, and rural farm or rural non-farm origins. The respondent's completed schooling intervenes between social origins to affect occupational status and family income during adulthood. In a subsequent respecification of this model, we include dummy variables reflecting adolescent-to-adulthood migration behaviors as intervening factors between completed schooling and occupational status, following Wang and Sewell (1980).

***Wisconsin social psychological model of status attainment.*** This social psychological model is shown graphically in Figure 4, and is specified as follows within the confines of the NLS-72 database upon which it is estimated. Socioeconomic background, such as mother's and father's completed schooling, father's occupational status, parental income, are specified as exogenous variables in conjunction with region of the country and whether or not the NLS-72 respondent lived in a rural community. These fully exogenous variables are sequentially linked to measured mental ability and high school grades. This recursive sequence shapes the perceptions of significant-other influence from parents (mother and father), teachers and friends. Educational plans during the senior year of high school are partly an outcome of this block-recursive process. These plans combine with previous stages in the model to sequentially determine completed schooling, occupational status, and family income (see Otto and Haller 1979 for an expository report).

***Model estimates and inter-period comparisons.*** The principal strategy used in the analysis is to, first, estimate the relevant model using conventional OLS multiple regression procedures and, second, compare the effects for variables pertaining to rural origins (dummy variables for rural farm and rural non-farm residence in the GSS data, rural versus other in the NLS-72 data) on

Figure 3. Blau-Duncan Socioeconomic Achievement Model

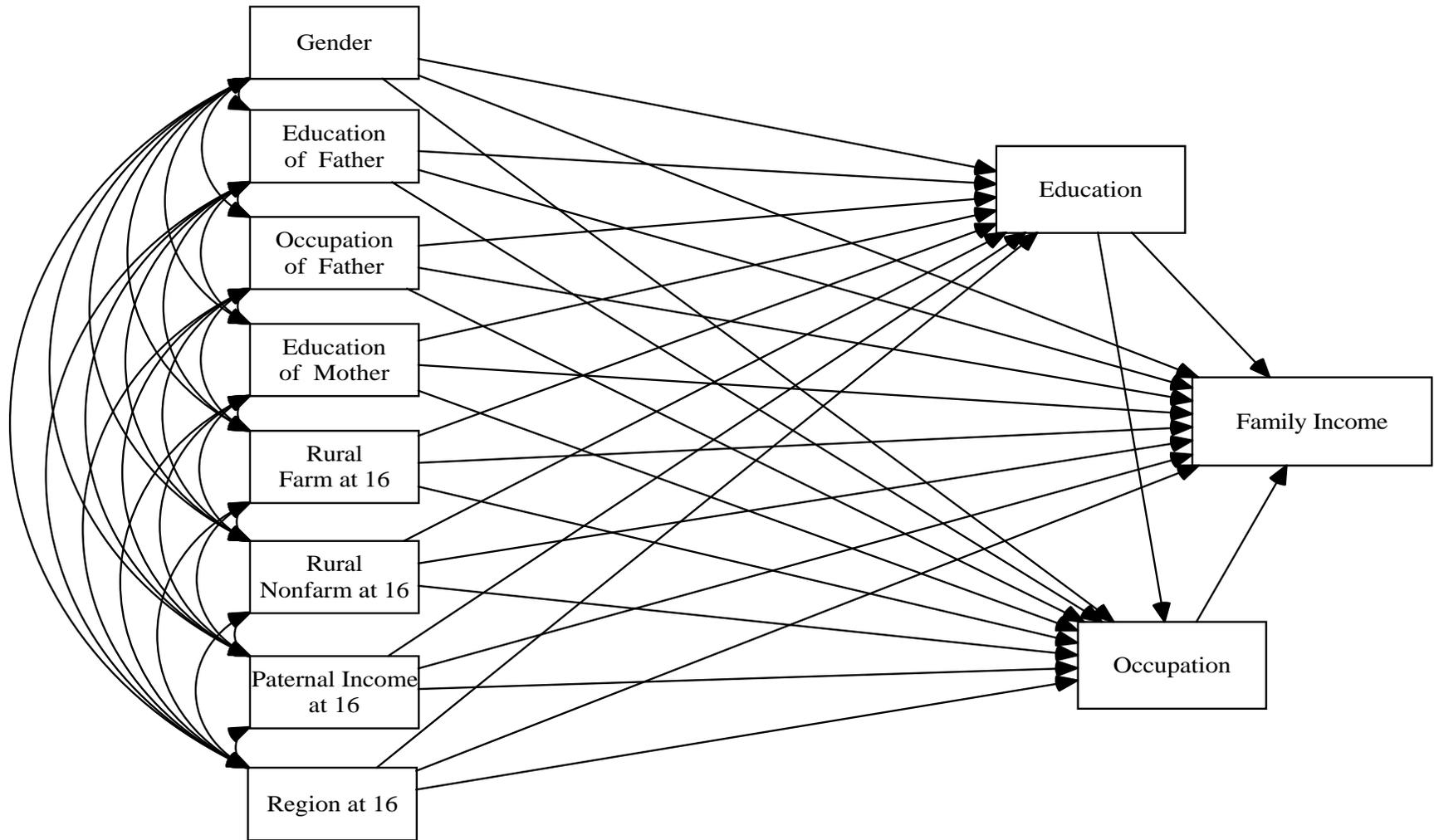
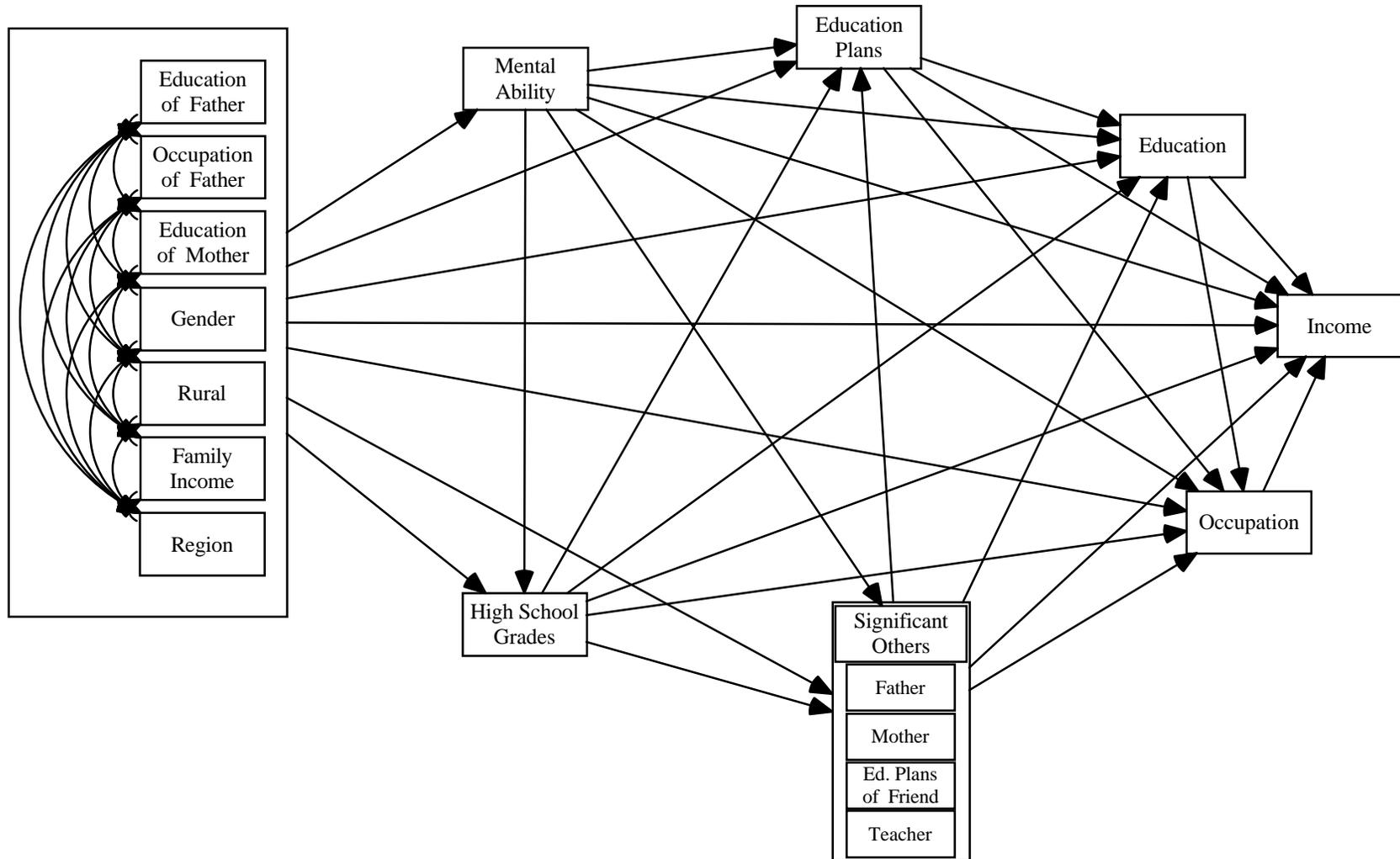


Figure 4. Wisconsin Socioeconomic Achievement Model



socioeconomic outcomes across the six major periods of rural development.<sup>5</sup> This is the approach taken in the first phase of the analysis which focuses on the Blau-Duncan model. In the second phase of analysis we use the Wisconsin social psychological model and the NLS-72 database to examine one process by which rural-origins influence these achievements in adulthood. In this second phase, we are concerned with the effects that rural origins have on all stages of the model so as to isolate the intervening mechanism by which having a rural background is transferred into lower attainments. In the third phase, our interest shifts to the role of migration away from rural-origins on the socioeconomic achievement process. Both the Blau-Duncan and Wisconsin models of status attainment are used and dummy variables indicating various types of migration patterns are specified as intervening variables (see above). We compare the direct effects of rural origins on attainments after controls for migration behavior are applied as one means of

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<sup>5</sup> Variable nonresponse was examined in both databases. For the GSS data, thirty-one percent of father's occupational prestige scores were missing, by far the most offending variable regarding missing values. In order to deal with the problem of these missing cases, the listwise deletion and pairwise deletion procedure were used to compare results. The results of both of these deletion procedures produced no great differences in the standardized regression coefficient (maximally between 0.03 and 0.04). There were a few independent variables whose standardized regression coefficients were reduced by approximately 0.1 through the use of pairwise deletion in comparison to listwise deletion. For example, in Period 5 (1953 to 1966), the standardized coefficient of individual education on family income is 0.0647 with listwise deletion and 0.1994 with pairwise deletion. In Period 6 (1967 to 1976), the standardized coefficient of mother's education on an individual's occupational prestige is 0.1156 with listwise deletion and 0.2167 with pairwise deletion. Based on these results, the pairwise deletion procedure has been utilized. In the NLS-72 dataset, pairwise-present deletion was also used, after a similar examination of missing data treatments.

assessing how migration influences achievement. In addition, urban youth who migrated to rural areas are also identified through a similar dummy variable arrangement as a way of examining a comparative migration effect. Our hypotheses would be that migration *from* rural origins *to* urban residence would have a positive effect on socioeconomic attainments while migration *from* urban origins *to* a rural setting would have a negative effect.<sup>6</sup>

The GSS and NLS-72 databases have weights which are to be applied to correct for sampling stratification or panel attrition, etc., and these are used in the analyses reported below. However, our reorganization of the cumulative GSS database presents us with unknown problems in this regard. Conventional procedures might suggest that the design-effect of the GSS or NLS-72 database be estimated and used as a rule-of-thumb for computation of standard errors in the multiple regression analysis (e.g., see Davis and Smith 1994; Tourangeau et al. 1987). Recent simulation studies, on the other hand, suggest that this procedure could be misleading for OLS multiple regression estimation (Winship and Radbill 1994). The estimates provided herein are based on weighted samples but without any adjustments for an estimated design effect and, for better or worse, assume a simple random sampling model. We have not reconciled these issues at this time so readers should interpret our tests of statistical significance with due caution.

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<sup>6</sup> A reader of a previous draft of this report raised the question about those youth who remain in their residential origins (e.g., are there "costs," to use our definition here, to remaining in a rural area and an urban area as compared to migrated from one to another?). We use those who "remained" in their residential origins as a comparison (or control) group and have no reasonable means to judge this question, except to reverse the set of dummy variables to reflect whether a NLS-72 panel member remained in a rural location or remained in an urban location. This would compare those respondents who "remained" with those who "migrated," effectively the converse of the research design used here.

## RESULTS

The results are presented in three phases, with each section addressing: the issues of trends in the effects of rural origins on socioeconomic attainments, the social psychological process by which rural origins affect attainments, and the issue of how (micro-level) migration affects this process.

### **Socioeconomic Effects of Rural Origins by Major Period of Rural Development**

The Blau-Duncan model estimates for the GSS data are presented in Tables 1-6 for each of the six major rural development periods and contain both unstandardized and standardized regression coefficients. Table 7 presents a summary of the trends in the unstandardized coefficients across these six periods for the total effects of the rural farm and rural non-farm variables on education, occupational status, and family income. Table 8 contains a similar summary of trends in the direct effects of these variables. While there are a several of interesting results contained in these tables, we will focus on the effects of specific interest to our research objectives.

As shown in a comparison of the detailed tables across periods or perusing the summary in Table 7, rural origins has had an observable negative effect on socioeconomic outcomes for most of this century. For completed years of schooling, occupational status, and family income, having lived at age sixteen in a rural area is related to a social cost in adulthood, even with controls for region of the United States and parental socioeconomic standing. There are at least three important observations that can be made from these results.

In general, *this effect has produced more of a deficit for individuals of farm-origins than rural non-farm areas.* During most periods of rural development, the negative effect of rural farm background is larger than that of rural non-farm. This was the case during the Golden Age, the Depression, and the New Deal eras. However, the World War II and New Horizons periods mark a turnaround in this pattern. For

both education and occupational status, the magnitude of the negative effects changes such that rural non-farm origins are at least as large as those for farm origins and perhaps even larger.

A second observation is that *the trend in these estimates clearly implies a decline in these social costs linked to rural origins.*

Beginning with the Golden Age, growing-up on a farm was associated with slightly less than a one-and-a-third year loss in completed schooling and almost nine-tenths of a year for rural non-farm youth. The trend in these educational deficits is that they have declined to virtually no detectable difference based on residential origins by the 1970's.

For occupational success, rural background cost United States youth about 2.5 units on the Duncan SEI scale. A somewhat similar trend for occupational status is observed. While farm youth continued to face an even stronger status deficit during the Depression, rural non-farm youth experienced a slight decline. By World War II, however, the relative burden was on rural non-farm youth as they continued to have a slightly larger negative effect from their residential background than did farm youth. Although the sample size and the cohort's short-term in the career cycle precludes any firm conclusion, the most recent period of rural development, since 1967, suggests that both groups of rural youth may have experienced a slight positive benefit from these origins. We subsequently show using the NLS-72 database, however, that this may be an aberration of the small sample size of the GSS data from this most recent period.

The pattern for family income, adjusted to constant 1993 dollars, is generally similar with a couple of noteworthy differences. While there has been a general decline in the deficits in family income linked to rural farm and rural non-farm origins, these negative effects have not declined to zero. During the first two decades of this century, an adulthood deficit of -\$3,800 for

*(Text continues on Page 38)*

Table 1a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1900-1920**: General Social Surveys 1972-1994 (N=3,012)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.259***	.579***	.042	911.344***	357.323**	348.270**
FOCC	.031***	.150***	.086***	130.888***	64.306	45.629
FAED	.152***	.391***	.074	388.749***	62.521	46.312
FARM16	-1.314***	-2.680***	.047	-3804.286***	-993.427	-1003.591
RNF16	-.883***	-2.449**	-.616	-2223.470	-333.373	-199.203
FINCOM16	.324***	1.183***	.511*	1079.125**	386.401	275.103
GENDER	-.046	-3.422***	-3.326***	-8288.369***	-8189.196***	-7464.437***
NE16	-.109	-.518	-.292	-1203.081	-969.680	-906.058
FRG16	-1.179***	-2.259	.187	-3316.693	-795.140	-835.926
MA16	-.188	-.007	.383	-133.325	268.722	185.197
ENC16	-.053	-.704	-.593	-3585.325	-3471.008	-3341.839
WNC16	.025	.621	.569	-2222.791	-2277.372	-2401.247
SA16	-1.015***	-1.701	.405	-4981.814*	-2810.632	-2898.942
ESC16	-1.204***	-2.480	.019	-7646.093***	-4887.892*	-4892.012*
WSC16	-.639*	-2.993*	-1.667	-6808.669**	-5442.041**	-5078.891*
MTN16	-.114	-.392	-.155	-3843.467	-3599.287	-3565.538
EDUC			2.076***		2139.355***	1687.123***
OCCSEI						217.890***
Constant	6.251	25.286	12.312	16196.400	2823.845	141.108

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI);FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 1b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1900-1920**: General Social Surveys 1972-1994 (N=3,012)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.276***	.157***	.011	.158***	.062**	.060**
FOCC	.097***	.119***	.068***	.066***	.033	.023
FAED	.181***	.118***	.022	.075***	.012	.009
FARM16	-.176***	-.091***	.002	-.083***	-.022	-.022
RNF16	-.066***	-.047**	-.012	-.027	-.004	-.002
FINCOM16	.079***	.074***	.032*	.043**	.015	.011
GENDER	-.006	-.121***	-.117***	-.187***	-.184***	-.168***
NE16	-.007	-.008	-.005	-.012	-.010	-.009
FRG16	-.063***	-.031	.003	-.029	-.007	-.007
MA16	-.020	-.001	.010	-.002	.005	.003
ENC16	-.006	-.020	-.017	-.066	-.064	-.062
WNC16	.002	.014	.013	-.033	-.033	-.035
SA16	-.105***	-.045	.011	-.084*	-.047	-.049
ESC16	-.102***	-.053	.001	-.102***	-.067*	-.067*
WSC16	-.051*	-.061*	-.034	-.089**	-.071**	-.066*
MTN16	-.006	-.005	-.002	-.031	-.029	-.029
EDUC			.528***		.348***	.274***
OCCSEI						.139***
R <sup>2</sup>	.352	.171	.352	.143	.222	.234

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income (constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 2a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1921-1932**: General Social Surveys 1972-1994 (N=2,908)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.177***	.476***	.069	735.888***	273.029	245.380
FOCC	.031***	.187***	.117***	232.263***	152.590***	105.698*
FAED	.167***	.300***	-.084	522.301***	85.462	119.029
FARM16	-1.089***	-3.180***	-.679	-4087.608***	-1244.115	-972.295
RNF16	-.740***	-1.244	.454	-4151.645**	-2221.349	-2403.017
FINCOM16	.348***	.975***	.177	2482.663***	1575.678**	1504.866**
GENDER	-.309**	-2.786***	-2.076***	-7339.973***	-6532.704***	-5701.664***
NE16	-.208	.293	.769	-1820.722	-1279.006	-1586.939
FRG16	-1.771***	-2.893	1.173	-6273.472*	-1650.378	-2119.675
MA16	-.019	.281	.325	-584.700	-534.268	-664.297
ENC16	-.081	-.543	-.358	-2147.582	-1937.428	-1794.105
WNC16	.155	1.025	.669	-3381.345	-3786.649	-4054.305
SA16	-.996***	-1.862	.424	-6722.098**	-4122.786*	-4292.604*
ESC16	-1.202***	-2.427	.333	-10208.812***	-7070.700**	-7204.086**
WSC16	-.722**	-1.264	.393	-5858.949*	-3975.723	-4132.878
MTN16	-.237	-.693	-.148	-5011.842	-4392.650	-4333.423
EDUC			2.295***		2610.016***	1691.286***
OCCSEI						400.237***
Constant	7.640	25.950	8.411	19904.660	-37.021	-3403.613

