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The Poverty of Wealth and Income in the United States

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THE POVERTY OF WEALTH AND INCOME IN THE UNITED STATES

by

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A Professional Project submitted to the Faculty of the Graduate School, Marquette University, in Partial Fulfillment of the Requirements for the Degree of Master of Leadership Studies

Milwaukee, Wisconsin

May 2011

Abstract

An alternative poverty rate was calculated using poverty thresholds from the U.S. Census Bureau to assess income poverty and a similar set of thresholds at four months' of the poverty threshold for annual income to assess wealth (i.e. net worth) poverty. Using point estimates derived from the multiple imputations of the Survey of Consumer Finances (SCF) between the years of 1989 and 2007, the findings revealed the percentage of households in poverty by both measures was 6% in 2007 compared to 11.1% of households experiencing poverty of income only and 22.4% experiencing a poverty of at least one of the measures. The author assessed the demographics of the households experiencing poverty of both income and wealth and found a larger racial gap for African Americans and Hispanics than income poverty alone, support for the lifecycle hypothesis, and the importance of home ownership in lower poverty rates among other factors.

Keywords: poverty, wealth, net worth, income, demographics, trends

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The Poverty of Wealth and Income in the United States

Poverty has come to be understood as a multidimensional concept with different measures and indicators (Heady, 2008; Narayan, 2000). However, it is still traditionally reported as a financial measure of well-being based on income alone (Heady, 2008). Even as a financial measure of well-being, however, income is insufficient in describing a person's or household's "potential command over resources" (Heady, 2008, p. 24). As a flow of resources or 'stream' concept, income tells only one part of the story on financial well-being (Kennickell, 2007, 2009). Wealth is a stock or 'pond' concept that has gained increased attention in recent years and represents greater financial security than income alone (Keister & Moller, 2000; Kennickell, 2007, 2009). Wealth has been shown to be only loosely related to income, signifies greater prestige, political power, and autonomy, and has relationships with health and child achievement independent of income (Keister & Moller, 2000; Kennickell, 2007; Orr, 2003; Shanks, 2007; Wright, 2000).

The purpose of this study is to examine poverty as a financial measure of well-being consisting of both income and wealth measures. It uses data obtained from the Survey of Consumer Finances (SCF) and seeks to understand similarities and differences between the demographics of the income poor, the wealth poor, and those who are considered poor by both an income and wealth measure.

Poverty Concept and Measures

It is worth noting that poverty has become more complex and nuanced in recent years. Amartya Sen (1993), for instance, treats poverty as a failure to meet basic or minimally acceptable capability levels, or rather to lack effective freedom of choice in

how to live one's life (Sen as cited in Heady, 2008). While not directly tied to income, having income as means to obtaining something like nutrition can be compared to having the capability of achieving a valued functioning, such as nutrition (Sen, 1993). In fact, in many developing countries, the 'poverty line' is expressed as a function of nutritional norms (a basic need) as opposed to income, which is a *means* to obtain basic needs (Sen, 1993).

Another perspective comes from the World Bank, which sought to understand poverty from the viewpoint of those living in poverty (Narayan, 2000). It demonstrated the multi-dimensional nature of poverty by documenting such factors as infrastructure, access to aid, voice, empowerment, social solidarity, and others as the many different facets of poverty that individuals and communities experience across the globe (Narayan, 2000).

Traditionally, however, poverty has been thought of as a deprivation in economic or *financial* well-being (Heady, 2008). The current poverty measure in the U.S. as documented by the U.S. Census Bureau is still based on the one originally developed in the 1960s as "an indicator of the number and proportion of people with inadequate family incomes for needed consumption of food and other goods and services" (Citro & Michaels, 1995, p. 1). A household or family is deemed to be poor if it is below the appropriate threshold. There are 48 thresholds established annually based on the size of the family unit, the number of children under 18 years of age, and the age of the head of household (U.S Census Bureau, 2011). According to Citro and Michaels (1995):

The current thresholds were originally developed as the cost of a minimum diet times three to allow for expenditures on all other goods and services. The multiplier of three represented the after-tax money income of the average family in 1955 relative to the amount it spent on food. The central threshold for 1963 was about \$3,100 for a family of four (two adults and two children). Because the thresholds have been adjusted only for estimated price changes, the 1992 threshold for a two-adult/two-child family of \$14,228 represents the same purchasing power as the threshold of \$3,100 did 30 years ago. (p. 2)

The updated 2009 poverty threshold for a two-adult/two child family was \$21,756. For 2007 (the year of the last reported survey from the Survey of Consumer Finances), it was \$21,027. (The full matrix of the U.S. poverty thresholds provided by the U.S. Census Bureau for 2007 can be found in Appendix A). The National Academy of Sciences admitted no measure is without flaws, but it recommended a new poverty measure due to several weaknesses of the original measure related to child care, health insurance, and regional differences among others (Citro & Michaels, 1995). Supplemental measures are reported, but the original measure continues to be used to determine the official poverty rate in the U.S. And while deficiencies in the measure have been noted, the focus has remained on income as the predominant measure of financial poverty in the U.S.

Even as a financial measure of poverty, however, income alone is not a full picture of a person's or household's "potential command over resources" (Heady, 2008, p. 24). One could be income poor, for instance, but have an accumulation of wealth to draw on for consumption (Heady, 2008; Keister & Moller, 2000). Likewise, an individual or household could have a reasonable income but little to no (or negative) wealth producing a tenuous financial position (Keister & Moller, 2000). A deprivation of both income and wealth identifies those who are truly in the throes of financial poverty.

A deprivation of either income or wealth may not be as dire a situation but represents financial vulnerability nonetheless. The concept of wealth therefore is important to the discussion on financial well-being and poverty and is now discussed in greater detail.