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income (constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 2b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1921-1932**: General Social Surveys 1972-1994 (N=2,908)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.191***	.123***	.018	.101***	.038	.034
FOCC	.108***	.159***	.099***	.105***	.069***	.048*
FAED	.208***	.089***	-.025	.083***	.014	.019
FARM16	-.142***	-.099***	-.021	-.068***	-.021	-.016
RNF16	-.064***	-.026	.009	-.046**	-.024	-.027
FINCOM16	.091***	.061***	.011	.083***	.053**	.050**
GENDER	-.046**	-.099***	-.074***	-.139***	-.124***	-.108***
NE16	-.014	.005	.013	-.016	-.011	-.014
FRG16	-.106***	-.041	.017	-.048*	-.013	-.016
MA16	-.002	.007	.009	-.008	-.008	-.009
ENC16	-.010	-.015	-.010	-.033	-.029	-.027
WNC16	.014	.022	.014	-.039	-.044	-.047
SA16	-.111***	-.050	.011	-.095**	-.058*	-.061*
ESC16	-.104***	-.050	.007	-.113***	-.078**	-.080**
WSC16	-.061**	-.025	.008	-.063*	-.043	-.044
MTN16	-.013	-.009	-.002	-.035	-.031	-.030
EDUC			.550***		.333***	.216***
OCCSEI						.213***
R <sup>2</sup>	.306	.146	.355	.132	.209	.238

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 3a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1933-1940**: General Social Surveys 1972-1994 (N=2,149)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.221***	.543***	-.043	1069.769***	451.360*	466.284*
FOCC	.026***	.169***	.101***	216.711***	144.333**	109.294*
FAED	.126***	.250*	-.085	396.164*	42.328	71.936
FARM16	-.821***	-2.252**	-.075	-1804.435	493.537	519.605
RNF16	-.370*	-1.069	-.088	-284.476	750.839	781.388
FINCOM16	.280***	1.299***	.556	2055.479**	1270.866*	1077.630
GENDER	-.403***	-2.502***	-1.433**	-6204.803***	-5077.021***	-4578.762***
NE16	.027	1.574	1.502	7387.602*	7311.951*	6789.712*
FRG16	-.240	-.989	-.352	1231.249	1904.061	2026.446
MA16	.046	.658	.537	1528.863	1400.527	1213.864
ENC16	-.200	-.260	.271	1397.561	1957.839	1863.578
WNC16	-.072	.538	.728	1413.891	1614.867	1361.761
SA16	-.600*	-1.916	-.327	-3488.894	-1811.103	-1697.515
ESC16	-.483	-.724	.556	-2746.771	-1394.902	-1588.382
WSC16	-.042	1.045	1.156	-1610.576	-1493.112	-1895.163
MTN16	.081	.696	.483	-4227.437	-4452.731	-4620.598
EDUC			2.651***		2798.259***	1876.556***
OCCSEI						347.676***
Constant	7.985	25.148	3.981	16248.985	-6094.044	-7478.060

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income (constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 3b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1933-1940**: General Social Surveys 1972-1994 (N=2,149)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.249***	.130***	-.010	.142***	.060*	.062*
FOCC	.104***	.145***	.086***	.103***	.069**	.052*
FAED	.167***	.070*	-.024	.062*	.007	.011
FARM16	-.109***	-.063**	-.002	-.028	.008	.008
RNF16	-.040*	-.024	-.002	-.004	.009	.010
FINCOM16	.080***	.078***	.033	.069**	.042*	.036
GENDER	-.066***	-.087***	-.050**	-.120***	-.098***	-.089***
NE16	.002	.023	.022	.059*	.058*	.054*
FRG16	-.018	-.016	-.006	.011	.017	.018
MA16	.006	.017	.014	.022	.020	.017
ENC16	-.026	-.007	.007	.021	.030	.028
WNC16	-.007	.011	.014	.016	.018	.015
SA16	-.075*	-.051	-.009	-.051	-.027	-.025
ESC16	-.046	-.014	.011	-.030	-.015	-.018
WSC16	-.004	.021	.023	-.018	-.016	-.021
MTN16	.005	.009	.006	-.030	-.032	-.033
EDUC			.562***		.329***	.221***
OCCSEI						.193***
R <sup>2</sup>	.274	.128	.357	.118	.197	.221

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 4a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1941-1952**: General Social Surveys 1972-1994 (N=5,046)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.170***	.651***	.193**	714.370***	347.375**	299.711*
FOCC	.024***	.151***	.086***	104.095***	51.777	30.554
FAED	.159***	.289***	-.138*	363.326**	20.613	54.765
FARM16	-.495***	-1.374*	-.039	-1162.866	-92.292	-82.698
RNF16	-.462***	-2.048***	-.802	-1487.109	-487.934	-289.567
FINCOM16	.134**	.426	.063	1993.927***	1703.200***	1687.517***
GENDER	-.440***	-.258	.927**	-3407.754***	-2457.596***	-2686.913***
NE16	.213	1.906	1.330	3525.124	3063.782	2734.761
FRG16	-.200	.987	1.526	2408.983	2841.681	2464.149
MA16	.073	2.036**	1.839**	2688.931*	2531.497*	2076.533
ENC16	-.059	.306	.465	570.490	697.498	582.593
WNC16	.081	1.233	1.015	-185.874	-361.185	-612.157
SA16	-.423**	-.065	1.075	-1316.595	-402.843	-668.706
ESC16	-.297	-.422	.379	-2552.928	-1910.847	-2004.536
WSC16	-.186	.188	.690	-2340.808	-1938.298	-2109.025
MTN16	.070	.177	-.011	-2370.702	-2521.488	-2158.701
EDUC			2.697***		2161.870***	1494.836***
OCCSEI						247.334***
Constant	8.875	24.205	.271	18100.805	-1085.077	-1152.071

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.  
 \*\* Significant at .01 level.  
 \* Significant at .05 level.

Table 4b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1941-1952**: General Social Surveys 1972-1994 (N=5,046)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.196***	.151***	.045**	.097***	.047**	.041*
FOCC	.114***	.142***	.081***	.058***	.029	.017
FAED	.226***	.083***	-.039*	.061**	.003	.009
FARM16	-.060***	-.033*	-.001	-.017	-.001	-.001
RNF16	-.053***	-.047***	-.019	-.020	-.007	-.004
FINCOM16	.040**	.025	.004	.069***	.059***	.059***
GENDER	-.078***	-.009	.033**	-.072***	-.052***	-.056***
NE16	.015	.027	.019	.030	.026	.023
FRG16	-.015	.015	.023	.022	.025	.022
MA16	.010	.055**	.050**	.043*	.040*	.033
ENC16	-.008	.009	.013	.010	.012	.010
WNC16	.008	.024	.020	-.002	-.004	-.007
SA16	-.054**	-.002	.028	-.020	-.006	-.010
ESC16	-.028	-.008	.007	-.028	-.021	-.022
WSC16	-.019	.004	.014	-.028	-.023	-.025
MTN16	.005	.002	-.001	-.019	-.020	-.020
EDUC			.541***		.255***	.176***
OCCSEI						.146***
R <sup>2</sup>	.261	.117	.333	.067	.115	.129

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 5a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1953-1966**: General Social Surveys 1972-1994 (N=3,873)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.141***	.341***	-.046	635.788***	329.228*	334.757*
FOCC	.022***	.088***	.028	32.669	-14.571	-17.993
FAED	.152***	.469***	.051	313.461*	-17.580	-23.666
FARM16	-.116	-.254	.066	-1009.437	-756.591	-764.505
RNF16	-.253*	-1.008	-.312	-2083.949	-1533.273	-1495.713
FINCOM16	.119*	.598*	.279	2999.762***	2747.630***	2714.063***
GENDER	-.072	2.249***	2.446***	-3739.637***	-3583.563***	-3877.936***
NE16	.082	2.053	1.827	4291.900*	4112.912*	3893.039*
FRG16	.821***	2.261	.001	-306.652	-2093.554	-2093.677
MA16	.233	.628	-.012	2364.525	1858.568	1860.043
ENC16	.145	.432	.033	210.490	-105.215	-109.207
WNC16	.306*	.752	-.090	-3694.431*	-4360.155**	-4349.354**
SA16	.071	-.461	-.658	-2433.390	-2588.866	-2509.725
ESC16	-.103	-.972	-.690	-4993.812**	-4770.672**	-4687.643**
WSC16	.042	1.810	1.695	-3962.949*	-4054.352**	-4258.326**
MTN16	.155	.681	.254	-3635.888	-3973.283*	-4003.903*
EDUC			2.751***		2175.729***	1844.612***
OCCSEI						120.346***
Constant	8.380	21.637	-1.421	13041.861	-5191.678	-5020.681

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income (constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 5b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1953-1966**: General Social Surveys 1972-1994 (N=3,873)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.175***	.075***	-.010	.086***	.044*	.045*
FOCC	.125***	.090***	.029	.020	-.009	-.011
FAED	.242***	.132***	.014	.054*	-.003	-.004
FARM16	-.014	-.005	.001	-.013	-.010	-.010
RNF16	-.035*	-.024	-.008	-.031	-.023	-.022
FINCOM16	.038*	.035*	.016	.107***	.098***	.097***
GENDER	-.015	.082***	.089***	-.083***	-.080***	-.086***
NE16	.007	.033	.029	.042*	.040*	.038*
FRG16	.069***	.034	.001	-.003	-.019	-.019
MA16	.034	.016	-.001	.037	.029	.029
ENC16	.024	.013	.001	.004*	-.002	-.002
WNC16	.034*	.015	-.002	-.044	-.053**	-.052**
SA16	.011	-.012	-.017	-.040	-.042	-.041
ESC16	-.011	-.018	-.013	-.057**	-.054**	-.053**
WSC16	.005	.037	.035	-.049*	-.051**	-.053**
MTN16	.014	.011	.004	-.034	-.038*	-.038*
EDUC			.486***		.235***	.199***
OCCSEI						.074***
R <sup>2</sup>	.235	.082	.263	.071	.113	.117

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 6a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1967-1980**: General Social Surveys 1972-1994 (N=211)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.149**	.552	.314	742.237	634.401	606.303
FOCC	.003	.252***	.247***	35.432	33.472	11.371
FAED	.113*	-.567	-.747*	-351.755	-433.401	-366.669
FARM16	.028	2.296	2.251	-1454.498	-1474.614	-1675.771
RNF16	-.052	3.154	3.236	-3052.224	-3014.750	-3303.907
FINCOM16	.309	-1.509	-1.999	6243.225**	6020.725**	6199.366**
GENDER	.014	4.563**	4.540**	-3575.254	-3585.419	-3991.079
NE16	-.133	3.410	3.622	12235.212	12331.186	12007.579
FRG16	.331	-1.402	-1.929	421.772	182.864	355.196
MA16	-.155	.210	.456	3945.750	4057.665	4016.893
ENC16	-.187	-3.044	-2.748	892.982	1027.473	1272.978
WNC16	.389	-4.223	-4.841	-5139.017	-5419.230	-4986.699
SA16	-.001	-2.815	-2.813	-1574.290	-1573.477	-1322.103
ESC16	-.625	-.037	.957	-4424.703	-3973.926	-4059.408
WSC16	.084	-2.382	-2.516	-3451.098	-3511.567	-3286.803
MTN16	-.256	.378	.784	-4260.266	-4075.928	-4146.020
EDUC			1.589***		720.752	578.752
OCCSEI						89.347
Constant	8.397	24.816	11.468	5446.641	-606.727	-1631.329

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 6b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, **Period 1963-1980**: General Social Surveys 1972-1994 (N=211)

Predetermined Variables:	Dependent Variables:					
	(1) EDUC	(2) OCCSEI	(3) OCCSEI	(4) FINC	(5) FINC	(6) FINC
MOED	.217**	.135	.077	.095	.081	.078
FOCC	.020	.315***	.310***	.023	.022	.007
FAED	.192*	-.161	-.213*	-.053	-.065	-.055
FARM16	.003	.045	.044	-.015	-.015	-.017
RNF16	-.008	.085	.087	-.043	-.042	-.047
FINCOM16	.121	-.099	-.131	.216**	.208**	.214**
GENDER	.003	.189**	.188**	-.078	-.078	-.087
NE16	-.012	.053	.057	.101	.102	.099
FRG16	.027	-.020	-.027	.003	.001	.003
MA16	-.026	.006	.013	.059	.060	.060
ENC16	-.036	-.100	-.090	.015	.018	.022
WNC16	.054	-.098	-.112	-.063	-.066	-.061
SA16	-.001	-.084	-.084	-.025	-.025	-.021
ESC16	-.076	-.001	.020	-.048	-.043	-.044
WSC16	.013	-.062	-.065	-.047	-.048	-.045
MTN16	-.031	.008	.016	-.046	-.044	-.045
EDUC			.267***		.064	.051
OCCSEI						.047
R <sup>2</sup>	.198	.161	.218	.101	.104	.106

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16; GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 7. Summary of Trends in Total Effects of Rural Origins on Socioeconomic Attainments in Adulthood by Major Period of Rural Development, 1900-1980

1900		<b>Rural Farm</b>			<b>Rural Non-Farm</b>		
		<u>Education (Years)</u>	<u>Occupational Status (SEI)</u>	<u>Family Income (Constant 1993 \$)</u>	<u>Education (Years)</u>	<u>Occupational Status (SEI)</u>	<u>Family Income (Constant 1993 \$)</u>
1910	The Golden Age (1900-1920)	-1.314	-2.680	-\$3804.29	-.883	-2.449	-\$2223.47
1920	Farm Depression (1921-1932)	-1.089	-3.180	-\$4087.61	-.740	-1.244	-\$4151.65
1930	The New Deal (1933-1940)	-.821	-2.252	-\$1804.44	-.370	-1.069	-\$284.48
1940	World War II & New Horizons (1941-1952)	-.495	-1.374	-\$1162.87	-.462	-2.048	-\$1487.11
1950	The Crisis and the the Opportunity of Abundance (1953-1966)	-.116	-.254	-\$1009.44	-.253	-1.008	-\$2083.95
1960	A Broader Rural Perspective (1967-1980)	.028	2.296	-\$1454.50	-.052	3.154	-\$3052.22
1970							
1980							

Source: NORC General Social Surveys, 1972-1994

**Table 8. Summary of Trends in Direct Effects of Rural Origins on Socioeconomic Attainments in Adulthood by Major Period of Rural Development, 1900-1980**

1900		<b>Rural Farm</b>			<b>Rural Non-Farm</b>		
		<b>Education (Years)</b>	<b>Occupational Status (SEI)</b>	<b>Family Income (Constant 1993 \$)</b>	<b>Education (Years)</b>	<b>Occupational Status (SEI)</b>	<b>Family Income (Constant 1993 \$)</b>
1910	The Golden Age (1900-1920)	-1.314	.047	-\$1003.59	-.883	-.616	-\$199.20
1920	Farm Depression (1921-1932)	-1.089	-.679	-\$972.30	-.740	.454	-\$2403.02
1930	The New Deal (1933-1940)	-.821	-.075	\$519.61	-.370	-.088	\$781.39
1940	World War II & New Horizons (1941-1952)	-.495	-.039	-\$82.70	-.462	-.802	-\$289.57
1950	The Crisis and the the Opportunity of Abundance (1953-1966)	-.116	.066	-\$764.51	-.253	-.312	-\$1495.71
1960	A Broader Rural Perspective (1967-1980)	.028	2.251	-\$1675.77	-.052	3.236	-\$3303.91
1970							
1980							

Source: NORC General Social Surveys, 1972-1994

rural farm youth and -\$2,200 for rural non-farm youth occurred. About the time of World War II and the New Horizons perspective in rural development policy-making, the economic experiences of adults growing-up in rural non-farm settings were more negative than those of their peers who grew-up on farms (compare -\$1,162 vs. -\$1,487). This unfortunate distinction grew stronger during the post-war period and into the 1960s where rural development policy faced the opportunities associated with national economic prosperity (1953-1966). The relative social cost in subsequent total family income during adulthood was twice as large for rural non-farm youth born during this period (-\$2,083 vs. -\$1,009). While the results for the latest period of rural development must remain speculative due to the small sample size, the estimates are that the farm vs. rural non-farm differential has grown larger. Unfortunately, the NLS-72 database does not permit us to distinguish between these two rural subgroups and so we leave these results as tentative, at best.

A third observation is that *the total effect of rural origins, whether farm or non-farm, appears to be almost all transmitted through deficits in completed schooling*. Comparing Table 8 with Table 7, as well as the detailed results in Tables 1-6, we can see that almost all of the total effects of rural background on (lower) occupational status is through its impact on completed schooling. This is the case for both the farm and rural non-farm groups. (The nominal exception is the most recent period of rural development policy, the post-1960 era.) A less consistent but similar pattern occurs for family income. A larger share of the total effect on income remains unmediated by educational and occupational attainments, but our provisional estimates of statistical significance indicate that these direct effects may well be due to sampling fluctuations (see Tables 1-6). Thus, it appears that for each of the six major periods of rural development policy-making, the social costs born by rural youth are due to their deficits in lower completed schooling relative to their urban contemporaries. This cost is less the case with family income than with occupational status. The die, nevertheless, appears to be cast: lower levels of educational credentials obtained by

rural youth in the United States leads to lower occupational status, and this only explains part of the lower family incomes that these same youth experience upon reaching adulthood.

The NLS-72 data were used for the estimates shown in Table 9. While the metric of the educational attainment variable is not in years of schooling completed, but rather an ordinal set of educational credentials, a negative effect of rural origins on completed education occurred in these data as well. As shown for occupational status, the NLS-72 data produce effects at least equal to, if not larger, than the GSS results. The total negative effect on occupational status is around 5 units in the SEI and this effect is only partly mediated through educational attainment (compare -5.332 with -3.184 in Table 9). For family income, the rural deficit is over two thousand dollars (-\$2,248). Almost one-half of this effect is due to unequal educational attainment (-\$2,248 vs. -\$1,283). Once occupational status is controlled, in contrast to the GSS results, the deficits associated with rural origins are reduced by about two-thirds. Thus, the NLS-72 panel data on young adults born during the early 1950s, is generally consistent with those of the cumulative GSSs: *rural origins have observable negative effects on adulthood socioeconomic attainments, which are largely due to the social costs produced through unequal completed schooling*.

### **Mediating Factors in the Socioeconomic Effects of Rural Origins**

We now turn to the issue of how are the social costs of rural origins manifested? The Wisconsin social psychological model was estimated using the NLS-72 data; these results are presented in Table 10.