Wealth vs. Income

Income (i.e. wages and salaries) and wealth (i.e. net worth) are both meaningful financial indicators; however, they hold different meanings (Keister & Moller, 2000). Keister and Moller (2000) report that wealth bestows social prestige and contributes to political power. While the same might be said of income, wealth affords the ability to make contributions without affecting current consumption. Wealth additionally avails the household to financial security in the face of financial shocks such as job loss that income often cannot provide (Keister & Moller, 2000). Moreover, wealth can itself generate income through returns on assets (Keister & Moller, 2000). To the extent that people can live off these returns, there is greater autonomy than those who must rely on an income from the labor market to obtain subsistence (Wright, 2000). Besides the meaning each conveys, there are both conceptual and empirical differences that are discussed further below.

Definitions

Income is generally based on wages and salaries but it can include quite an array of items as identified by Kennickell (2009):

In the SCF, the elements of income directly available are wages and salaries; selfemployment and farm income; tax-exempt interest; taxable interest; dividends; returns from real estate, partnerships, subchapter s corporations, trusts and estates; realized capital gains and losses; payments from unemployment insurance or workmen's compensation; pension (including pension account withdrawals), Social Security, annuity and disability payments; various types of welfare; alimony and child support; and miscellaneous income. (p. 5)

Some might argue to exclude some of these components or include others. For instance unrealized capital gains, employer contributions to retirement plans, or even 'psychic' income from families or social structure might be included in some definitions but are excluded here as they would rely more heavily on assumptions than data (Kennickell, 2009, pp. 5-6). The definition used by the SCF is used herein for the sake of simplicity in working with the data. It is also noteworthy that income contains several components (such as interest, dividends, and returns from other assets) that are generated from wealth separate from wages and salaries (Keister & Moller, 2000).

Wealth on the other hand is defined as a household's net worth (Keister & Moller, 2000; Kennickell, 2009). It is calculated by taking the difference between total assets and total liabilities or debt (Keister & Moller, 2000; Kennickell, 2009). While seemingly a simple calculation, the details on how to capture and categorize the information can again become numerous and subjective but are guided by the same principle as before in relying on data more than assumptions. (Kennickell, 2009). Assets are generally considered to be composed of either financial or nonfinancial assets (Kennickell, 2009).

The financial assets measured in the SCF include current values of deposits and cash accounts (i.e. transaction accounts, savings accounts, money market accounts, and call accounts), securities traded on exchanges (i.e. stock, bonds, exchange-traded funds, futures contracts, etc.), mutual funds and hedge funds, annuities, cash-value life

insurance, tax-deferred retirement accounts (i.e. IRAs, Keoghs, and 401(k) accounts), loans made to other people, and other miscellaneous assets (Kennickell, 2009).

The measured nonfinancial assets include current values and characteristics of principal residences (farms, mobile homes, apartments, condominiums, co-ops, houses, etc.); other real estate not owned by a business; corporate and non-corporate private businesses; a selection of durables including cars, trucks, motorcycles, boats, airplanes, and miscellaneous other vehicles; and miscellaneous valuables, such as antiques, jewelry, precious metals, etc." (Kennickell, 2009)

Total assets then is the sum of the financial and nonfinancial assets. Net worth is obtained by subtracting total liabilities or debt.

The debt data include measurements as of approximately the time of the interview of the outstanding balances on credit cards, lines of credit and other revolving accounts; mortgages on a primary residence as well as second homes and investment properties not owned by a business; installment loans and similar loans for vehicles, education and other purposes; loans against pensions and insurance policies; money owed to a business owned at least in part by the family; personal loans taken out by the family for such a business; and miscellaneous other personal loans. (Kennickell, 2009, p. 6)

If a household's debt exceeds its total assets, it has negative wealth or net worth.

Linkages and the Life Cycle Hypothesis

Income and wealth are inextricably linked. After all, the difference between income and consumption equals the change in wealth for a given period (Heady, 2008). If one spends more than s/he earns, the result is a decrease in wealth. If one earns more

than s/he spends, however, the result is savings and an increase in wealth. There are of course situations which will affect wealth to a greater extent. There is much literature on the effect of inheritance, for instance. Modigliani (as cited in Keister & Moller, 2000) "found that transfers—both inter-vivos, made between living persons, and bequests, made after the death of the giver—account for only 20% of the net worth of US families" (p. 72). Yet the bulk of the research shows it accounts for at least more than 50% and possibly more than 80% of U.S. families' net worth (Gale & Scholz and Kotlikoff & Summers as cited in Keister & Moller, 2000).

The life cycle hypothesis is also widely cited. Ando and Modigliani (as cited in Chen & Finke, 1996 and Keister & Moller, 2000) developed the life cycle hypothesis, which suggests families will accumulate wealth during working years to support consumption in older age. Accordingly, it would be expected that a household's net worth should increase until retirement age at which time it would begin to drop (Ando & Modigliani as cited in Keister & Moller, 2000). During early adulthood, which is characterized by lower income and higher spending needs, it would be expected that wealth accumulation is low (Chen & Finke, 1996). In fact, taking into view the concept of total income across the life cycle, a household might spend beyond its earnings (incurring negative net worth) if real income is expected to increase (Chen & Finke, 1996).

"While the lifecycle hypothesis is conceptually appealing," (Keister & Moller, 2000, p. 72) empirical support has been mixed (Chen & Fink, 1996; Keister & Moller, 2000). Keister and Moller (2000) present support from many authors that dissaving does occur after retirement, but it does so at a much lower rate than expected by the life cycle

hypothesis. This could be due to a decline in expenditures during retirement, uncertainty to the length of life, and the desire to leave an inheritance to children (Cheal, Davies, Hurd & Mundaca, and Osberg as cited in Keister & Moller, 2000).