Prior to examining the principal results for adulthood attainments, we overview the effects of rural background on the prior variables in the model. Rural background has small but positive effects on academic

*(Text continues on Page 48)*

**Table 9. Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=8,729)**

Dependent Variables:	Predetermined Variables:											Constant
	RURAL	GENDER	FOCC	FAED	MOED	FINCOM	NEAST	NCENT	SOUTH	EDUC	OCCSEI	
<b>A. Unstandardized Regression Coefficients</b>												
1) EDUC	-.292***	-.147***	.005***	.221***	.198***	.001***	.167***	.038	.123**			2.548
2) OCCSEI	-5.332***	3.530***	.081***	1.526***	1.835***	.001***	1.796**	-.675	2.415**			31.178
3) OCCSEI	-3.184***	4.609***	.045***	-.100	.375	.001***	.568	-.958	1.509*	7.365***		12.415
4) FINC	-2248.935***	-709.719	39.018***	607.338**	412.530	.751***	1704.081**	-189.777	1037.364			20539.108
5) FINC	-1283.161**	-224.597	22.802*	-123.750	-243.769	.683***	1151.904	-316.792	629.930	3310.904***		12103.781
6) FINC	-746.618	-1001.319**	15.178	-106.826	-307.012	.631***	1056.197	-155.359	375.655	2069.896***	168.507***	10011.781
<b>B. Standardized Regression Coefficients</b>												<b>R<sup>2</sup></b>
1) EDUC	-.093***	-.055***	.085***	.204***	.152***	.045***	.054***	.013	.042**			.183
2) OCCSEI	-.102***	.080***	.085***	.085***	.085***	.093***	.035**	-.014	.050**			.101
3) OCCSEI	-.061***	.105***	.047***	-.006	.017	.073***	.011	-.020	.031*	.444***		.261
4) FINC	-.048***	-.018	.054***	.038**	.021	.191***	.037**	-.004	.024			.071
5) FINC	-.027**	-.006	.027*	-.008	-.013	.181***	.025	-.007	.015	.223***		.112
6) FINC	-.016	-.025**	.018	-.007	-.016	.167***	.023	-.004	.009	.139***	.188***	.138

Note: Variables are: RURAL=rural areas in senior year (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's education; MOED=mother's education; FINCOM=family income in senior year; NEAST=Northeast in senior year (1=yes); NCENT=North Central in senior year (1=yes); SOUTH=South in senior year (1=yes); EDUC=respondent's education; OCCSEI=respondent's occupational status (SEI); FINC=respondent's total family 1985 earnings (dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 10a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Wisconsin Socioeconomic Achievement Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:											
	(1) ABIL	(2) HSGPA	(3) HSGPA	(4) FSOI	(5) FSOI	(6) FSOI	(7) MSOI	(8) MSOI	(9) MSOI	(10) FPLAN	(11) FPLAN	(12) FPLAN
RURAL	-.027	.184***	.206***	-.253***	-.241***	-.267***	-.263***	-.252***	-.280***	-.097***	-.093***	-.102***
GENDER	.038	.627***	.597***	-.160***	-.178***	-.258***	-.269***	-.285***	-.368***	.001	-.004	-.029**
FOCC	.003***	.002*	-.001	.005***	.003***	.003***	.004***	.003***	.003***	.001***	.001	.001*
FAED	.131***	.132***	.029*	.243***	.184***	.180***	.178***	.122***	.118***	.055***	.036***	.034***
MOED	.101***	.097***	.017	.131***	.084***	.082***	.187***	.143***	.141***	.049***	.034***	.034***
FINCOM	.001***	.001***	-.001**	.001***	.001	.001*	.001***	.001	.001	.001***	.001	.001
NEAST	.211***	.162***	-.005	-.069	-.166***	-.165***	-.099*	-.190***	-.189***	-.035*	-.065***	-.065***
NCENT	.027	-.130**	-.152***	-.140***	-.152***	-.132***	-.120**	-.132***	-.111**	-.041**	-.045**	-.038*
SOUTH	-.093**	.179***	.252***	.085*	.128***	.094*	.144***	.184***	.149***	-.044**	-.031*	-.041**
ABIL			.787***		.456***	.349***		.430***	.320***		.145***	.112***
HSGPA						.135***			.139***			.042***
FSOI												
MSOI												
FPLAN												
TSOI												
EDEX												
EDUC												
OCCSEI												
Constant	-1.084	4.370	5.223	3.113	3.607	2.900	3.248	3.714	2.988	.357	.514	.296

(Continued)

Table 10a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Wisconsin Socioeconomic Achievement Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:											
	(13) TSOI	(14) TSOI	(15) TSOI	(16) EDEX	(17) EDEX	(18) EDEX	(19) EDEX	(20) EDUC	(21) EDUC	(22) EDUC	(23) EDUC	(24) EDUC
RURAL	-.004	.001	-.015	-.283***	-.269***	-.320***	-.088***	-.292***	-.277***	-.322***	-.177***	-.147***
GENDER	.041***	.035**	-.010	-.248***	-.268***	-.414***	-.183***	-.147***	-.167***	-.297***	-.161***	-.100***
FOCC	.001	-.001	-.001	.002*	.001	.001	-.002**	.005***	.003***	.003***	.002**	.002***
FAED	.047***	.027***	.025***	.267***	.199***	.192***	.079***	.221***	.150***	.143***	.072***	.046***
MOED	.011	-.005	-.006	.145***	.092***	.088***	-.005	.198***	.143***	.139***	.083***	.085***
FINCOM	.001	-.001**	-.001*	.001***	.001***	.001***	.001***	.001***	-.001*	-.001	-.001**	-.001***
NEAST	.022	-.011	-.011	-.063	-.174***	-.173***	-.022	.167***	.052	.053	.146***	.154***
NCENT	-.041*	-.045**	-.033*	-.255***	-.269***	-.232***	-.133***	.038	.024	.057	.118**	.162***
SOUTH	.096***	.110***	.091***	.036	.084	.023	-.050	.123**	.174***	.119**	.085*	.101**
ABIL		.156***	.096***		.523***	.330***	.051***		.543***	.372***	.200***	.183***
HSGPA			.075***			.245***	.129***			.217***	.148***	.105***
FSOI							.267***				.203***	.114***
MSOI							.403***				.199***	.065**
FPLAN							.455***				.342***	.190***
TSOI							.064**				-.007	-.028
EDEX												.334***
EDUC												
OCCSEI												
Constant	2.42	2.589	2.194	2.917	3.483	2.205	-.047	2.548	3.137	2.002	.732	.747

(Continued)

Table 10a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Wisconsin Socioeconomic Achievement Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)  
(Continued)

Predetermined Variables:	Dependent Variables:					
	(25) OCCSEI	(26) OCCSEI	(27) OCCSEI	(28) OCCSEI	(29) OCCSEI	(30) OCCSEI
RURAL	-5.33***	-5.153***	-5.752***	-4.740***	-4.527***	-3.694***
GENDER	3.530***	3.278***	1.537**	2.453***	2.898***	3.463***
FOCC	.081***	.059***	.062***	.053***	.057***	.043***
FAED	1.526***	.653*	.569*	.098	-.095	-.352
MOED	1.835***	1.160***	1.110***	.711*	.725*	.244
FINCOM	.001***	.001**	.001**	.001**	.001*	.001***
NEAST	1.796*	.386	.399	1.058	1.111	.242
NCENT	-.675	-.857	-.415	.020	.342	-.576
SOUTH	2.415**	3.037***	2.302**	2.046**	2.166**	1.593*
ABIL		6.672***	4.377***	3.145***	3.021***	1.986***
HSGPA			2.916***	2.396***	2.083***	1.487***
FSOI				.901*	.252	-.391
MSOI				1.599***	.620	.253
FPLAN				3.065***	1.959***	.887
TSOI				.644	.488	.649
EDEX					2.431***	.542
EDUC OCCSEI						5.654***
Constant	31.178	38.408	23.176	13.465	13.580	9.354

(Continued)

Table 10a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Wisconsin Socioeconomic Achievement Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)  
(Continued)

Predetermined Variables:	Dependent Variables:						
	(31) FINC	(32) FINC	(33) FINC	(34) FINC	(35) FINC	(36) FINC	(37) FINC
RURAL	-2248.935***	-2147.266***	-2497.111***	-2092.964***	-2054.507***	-1719.455**	-1159.882*
GENDER	-709.719	-852.631	-1868.651***	-1600.349***	-1520.185**	-1292.720**	-1817.351***
FOCC	39.018**	26.533*	28.043*	24.525	25.328*	19.776	13.233
FAED	607.338*	113.646	64.941	-157.533	-192.175	-295.699	-242.358
MOED	412.530	30.600	1.539	-119.790	-117.412	-310.799	-347.733
FINCOM	.721***	.587***	.603***	.600***	.595***	.622***	.590***
NEAST	1704.081*	906.508	914.553	1168.480	1178.100	828.586	791.900
NCENT	-189.777	-292.335	-34.156	160.498	218.536	-150.770	-63.463
SOUTH	1037.364	1388.661	959.891	895.696	917.409	686.921	445.569
ABIL		3772.547***	2432.991***	1894.189***	1871.817***	1455.395***	1154.572***
HSGPA			1702.095***	1472.187***	1415.750***	1176.222***	950.924***
FSOI				823.771*	706.827	448.162	507.391
MSOI				-.835	-177.201	-324.917	-363.192
FPLAN				1707.726**	1508.453**	1077.241*	924.845
TSOI				628.432	600.400	664.900	566.660
EDEX					437.995	-321.595	-403.759
EDUC						2274.108***	1417.661***
OCCSEI							151.481***
Constant	20539.108	24627.072	15737.098	11465.948	11486.737	9786.851	8369.883

Note: Variables are: RURAL=rural areas in senior year (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's education; MOED=mother's education; FINCOM=family income in senior year; NEAST=Northeast in senior year (1=yes); NCENT=North Central in senior year (1=yes); SOUTH=South in senior year (1=yes); HSGPA=high school grades; FSOI=schooling father expects for student; MSOI=schooling mother expects for student; FPLAN=R's friends plan to go to college (1=yes); TSOI=teachers affect plans for college; EDEX=highest education student plans; ABIL= R's ability factor score; EDUC=R's education; OCCSEI=R's occupational status (SEI); FINC=R's total family 1985 earnings (dollars).

\*\*\* Significant at .001 level.  
 \*\* Significant at .01 level.  
 \* Significant at .05 level.

Table 10b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Wisconsin Socioeconomic Achievement Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:											
	(1) ABIL	(2) HSGPA	(3) HSGPA	(4) FSOI	(5) FSOI	(6) FSOI	(7) MSOI	(8) MSOI	(9) MSOI	(10) FPLAN	(11) FPLAN	(12) FPLAN
RURAL	-.011	.055***	.061***	-.084***	-.080***	-.089***	-.089***	-.085***	-.095***	-.085***	-.081***	-.089***
GENDER	.019	.220***	.210***	-.063***	-.070***	-.102***	-.108***	-.114***	-.148***	.001	-.004	-.030**
FOCC	.076***	.028*	-.014	.085***	.058***	.060***	.078***	.052***	.054***	.048***	.025	.027*
FAED	.160***	.113***	.025*	.234***	.177***	.173***	.174***	.119***	.115***	.138***	.090***	.087***
MOED	.103***	.069***	.012	.104***	.067***	.066***	.152***	.117***	.115***	.103***	.072***	.071***
FINCOM	.186***	.068***	-.035**	.084***	.018	.023*	.077***	.013	.019	.056***	.001	.004
NEAST	.090***	.049***	-.001	-.023	-.056***	-.056***	-.034*	-.065***	-.065***	-.031*	-.058***	-.058***
NCENT	.012	-.042**	-.049***	-.050***	-.055***	-.047***	-.044**	-.048***	-.041**	-.038**	-.042**	-.036*
SOUTH	-.043**	.057***	.081***	.031*	.046***	.034*	.053***	.068***	.055***	-.042**	-.029*	-.039**
ABIL			.553***		.358***	.275***		.345***	.257***		.299***	.231***
HSGPA						.151***			.158***			.122***
FSOI												
MSOI												
FPLAN												
TSOI												
EDEX												
EDUC												
OCCSEI												
R <sup>2</sup>	.193	.096	.344	.197	.300	.315	.185	.281	.298	.096	.168	.178

(Continued)

Table 10b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Wisconsin Socioeconomic Achievement Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:											
	(13) TSOI	(14) TSOI	(15) TSOI	(16) EDEX	(17) EDEX	(18) EDEX	(19) EDEX	(20) EDUC	(21) EDUC	(22) EDUC	(23) EDUC	(24) EDUC
RURAL	-.003	.001	-.012	-.086***	-.081***	-.097***	-.027***	-.093***	-.088***	-.102***	-.056***	-.047***
GENDER	.038***	.033**	-.009	-.089***	-.096***	-.148***	-.066***	-.055***	-.063***	-.112***	-.061***	-.038***
FOCC	.006	-.016	-.013	.033*	.004	.008	-.030**	.085***	.054***	.057***	.032**	.042***
FAED	.108***	.062***	.057***	.234***	.174***	.168***	.069***	.204***	.138***	.132***	.066***	.042***
MOED	.021	-.009	-.011	.106***	.067***	.064***	-.004	.152***	.110***	.107***	.064***	.065***
FINCOM	.020	-.034**	-.027*	.117***	.047***	.056***	.044***	.045***	-.031*	-.023	-.031**	-.047***
NEAST	.017	-.009	-.009	-.019	-.053***	-.053***	-.007	.054***	.017	.017	.047***	.050***
NCENT	-.035*	-.039**	-.029*	-.084***	-.088***	-.076***	-.043***	.013	.008	.020	.041**	.056***
SOUTH	.082***	.094***	.078***	.012	.028	.007	-.016	.042**	.060***	.041**	.029*	.035**
ABIL		.292***	.181***		.375***	.237***	.037***		.410***	.281***	.151***	.138***
HSGPA			.201***			.250***	.131***			.233***	.159***	.113***
FSOI							.244***				.195***	.109***
MSOI							.360***				.188***	.061**
FPLAN							.158***				.125***	.069***
TSOI							.024**				-.003	-.011
EDEX												.351***
EDUC												
OCCSEI												
R <sup>2</sup>	.028	.096	.123	.195	.309	.350	.645	.183	.319	.355	.477	.521

(Continued)

Table 10b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Wisconsin Socioeconomic Achievement Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)  
(Continued)

Predetermined Variables:	Dependent Variables:					
	(25) OCCSEI	(26) OCCSEI	(27) OCCSEI	(28) OCCSEI	(29) OCCSEI	(30) OCCSEI
RURAL	-.102***	-.099***	-.110***	-.091***	-.087***	-.071***
GENDER	.080***	.075***	.035**	.056***	.066***	.079***
FOCC	.085***	.062***	.064***	.055***	.059***	.045***
FAED	.085***	.036*	.032*	.005	-.005	-.020
MOED	.085***	.054***	.051***	.033*	.033*	.011
FINCOM	.093***	.037**	.043**	.0041**	.034*	.050***
NEAST	.035*	.008	.008	.021	.022	.005
NCENT	-.014	-.018	-.009	.001	.007	-.012
SOUTH	.050**	.063***	.048**	.043**	.045**	.033*
ABIL		.303***	.199***	.143***	.137***	.090***
HSGPA			.189***	.155***	.135***	.096***
FSOI				.052*	.015	-.023
MSOI				.091***	.0351	.014
FPLAN				.067***	.043***	.020
TSOI				.016	.012	.016
EDEX					.154***	.034
EDUC OCCSEI						.341***
R <sup>2</sup>	.101	.175	.198	.220	.228	.284

(Continued)

Table 10b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Wisconsin Socioeconomic Achievement Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:						
	(31) FINC	(32) FINC	(33) FINC	(34) FINC	(35) FINC	(36) FINC	(37) FINC
RURAL	-.048***	-.046***	-.054***	-.045***	-.044***	-.037**	-.025*
GENDER	-.018	-.022	-.047***	-.041***	-.039**	-.033**	-.046***
FOCC	.045**	.031*	.033*	.029	.029*	.023	.015
FAED	.038*	.007	.004	-.010	-.012	-.018	-.015
MOED	.021	.002	.001	-.006	-.006	-.016	-.018
FINCOM	.191***	.156***	.160***	.159***	.158***	.165***	.156***
NEAST	.037*	.020	.020	.025	.026	.018	.017
NCENT	-.004	-.007	-.001	.004	.005	-.004	-.001
SOUTH	.024	.032	.022	.021	.021	.016	.010
ABIL		.192***	.124***	.096***	.095***	.074***	.059***
HSGPA			.123***	.106***	.102***	.085***	.069***
FSOI				.053*	.046	.029	.033
MSOI				-.001	-.011	-.021	-.023
FPLAN				.042**	.037**	.026*	.023
TSOI				.017	.016	.018	.015
EDEX					.031	-.023	-.029
EDUC						.153***	.096***
OCCSEI							.169***
R <sup>2</sup>	.071	.101	.111	.116	.116	.127	.148

Note: Variables are: RURAL=rural areas in senior year (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's education; MOED=mother's education; FINCOM=family income in senior year; NEAST=Northeast in senior year (1=yes); NCENT=North Central in senior year (1=yes); SOUTH=South in senior year (1=yes); HSGPA=high school grades; FSOI=schooling father expects for student; MSOI=schooling mother expects for student; FPLAN=R's friends plan to go to college (1=yes); TSOI=teachers affect plans for college; EDEX=highest education student plans; ABIL=R's ability factor score; EDUC=R's education; OCCSEI=R's occupational status (SEI); FINC=R's total family 1985 earnings (dollars).

\*\*\* Significant at .001 level.  
 \*\* Significant at .01 level.  
 \* Significant at .05 level.

performance in the form of grades received, even though it has no influence on measured academic ability. For virtually each variable in the block of significant-other influences, rural background has modest negative effects, which are somewhat smaller than the standardized coefficients obtained for parental education, grades, and gender. The sole exception to these effects on significant-other influence is perceived teacher's expectations: rural origins have almost *no* effect on the expectations of teachers for these seniors. There are also somewhat smaller effects on friends' plans relative to those of parents' expectations by rural background. Finally, rural origins have a depressing effect on educational plans, most of which is transmitted through significant-other influences. In other words, rural-origin youth plan to get less schooling, largely because their parents—but not their teachers—expect them to do so and their friends tend to expect less. The linkage of teacher expectations to the formation of their plans, however, is almost nil, removing the potential for teachers to counteract the lower expectations of important “others” in the student's social environment.

The pertinent results for socioeconomic attainments during adulthood are also shown in Table 10. For educational attainment (see Table 10a,b; equations 20-24), it can be observed that about one-half of the total negative effect of rural background is mediated through significant-other influences (equation 23; compare  $-.093$  vs.  $-.056$ ) and educational plans (equation 24). For occupational status, about one-third of transmitted through completed schooling (compare equation 25,  $-.102$  vs. equation 30,  $-.071$ ). Finally, the total effect of rural residence on adulthood income is mostly mediated by education and occupational status, suggesting that rural differences in schooling completed accounts for the costs of rural origins in terms of the status of jobs attained and income received.

### **Rural-to-Urban Migration and the Social Costs of Rural Origins**

The role of migration in socioeconomic attainments has been viewed as one avenue of social opportunity (Fuguitt et al. 1989). To investigate how this might occur within the

context of the status attainment model that we are using, we re-estimated the Blau-Duncan model with dummy variables for rural farm-to-city, rural non-farm-to-city and city-to-rural patterns as intervening between completed education and current occupational status (see above). Our hypothesis is that migration from either rural origin to any urban setting will have a positive effect on attainments while, as a “counter-treatment” condition, migration from an urban origin to any rural setting will have a negative effect. In experimental terminology, respondents who do not migrate serve as a control group in the regression analysis.

For the cumulative GSS data, these results are shown in Tables 11-16. A summary of the effects of rural origins on attainments by major period of rural development policy-making, controlling for these migration effects through dummy variables, is presented in Table 17.

For the effects of migration itself, we can observe by comparing the results across Tables 11 through 16 that they are small to non-existent and certainly not clearly patterned across these historical periods of rural development. The only noteworthy exceptions are as follows. Migrating from a rural non-farm setting to an urban area had a small negative effect on occupational status during the 1921-1932 period ( $\beta = -.070$ ). The unstandardized coefficient suggests that this effect was around 4 units on the SEI ( $b = -4.138$ ). During the 1933-1940 period, the effect of farm-to-city migration was positive and was “worth” about \$4,500 in 1993 dollars ( $b = \$4,498$ ). A similar effect also occurred during the 1941-1952 period. For the 1955-1966 period, moving from the city to a rural area cost a GSS respondent over \$4,000 in 1993 dollars ( $-\$4,340$ ). Thus, the hypotheses about migration effects on socioeconomic attainments during this century are rather easily discarded. One result was contrary to the direction of the hypotheses while two additional results were indeed consistent with them but, overall, the set of results do not provide a solid foundation upon which to confirm that rural-to-urban migration behaviors have reaped clear and observable socioeconomic rewards for rural youth.

While the effects of migration itself may not

*(Text continues on Page 62)*

Table 11a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, **Period 1900-1920**: General Social Surveys 1972-1994 (N=3,012)

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNFCITY	(5) RNFCITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.259***	.001	.001	.001	.001	-.001	-.001	.579***	.042	.045	911.344***	357.322**	352.560**	342.639**
FOCC	.031***	-.001	-.001	-.001	-.001	.001	.001	.150***	.086***	.083**	130.888***	64.306	66.406	47.912
FAED	.152***	.004*	.004*	.001	.001	.001	.001	.391***	.074	.082	388.749**	62.521	62.080	43.758
FARM16	-1.314***	.486***	.491***	.008	.009	-.052***	-.053***	-2.680***	.047	1.176	-3804.286***	-993.427	-2028.587	-2290.424*
RNF16	-.883***	.007	.010	.618***	.619***	-.052***	-.053***	-2.449**	-.616	.558	-2223.470	-333.373	-1083.006	-1207.235
FINCOM16	.324***	-.014**	-.015*	-.003	-.003	-.001	-.001	1.183***	.511*	.473	1079.125*	386.401	412.545	307.356
GENDER	-.046	.013	.013	-.002	-.002	-.004	-.004	-3.422***	-3.326***	-3.296***	-8288.369***	-8189.196***	-8228.315***	-7494.700***
NE16	-.109	-.006	-.005	.002	.002	-.034	-.034	-.518	-.292	-.258	-1203.081	-969.680	-1122.175	-1064.714
FRG16	-1.179***	.048	.052	.031	.032	-.019	-.020	-2.259	.187	.380	-3316.693	-795.140	-997.082	-1081.651
MA16	-.188	-.012	-.012	.001	.001	-.005	-.005	-.007	.383	.366	-133.325	268.722	264.523	182.978
ENC16	-.053	-.018	-.018	-.021	-.021	-.005	-.005	-.704	-.593	-.660	-3585.325	-3471.008	-3452.528	-3305.685
WNC16	.026	-.086**	-.086**	-.012	-.012	-.001	-.001	.621	.569	.363	-2222.791	-2277.372	-2131.295	-2211.999
SA16	-1.015***	-.089**	-.085**	-.031*	-.031*	-.014	-.014	-1.701	.405	.187	-4981.814*	-2810.633	-2719.245	-2760.810
ESC16	-1.204***	-.020	-.015	-.004	-.003	-.019	-.019	-2.480	.019	.004	-7464.093***	-4887.892*	-4953.169*	-4954.217*
WSC16	-.639*	.019	.021	-.005	-.004	-.029	-.029	-2.993*	-1.667	-1.592	-6808.669**	-5442.041**	-5610.403**	-5256.026*
MTN16	-.114	-.010	-.009	-.008	-.008	-.036	-.036	-.392	-.155	-.144	-3843.467	-3599.287	-3749.863	-3717.920
EDUC			.004		.001		-.001		2.076***	2.085***		2139.355***	2131.969***	1668.008***
FARMCITY											-2.137**		1585.889	2061.536
RNFCITY											-1.757		783.013	1173.999
CITYRUR											1.242		-4740.029*	-5016.565*
OCCSEI														222.570***
Constant	6.251	.041	.019	.011	.007	.064	.066	25.286	12.312	12.284	16196.400	2823.845	3099.580	365.616

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNFCITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income (constant 1993 dollars).

\*\*\* Significant at .001 level.  
 \*\* Significant at .01 level.  
 \* Significant at .05 level.

**Table 11b. Standardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, Period 1900-1920: General Social Surveys 1972-1994 (N=3,012)**

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNFCITY	(5) RNFCITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.276***	.014	.005	.014	.011	-.017	-.016	.157***	.011	.012	.158***	.062**	.061**	.059**
FOCC	.097***	-.025	-.029	-.014	-.015	.004	.005	.119***	.068**	.066**	.066***	.033	.034	.024
FAED	.181***	.047*	.040*	.025	.023	.029	.030	.118***	.022	.025	.075**	.012	.012	.008
FARM16	-.176***	.631***	.637***	.018	.020	-.141***	-.142***	-.091***	.002	.040	-.083***	-.022	-.044	-.050*
RNF16	-.066***	.005	.007	.775***	.776***	-.079***	-.079***	-.047**	-.012	.011	-.027	-.004	-.013	-.015
FINCOM16	.079***	-.033*	-.036*	-.013	-.014	-.001	-.001	.074***	.032*	.029	.043*	.015	.016	.012
GENDER	-.006	.018	.018	-.005	-.005	-.011	-.011	-.121***	-.117***	-.116***	-.187***	-.184***	-.185***	-.169***
NE16	-.007	-.003	-.003	.002	.002	-.041	-.041	-.008	-.005	-.004	-.012	-.010	-.011	-.010
FRG16	-.063***	.025	.027	.028	.029	-.021	-.022	-.031	.003	.005	-.029	-.007	-.009	-.009
MA16	-.020	-.013	-.012	.002	.002	-.009	-.010	-.001	.010	.010	-.002	.005	.004	.003
ENC16	-.006	-.020	-.019	-.039	-.039	-.012	-.012	-.020	-.017	-.019	-.066	-.064	-.064	-.061
WNC16	.002	-.075***	-.076**	-.019	-.019	-.001	-.001	.014	.013	.008	-.033	-.033	-.031	-.033
SA16	-.105***	-.090**	-.086**	-.054*	-.053*	-.029	-.030	-.045	.011	.005	-.084*	-.047	-.046	-.047
ESC16	-.102***	-.016	-.013	-.006	-.004	-.032	-.033	-.053	.001	.001	-.102***	-.067*	-.068*	-.068*
WSC16	-.051*	.015	.017	-.006	-.006	-.046	-.047	-.061*	-.034	-.033	-.089**	-.071**	-.073**	-.069*
MTN16	-.006	-.005	-.004	-.007	-.007	-.036	-.036	-.005	-.002	-.002	-.031	-.029	-.031	-.030
EDUC			.034		.011		-.005		.528***	.531***		.348***	.347***	.271***
FARMCITY										-.056**			.027	.035
RNFCITY										-.027			.008	.011
CITYRUR										.016			-.038*	-.041*
OCCSEI														.142***
R <sup>2</sup>	.352	.375	.375	.603	.603	.029	.029	.171	.352	.354	.143	.222	.224	.237

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNFCITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 12a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, **Period 1921-1932**: General Social Surveys 1972-1994 (N=2,908)

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNFCITY	(5) RNFCITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.177***	.001	-.001	-.002	-.002*	-.001	.001	.476***	.069	.059	735.888***	273.029	282.477	258.358
FOCC	.031***	.001	.001	.001	-.001	.001	.001	.187***	.117***	.117***	232.263***	152.590***	154.071***	106.774**
FAED	.167***	.001	-.001	.002*	.001	.001	.001	.300***	-.084	-.078	522.301***	85.462	81.096	112.774
FARM16	-1.089***	.513***	.520***	.008	.012	-.044***	-.045***	-3.180***	-.679	-.161	-4087.608***	-1244.115	-2729.341	-2664.044
RNF16	-.740***	.002	.007	.644***	.647***	-.044***	-.045***	-1.244	.454	3.161**	-4151.645**	-2221.349	-4898.769*	-6180.645*
FINCOM16	.348***	-.016**	-.018**	.002	.001	-.002	-.002	.945***	.177	.167	2482.663***	1575.678**	1613.948**	1546.369**
GENDER	-.309**	.007	.009	.002	.003	.010	.010	-2.786***	-2.076***	-2.060***	-7339.973***	-6532.704***	-6543.287***	-5707.752***
NE16	-.208	-.016	-.014	-.008	-.007	-.035	-.035	.293	.769	.746	-1820.722	-1279.006	-1301.493	-1604.183
FRG16	-1.771***	.007	.019	.015	.022	-.032	-.034	-2.893	1.173	1.296	-6273.472*	-1650.378	-1867.589	-2393.197
MA16	-.019	-.019	-.019	-.016	-.016	.008	.008	.281	.325	.240	-584.700	-534.268	-404.306	-501.640
ENC16	-.081	-.033	-.032	-.023*	-.023	.005	.005	-.543	-.358	-.484	-2147.582	-1937.428	-1752.659	-1556.500
WNC16	.155	-.078***	-.079***	-.019	-.019	-.016	-.016	1.025	.669	.530	-3381.345	-3786.649	-3549.867	-3764.851
SA16	-.996***	-.082***	-.076***	-.042***	-.038**	-.019	-.020	-1.862	.424	.213	-6722.098**	-4122.786*	-3829.385	-3915.587*
ESC16	-1.202***	-.025	-.017	-.026	-.022	-.022	-.023	-2.427	.333	.241	-10208.812***	-7070.700**	-6998.738**	-7096.278**
WSC16	-.722**	.004	.009	-.018	-.015	-.022	-.023	-1.264	.393	.348	-5858.949*	-3975.723	-3993.955	-4135.051
MTN16	-.237	-.002	.004	.001	.002	-.018	-.018	-.693	-.148	-.127	-5011.842	-4392.650	-4455.723	-4404.328
EDUC			.006***		.004***		-.001		2.295***	2.317***		2610.016***	2576.538***	1636.931***
FARMCITY										-.857			2551.007	2898.487
RNFCITY										-4.138**			3936.961	5615.236
CITYRUR										.501			-2465.015	-2668.367
OCCSEI														405.570***
Constant	7.640	.041	-.008	.006	-.022	.036	.043	25.950	8.411	8.290	19904.660	-37.021	178.915	-3183.227

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNFCITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income (constant 1993 dollars).

\*\*\* Significant at .001 level.  
 \*\* Significant at .01 level.  
 \* Significant at .05 level.

**Table 12b. Standardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, Period 1921-1932: General Social Surveys 1972-1994 (N=2,908)**

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNFCITY	(5) RNFCITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.191***	.012	-.001	-.025	-.035*	-.001	.003	.123***	.018	.015	.101***	.038	.039	.036
FOCC	.108***	.010	.003	.002	-.004	.036	.038	.159***	.099***	.099***	.105***	.069***	.070***	.048**
FAED	.208***	.010	-.004	.037*	.026	.003	.007	.089***	-.025	-.023	.083***	.014	.013	.018
FARM16	-.142***	.669***	.678***	.015	.022	-.107***	-.110***	-.099***	-.021	-.005	-.068***	-.021	-.045	-.044
RNF16	-.064***	.002	.006	.791***	.794***	-.072***	-.073***	-.026	.009	.065**	-.046**	-.024	-.054*	-.068*
FINCOM16	.091***	-.042**	-.048**	.009	.004	-.010	-.008	.061***	.011	.010	.083***	.053**	.054**	.052**
GENDER	-.046**	.010	.013	.005	.007	.029	.028	-.099***	-.074***	-.073***	-.139***	-.124***	-.124***	-.108***
NE16	-.014	-.011	-.010	-.007	-.007	-.044	-.045	.005	.013	.012	-.016	-.011	-.011	-.014
FRG16	-.106***	.004	.011	.013	.018	-.036	-.038	-.041	.017	.018	-.048*	-.013	-.014	-.018
MA16	-.002	-.021	-.021	-.025	-.025	.017	.017	.007	.009	.006	-.008	-.008	-.006	-.007
ENC16	-.010	-.039	-.038	-.040*	-.039	.011	.010	-.015	-.010	-.014	-.033	-.029	-.027	-.024
WNC16	.014	-.070***	-.071***	-.024	-.024	-.027	-.027	.022	.014	.011	-.039	-.044	-.041	-.043
SA16	-.111***	-.091***	-.084***	-.067***	-.060**	-.040	-.042	-.050	.011	.006	-.095**	-.058*	-.054	-.055*
ESC16	-.104***	-.022	-.015	-.032	-.027	-.036	-.038	-.050	.007	.005	-.113***	-.078**	-.078**	-.079**
WSC16	-.061**	.003	.007	-.022	-.018	-.035	-.037	-.025	.008	.007	-.063*	-.043	-.043	-.044
MTN16	-.013	.001	.002	.001	.002	-.019	-.019	-.009	-.002	-.002	-.035	-.031	-.031	-.031
EDUC			.065***		.052***		-.018		.550***	.555***		.333***	.329***	.209***
FARMCITY										-.021			.033	.037
RNFCITY										-.070**			.035	.050
CITYRUR										.006			-.017	-.018
OCCSEI														.216***
R <sup>2</sup>	.306	.441	.444	.623	.625	.026	.026	.146	.355	.357	.132	.209	.210	.240

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNFCITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.  
 \*\* Significant at .01 level.  
 \* Significant at .05 level.

Table 13a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, **Period 1933-1940**: General Social Surveys 1972-1994 (N=2,149)

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNFCITY	(5) RNFCITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.221***	.004*	.003	-.001	-.002	.004**	.004**	.543***	-.043	-.041	1069.769***	451.360*	442.099*	456.372*
FOCC	.026***	-.001	-.001	-.001	-.001	.001	.001	.169***	.101***	.100***	216.711***	144.332**	146.387**	111.316*
FAED	.126***	.001	.001	.002	.002	-.003*	-.003*	.250*	-.085	-.082	396.164*	42.328	38.388	67.202
FARM16	-.821***	.542***	.546***	.004	.006	-.049**	-.049***	-2.252**	-.075	.887	-1804.435	493.537	-1716.979	-2028.516
RNF16	-.370*	.008	.010	.634***	.635***	-.051***	-.051***	-1.069	-.088	-.291	-284.476	750.839	1670.468	1772.753
FINCOM16	.280***	.001	-.001	.001	-.001	.006	.006	1.299***	.556	.548	2055.479**	1270.866*	1284.855*	1092.401
GENDER	-.403***	.005	.007	-.006	-.005	-.004	-.004	-2.502***	-1.433**	-1.416**	-6204.803***	-5077.021***	-5119.048***	-4621.885***
NE16	.027	-.006	-.006	-.027	-.028	-.006	-.006	1.574	1.502	1.510	7387.602*	7311.951*	7279.482*	6749.095*
FRG16	-.240	.022	.023	.008	.008	.005	.005	-.989	-.350	-.323	1231.249	1904.061	1837.817	-1951.196
MA16	.046	-.025	-.025	-.012	-.012	.031	.031	.658	.537	.468	1528.863	1400.527	1533.222	1368.878
ENC16	-.200	-.031	-.030	-.011	-.010	.021	.021	-.260	.271	.204	1397.561	1957.839	2093.498	2021.735
WNC16	-.072	-.049*	-.049*	-.005	-.005	.001	.001	.538	.728	.648	1413.891	1614.867	1799.100	1571.671
SA16	-.600*	-.065**	-.062**	-.032*	-.031*	.018	.019	-1.916	-.327	-.437	-3488.894	-1811.103	-1584.886	-1431.273
ESC16	-.483	-.026	-.024	-.012	-.011	.022	.022	-.724	.556	.498	-2746.771	-1394.902	-1280.100	-1455.002
WSC16	-.042	.023	.023	-.008	-.008	.017	.017	1.045	1.156	1.181	-1610.576	-1493.112	-1568.766	-1983.767
MTN16	.081	-.042	-.043	-.009	-.009	.018	.018	.696	.483	.396	-4227.437	-4452.731	-4268.860	-4408.057
EDUC			.004*		.002		.001		2.651***	2.657***		2798.259***	2785.031***	1851.818***
FARMCITY											-1.674		3910.516	4498.602*
RNFCITY											.428		-1646.088	-1769.331
CITYRUR										1.033			-1749.261	-2111.929
OCCSEI														351.209***
Constant	7.985	-.016	-.052	.011	-.006	.005	.001	25.148	3.980	3.896	16248.985	-6094.044	-5899.851	-7268.049

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNFCITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

**Table 13b. Standardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, Period 1933-1940: General Social Surveys 1972-1994 (N=2,149)**

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNFCITY	(5) RNFCITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.249***	.049*	.038	-.018	-.024	.079**	.077**	.130***	-.010	-.010	.142***	.060*	.059*	.061*
FOCC	.104***	-.018	-.022	-.003	-.005	.003	.002	.145***	.086***	.085***	.103***	.069**	.070**	.053*
FAED	.167***	.013	.005	.033	.029	-.068*	-.069*	.070*	-.024	-.023	.062*	.007	.006	.010
FARM16	-.109***	.706***	.710***	.006	.009	-.108**	-.108***	-.063**	-.002	.025	-.028	.008	-.027	-.032
RNF16	-.040*	.008	.010	.780***	.781***	-.091***	-.090***	-.024	-.002	-.007	-.004	.009	.021	.022
FINCOM16	.080***	.001	-.003	.001	-.002	.029	.028	.078***	.033	.033	.069**	.042*	.043*	.036
GENDER	-.066***	.008	.011	-.012	-.010	-.010	-.010	-.087***	-.050**	-.049**	-.120***	-.098***	-.099***	-.089***
NE16	.002	-.004	-.004	-.021	-.021	-.007	-.007	.023	.022	.022	.059*	.058*	.058*	.054*
FRG16	-.018	.016	.017	.007	.007	.007	.007	-.016	-.006	-.005	.011	.017	.017	.018
MA16	.006	-.030	-.030	-.017	-.017	.063	.062	.017	.014	.012	.022	.020	.022	.020
ENC16	-.026	-.039	-.038	-.016	-.015	.045	.045	-.007	.007	.006	.021	.030	.032	.031
WNC16	-.007	-.045*	-.045*	-.005	-.005	.002	.002	.011	.014	.013	.016	.018	.020	.017
SA16	-.075*	-.080**	-.076**	-.046*	-.044*	.038	.039	-.051	-.009	-.012	-.051	-.027	-.023	-.021
ESC16	-.046	-.024	-.022	-.013	-.012	.034	.034	-.015	.011	.010	-.030	-.015	-.014	-.016
WSC16	-.004	.021	.022	-.009	-.009	.027	.027	.021	.023	.023	-.018	-.016	-.017	-.022
MTN16	.005	-.025	-.025	-.006	-.006	.018	.018	.009	.006	.005	-.030	-.032	-.030	-.031
EDUC			.044		.024		.008		.562***	.563***		.329***	.328***	.218***
FARMCITY										-.036			.047	.054*
RNFCITY										.008			-.017	-.018
CITYRUR										.013			-.012	-.015
OCCSEI														.195***
R <sup>2</sup>	.274	.482	.483	.603	.603	.025	.025	.128	.357	.358	.118	.197	.198	.223

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNFCITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.  
 \*\* Significant at .01 level.  
 \* Significant at .05 level.