Lydall (as cited in Chen & Finke, 1996) "found that mean net worth grew steadily with the age of household heads in the United Kingdom until age 64, after which mean net worth decreased slightly" (p. 88). Hanna and Prather (as cited in Chen & Finke, 1996) also found age and income to be the key variables in predicting net worth using data from the Survey of Consumer Finances. However, Hendricks (2007) found the correlation coefficient to be a less than perfect 0.61 between retirement wealth and lifetime earnings. Similarly, Hendricks (2007) found the average Gini coefficient of retirement wealth to be 0.54 within lifetime earning deciles, which is comparable to the Gini coefficient of retirement wealth across all households. Each decile in this analysis also contained households with no wealth (Hendricks, 2007). "Wolff concluded that the life cycle hypothesis was only appropriate to explain the behavior of the 'primary working class' – namely white, urban and educated middle classes and their accumulation of housing, durables, and cash" (Chen & Finke, 1996, p. 88). It could not explain the behavior of the rich (who may receive inheritances) or the poor (who may not have enough income to accumulate wealth) (Wolff as cited in Chen & Finke, 1996). Chen and Finke (1996) found other researchers who ignored households with negative net worth assuming them to be poor.

There are further divergences in the literature between wealth and income. For instance, Keister and Moller (2000) note the loose correlation between the two in a critique on wealth inequality.

Estimates of the survey data during the 1980s suggested that the correlation between income and wealth was about 0.50, and that much of this already-weak correlation was attributable to the inclusion of asset income (income generated by wealth) in the definition of total income. When asset income was removed from total income, the correlation between income and net worth dropped to 0.26" (Lerman & Mikesell as cited in Keister & Moller, 2000, p. 65)

The weak correlation could be due to several reasons. Many with very high levels of wealth have low earnings because they can support consumption from income derived from assets (Wolff as cited in Keister & Moller, 2000). Also, those in retirement often have low incomes but continue to accumulate wealth (Radner as cited in Keister & Moller, 2000) documents that racial differences in savings and asset accumulation would also account for differences between income and wealth. "In fact, many families, particularly nonwhite families, have zero or negative net worth regardless of income" (Radner and Winnick as cited in Keister & Moller, 2000). This may partially explain Hendricks' findings that each lifetime earnings decile contained households with no wealth. Therefore, it is expected that there are households below the poverty line that are living comfortably off previously acquired assets as well as households living above the poverty line with considerable debt making them vulnerable to decreases or termination of their current income (Keister & Moller, 2000).

Wolff (1990) supports the notion that "current income may not be the best indicator of poverty status" (p. 143) due to the different dynamics of poverty status. Some families' experience of poverty may be transitory in nature due to "a temporary

period of unemployment, illness, or the like, or a recent change in family status, such as divorce" (pp. 143-144). For others, poverty may be a persistent condition with a history of low income and an inability to accumulate wealth (Wolff, 1990). Stern (2008) found a significant difference between these groups with nearly one-third of people experiencing a spell of poverty lasting two or more months during the three year period from 2001 to 2003 compared to just 2.4% of the population experiencing chronic poverty, measured as living below the poverty level for all 36 months of the period. What is not known is the level of wealth people had to maintain consumption during the periods of episodic poverty experienced.

Inequality

Differences in wealth and income also extend to inequality (Keister & Moller, 2000). Wolff (as cited in Keister & Moller, 2000), for instance, found in 1989 that "the top 1% of wealth owners held 38.9% of total household wealth, while the top 1% of income earners received 16.4% of total household income" (p. 65). Likewise, the top quintile of wealth holders owned almost 85% of the total household wealth compared to the top quintile of income earners who received just over 50% of the total family income (Keister & Moller, 2000, p. 65). Kennickell (2009) in a more recent and comprehensive analysis documented the nature of the Gini coefficient as well.

The Gini coefficient is a measure of inequality based on the Lorenz curve where a value of zero represents perfect equality (i.e. each person owns an equal share of wealth or income) and a value of one represents perfect inequality (i.e. one person owns all shares of wealth or income) (Keister & Moller, 2000; Kennickell, 2009). The Gini coefficient for wealth in 2007 using the Survey of Consumer Finances was reported as

0.8121" (Kennickell, 2009, p. 13). This was significantly higher than the 1989-98 surveys; however, the measure appears to change slowly as none of the changes from survey-to-survey have been statistically significant (Kennickell, 2009). The Gini coefficient for income, on the other hand, was reported as 0.575 in 2007, approximately 30% smaller than the value for wealth (Kennickell, 2009). Additionally, "each value is significantly different from the value for the preceding survey" (Kennickell, 2009, p. 16). The Gini coefficients from the analysis are provided in Table 1 below.

Table 1

Gini Coefficients for Net Worth and Income, 1989-2007

	1989	1992	1995	1998	2001	2004	2007
Net Worth	0.7863	0.7808	0.7841	0.7935	0.8030	0.8047	0.8120
Income	0.5399	0.5005	0.5146	0.5302	0.5643	0.5406	0.5745

While both net worth and income have been increasingly unequal since 1992 (save for income in 2004), the consistent gap between wealth and income inequality is apparent.

Inequality can also be linked to poverty (Levitan & Wieler, 2008). Levitan and Wieler (2008) illustrated that equally shared increases in real income shift the entire income distribution resulting in lower poverty; however, "increases in inequality (assuming they occur at least in part in the lower tail of the distribution) will raise the proportion in poverty" (p. 24). Their study showed empirical evidence of increasingly unequal earnings in New York City from 1979 to 1999. During this period, there was extraordinary growth in mean income that would have been expected to be associated with a seven percentage point decrease in the poverty rate (Levitan & Wieler, 2008).