Table 14a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, **Period 1941-1952**: General Social Surveys 1972-1994 (N=5,046)

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNF16	(5) RNF16	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.170***	.002*	.002	.001	.001	.003**	.003**	.651***	.193**	.191**	714.370***	347.375**	342.607**	295.410*
FOCC	.024***	-.001	-.001	.001	.001	-.001	-.001	.151***	.086***	.085***	104.095***	51.777	50.640	29.530
FAED	.159***	.001	-.001	.001	-.001	-.002*	-.002*	.289***	-.138*	-.137*	363.326**	20.613	17.271	51.144
FARM16	-.495***	.475***	.475***	.009	.010	-.053***	-.052***	-1.374*	-.039	.141	-1162.866	-92.292	-1912.616	-1947.333
RNF16	-.462***	.005	.005	.619***	.620***	-.056***	-.055***	-2.048***	-.802	-1.477	-1487.109	-487.934	-3331.537*	-2966.770
FINCOM16	.134**	-.005	-.006	.001	.001	.007	.007	.426	.063	.058	1993.927***	1703.200***	1731.788***	1717.545***
GENDER	-.440***	.003	.004	.001	.002	-.001	-.001	-.258	.927**	.927**	-3407.754***	-2457.596***	-2480.477***	-2709.314***
NE16	.213	-.003	-.003	.012	.012	-.039*	-.039*	1.906	1.330	1.329	3525.124	3063.782	2940.085	2611.829
FRG16	-.200	.028*	.028	.013	.013	-.015	-.015	.987	1.526	1.527	2408.983	2841.681	2654.495	2277.407
MA16	.073	.001	-.001	.001	.001	-.016	-.016	2.036**	1.839**	1.845**	2688.931*	2531.497*	2497.070*	2041.579
ENC16	-.059	-.012	-.012	-.008	-.008	-.025*	-.024*	.306	.465	.477	570.490	697.499	720.526	602.754
WNC16	.081	-.025*	-.025*	-.008	-.008	-.036**	-.036**	1.233	1.015	1.027	-185.874	-361.185	-314.447	-568.135
SA16	-.423**	-.038***	-.037***	-.033***	-.033***	-.020	-.020	-.065	1.075	1.105	-1316.595	-402.843	-173.026	-445.812
ESC16	-.297	-.016	-.015	-.010	-.009	-.019	-.019	-.422	.379	.390	-2552.928	-1910.847	-1857.280	-1953.587
WSC16	-.186	-.005	-.005	-.009	-.009	-.019	-.019	.188	.690	.705	-2340.808	-1938.298	-1922.623	-2096.680
MTN16	.070	-.023	-.023	-.030*	-.031*	-.019	-.019	.177	-.011	.021	-2370.702	-2521.488	-2348.395	-2535.610
EDUC			.001		.001		.001		2.697***	2.695***		2161.870***	2153.594***	1488.058***
FARMCITY										-.363			3501.308*	3590.869*
RNF16										1.122			4362.642*	4085.480*
CITYRUR										.340			-2178.011	-2261.936
OCCSEI														246.918***
Constant	8.875	.001	-.011	-.025	-.038	.044	.034	24.205	.271	.298	18100.805	-1085.077	-809.114	-882.635

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNF16=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

**Table 14b. Standardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, Period 1941-1952: General Social Surveys 1972-1994 (N=5,046)**

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNFCITY	(5) RNFCITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.196***	.030*	.027	.017	.014	.053**	.050**	.151***	.045**	.044**	.098***	.047**	.047**	.040*
FOCC	.114***	-.002	-.004	.016	.014	-.003	-.005	.142***	.081***	.081***	.058***	.029	.028	.016
FAED	.226***	.001	-.002	.001	-.003	-.039*	-.043*	.083***	-.039*	-.039*	.061**	.003	.003	.009
FARM16	-.060***	.670***	.670***	.012	.013	-.088***	-.087***	-.033*	-.001	.003	-.017	-.001	-.027	-.028
RNF16	-.053***	.007	.007	.771***	.772***	-.088***	-.088***	-.047***	-.019	-.034	-.020	-.007	-.045*	-.040
FINCOM16	.040**	-.019	-.019	.005	.004	.028	.027	.025	.004	.003	.069***	.059***	.060***	.060**
GENDER	-.078***	.007	.008	.002	.003	-.003	-.001	-.009	.033**	.033**	-.072***	-.052***	-.052***	-.057**
NE16	.015	-.003	-.003	.009	.009	.039*	-.039*	.027	.019	.019	.030	.026	.025	.022
FRG16	-.015	.025*	.025	.010	.011	-.016	-.016	.015	.023	.023	.022	.025	.024	.020
MA16	.010	.001	-.001	.001	.001	-.029	-.029	.055**	.050**	.050**	.043*	.040*	.040*	.032
ENC16	-.008	-.021	-.021	-.012	-.012	-.048*	-.048*	.009	.013	.014	.010	.012	.012	.010
WNC16	.008	-.029*	-.029*	-.009	-.009	-.049**	-.049**	.024	.020	.020	-.002	-.004	-.004	-.006
SA16	-.054**	-.057***	-.056***	-.046***	-.045***	-.036	-.035	-.002	.028	.028	-.020	-.006	-.003	-.007
ESC16	-.028	-.017	-.017	-.010	-.009	-.025	-.024	-.008	.007	.007	-.028	-.021	-.020	-.021
WSC16	-.019	-.006	-.006	-.010	-.010	-.027	-.027	.004	.014	.014	-.028	-.023	-.023	-.025
MTN16	.005	-.019	-.019	-.023*	-.023*	-.018	-.018	.002	-.001	.001	-.019	-.020	-.019	-.019
EDUC			.015		.015		.016		.541***	.540***		.255***	.254***	.176***
FARMCITY										-.006			.035*	.036*
RNFCITY										.021			.048*	.045*
CITYRUR										.005			-.019	-.019
OCCSEI														.145***
R <sup>2</sup>	.261	.436	.436	.586	.586	.020	.020	.117	.333	.333	.067	.115	.117	.131

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNFCITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.  
 \*\* Significant at .01 level.  
 \* Significant at .05 level.

Table 15a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, **Period 1953-1966**: General Social Surveys 1972-1994 (N=3,873)

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNF CITY	(5) RNF CITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.141***	.001	.001	.001	.001	.001	.001	.342***	-.046	-.046	635.788***	329.228*	330.004*	335.476*
FOCC	.022***	.001	.001	.001	.001	-.001	-.001	.088***	.028	.028	32.669	-14.571	-16.251	-19.552
FAED	.152***	-.001	-.001	.002	.002	-.001	-.001	.469***	.051	.051	313.461*	-17.580	-20.180	-26.197
FARM16	-.116	.461***	.461***	.012	.013	-.057***	-.057***	-.254	.066	-.925	-1009.437	-756.591	-2934.745	-2825.613
RNF16	-.253*	.003	.003	.570***	.570***	-.056***	-.056***	-1.008	-.312	-.600	-2083.949	-1533.273	-3343.897*	-3273.100*
FINCOM16	.116*	-.001	-.001	.003	.003	.010*	.010*	.598*	.279	.286	2999.762***	2747.630***	2786.975***	2753.226***
GENDER	-.072	-.001	-.001	.003	.003	.010	.010	2.249***	2.446***	2.454***	-3739.637***	-3583.563***	-3543.134***	-3832.611***
NE16	.082	-.014	-.014	-.022	-.023	.003	.003	2.053	1.827	1.867	4291.900*	4112.912*	4244.878*	4024.570*
FRG16	.821***	.006	.005	.008	.007	.003	.003	2.261	.001	-.010	-306.652	-2093.554	-2116.871	-2115.745
MA16	.233	-.014	-.015	-.004	-.004	-.005	-.005	.628	-.012	.016	2364.525	1858.568	1906.232	1904.319
ENC16	.145	-.012	-.012	-.017	-.017	-.002	-.002	.432	.033	.064	210.490	-105.215	-19.676	-27.252
WNC16	.306*	-.039***	-.039***	-.039**	-.040**	.011	.011	.752	-.090	.015	-3694.431*	-4360.155**	-4043.908*	-4045.622*
SA16	.071	-.034***	-.034***	-.035**	-.035**	.031*	.031*	-.461	-.658	-.553	-2433.390	-2588.866	-2220.334	-2155.045
ESC16	-.103	-.031**	-.031**	-.035**	-.035**	.011	.011	-.972	-.690	-.605	-4993.812**	-4770.672**	-4502.913**	-4431.526**
WSC16	.042	-.015	-.016	-.020	-.020	.007	.007	1.810	1.695	1.740*	-3962.949*	-4054.352**	-3907.055*	-4112.300**
MTN16	.155	-.014	-.014	-.037*	-.037*	.048**	.048**	.681	.254	.331	-3635.888	-3973.283*	-3600.751	-3639.800
EDUC			.001		.001		.001		2.751***	2.749***		2175.729***	2168.811***	1844.533***
FARMCITY										2.056			4098.311	3855.771
RNF CITY										.431			2717.914	2667.041
CITYRUR										-.641			-4416.606**	-4340.952**
OCCSEI														117.977***
Constant	8.380	.012	.003	-.035	-.046	.008	.006	21.637	-1.421	-1.403	13041.861	-5191.678	-5052.601	-4887.072

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNF CITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

**Table 15b. Standardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, Period 1953-1966: General Social Surveys 1972-1994 (N=3,873)**

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNFCITY	(5) RNFCITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.175***	.008	.005	.017	.015	.019	.019	.075***	-.010	-.010	.086***	.044*	.044*	.045*
FOCC	.125***	.011	.010	.005	.004	-.014	-.014	.090***	.029	.028	.020	-.009	-.010	-.012
FAED	.242***	-.008	-.011	.027	.024	-.002	-.003	.132***	.014	.014	.054*	-.003	-.003	-.004
FARM16	-.014	.665***	.665***	.014	.014	-.081***	-.081***	-.005	.001	-.020	-.013	-.010	-.038	-.037
RNF16	-.035*	.004	.005	.737***	.738***	-.091***	-.091***	-.024	-.007	-.014	-.031	-.023	-.049*	-.048*
FINCOM16	.038*	-.004	-.004	.009	.009	.038*	.037*	.035*	.016	.017	.107***	.098***	.099***	.098***
GENDER	-.015	-.003	-.003	.006	.006	.024	.024	.082***	.089***	.089***	-.083***	-.080***	-.079***	-.085***
NE16	.007	-.015	-.015	-.019	-.019	.003	.003	.033	.029	.030	.042*	.040*	.041*	.039*
FRG16	.069***	.006	.005	.006	.005	.003	.003	.034	.001	-.001	-.003	-.019	-.019	-.020
MA16	.034	-.025	-.026	-.006	-.006	-.009	-.010	.016	-.001	.001	.037	.029	.030	.030
ENC16	.024	-.024	-.025	-.027	-.027	-.005	-.005	.013	.001	.002	.004	-.002	-.001	-.001
WNC16	.034*	-.052***	-.052***	-.042**	-.042**	.015	.014	.015	-.002	.001	-.044*	-.053**	-.049*	-.049*
SA16	.011	-.061***	-.061***	-.049**	-.049**	.055*	.055*	-.012	-.017	-.015	-.040	-.042	-.036	-.035
ESC16	-.011	-.039**	-.039**	-.035**	-.035**	.014	.014	-.018	-.013	-.011	-.057**	-.054**	-.051**	-.050**
WSC16	.005	-.021	-.022	-.022	-.022	.009	.009	.037	.035	.035*	-.049*	-.051**	-.049*	-.051**
MTN16	.014	-.015	-.015	-.030*	-.031*	.050**	.050**	.011	.004	.005	-.034	-.038*	-.034	-.034
EDUC			.014		.013		.004		.486***	.486***		.235***	.234***	.199***
FARMCITY										.030			.037	.035
RNFCITY										.008			.031	.030
CITYRUR										-.010			-.040**	-.040**
OCCSEI														.072***
R <sup>2</sup>	.235	.435	.436	.536	.536	.020	.020	.082	.263	.264	.071	.113	.116	.120

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West South Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNFCITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 16a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, **Period 1967-1980**: General Social Surveys 1972-1994 (N=211)

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNFCITY	(5) RNFCITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.150**	-.001	-.001	-.001	-.001	.001	-.001	.552	.314	.311	742.237	634.401	626.188	597.976
FOCC	.003	-.001	-.001	.001	.001	.002	.002	.252***	.247***	.248***	35.432	33.472	43.839	21.338
FAED	.113*	.001	.001	.005	.005	.001	.001	-.567	-.747*	-.725*	-351.755	-433.401	-435.902	-370.216
FARM16	.028	.438***	.438***	.011	.011	-.054	-.054	2.296	2.251	2.587	-1454.498	-1474.614	-944.951	-1179.397
RNF16	-.052	.002	.002	.558***	.558***	-.054	-.053	3.154	3.236	5.775	-3052.224	-3014.750	-4027.150	-4550.425
FINCOM16	.309	.002	.002	-.003	-.003	-.002	-.004	-1.509	-1.999	-2.014	6243.225**	6020.725**	6002.621**	6185.094**
GENDER	.014	-.001	-.001	-.001	-.001	-.012	-.012	4.563**	4.540**	4.533**	-3575.254	-3585.419	-3661.434	-4072.141
NE16	-.133	-.012	-.012	-.040	-.039	-.020	-.019	3.410	3.622	3.432	12235.212	12331.186	12231.351	11920.425
FRG16	.331	.004	.003	-.024	-.024	.021	.019	-1.402	-1.929	-2.033	421.772	182.864	343.846	528.051
MA16	-.155	-.012	-.012	.011	.012	.028	.029	.210	.456	.505	3945.750	4057.665	4209.459	4163.685
ENC16	-.187	-.002	-.002	-.024	-.024	.018	.020	-3.044	-2.748	-2.854	892.982	1027.473	1182.561	1441.178
WNC16	.389	-.034	-.034	-.043	-.043	.039	.036	-4.223	-4.841	-5.055	-5139.017	-5419.230	-5201.958	-4743.936
SA16	-.001	-.016	-.016	-.049	-.049	.119	.119	-2.815	-2.813	-3.030	-1574.290	-1573.477	-.764.684	-.490.105
ESC16	-.625	-.034	-.034	-.060	-.059	.034	.039	-.037	.957	.672	-4424.703	-3973.926	-3717.518	-3778.421
WSC16	.084	-.015	-.015	-.012	-.013	.050	.049	-2.382	-2.516	-2.576	-3451.098	-3511.567	-3201.908	-2968.541
MTN16	-.256	-.023	-.023	-.075	-.074	.057	.059	.378	.785	.439	-4260.266	-4075.928	-3644.577	-3684.336
EDUC			.001		.001		.007		1.589***	1.597***		720.752	769.264	624.559
FARMCITY											-.670		-2053.296	-1992.593
RNFCITY											-4.558		1194.783	1607.779
CITYRUR													-6583.181	-6569.742
OCCSEI														90.607
Constant	8.399	.011	.005	-.033	-.044	-.059	-.121	24.816	11.468	11.250	5446.641	-606.727	-1342.051	-2361.422

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNFCITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income (constant 1993 dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

**Table 16b. Standardized Regression Coefficients of Reduced-Form and Structural Equations with Migration Effects for Blau-Duncan Socioeconomic Achievement Model, Period 1967-1980: General Social Surveys 1972-1994 (N=211)**

Predetermined Variables:	Dependent Variables:													
	(1) EDUC	(2) FARMCITY	(3) FARMCITY	(4) RNF CITY	(5) RNF CITY	(6) CITYRUR	(7) CITYRUR	(8) OCCSEI	(9) OCCSEI	(10) OCCSEI	(11) FINC	(12) FINC	(13) FINC	(14) FINC
MOED	.216**	-.025	-.027	-.003	-.005	.003	-.012	.135	.077	.076	.095	.081	.080	.077
FOCC	.020	-.005	-.006	.011	.011	.119	.117	.315***	.310***	.311***	.023	.022	.029	.014
FAED	.192*	.024	.022	.067	.065	.016	.002	-.161	-.213*	-.206*	-.053	-.065	-.065	-.055
FARM16	.003	.655***	.655***	.011	.011	-.061	-.061	.045	.044	.051	-.015	-.015	-.010	-.012
RNF16	-.008	.004	.004	.734***	.735***	-.083	-.082	.085	.087	.155	-.043	-.042	-.057	-.064
FINCOM16	.121	.010	.009	-.009	-.011	-.006	-.015	-.099	-.131	-.132	.216**	.208**	.208**	.214**
GENDER	.003	-.001	-.001	-.002	-.003	-.028	-.028	.189**	.188**	.188**	-.078	-.078	-.080	-.089
NE16	-.012	-.014	-.014	-.030	-.030	-.018	-.017	.053	.057	.054	.101	.102	.101	.098
FRG16	.027	.004	.004	-.016	-.016	.017	.015	-.020	-.027	-.028	.003	.001	.003	.004
MA16	-.026	-.026	-.026	.016	.016	.045	.047	.006	.013	.014	.059	.060	.062	.062
ENC16	-.036	-.005	-.005	-.039	-.038	.035	.037	-.100	-.090	-.094	.015	.018	.020	.025
WNC16	.054	-.060	-.060	-.049	-.049	.052	.048	-.098	-.112	-.117	-.063	-.066	-.063	-.058
SA16	-.001	-.035	-.035	-.072	-.072	.205*	.205*	-.084	-.084	-.091	-.025	-.025	-.012	-.008
ESC16	-.076	-.053	-.053	-.060	-.059	.040	.046	-.001	.020	.014	-.048	-.043	-.040	-.041
WSC16	.013	-.030	-.030	-.016	-.016	.075	.074	-.062	-.065	-.067	-.047	-.048	-.044	-.040
MTN16	-.031	-.036	-.036	-.076	-.075	.068	.070	.008	.016	.009	-.046	-.044	-.040	-.040
EDUC			.009		.011		.072		.267***	.269***		.064	.068	.055
FARMCITY										-.009			-.014	-.014
RNF CITY										-.093			.013	.017
CITYRUR										-.003			-.060	-.060
OCCSEI														.048
R <sup>2</sup>	.198	.424	.424	.528	.528	.059	.063	.161	.218	.222	.101	.104	.108	.110

Note: Variables are: FARM16=rural farm areas when 16 (1=yes); RNF16=rural nonfarm areas when 16 (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's the highest year of school completed; MOED=mother's the highest year of school completed; FINCOM16=family income when 16; NE16=New England when 16 (1=yes); FRG16=Foreign when 16 (1=yes); MA16=Middle Atlantic when 16 (1=yes); ENC16=East North Central when 16 (1=yes); WNC16=West North Central when 16 (1=yes); SA16=South Atlantic when 16 (1=yes); ESC16=East South Central when 16 (1=yes); WSC16=West North Central when 16 (1=yes); MTN16=Mountain when 16 (1=yes); EDUC=R's the highest year of school completed; FARMCITY=migration from farm areas (1=yes); RNF CITY=migration from rural nonfarm areas (1=yes); CITYRUR=migration from city areas (1=yes); OCCSEI=R's occupational status (SEI); FINC=R's family income ( constant 1993 dollars).

\*\*\* Significant at .001 level.  
 \*\* Significant at .01 level.  
 \* Significant at .05 level.

**Table 17. Summary of Trends in Direct Effects of Rural Origins on Socioeconomic Attainments in Adulthood with Migration Controlled by Major Period of Rural Development, 1900-1980**

1900		<b>Rural Farm</b>			<b>Rural Non-Farm</b>		
		<u>Education (Years)</u>	<u>Occupational Status (SEI)</u>	<u>Family Income (Constant 1993 \$)</u>	<u>Education (Years)</u>	<u>Occupational Status (SEI)</u>	<u>Family Income (Constant 1993 \$)</u>
1910	The Golden Age (1900-1920)	-1.314	1.176	-\$2290.42	-.883	.558	-\$1207.24
1920	Farm Depression (1921-1932)	-1.089	-.161	-\$2664.04	-.740	3.161	-\$6180.65
1930	The New Deal (1933-1940)	-.821	.887	-\$2028.52	-.370	-.291	\$1772.75
1940	World War II & New Horizons (1941-1952)	-.495	.141	-\$1947.33	-.462	-1.477	-\$2966.77
1950	The Crisis and the the Opportunity of Abundance (1953-1966)	-.116	-.925	-\$2825.61	-.253	-.600	-\$3273.10
1960	A Broader Rural Perspective (1967-1980)	.028	2.587	-\$1179.40	-.052	5.775	-\$4550.43
1970							
1980							

Source: NORC General Social Surveys, 1972-1994

prove to be clearly important, perhaps these behaviors do serve to mediate the background effects of rural origins. Comparing the direct effects of rural origins on status attainments in adulthood, both with (Table 8) and without (Table 17) controls for migration, shows the following results which are pertinent to this issue. While the direct effects of the migration dummies on attainments were small, these variables seem to manifest “suppressor” relationships with rural origins (see Alwin and Hauser 1975). Table 8 shows the direct effects of rural and rural non-farm origins and these coefficients are generally larger after controlling for migration. For example, during the Golden Age of rural development (1900-1920), the effect of growing-up on a farm on occupational status during adulthood is negligible ( $b = .047$ ), but it increases substantially when migration is controlled ( $b = 1.176$ ). Similar patterns occur for family income. In other cases (e.g., during the Depression period for occupational status), migration reduces the direct effect of farm origins, in essence serving as a conventional mediating variable. In general, the GSS data produce somewhat inconsistent results regarding the role of migration effects on adulthood attainments.