However, New York City instead saw a 1.8% increase, from 20.2% to 21.9% (Levitan & Wieler, 2008). Levitan and Wieler (2008) found that the gap between the expected reduction and actual increase was largely due to the increase in inequality. They attributed a 6.4% increase in the poverty rate (offset by the decrease due to mean income) to inequality and another 2.5% increase due to changing demographics that made it more prone to poverty. The impact of income inequality was substantial in this example yet income inequality, however severe, is significantly lower than the inequality of wealth.

Wealth Relationships

Wealth is also found to have relationships with important personal and social factors of well-being independent of income. One key relationship has been the link between one's wealth and various health indicators. Kennickell (2007) posits that high levels of wealth are an indication of a history with fewer negative shocks or more positive ones and act as a sort of insurance. "To the extent that possession of wealth leads people to feel more secure, it may also lead indirectly to lower levels of stress and deleterious stress-related behaviors and outcomes that could, in turn, have consequences for future income" (p. 9). The 1967 Whitehall Study of U.K. civil servants and numerous others have supported socioeconomic ties to morbidity and mortality, but "the relationship between health indicators and economic measures has often been contaminated by measurement problems" (Kennickell, 2007, p. 1). Kennickell (2007) using data from the Survey of Consumer Finances found that wealth independent of income was a factor in reduced smoking, better health status, greater longevity, and coverage by health insurance.

Wealth has also been shown to be associated with several child development factors. Orr (2003) found wealth to have a positive effect on child achievement (measured by standardized scores on the mathematics subscale of the PIAT) even after other indicators of socioeconomic status were held constant. Moreover, "wealth also explains a portion of the black-white differences in achievement" (p. 295). Shanks (2007) supports both findings using data from the Panel Study of Income Dynamics. Additionally, Blacks and Hispanics became less likely to have behavior problems when socioeconomic factors were added to the model (Shanks, 2007).

Sherraden (as cited in Shanks, 2007) also emphasizes the theoretical rationale of improved or increased household stability, personal efficacy, political participation, orientation toward the future, and foundation for risk-taking as features associated with higher levels of assets or wealth. Many links have been made with wealth, not all of which are discussed here.

Poverty Trends and Demographics

Just as income and wealth are both linked and have important differences, so do the poverty of income (income poverty) and poverty of wealth (wealth poverty). Both are a deprivation in a financial indicator of well-being; however, the information for income poverty is profuse while information for wealth poverty is ill-defined and not often reported. There is information, however, regarding the demographics of these groups that point to similarities. In addition, some have looked at what it means to look at a measure of poverty that combines both income and wealth.

Income Poverty

Income poverty estimates first became available in 1959 at which time it was reported to be 22.4% (U.S. Census Bureau, 2010). While there has been variation, the level of the poverty rate has decreased overall to its latest reported value of 14.3% in 2009 (U.S. Census Bureau, 2010). At that time, the number of people in poverty was approximately 43.6 million, which was higher than the nearly 40 million in 1959 (despite the lower poverty rate) because of the increased size of the U.S population (U.S. Census Bureau, 2010). Recessions, reported by the National Bureau of Economic Research (NBER), are typically accompanied by an increase in the poverty rate. While there have been significant changes from year to year, the income poverty rate has not been much higher than 15% since the 1960s nor has it dipped below 10% in the history of its reporting (U.S. Census Bureau, 2010). Similarly, the demographics may change from year to year, but the vulnerable populations tend to remain the same.

Levitan and Wieler (2008) who documented demographic and economic influences on poverty in New York City between 1969 and 1999, noted groups that are expected to be more prone to poverty. These groups included immigrants as opposed to native born peoples, those with lower education, female-headed households, and those of Black or Hispanic ethnicity (Levitan & Wieler, 2008). Looking at the 2009 data from the U.S. Census Bureau (2010), the differences in nativity, race/ethnicity, education, and type of family continue to hold true. Those foreign born report 19.0% below the poverty level compared to 13.7% for those native born (U.S. Census Bureau, 2010). Levitan and Wieler (2008) posit that many immigrants "arrive in the country with few years of formal schooling and minimal English skills" (p. 18) making it more difficult to overcome

poverty. However, this is likely not true of all immigrants. In their study, Levitan and Wieler (2008) found that immigration per se did not lead to greater poverty; it was the demographic shifts that cut across both native and foreign born that mattered. It would seem that vulnerability to poverty may have less to do with being foreign born than the country or culture they are migrating from as well as other factors, such as education and family structure. Moreover ethnicity shows significant disparities. The 2009 poverty rates for Blacks and Hispanics were similar at 25.8% and 25.3% respectively, substantially higher than both classifications of non-Hispanic White at 9.4% and Asian at 12.5% (U.S. Census Bureau, 2010).

It is also thought that higher educational attainment is associated with higher levels of income and lower levels of poverty (Levitan & Wieler, 2008). Bucks, Kennickell, Mach, and Moore (2009), for instance, clearly show a progressive increase in median before-tax family incomes across all four levels of educational status from the Survey of Consumer Finances, from \$22,200 (in 2007 dollars) for those with no high school diploma to \$78,200 for those with a college degree. Married couples also typically benefit from higher household incomes. The 2009 poverty level was reported at 5.8%, much less than the 29.9% for female householders (U.S. Census Bureau, 2010). By comparison, the poverty rate for male householders was 16.9% (U.S. Census Bureau, 2010). Among other factors, this points to inequality of earnings between men and women; the female-to-male earnings ratio was 77% in 2009 (U.S. Census Bureau, 2010).