Turning to the results for the NLS-72 data (shown in Table 18), we observe positive evidence for our hypotheses about migration influences on attainments. The effect of rural-to-urban migration raises occupational status by about 6 units on the SEI ( $b = 6.350$ ). The counter migration behavior of moving from an urban origin to a rural setting lowers occupational status by about 5 SEI units ( $b = -4.946$ ). The same pattern can be observed for family income: rural-to-urban migration raises income by about \$3,200, whereas, the converse reduces it by a similar margin (\$3,100).

The Wisconsin social psychological model was also estimated with migration effects specified as intervening between education and occupational attainment. The results are presented in Table 19. There are two aspects to these results that are of interest to our hypotheses. One is the “selectivity” of specific migration patterns: are these exogenous variables shaping the completion of educational credentials related to migration at all

and, if so, which specific pattern of migration? The second is whether these additional variables contained in the social psychological version of the status attainment model change the effects of migration that we observed in Table 17 above.

Regarding the first issue, an examination of the results in which the migration variables are endogenous (equations 25-36) reveals some selectivity in the migration experiences of NLS-72 panel members. Education and region of the country play the major roles observed in shaping migrants into their behaviors.

For rural-to-urban migrants, academic performance, mother’s educational expectations, and completed schooling all have positive effects. However, education clearly appears to channel these influences onto migration from rural origins to urban residence by adulthood. Women are more likely to move to urban locations from rural origins. Region is also related to migration from rural-to-urban locations. NLS-72 panel members living in all other regions, as compared to the omitted Western region, were more likely to be rural-to-urban migrants.

The converse migration behavior, moving from an urban origin to a rural area in adulthood, is also shaped by completed schooling. However, the effects of educational plans held by seniors and those of their friends are not fully mediated through educational attainment as they have direct effects on this type of migration pattern. Seniors in the Northeast are more likely to migrate from urban to rural areas as well.

The second issue, concerning possible changes in the effects of migration on attainments when the social psychological variables are included in the specification of the model, suggests that this is not the case. Comparing the regression coefficients in Table 18 with those in Table 19, the addition of the social psychological component, while important for shaping “selective migration,” does not appreciably change the effects of migration on occupational status or family income during adulthood.

*(Text continues on Page 75)*

**Table 18a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, with Migration: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=8,729)**

Dependent Variables:	Dependent Variables:													Constant
	RURAL	GENDER	FOCC	FAED	MOED	FINCOM	NEAST	NCENT	SOUTH	EDUC	RURCITY	CITYRUR	OCCSEI	
1) EDUC	-.292***	-.147***	.005***	.221***	.198***	.001***	.167***	.038	.123**					2.548
2) RURCITY	.506***	.013**	.001*	.003	.004	-.001	-.026***	-.028***	-.031***					-.001
3) RURCITY	.511***	.016**	.001	-.001	.001	-.001	-.029***	-.029***	-.033***	.016***				-.043
4) CITYRUR	-.104***	.004	-.001*	-.001	-.009**	-.001	.021*	.034***	.013					.112
5) CITYRUR	-.109***	.002	-.001	.004	-.005	-.001	.024**	.034***	.015	-.018***				.178
6) OCCSEI	-5.332***	3.530***	.081***	1.526***	1.835***	.001***	1.796**	-.675	2.415**					31.178
7) OCCSEI	-3.184***	4.609***	.045***	-.100	.375	.001***	.568	-.958	1.509*	7.365***				12.415
8) OCCSEI	-6.969***	4.519***	.043***	-.078	.346	.001***	.867	-.607	1.793**	7.173***	6.350***	-4.946***		13.466
9) FINC	-2248.935***	-709.719	39.018***	607.338**	412.530	.721***	1704.081**	-189.777	1037.364					20539.108
10) FINC	-1283.161**	-224.597	22.802*	-123.750	-243.769	.683***	1151.904	-316.792	629.930	3310.904***				12103.781
11) FINC	-3275.379***	-269.573	21.449*	-110.299	-261.531	.686***	1318.091*	-117.671	783.061	3202.936***	3235.366***	-3102.477***		12731.018
12) FINC	-2130.968***	-1011.666**	14.412	-97.482	-318.414	.634***	1175.698*	-18.067	488.682	2025.024***	2192.666**	-2290.288**	164.216***	10519.647

Note: Variables are: RURAL=rural areas in senior year (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's education; MOED=mother's education; FINCOM=family income in senior year; NEAST=Northeast in senior year (1=yes); NCENT=North Central in senior year (1=yes); SOUTH=South in senior year (1=yes); RURCITY=migration from rural areas (1=yes); CITYRUR=migration from city areas (1=yes); EDUC=respondent's education; OCCSEI=respondent's occupational status (SEI); FINC=respondent's total family 1985 earnings (dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

**Table 18b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Blau-Duncan Socioeconomic Achievement Model, with Migration: National Longitudinal Study of the High School Class of 1972 (NLS-72)**

Dependent Variables:														
Dependent Variables:	RURAL	GENDER	FOCC	FAED	MOED	FINCOM	NEAST	NCENT	SOUTH	EDUC	RURCITY	CITYRUR	OCCSEI	R <sup>2</sup>
1) EDUC	-.093***	-.055***	.085***	.204***	.152***	.045***	.054***	.013	.042**					.183
2) RURCITY	.665***	.021**	.020*	.011	.012	-.012	-.035***	-.040***	-.044***					.433
3) RURCITY	.671***	.024**	.014	-.003	.002	-.015	-.038***	-.041***	-.047***	.068***				.437
4) CITYRUR	-.169***	.009	-.028*	-.002	-.034**	-.007	.034*	.059***	.022					.029
5) CITYRUR	-.177***	.004	-.020	.017	-.020	-.003	.039**	.060***	.026	-.090***				.036
6) OCCSEI	-.102***	.080***	.085***	.085***	.085***	.001***	.035**	-.014	.050**					.101
7) OCCSEI	-.061***	.105***	.047***	-.006	.017	.073***	.011	-.020	.031*	.444***				.261
8) OCCSEI	-.134***	.103***	.045***	-.004	.016	.074***	.017	-.013	.037**	.432***	.093***	-.059***		.270
9) FINC	-.048***	-.018	.045***	.038**	.021	.191***	.037**	-.004	.024					.071
10) FINC	-.027**	-.006	.027*	-.008	-.013	.181***	.025	-.007	.015	.223***				.112
11) FINC	-.070***	-.007	.025*	-.007	-.014	.182***	.029*	-.003	.018	.216***	.053***	-.041***		.115
12) FINC	-.046***	-.026**	.017	-.006	-.016	.168***	.026*	-.001	.011	.136***	.036**	-.030**	.184***	.139

Note: Variables are: RURAL=rural areas in senior year (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's education; MOED=mother's education; FINCOM=family income in senior year; NEAST=Northeast in senior year (1=yes); NCENT=North Central in senior year (1=yes); SOUTH=South in senior year (1=yes); RURCITY=migration from rural areas (1=yes); CITYRUR=migration from city areas (1=yes); EDUC=respondent's education; OCCSEI=respondent's occupational status (SEI); FINC=respondent's total family 1985 earnings (dollars).

\*\*\* Significant at .001 level.  
 \*\* Significant at .01 level.  
 \* Significant at .05 level.

Table 19a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Socioeconomic Achievement with Migration Effects, Wisconsin Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:											
	(1) ABIL	(2) HSGPA	(3) HSGPA	(4) FSOI	(5) FSOI	(6) FSOI	(7) MSOI	(8) MSOI	(9) MSOI	(10) FPLAN	(11) FPLAN	(12) FPLAN
RURAL	-.027	.184***	.206***	-.253***	-.241***	-.267***	-.263***	-.252***	-.280***	-.097***	-.093***	-.102***
GENDER	.038	.627***	.597***	-.160***	-.178***	-.258***	-.269***	-.285***	-.368***	.001	-.004	-.029**
FOCC	.003***	.002*	-.001	.005***	.003***	.003***	.004***	.003***	.003***	.001***	.001	.001*
FAED	.131***	.132***	.029*	.243***	.184***	.180***	.178***	.122***	.118***	.055***	.036***	.034***
MOED	.101***	.097***	.017	.131***	.084***	.082***	.187***	.143***	.141***	.049***	.034***	.034***
FINCOM	.001***	.001***	-.001**	.001***	.001	.001*	.001***	.001	.001	.001***	.001	.001
NEAST	.211***	.162***	-.005	-.069	-.166***	-.165***	-.099*	-.190***	-.189***	-.035*	-.065***	-.065***
NCENT	.027	-.130**	-.152***	-.140***	-.152***	-.132***	-.120**	-.132***	-.111**	-.041**	-.045**	-.038*
SOUTH	-.093**	.179***	.252***	.085*	.128***	.094*	.144***	.184***	.149***	-.044**	-.031*	-.041**
ABIL			.787***		.456***	.349***		.430***	.320***		.145***	.112***
HSGPA						.135***			.139***			.042***
FSOI												
MSOI												
FPLAN												
TSOI												
EDEX												
EDUC												
RURCITY												
CITYRUR												
OCCSEI												
Constant	-1.084	4.370	5.223	3.113	3.607	2.900	3.248	3.714	2.988	.357	.514	.296

(Continued)

Table 19a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Socioeconomic Achievement with Migration Effects, Wisconsin Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:											
	(13) TSOI	(14) TSOI	(15) TSOI	(16) EDEX	(17) EDEX	(18) EDEX	(19) EDEX	(20) EDUC	(21) EDUC	(22) EDUC	(23) EDUC	(24) EDUC
RURAL	-.004	.001	-.015	-.283***	-.269***	-.320***	-.088***	-.292***	-.277***	-.322***	-.177***	-.147***
GENDER	.041***	.035**	-.010	-.248***	-.268***	-.414***	-.183***	-.147***	-.167***	-.297***	-.161***	-.100***
FOCC	.001	-.001	-.001	.002*	.001	.001	-.002**	.005***	.003***	.003***	.002**	.002***
FAED	.047***	.027***	.025***	.267***	.199***	.192***	.079***	.221***	.150***	.143***	.072***	.046***
MOED	.011	-.005	-.006	.145***	.092***	.088***	-.005	.198***	.143***	.139***	.083***	.085***
FINCOM	.001	-.001**	-.001*	.001***	.001***	.001***	.001***	.001***	-.001*	-.001	-.001**	-.001***
NEAST	.022	-.011	-.011	-.063	-.174***	-.173***	-.022	.167***	.052	.053	.146***	.154***
NCENT	-.041*	-.045**	-.033*	-.255***	-.269***	-.232***	-.133***	.038	.024	.057	.118**	.162***
SOUTH	.096***	.110***	.091***	.036	.084	.023	-.050	.123**	.174***	.119**	.085*	.101**
ABIL		.156***	.096***		.523***	.330***	.051***		.543***	.372***	.200***	.183***
HSGPA			.075***			.245***	.129***			.217***	.148***	.105***
FSOI							.267***				.203***	.114***
MSOI							.403***				.199***	.065**
FPLAN							.455***				.342***	.190***
TSOI							.064**				-.007	-.028
EDEX												.334***
EDUC												
RURCITY												
CITYRUR												
OCCSEI												
Constant	2.42	2.589	2.194	2.917	3.483	2.205	-.047	2.548	3.137	2.002	.732	.747

(Continued)

Table 19a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Socioeconomic Achievement with Migration Effects, Wisconsin Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:											
	(25) RURCITY	(26) RURCITY	(27) RURCITY	(28) RURCITY	(29) RURCITY	(30) RURCITY	(31) CITYRUR	(32) CITYRUR	(33) CITYRUR	(34) CITYRUR	(35) CITYRUR	(36) CITYRUR
RURAL	.506***	.506***	.505***	.507***	.508***	.510***	-.104***	-.104***	-.104***	-.110***	-.111***	-.113***
GENDER	.013*	.013*	.008	.012	.013*	.014*	.004	.005	.007	.003	-.001	-.001
FOCC	.001	.001	.001	.001	.001	.001	-.001	-.001	-.001	-.001	-.001	-.001
FAED	.003	.002	.002	.001	.001	-.001	-.001	.001	.001	.004	.005	.005
MOED	.004	.003	.003	.001	.001	.001	-.009*	-.008*	-.008*	-.006	-.006	-.005
FINCOM	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	-.001	.001	-.001
NEAST	-.026**	-.028**	-.027**	-.026**	-.026**	-.028**	.021*	.022*	.022*	.018*	.017	.019
NCENT	-.028**	-.028**	-.027**	-.026**	-.025**	-.028**	.034***	.034***	.033***	.031**	.029**	.030**
SOUTH	-.031***	-.030**	-.033***	-.034***	-.033***	-.035***	.013	.012	.013	.013	.012	.013
ABIL		.007*	.001	-.002	-.002	-.005		-.005	-.002	.005	.006	.008
HSGPA			.008**	.007**	.006*	.005			-.003	-.001	.002	.003
FSOI				-.003	-.005	-.006				-.012*	-.008	-.006
MROI				.012*	.009	.008				.001	.006	.007
FPLAN				.001	-.002	-.005				-.031***	-.023**	-.021**
TSOI				-.004	-.004	-.004				-.002	-.001	-.001
EDEX					.007	.002					-.016***	-.012**
EDUC						.015***						-.012***
RURCITY												
CITYRUR												
OCCSEI												
Constant	-.001	.007	-.036	-.055	-.055	-.066	.112	.107	.123	.170	.169	.178

(Continued)

Table 19a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Socioeconomic Achievement with Migration Effects, Wisconsin Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:						
	(37) OCCSEI	(38) OCCSEI	(39) OCCSEI	(40) OCCSEI	(41) OCCSEI	(42) OCCSEI	(43) OCCSEI
RURAL	-5.33***	-5.153***	-5.752***	-4.740***	-4.527***	-3.694***	-7.451***
GENDER	3.530***	3.278***	1.537**	2.453***	2.898***	3.463***	3.366***
FOCC	.081***	.059***	.062***	.053***	.057***	.043***	.041**
FAED	1.526***	.653*	.569*	.098	-.095	-.352	-.323
MOED	1.835***	1.160***	1.110***	.711*	.725*	.244	.216
FINCOM	.001***	.001**	.001*	.001**	.001*	.001***	.001***
NEAST	1.796*	.386	.399	1.058	1.111	.242	.513
NCENT	-.675	-.857	-.415	.020	.342	-.576	-.251
SOUTH	2.415**	3.037***	2.302**	2.046**	2.166**	1.593*	1.879**
ABIL		6.672***	4.377***	3.145***	3.021***	1.986***	2.058***
HSGPA			2.916***	2.396***	2.083***	1.487***	1.473***
FSOI				.901*	.252	-.391	-.382
MSOI				1.599***	.620	.253	.237
FPLAN				3.065***	1.960***	.887	.814
TSOI				.644	.488	.649	.667
EDEX					2.431***	.542	.474
EDUC						5.654***	5.500***
RURCITY							6.254***
CITYRUR							-5.022***
OCCSEI							
Constant	31.178	38.408	23.176	13.464	13.580	9.354	10.664

(Continued)

**Table 19a. Unstandardized Regression Coefficients of Reduced-Form and Structural Equations for Socioeconomic Achievement with Migration Effects, Wisconsin Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)**

Predetermined Variables:	Dependent Variables:							
	(44) FINC	(45) FINC	(46) FINC	(47) FINC	(48) FINC	(49) FINC	(50) FINC	(51) FINC
RURAL	-2248.935***	-2147.266***	-2497.111***	-2092.964***	-2054.507***	-1719.455**	-3722.789***	-2629.111***
GENDER	-709.719	-852.631	-1868.651***	-1600.349***	-1520.185**	-1292.720**	-1343.742**	-1837.787***
FOCC	39.018**	26.533*	28.043*	24.525	25.328*	19.776	18.306	12.341
FAED	607.338*	113.646	64.941	-157.533	-192.175	-295.699	-277.412	-229.975
MOED	412.530	30.600	1.539	-119.790	-117.412	-310.799	-328.246	-360.010
FINCOM	.721***	.587***	.603***	.600***	.595***	.622***	.624***	.593***
NEAST	1704.081*	906.508	914.553	1168.480	1178.100	828.586	980.223	904.890
NCENT	-189.777	-292.335	-34.156	160.498	218.536	-150.770	36.228	72.997
SOUTH	1037.364	1388.661	959.981	895.696	917.409	686.921	842.080	566.351
ABIL		3772.547***	2432.991***	1894.189***	1871.817***	1455.395***	1497.603***	1195.591***
HSGPA			1702.095***	1472.187***	1415.750***	1176.222***	1170.848***	954.650***
FSOI				823.771*	706.827	448.162	448.817	504.886
MSOI				-.835	-177.201	-324.917	-328.173	-363.023
FPLAN				1707.726**	1508.453**	1077.241*	1026.265	906.727
TSOI				628.432	600.400	664.900	673.725	575.835
EDEX					437.995	-321.595	-364.375	-433.902
EDUC						2274.108***	2186.877***	1379.729***
RURCITY							3213.866***	2295.940*
CITYRUR							-3221.908***	-2484.775**
OCCSEI								146.780***
Constant	20539.108	24627.072	15737.098	11465.948	11486.737	9786.851	10574.035	9008.837

Note: Variables are: RURAL=rural areas in senior year (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's education; MOED=mother's education; FINCOM=family income in senior year; NEAST=Northeast in senior year (1=yes); NCENT=North Central in senior year (1=yes); SOUTH=South in senior year (1=yes); RURCITY=migration from rural areas (1=yes); CITYRUR=migration from city areas (1=yes); HSGPA=high school grades; FSOI=schooling father expects for student; MSOI=schooling mother expects for student; FPLAN=R's friends plan to go to college (1=yes); TSOI=teachers affect plans for college; EDEX=highest education student plans; ABIL=R's ability factor score; EDUC=R's education; OCCSEI=R's occupational status (SEI); FINC=R's total family 1985 earnings (dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

Table 19b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Socioeconomic Achievement with Migration Effects, Wisconsin Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:											
	(1) ABIL	(2) HSGPA	(3) HSGPA	(4) FSOI	(5) FSOI	(6) FSOI	(7) MSOI	(8) MSOI	(9) MSOI	(10) FPLAN	(11) FPLAN	(12) FPLAN
RURAL	-.011	.055***	.061***	-.084***	-.080***	-.089***	-.089***	-.085***	-.095***	-.085***	-.081***	-.089***
GENDER	.019	.220***	.210***	-.063***	-.070***	-.102***	-.108***	-.114***	-.148***	.001	-.004	-.030**
FOCC	.076***	.028*	-.014	.085***	.058***	.060***	.078***	.052***	.054***	.048***	.025	.027*
FAED	.160***	.113***	.025*	.234***	.177***	.173***	.174***	.119***	.115***	.138***	.090***	.087***
MOED	.103***	.069***	.012	.104***	.067***	.066***	.152***	.117***	.115***	.103***	.072***	.071***
FINCOM	.186***	.068***	-.035**	.084***	.018	.023*	.077***	.013	.019	.056***	.001	.004
NEAST	.090***	.049***	-.001	-.023	-.056***	-.056***	-.034*	-.065***	-.065***	-.031*	-.058***	-.058***
NCENT	.012	-.042**	-.049***	-.050***	-.055***	-.047***	-.044**	-.048***	-.041**	-.038**	-.042**	-.036*
SOUTH	-.043**	.057***	.081***	.031*	.046***	.034*	.053***	.068***	.055***	-.042**	-.029*	-.039**
ABIL			.553***		.358***	.275***		.345***	.257***		.299***	.231***
HSGPA						.151***			.158***			.122***
FSOI												
MSOI												
FPLAN												
TSOI												
EDEX												
EDUC												
OCCSEI												
R <sup>2</sup>	.193	.096	.344	.197	.300	.315	.185	.281	.298	.096	.168	.178