Wealth Poverty

While there has been an increase in the literature on wealth in recent decades, there does not appear to be any clear definition on the poverty of wealth, much less an

official measure for the U.S. However, there have been studies, government reports, and reports from the Federal Reserve Board on wealth that point to those without wealth, the distribution of wealth, and related demographics.

Arthur B. Kennickell, for instance, has done much work at the Federal Reserve Board using the Survey of Consumer Finances documenting the distribution of wealth. In his paper on the changes in the distribution from 1989 to 2001, Kennickell (2003) documented the percentage of families with negative net worth. The percentage decreased slightly from 7.3% in 1989 to 6.9% in 2001 with the one increase coming in the 1998 survey at 8.0% (Kennickell, 2003). Measuring households with either zero or negative net worth, Keister and Moller (2000) found slightly different results with 18% of families falling into this category in 1989 and increasing to 19% in 1995. Using data from the Survey of the Financial Characteristics of Consumers for 1962, the families with zero or negative net worth was reported at 11% making it appear that it may have been on an increasing trend from the 1960s to the end of the century (Keister & Moller, 2000).

Those with negative net worth could certainly be considered to have a deprivation of wealth. A negative net worth occurs when the value of debt exceeds the value of assets (Kennickell, 2003). Some could be experiencing a temporary loss of income and using credit to maintain current consumption; others could be borrowing against expected future earnings according to the life cycle hypothesis as in the example of student loans (Chen & Finke, 1996). There could be many nuanced situations, but it leaves the household in a precarious financial situation nonetheless. Kennickell (2003) found that the median value of this group was -\$5,100 in 2001. Interestingly, those with less than -\$5,000 had twice the assets and considerably more debt than those with net worth closer

to zero (Kennickell, 2003). Of those with negative wealth, only 16.4% were homeowners (Kennickell, 2003). However, among these homeowners, 40.2% had housing debt that exceeded the value of their principal residence (Kennickell, 2003).

There were key demographic variables to this group as well. Kennickell (2003) only reported on those from the 2001 survey "because the general characteristics of the group with negative wealth changed relatively little over the period considered" (p. 24). Those with negative wealth were younger than the population as a whole, which is consistent with the life cycle hypothesis (Kennickell, 2003). Chen and Finke (1996) found similar results using the 1992 data from the Survey of Consumer Finances. However, they were also less likely to have a high school education (or its equivalent) and somewhat less likely to have any college experience (Kennickell, 2003). This is somewhat contradictory to the life cycle hypothesis. However, "the group with the larger absolute negative wealth was notably more likely than the overall population to have college experience; in contrast, the group with wealth closer to zero was much less likely to have college experience" (Kennickell, 2003, p. 25). The proportion of families who were neither working nor retired was more than twice as large in the negative wealth group compared to the whole population (Kennickell, 2003). Also, the negative wealth group reflected a larger percentage of nonwhite and Hispanic families than the population as a whole, particularly for the group with wealth between \$-5,000 and zero – nearly half consisted of minorities (Kennickell, 2003).

The review by Keister and Moller (2000) support the findings on race/ethnicity.

Oliver and Shapiro (as cited in Keister & Moller, 2000) found 25% of white families with zero or negative assets in 1992 compared to more than 60% of black families in the late

1980s. Oliver and Shapiro (as cited in Keister & Moller, 2000) also found the median net worth for blacks in the 1980s was just 8% of that of white families. Even the median income at that time for blacks was approximately 60% of that of whites (Oliver & Shapiro as cited in Keister & Moller, 2000). Reasons for the sharp contrast in wealth ownership between race range from educational differences, structural barriers, inequality, and differences in savings rates among others (Keister & Moller, 2000).

Family structure has also been shown to be an important factor of wealth ownership (Keister & Moller, 2000). Marriage and widowhood typically increase net worth while increased family size and divorce or separation have the opposite effect (Kennickell & Starr and Kennickell et al as cited in Keister & Moller, 2000).

Combined Poverty

Information on the levels and demographics of poverty using a combined measure that includes both wealth and income are rare, but there are a couple of exceptions.

Wolff (1990) used two alternative poverty rate calculations to include wealth. The first converted wealth into annuity flows that were combined with income and compared against the official income poverty thresholds at the time (Wolff, 1990). It was found as expected that the poverty rate drops; the change was reported as a 10% reduction in the poverty rate for the full population and a 20% reduction for elderly families in 1983 (Wolff, 1990). The second measure looked at poverty as a deprivation of both income and wealth using various thresholds for wealth (median wealth, first quartile, and first quintile) (Wolff, 1990). The joint criterion saw reductions of 15%, 37%, and 42% in the poverty rate based on the corresponding thresholds revealing that the same people who are income poor are not necessarily wealth poor (Wolff, 1990).

Heady (2008) took a slightly different approach to calculate a combined poverty measure for Australia. The analysis redefined poverty as the intersection of low income, low net worth, and low consumption (Heady, 2008). Consumption was included to identify the actual standard of living people had as opposed to simply the strength of the household's financial position (Heady, 2008). Heady (2008) found a reduction in Australian poverty based on the combined measure from 12.4% to 3.4% for 2005 and 11.7% to 1.9% for 2006. However, the rates are bit muddied by the selection of thresholds. Heady (2008) used a rather subjective threshold for poverty of wealth at \$200,000.

It is clear that including additional criteria to the poverty measure will reduce the rate, and it does reveal the difference between the populations that are income poor versus wealth poor. However, the definitions are still ill-defined, trends are not readily available, and the demographics are not well understood. Both Wolff and Heady focus more on the financial portfolios as opposed to the demographics of the people experiencing the combined measure of poverty. As reported above, there are certain groups (Blacks and Hispanics, for instance) that are both prone to income poverty and more likely to have negative wealth. However, it is not clear how the demographics change when looking at the intersection of people who are experiencing deprivations of both income and wealth.

Methodology

In the forthcoming analysis, data from the Survey of Consumer Finances is used to measure poverty across demographic characteristics from multiple perspectives.

Data and Sample

"In contrast to other U.S. government surveys, the SCF is designed primarily to measure wealth and related variables for the whole population" (Kennickell, 2007). Few other surveys collect information on wealth, let alone a design that allows inferences to be made regarding the population (Kennickell, 2007). Besides providing rich information on assets and liabilities of U.S. households, the survey includes variables such as income, employment history, pension rights, inheritances, marital history, household demographic characteristics, attitudes, and others (Kennickell, 2007; Montalto & Sung, 1996). A subset of these is made available for public use.

The first survey was conducted in 1983, but it was in 1989 that the first cross-sectional survey in a series with comparable methodologies was introduced that has continued triennially ever since (Kennickell, 2009). (The 2007 survey was the most recent survey published for public use at the time of this writing). The consistency in methodologies makes it attractive for panel data to be used over time. The Federal Reserve Board uses the survey information to publish information on trends in U.S. family finances, and the data have been used in numerous scholarly articles.

Because wealth is highly concentrated and the distribution skewed, it is important to obtain accurate representation of the top wealth holders to have meaningful information about the population (Keister & Moller, 2000). To address this concern, the SCF employs a dual-frame sample design in order to oversample wealthy families (Kennickell, 2009; Montalto & Sung, 1996). An area-probability sample is intended to provide robust information on the characteristics broadly distributed in the population (Kennickell, 2009; Montalto & Sung, 1996). A separate list sample is developed from

tax return data and follows a stratification scheme to oversample households that are likely to be wealthy (Kennickell, 2009; Montalto & Sung, 1996). "Of the 3,906 completed cases in the 1992 survey, 2,456 households were part of the area-probability sample, and the remaining 1,450 were part of the list sample" (Montalto & Sung, 1996, p. 2). Because of the dual-frame design, extensive weighting procedures are also administered, which make it difficult to apply standard methods of variance and standard error estimation (Kennickell, McManus, & Woodburn, 1996).

Since 1992, the data have been collected by the National Opinion Research Center (NORC) headquartered at the University of Chicago (The Federal Reserve Board, 2009). The surveys have typically sampled between 3,800 and 4,600 households. Because the sample has been relatively small, participation is important to ensure the representativeness of the study (The Federal Reserve Board, 2009). Likewise, missing or incomplete information, common in all survey data, can make meaningful interpretation difficult (Montalto & Sung, 1996).

Data can be missing because of participants that are unable or unwilling to provide information as well as data rendered unusable due to errors in data recording and processing (Montalto & Sung, 1996). The SCF is no exception. Keister and Moller (2000) note that wealthy families tend not to welcome inquiries about the extent of their wealth holdings; moreover, those who are willing to answer questions openly may not be well-informed about the details of their portfolios (p. 66). To address these concerns, the SCF employs multiple imputation (Kennickell, 2009; Montalto & Sung, 1996). Essentially, this technique provides five imputations for each missing value (Kennickell, 2009). Unlike singly imputed data sets that typically treat imputations as if they were

known without error, multiple imputation yields estimates for the missing values as well expected variances (Kennickell, 2009). The result is five complete data sets referred to as "implicates" (Board of Governors of the Federal Reserve System as cited in Montalto & Sung, 1996). Caution should be observed when analyzing the data sets in order to avoid misrepresentation (Kennickell, 1998; Montalto & Sung, 1996).

Although analyses can be complex, the SCF provides information, specifically on wealth, that is difficult to find elsewhere. In fact, there are hundreds of working papers and published works that have used the SCF, which is some indication of its usefulness (The Federal Reserve Board, 2010).

Approach and Definitions

The study herein looks at poverty from the perspective of both wealth and income as opposed to income alone. In order to perform the analysis, working definitions need to be addressed. The aforementioned problems with existing definitions withstanding, it is not the inclusion of wealth in addition to income. The desire of the definitions used is to maintain the spirit of a "basic needs" approach to poverty while using previously established guidelines to maintain consistency and comparability.

Income poverty.

The definition of poverty from an income perspective follows the methodology of the official measure used by the U.S. Census Bureau. It applied the 2007 poverty thresholds (see Appendix A) to the 2007 SCF data. If household income was below the threshold, the household was considered to be poor. Because the thresholds were applied to the SCF, there were some limitations. Namely, the SCF does not have a variable for "Size of Family Unit." The SCF collects its information based on the "primary economic

unit" (U.S. Social Security Administration, Office of Policy, 2003/2004, para. 2), which more closely represents a family (the economically dominant individual/couple and related dependents). This approach, however, leaves out information on the remaining individuals in the collective household (U.S. Social Security Administration, Office of Policy, 2003/2004). Due to this mismatch, only 20 of the 48 poverty thresholds were applied. For example, if there were four people in a household, the only options using the SCF approach were to identify this household as either a single individual with three children or a couple with two children. With information regarding whether or not someone is married or living with her/his partner and the number of children, these scenarios are easily identifiable. However, the SCF would ignore the scenario where a grandmother is living with the aforementioned family of four, for example, if she is financially independent.

Wealth poverty.

Measuring poverty from a wealth perspective is less clear because there are no standard definitions. Chen and Finke (1996), Keister and Moller (2000), Kennickell (2003), and Wolff (1990), for instance, all make mention of those with negative net worth. This is an attractive approach when measuring wealth because it seemingly represents a problem or at least a risk. However, from the perspective of a basic need of wealth as security, there is not much difference between a net worth of negative five dollars and a net worth of positive five dollars.