(Continued)

Table 19b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Socioeconomic Achievement with Migration Effects, Wisconsin Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:											
	(13) TSOI	(14) TSOI	(15) TSOI	(16) EDEX	(17) EDEX	(18) EDEX	(19) EDEX	(20) EDUC	(21) EDUC	(22) EDUC	(23) EDUC	(24) EDUC
RURAL	-.003	.001	-.012	-.086***	-.081***	-.097***	-.027***	-.093***	-.088***	-.102***	-.056***	-.047***
GENDER	.038***	.033**	-.009	-.089***	-.096***	-.148***	-.066***	-.055***	-.063***	-.112***	-.061***	-.038***
FOCC	.006	-.016	-.013	.033*	.004	.008	-.030**	.085***	.054***	.057***	.032**	.042***
FAED	.108***	.062***	.057***	.234***	.174***	.168***	.069***	.204***	.138***	.132***	.066***	.042***
MOED	.021	-.009	-.011	.106***	.067***	.064***	-.004	.152***	.110***	.107***	.064***	.065***
FINCOM	.020	-.034**	-.027*	.117***	.047***	.056***	.044***	.045***	-.031*	-.023	-.031**	-.047***
NEAST	.017	-.009	-.009	-.019	-.053***	-.053***	-.007	.054***	.017	.017	.047***	.050***
NCENT	-.035*	-.039**	-.029*	-.084***	-.088***	-.076***	-.043***	.013	.008	.020	.041**	.056***
SOUTH	.082***	.094***	.078***	.012	.028	.007	-.016	.042**	.060***	.041**	.029*	.035**
ABIL		.292***	.181***		.375***	.237***	.037***		.410***	.281***	.151***	.138***
HSGPA			.201***			.250***	.131***			.233***	.159***	.113***
FSOI							.244***				.195***	.109***
MSOI							.360***				.188***	.061**
FPLAN							.158***				.125***	.069***
TSOI							.024**				-.003	-.011
EDEX												.351***
EDUC												
OCCSEI												
R <sup>2</sup>	.028	.096	.123	.195	.309	.350	.645	.183	.319	.355	.477	.521

(Continued)

Table 19b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Socioeconomic Achievement with Migration Effects, Wisconsin Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:											
	(25) RURCITY	(26) RURCITY	(27) RURCITY	(28) RURCITY	(29) RURCITY	(30) RURCITY	(31) CITYRUR	(32) CITYRUR	(33) CITYRUR	(34) CITYRUR	(35) CITYRUR	(36) CITYRUR
RURAL	.665***	.665***	.663***	.666***	.667***	.670***	-.169***	-.170***	-.168***	-.178***	-.180***	-.183***
GENDER	.021*	.021*	.013	.018	.020*	.022*	.009	.009	.013	.005	-.001	-.003
FOCC	.020	.018	.019	.017	.018	.015	-.028	-.027	-.027	-.022	-.024	-.022
FAED	.011	.007	.006	.003	.001	-.001	-.002	.001	.002	.017	.022	.025
MOED	.012	.010	.009	.005	.005	.001	-.034*	-.032*	-.032*	-.024	-.024	-.020
FINCOM	-.012	-.016	-.015	-.016	-.017	-.014	-.007	-.003	-.004	-.003	.001	-.002
NEAST	-.035**	-.037**	-.037**	-.034**	-.034**	-.037**	.034*	.036*	.036*	.029*	.029	.032
NCENT	-.040**	-.040**	-.038**	-.037**	-.036**	-.039**	.059***	.059***	.059***	.054**	.050**	.054**
SOUTH	-.044***	-.043**	-.046***	-.048***	-.048***	-.050***	.022	.021	.023	.023	.021	.023
ABIL		.023*	.003	-.005	-.006	-.015		-.018	-.009	.021	.024	.032
HSGPA			.037**	.032**	.028*	.021			-.017	-.001	.010	.017
FSOI				-.012	-.019	-.025				-.057*	-.037	-.030
MSOI				.046*	.036	.032				.001	.030	.034
FPLAN				.001	-.004	-.008				-.057***	-.044**	-.039**
TSOI				-.006	-.007	-.006				-.003	-.001	-.002
EDEX					.029	.007					-.084***	-.062**
EDUC						.062***						-.061***
RURCITY												
CITYRUR												
OCCSEI												
R <sup>2</sup>	.433	.433	.434	.435	.435	.437	.029	.030	.030	.036	.038	.040

(Continued)

Table 19b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Socioeconomic Achievement with Migration Effects, Wisconsin Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)

Predetermined Variables:	Dependent Variables:						
	(37) OCCSEI	(38) OCCSEI	(39) OCCSEI	(40) OCCSEI	(41) OCCSEI	(42) OCCSEI	(43) OCCSEI
RURAL	-.102***	-.099***	-.110***	-.091***	-.087***	-.071***	-.143***
GENDER	.080***	.075***	.035**	.056***	.066***	.079***	.077***
FOCC	.085***	.062***	.064***	.055***	.059***	.045***	.042**
FAED	.085***	.036*	.032*	.005	-.005	-.020	-.018
MOED	.085***	.054***	.051***	.033*	.033*	.011	.010
FINCOM	.093***	.037**	.043**	.041**	.034*	.050***	.051***
NEAST	.035*	.008	.008	.021	.022	.005	.010
NCENT	-.014	-.018	-.009	.001	.007	-.012	-.005
SOUTH	.050**	.063***	.048**	.043**	.045**	.033*	.039**
ABIL		.303***	.199***	.143***	.137***	.090***	.094***
HSGPA			.189***	.155***	.135***	.096***	.095***
FSOI				.052*	.015	-.023	-.022
MSOI				.091***	.035	.014	.013
FPLAN				.067***	.043***	.020	.018
TSOI				.016	.012	.016	.016
EDEX					.154***	.034	.030
EDUC						.341***	.331***
RURCITY							.091***
CITYRUR							-.059***
OCCSEI							
R <sup>2</sup>	.101	.175	.198	.220	.228	.284	.292

(Continued)

**Table 19b. Standardized Regression Coefficients of Reduced-Form and Structural Equations for Socioeconomic Achievement with Migration Effects, Wisconsin Model: National Longitudinal Study of the High School Class of 1972 (NLS-72) (N=6,638)**

Predetermined Variables:	Dependent Variables:								
	(44) FINC	(45) FINC	(46) FINC	(47) FINC	(48) FINC	(49) FINC	(50) FINC	(51) FINC	
RURAL	-.048***	-.046***	-.054***	-.045***	-.044***	-.037**	-.080***	-.056***	
GENDER	-.018	-.022	-.047***	-.041***	-.039**	-.033**	-.034**	-.047***	
FOCC	.045**	.031*	.033*	.029	.029*	.023	.021	.014	
FAED	.038*	.007	.004	-.010	-.012	-.018	-.017	-.014	
MOED	.021	.002	.001	-.006	-.006	-.016	-.017	-.019	
FINCOM	.191***	.156***	.160***	.159***	.158***	.165***	.166***	.157***	
NEAST	.037*	.020	.020	.025	.026	.018	.021	.020	
NCENT	-.004	-.007	-.001	.004	.005	-.004	.001	.002	
SOUTH	.024	.032	.022	.021	.021	.016	.020	.013	
ABIL		.192***	.124***	.096***	.095***	.074***	.076***	.061***	
HSGPA			.123***	.106***	.102***	.085***	.085***	.069***	
FSOI				.053*	.046	.029	.029	.033	
MSOI				-.001	-.011	-.021	-.021	-.023	
FPLAN				.042**	.037**	.026*	.025	.022	
TSOI				.017	.016	.018	.018	.016	
EDEX					.031	-.023	-.026	-.031	
EDUC						.153***	.147***	.093***	
RURCITY							.052***	.037*	
CITYRUR							-.043***	-.033**	
OCCSEI								.164***	
R <sup>2</sup>	.071	.101	.111	.116	.116	.127	.130	.150	

Note: Variables are: RURAL=rural areas in senior year (1=yes); GENDER=Gender (1=female); FOCC=father's occupation status(SEI); FAED=father's education; MOED=mother's education; FINCOM=family income in senior year; NEAST=Northeast in senior year (1=yes); NCENT=North Central in senior year (1=yes); SOUTH=South in senior year (1=yes); RURCITY=migration from rural areas (1=yes); CITYRUR=migration from city areas (1=yes); HSGPA=high school grades; FSOI=schooling father expects for student; MSOI=schooling mother expects for student; FPLAN=R's friends plan to go to college (1=yes); TSOI=teachers affect plans for college; EDEX=highest education student plans; ABIL= R's ability factor score; EDUC=R's education; OCCSEI=R's occupational status (SEI); FINC=R's total family 1985 earnings (dollars).

\*\*\* Significant at .001 level.

\*\* Significant at .01 level.

\* Significant at .05 level.

## SUMMARY AND CONCLUSIONS

In this section, we summarize the results of this study and draw conclusions regarding the trends in the life chances of rural youth and how they may be related to rural development policy in the United States. This summary is organized around the three issues of: (a) estimating the existence and magnitude of any social costs of growing-up in rural America for socioeconomic achievements later in adulthood; (b) identifying some mechanisms within a status attainment model by which social costs are manifested into adulthood; and (c) assessing whether rural-to-urban migration represents a means to escape any systematic social costs which may be identified. Finally, the future of Federal rural development policy is discussed in terms of both these findings and the context of policy-making regarding rural America.

### Trends in the Social Costs of Rural Origins in America

The specific results pertaining to the effects of rural background at age sixteen on socioeconomic outcomes in adulthood were rather detailed, particularly for the cumulative GSS database. To facilitate the summary of these results, we constructed bar charts of the trends in the effects of rural farm and rural non-farm origins on education (Figure 5), occupational status (Figures 6 and 7), and family income (Figures 8 and 9) by major period during this century.

Clearly, the effects of rural origins on completed schooling have diminished during this century (see Figure 5). The larger deficit observed for rural farm youth has also become near zero in recent decades. This seemed to occur during and just after World War II, coinciding with the G.I. Bill and the rapid expansion of higher education throughout the United States. While we cannot isolate the effects of specific legislation with these data, twenty years or so after this important avenue of social opportunity was implemented, the negative effects of rural origins, after

controlling for other social background factors, have become generally ameliorated.

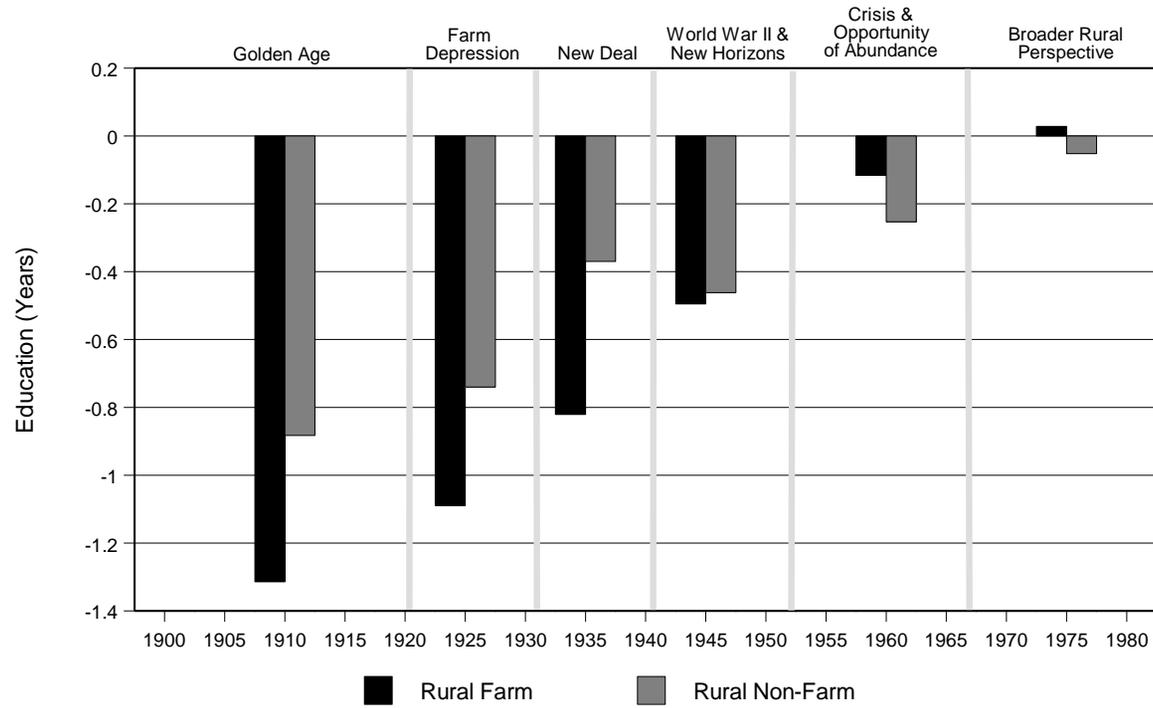
Occupational success, in terms of the social status attached to the job title, has a generally similar pattern, as shown in Figures 6 (total effects) and 7 (direct effects). Both rural farm and non-farm youth fared lower on the occupational status ladder during the Golden Age of rural development policy (1900-1920), averaging from two to three points lower on the Duncan Socioeconomic Index. In absolute terms, this differential in the SEI is not large but, considering that parental background and other demographic factors are statistically held constant, it is a demonstrable impediment to success faced by rural youth around the turn of the century. During the Depression era (1921-1932), farm youth continued to face this cost of their birth whereas rural non-farm youth experienced smaller deficits in occupational status. This pattern reversed by World War II, as the shift occurred during the expansion of the American economy in the post-war boom period of the fifties. The effects of rural origins had subsided to less than a single point on Duncan's SEI. While the most recent period suggests a complete reversal in social costs, toward an actual social "benefit," or positive effect of rural origins on occupational attainment, we must caution that the sample size makes these results tenuous to interpret. From an inspection of Figure 7, we might conclude that *all of these occupational status differentials are attributable to unequal educational attainments*. The direct effects by period shown in this graph have all been reduced to near-zero, with the exception of the most recent period (1967-1980).<sup>7</sup>

The results for family income among those who spent all or part of their youth in rural America paints a strikingly different picture

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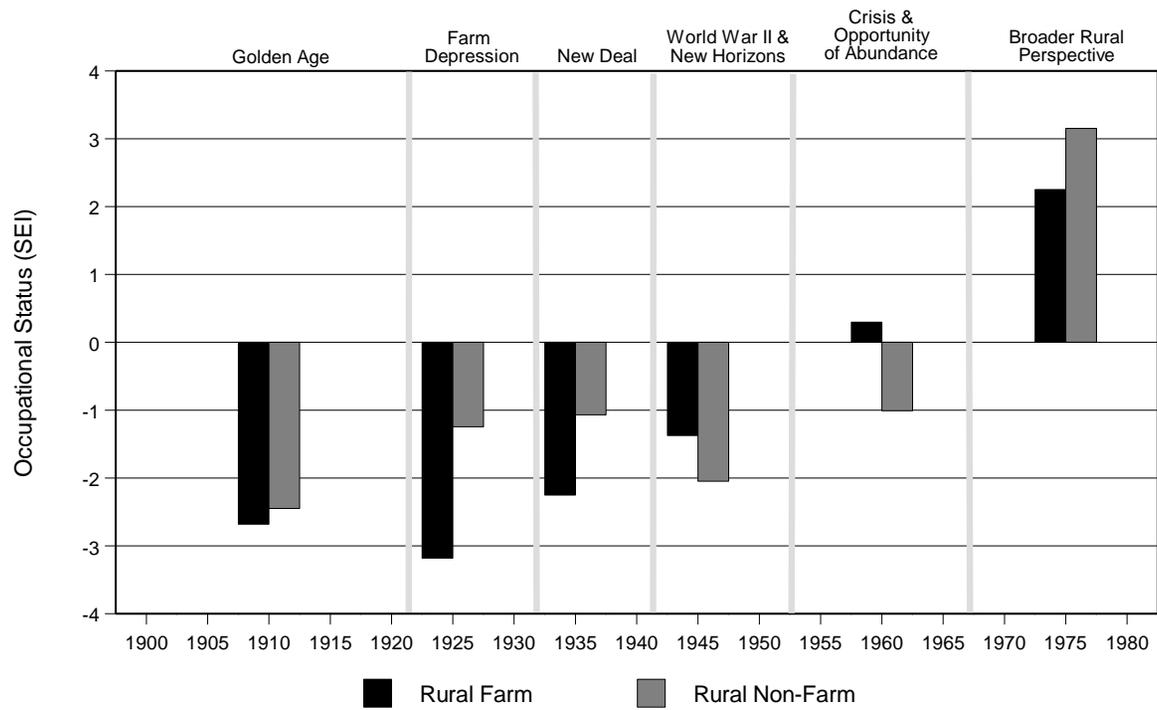
<sup>7</sup> While the "deficits" in this late period have apparently turned into "assets," we urge caution concerning the results for this period with the GSS data due to the relatively smaller sample size.

Figure 5. Trends in Total Effects of Rural Origins on Education in Adulthood by Major Period of Rural Development, 1900-1980



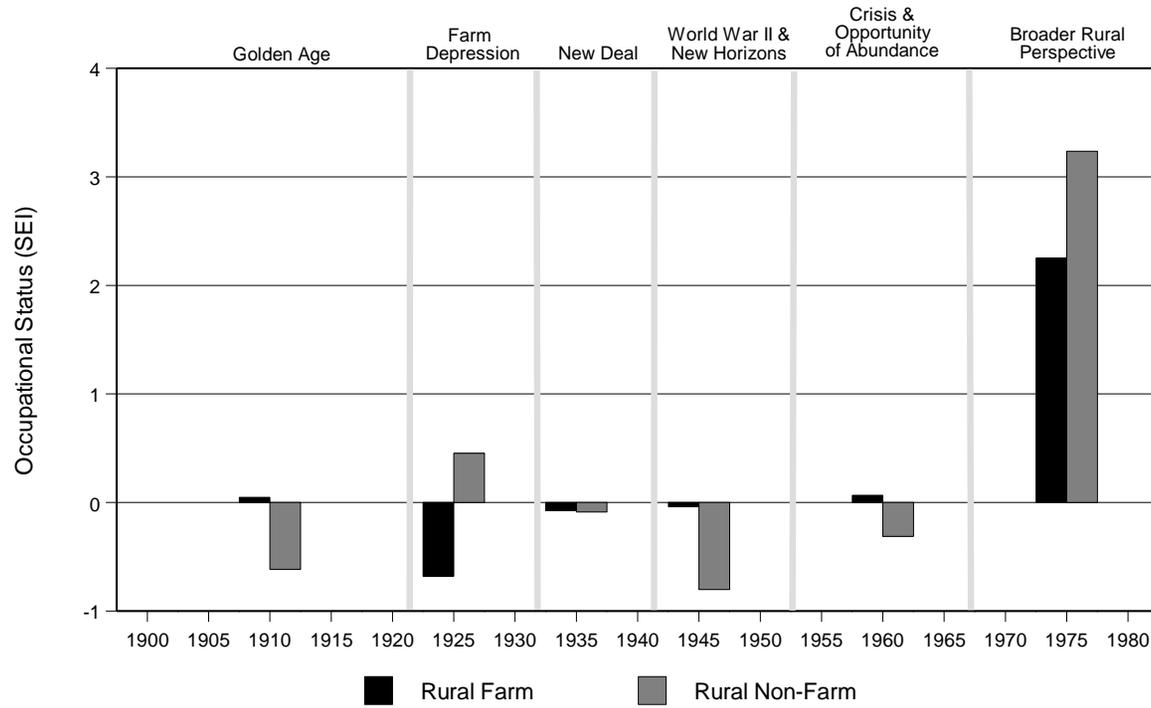
Source: NORC General Social Surveys, 1972-1994

Figure 6. Trends in Total Effects of Rural Origins on Occupational Status in Adulthood by Major Period of Rural Development, 1900-1980



Source: NORC General Social Surveys, 1972-1994

Figure 7. Trends in Direct Effects of Rural Origins on Occupational Status in Adulthood by Major Period of Rural Development, 1900-1980



Source: NORC General Social Surveys, 1972-1994

(see Figures 8 and 9). *These results suggest that family income inequalities for rural-origin persons—especially those not living on farms where rural development efforts have been most directed—have actually become greater since World War II.* The average social cost of a rural farm background amounted to just under \$4,000 in 1993 dollars for the 1900-1920 cohort. For rural non-farm youth, the same cost during this period was just over \$2,000. During the Depression period, both groups experienced a social deficit of about \$4,000 due to the residential origins of their youth. During the New Deal (1933-1940) these burdens were cut by at least one-half, to just under \$2,000 for farm-origin youth and to less than \$500 for rural non-farm youth. Since the second World War era, these effects for rural farm origins have fluctuated around \$1,000. However, for the rural non-farm population, these family income effects have increased steadily. While the estimate for the most recent period of rural development must be regarded cautiously (see footnote 6), we are struck with how the pattern of effects seems to fall in line with the trends for the preceding two periods and in balance with the farm versus. non-farm rural populations.