Heady (2008) took a different approach. He noted the use of a wealth cut-off for assessing poverty as problematic and rejected using 50% or 60% of the household median as a possibility because one consequence would be to place nearly all young

householders below the line (Heady, 2008). Heady's (2008) decision to use \$200,000 (in Australian dollars) was in his own words "somewhat arbitrary" (p. 31) but attempted to represent Australian households who had owned a modest home for several years.

Haveman and Wolff (as cited in Shanks, 2007) define the concept of assetpoverty as insufficient wealth to sustain a household at the federal poverty level for
several months should income sources fail. It is this line of thought that is applied to the
SCF data. Poverty from a wealth perspective is considered to be four months of income
at the poverty level. A matrix mirroring income poverty thresholds provided by the U.S.
Census Bureau was created and modified to reflect a third of this annual income amount
or four months' worth (see Appendix A). If a household's net worth was below the
appropriate wealth poverty threshold based on family structure, number of children, and
age of household head, the household was said to be wealth poor.

Combined measures.

A combined measure of poverty was also calculated. A household was said to be poor if it was considered both income poor and wealth poor by the previous definitions. This was the primary measure of comparison against the income poor. It is thought that this combined measure likely reflects those who are worse off than if they are below only one of the poverty measures.

An alternative poverty measure that includes both wealth and income was also calculated at the aggregate level over each of the surveys. It simply looks at the poverty rate of the population to identify whether the household is *either* income poor *or* wealth poor. While the focus was on the characteristics of those experiencing a deprivation of

both wealth and income, the either/or approach shows how much of the population may be in an unstable financial position.

Procedures

Data were retrieved from the Survey of Consumer Finances website. The full public data set for each survey from 1989 to 2007 was used. The 2007 survey was used for the cross-sectional analysis of poverty across demographic characteristics. Dummy variables were created to represent the income poor, the wealth poor, the wealth and income poor, and the wealth or income poor. If a case or household was poor by the appropriate definition, it was coded as one; otherwise it was coded zero. The five implicates were separated so point estimates could be derived independently for each implicate and then averaged to obtain the appropriate estimate for the entire sample. This approach came at the recommendation of Montalto and Sung (1996) who noted the shortcomings of misinterpreting results based on the five implicates.

Results and Discussion

Poverty Trends and Dynamics

Table 2 presents findings on poverty rates based on the definitions above. It should be noted that the income poor group is different than reported poverty measures by the U.S. Census Bureau. There are a number of factors that create differences including different definitions of a household, measuring households versus individuals, different sample sizes, different samples, different sample designs, and different statistical treatment of missing data. Still, however, the rates are typically within two percentage points of each other and follow the same trends with the exception of 1995 when the income poor measured below increased slightly (0.6%) from 1992 compared to

a decrease of one percentage point in the U.S. Census Bureau report between 1992 and 1995.

Table 2

Percent of Households in Poverty for Various Definitions, 1989-2007

	1989	1992	1995	1998	2001	2004	2007
Income Poor	14.9%	15.1%	15.7%	14.5%	11.6%	11.8%	11.1%
Wealth Poor	21.3%	19.5%	17.4%	18.7%	17.0%	17.9%	17.2%
Income AND Wealth Poor	8.8%	8.6%	7.7%	7.5%	6.2%	6.2%	6.0%
Income OR Wealth Poor	27.3%	26.0%	25.4%	25.7%	22.4%	23.5%	22.4%

Note. Data are from the Survey of Consumer Finances. Income thresholds for poverty come from the Census Bureau for the corresponding years. Assumptions were made to apply the thresholds to the data in the Survey of Consumer Finances.

Because the survey information is reported triennially, it is more difficult to assess the nuances of the fluctuations across the time period, but it appears (as shown in Figure 1) that overall there is a slight decreasing trend through 2007. It should be noted that the economic outlook changed substantially with the recession that began in December of 2007 according to NBER. The full impact of that recession is still unknown. However, the relationship between the different types of poverty is telling.

Consistently, there have been higher numbers of households experiencing a poverty of wealth compared to poverty of income; however, this could potentially vary depending on the threshold or definition chosen. At four months' of income at the poverty level, this would equate to a net worth of \$7,009 in 2007 for a couple with two children. The corresponding threshold for income poverty was \$21,027. If a household has not had much experience living above the poverty line for income, it would admittedly be difficult to accumulate savings and corresponding net worth. Likewise, following the lifecycle hypothesis, many young households may not have had a chance to accumulate wealth or are borrowing against potential future earnings. Either scenario

would naturally keep them below the threshold unless they received transfers from relatives or earned substantial income while still dependent on their parents. Thus, the finding is not surprising, but the result is the same – higher numbers experiencing a deprivation of wealth.

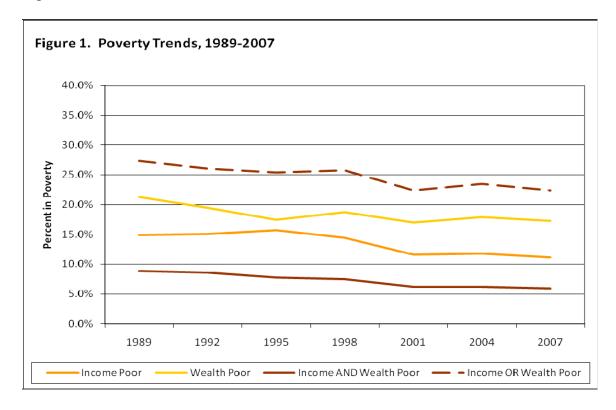
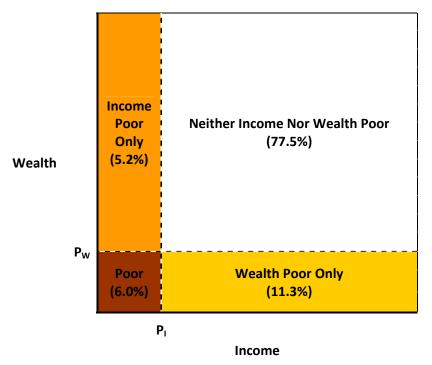