When we examine the period-to-period trends in the direct effects of rural origins on family income, we can observe a pattern that seems fundamentally distinct from that for education and occupational status. For example, education and occupational status tend to serve as substantial mediators of the influence of rural origins on family income for farm youth in the United States. The direct effects of rural farm origins on income are systematically smaller once education and occupational status are controlled in the model. For rural non-farm youth, however, rural background retains larger portions of its total effects on family income, independent of completed schooling and occupational status during adulthood. The shape of the trends for rural non-farm youth mirror those of the total effects shown in Figure 8. Thus, *education not only serves as somewhat less of an important arbiter of income inequality between rural and urban youth for their economic well-being in adulthood, it appears to function significantly less so for the non-farm segment of the rural population.*

## **The Construction of Social Costs among Rural Youth in America**

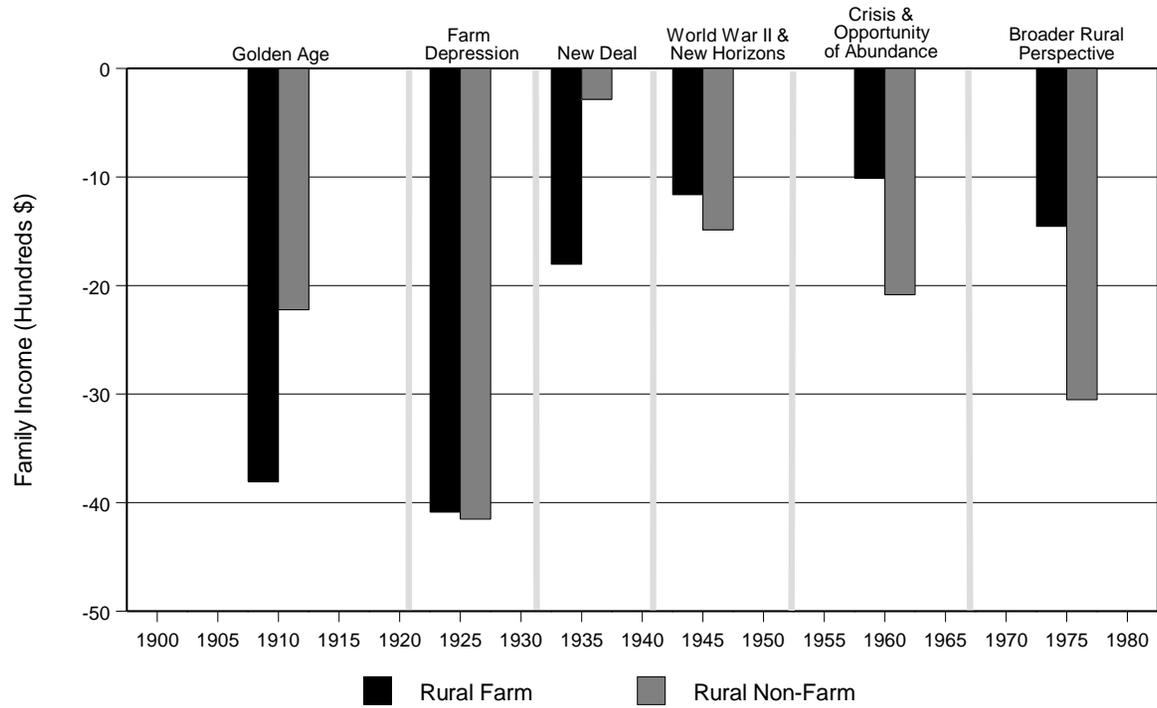
Using the status attainment perspective on the social psychological process shaping individual life chances in the United States, we tried to identify how the negative effects of rural origins are manifested in socioeconomic outcomes during the adult years.<sup>8</sup> Analyzing the cumulative GSS series, we found that education is the conduit through which most of these deficits occur for occupational status, aside from being an important element of these outcomes itself. That is, once completed schooling entered the equation, the effects of rural background on occupational attainments are almost zero. As is well-known in the literature (Otto and Haller 1979), the major determinants of family income appear to work through a process not captured through the specification of the status attainment models.

The results from the Wisconsin social psychological model estimated using NLS-72 data revealed a pattern of effects which does help identify mechanisms which lead to rural youth obtaining less education and occupational status. Most of the effects of rural origins are mediated through completed education and the effects on education are transmitted through the formation of a student's plans as of the senior year of high school. Educational plans are influenced negatively by a rural residence, largely because a student's mother

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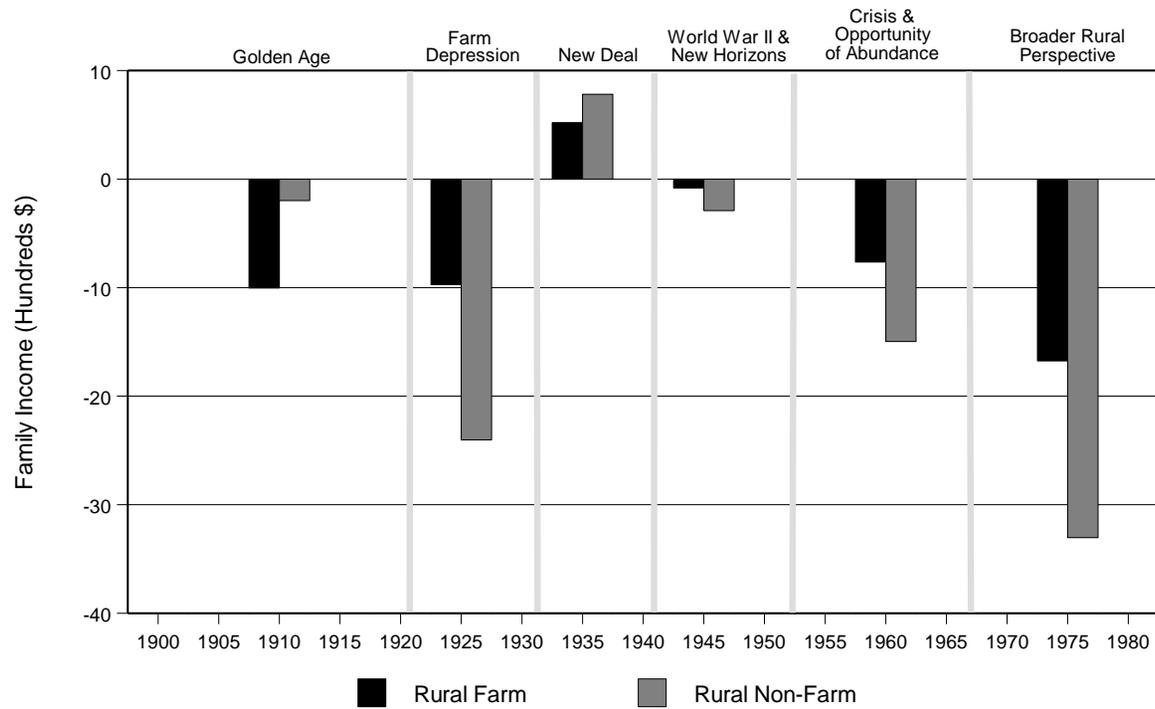
<sup>8</sup> This perspective places much of its emphasis on individual-level human capital factors in the explanation of socioeconomic achievements, to the exclusion of more structural elements of labor markets and the economy (see Falk and Lyson 1988 and citations therein). We would have preferred to have measures of economic sectors, class position, and local labor markets and their characteristics, for example, to examine simultaneously with human capital factors in this study. However, their unavailability for earlier periods serves as a practical constrain on most research which wishes to understand periods of social change which precede the previous couple of decades or so. That constraint is certainly true for our study as well.

**Figure 8. Trends in Total Effects of Rural Origins on Family Income in Adulthood  
by Major Period of Rural Development, 1900-1980  
(Constant 1993 \$)**



Source: NORC General Social Surveys, 1972-1994

**Figure 9. Trends in Direct Effects of Rural Origins on Family Income in Adulthood  
by Major Period of Rural Development, 1900-1980  
(Constant 1993 \$)**



Source: NORC General Social Surveys, 1972-1994

and father do not appear to expect the student to complete as much schooling as other non-rural adolescents. Friends of rural youth do not expect to attain as much schooling either and the influences of parents and friends serve to transmit the lion's share of the negative effect of rural origins. Thus, *the construction of the social costs of rural origins on education and occupational status appears to largely be a constructed reality through the "definition of the situation" applied by two powerful sets of significant-others: parents and peers* (see Otto and Haller 1979).

Ironically, the expectations held by teachers are unaffected by the rural backgrounds of high school seniors, unlike those of the students' parents and friends. The fact that these expectations also have no effect on the students' own plans compounds the inability of the school to intercede in this process of residential inequality. While this study cannot begin to adequately examine the role that rural families or schools play, either separately or in concert (e.g., Howell 1989b), in fostering or hindering educational equality for rural youth, our findings can certainly contribute to demonstrating the need for more multi-level studies which allow this type of assessment.

It is important to understand the process through which rural-origin adults incur social costs in family income and the scope of this study was unable to do that. However, part of the story is already being told in the work of other scholars who have more thoroughly examined the institutional changes that have taken place in rural America, especially in the South (Lyson 1989; Lyson and Falk 1993; Falk and Lyson 1988; Swanson and Brown 1993). When the industrial and labor market structures from earlier in this century are mapped into empirically-demonstrable form, perhaps it will be possible to incorporate more elements of the structural organization of local economies and labor markets into historical-comparative assessments of the social costs of rural origins.<sup>9</sup>

### **Can Rural Youth Move Away from the Costs of Their Origins?**

In one sense, the clearest answer is,

simply, no. We did not observe any substantial effects of rural-to-urban migration on socioeconomic attainments in adulthood during the major periods of rural development policy using the cumulative GSS database. The only such effects were sporadic and not patterned according to our theoretical expectations, which were that migration from the rural hinterlands to the city during the early part of the century would have produced large positive effects on status attainments and the magnitude of these effects would have declined, perhaps even diminished, approaching the most recent period of rural development policies.

On the other hand, the specification of migration during the adolescent-to-adulthood period of the life course as causally occurring between education and occupational attainments makes the disentanglement of education and migration difficult. Given that we found the conduit of rural origins on occupational status and, partially, family income to be completed schooling, we believe that migration behavior would be an unlikely mediating factor for these effects. Other studies of the migration behavior of rural youth have found that the most important size-of-place move was the first one after high school (Howell and Frese 1983; Zuiches and Rieger 1978). Thus, our results using the GSS database may not rule out the importance of migration in the life chances of rural youth, but they do not serve to confirm it or indicate any trends related to major periods of rural development policy-making.

We did observe in the NLS-72 panel data, however, that migration behaviors operate as was hypothesized: rural-to-urban movement enhanced occupational status and family income while urban-to-rural migration re-

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<sup>9</sup> For instance, if we had operationalizations of labor markets or segments of the economy (e.g., Killian and Tolbert 1993) that went back to the turn of the century, then we might be able to use multi-level models to examine the structural and human capital effects on family income or personal earnings among rural- and urban-origin individuals. That work must remain an agenda item for the future.

duced these socioeconomic outcomes. The magnitude of these effects are important enough to warrant further study and leave us with the acknowledgment that, at least among the most recent period of rural development policies, migration away from rural origins might indeed be linked to better socioeconomic well-being. On the down-side, that rural-origin adults in the NLS-72 panel had to move away from their residential environs for socioeconomic advantages, *ceteris paribus*, is less than desirable from the perspective of the goals of rural development. Moreover, for urban-to-rural adults to encounter similar economic deficits through moving to a rural area (and, ostensibly, a rural labor market), while not a desirable outcome, tends to corroborate the need for further study of the linkage between micro-level migration processes and institutional-community characteristics (Fuguitt 1993). In short, one inference from the NLS-72 data is that it seems to be rural areas that produce lower family incomes rather than the socioeconomic origins or human capital characteristics of persons choosing to remain there or to move there from urban-origins.

### **Rural Development Policy: Where to from Here?**

We began this study with the observation that rural development policy programs have been justified on the premise of improving the lives of rural citizens. But, as the U.S. General Accounting Office recently concluded, there has been little in the way of a common perspective among these initiatives over the years (U.S. GAO 1994). The GAO also recognized that rural development programs have been “too narrowly focused,” an assessment generally shared by other analysts of policies created to better the well-being of rural entities (Wimberley 1993; Zuiches 1991; Deaton et al. 1994). Those issues are growing in their importance to both scientific audiences and the general public, for the latter’s shift toward an “urban-centric” view of America creates a shrinking constituency which is clearly supportive of production-agriculture (see Cosby 1996).

While those authors’ already mentioned

(e.g., Deaton et al. 1994; Wimberley 1993) have assessed rural development policy in a broader perspective, we approach our discussion of the future of these policy actions from a concern with the life chances of people of rural origins. If the principal purpose of rural development action is to make the living conditions of rural citizens better, and the opportunities for greater well-being to be on par with those residents of urban areas, then the life chances of those whose origins is an accident of birthplace is a criterion-based indicator of the success of these actions.

Even so, we should point out some important social context to the logic of this assertion. Our discussion has placed a large weight on the importance of Federal rural development policies and program initiatives to affect the lives of rural residents and, moreover, to be the *only* source of influence on their well-being. Even if the legislative justification for such Federal initiatives is consistent with such weighty goals (Wimberley 1993), there are a number of other programs which may simultaneously influence both “rural development” and the life-chances of the rural population.<sup>10</sup>

Perhaps the most sanguine assessment of the context of these results is that, if the costs of rural origins had been observed to have declined to zero (i.e., the negative effects of rural origins systematically declined over each successive period to approach non-significance), then programs aimed at rural development objectives may or may not have been responsible. On the other hand, if the costs of growing-up in rural America did not diminish, then the relevant question is: were rural development programs themselves to blame? It could just as easily be argued that the socioeconomic deficits experienced by rural youth later in adulthood would have been even greater had these programs *not* been in place. In short, it is virtually impossible to completely isolate a “program effect” which has as broad a mandate and target audience as do Federal

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<sup>10</sup> Many of these other “program effects” are from alternate public sectors—state and local governments—and from the private sector.

rural development initiatives, particularly after-the-fact using post-hoc research designs. But, an incentive to make such programs more efficient (GAO 1994), is the realization that the opportunities faced by rural youth are less than those growing-up in urban areas.

With these qualifications in mind, the most critical conclusion about Federal rural development programs aligns itself with the spirit of the GAO report (1994). Educational completion deficits associated with rural origins have appeared to diminish—perhaps largely due to the unintentional “rural development” effects of the GI Bill—and, as a consequence, so have deficits in occupational status. But these programs may have, at best, reduced rural-origin costs in real family incomes for those from farms. We find no evidence for such effects which benefit rural non-farm origin youth. To the contrary, their “costs” have appeared to increase in real dollars since World War II.

Future rural development policy should consider the following issues, among others, in defining a course of action. Some of these issues are part of Federal-State initiatives that are currently underway.

**Recognize the pluralism of rural America.** The rural-to-urban demographic shift over most of this century coincided with a redefinition of the cultural “pulse” of America as residing in “urban centers,” where high culture, communications, transportation, and commerce became concentrated. The “typification” of rural America became that of “farming.” Rural-ness became defined in terms of the lack of urbanization (see Cosby 1996). This definition-of-the-situation reduces public policies on rural development today to initiatives which are largely agricultural policy actions (Wimberley 1993). The heated congressional debate over the 1996 Farm Bill reflects some of the consequences of this historical shift in definitions about what is “rural” and what is not (Swanson and Brown, 1993; see also Falk and Pinhey 1978). Whereas there seems to be a declining political base of support for government action to intervene in production-agriculture, based on the numbers of farms and the farm population itself, the continued justification of these actions as similarly contributing to all rural development

further masks the pluralism of rural America.

The demographic patterns in the U.S. over this century show that the total rural population (primarily non-farm) has stabilized at around one-fourth of the population of the nation as a whole. The growth of the rural segment of the U.S. population has been increasing during the past twenty-five years as much or more than at any point since 1900. Essentially, the rural population is not “going away” and an urban-centric perspective on rural issues as synonymous with those of production-agriculture is in error and, we believe, fundamentally misguided. Moreover, agriculture’s importance is not diminished by the recognition of this rural pluralism.

**Agricultural policy does not necessarily reflect rural (non-farm) development.** While the periodic Farm Bill is perhaps the single most important federal policy which is justified partly under the rubric of rural development, it is critical to understand the social system and context which underlies the pluralistic landscape defined largely in terms of its lack of “urban-ness” (USDA Economic Research Service 1996; Cosby 1996). For instance, in this study using the GSS data, we find that in recent decades the consequences of rural farm origins for family income in real dollars has a much less negative effect than it does for rural *non-farm* origins. Is this somehow an unintended result of the Federal policies directed at the farm population and not at the rural non-farm population? Frankly, we do not know, but it represents either an anomaly in these data or a subtle indicator for further investigation along the lines of this issue. We hope that, indeed, it is further investigated in ways that may more accurately identify its root causes.

**Determining Rural Development Policy Domains.** How should the Federal government assess the dimensions and priorities in rural development policy? Wimberley (1993) uses employment in certain sectors of the economy as a vehicle for measuring the magnitude of the “policy domains” involving rural America. While this is a novel approach, the indicator used to create the size of the policy domain has its drawbacks and limitations.<sup>11</sup> Nonetheless, his attempt to indicate how non-agricultural, nonmetropolitan

employment reflects an important sector of the labor force, to which agricultural policy does not directly address, is indeed insightful.

More work which falls outside the parameters of conventional thinking about rural development is needed to thoroughly develop these dimensions of the federal policy nexus involving rural America. We believe that it will require the attention of scholars, policy-makers, and citizens from many sizes-of-place to do so.

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<sup>11</sup> For instance, the use of employment, as opposed to resident population, excludes the “dependency ratio” of children and the elderly for policy-relevance as well as over-represents the male population in any given area since men tend to commute further on the average to their place of employment, in comparison to women (Howell and Bronson 1996).

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