Table 2 and Figure 1 also illustrate the spread between the different measures, which highlights the differences between these groups. If the people that were experiencing poverty of wealth were the same ones who were experiencing poverty of income, the lines and corresponding percentages would be much closer to each other. There are both positive and negative aspects to the variance. While there were 11.1% of households that experienced poverty of income and 17.2% of households that experienced poverty of wealth in 2007, there were only 6.0% that experienced poverty of both income and wealth. From a social development perspective, it's encouraging to see the lower number of households experiencing the combined poverty of income and

wealth. Conversely, however, there were a full 22.4% of households that experienced either poverty of income or poverty of wealth in 2007, which is a rather disappointing finding. One in five household in the U.S. does not have both a basic income and net worth. Figure 2 shows the percentages by poverty type.

Figure 2. Poverty Dynamics by Percent of Households, 2007



If a household is income poor but not wealth poor, it is possible that the income poverty is a temporary condition and the family can draw on its wealth until income is restored. However, without sustained income, the family will likely be drawing down its net worth for consumption, reducing its future financial security, status, political power, and autonomy. If a household is wealth poor but not income poor, it is likely to be able to still maintain a standard of living and accumulate wealth over time even if it is not yet in hand. However, if consumption patterns disallow an accumulation of wealth, the family suffers greater risk of financial calamity.

Poverty Demographics

Table 3 presents findings on the household demographics for those in poverty in 2007. It compares the concentrated group of people who experienced poverty of both income and wealth to those who only experienced one of the elements of poverty.

Table 3

Household Demographics of Poverty, 2007

	Income	Wealth	
	Poor	Poor	Poor
Total	11.1%	17.2%	6.0%
Race			
White	8.2%	12.7%	3.6%
Black / African American	21.3%	35.1%	14.5%
Hispanic	21.0%	30.9%	14.1%
Other	9.6%	11.9%	4.3%
Age			
Less than 35 years	16.2%	35.5%	11.6%
35 to 44 years	11.1%	20.0%	6.7%
45 to 54 years	9.3%	10.9%	4.5%
55 to 64 years	8.0%	8.9%	3.0%
65 to 74 years	8.8%	7.9%	3.3%
75 and over	11.8%	9.7%	3.3%
Education			
No High School Diploma or GED	29.0%	33.6%	17.6%
High School Diploma or GED	12.9%	17.3%	6.6%
Some College	8.4%	20.0%	4.5%
College Degree	4.1%	9.4%	1.7%
Marital Status			
Married	6.3%	11.7%	2.7%
Single	18.1%	25.1%	10.6%
Occupational Class			
Managerial / Professional	2.9%	10.2%	1.2%
Technical / Sales / Services	9.5%	20.9%	6.1%
Other (operators, laborers, farmers, etc.)	9.0%	17.3%	5.0%
Not Working	21.6%	20.9%	10.9%
Tenure			
Owner	5.2%	2.7%	0.3%
Renter	24.2%	49.0%	18.3%

The results for race/ethnicity tell an interesting tale. First, while the household rates of poverty for income are nearly the same for African Americans and Hispanics (21.3% vs. 21.0%), there are more African American households than Hispanic households experiencing a poverty of wealth (35.1% vs. 30.9%). However, both African Americans and Hispanics are much more likely to be both income and wealth poor compared to the other groups. The percent of White and Other households who are poor, for example, drop by more than half when they have to fall below both income and wealth thresholds for poverty. African American and Hispanic households in poverty, however, only drop by about a third when adding the stricter poverty measure. The racial gap appears to be much greater when looking at the combined measure of poverty rather than income alone (see Appendix B for an illustration).

This larger racial gap in wealth is supported by Brimmer (1988), who reviewed the financial behavior of the Black community. Brimmer (1988) posited that the lower average income among African Americans (61.8% of that for whites in 1984) meant lower disposable income and decreased opportunity to save. Those families that did have funds to save and invest typically acquired much safer assets, such as savings accounts or real estate (Brimmer, 1988). By comparison, it was estimated that African Americans held just 0.25% of total stock ownership in 1982 (Brimmer, 1988). Keister and Moller (2000) note research on differences in portfolio behavior, but explain that the reasons for systematic racial variations in asset ownership are less clear. Others have argued that structural barriers and discrimination have created the racial differences in wealth ownership (Keister & Moller, 2000). Brimmer (1988) suggests that a long history of

deprivation for African Americans has meant less opportunity (compared to whites) to earn, save, or inherit wealth.

The Hispanic community has its own history but a similar deprivation of income and wealth. Kochar (2004) suggests that Hispanics compared to Whites are not as highly educated, concentrated in regions with a high cost of living, experience barriers to home ownership, and are more likely to be immigrants (and correspondingly display a strong propensity to send remittances to their source countries). All of these factors are thought to affect wealth ownership among Hispanic households. The differences in wealth ownership between African Americans and Hispanics, however, are less clear.

The poverty rates by age group are not altogether surprising. There are more households who are either income poor or wealth poor when the household head is younger. The rates decrease as the household head ages. As time goes on, it is likely that the household head has an opportunity for increased pay through employment as well as accumulated savings and net worth. Then into retirement age and beyond the poverty rates begin to increase again but not to the same levels as younger households. This is expected with lower levels of income in retirement age in addition to drawing on savings from previous years according to the life cycle hypothesis. The poverty of wealth follows the literature on the life cycle hypothesis fairly closely. When the head of household is less than age 45, the family is much more likely to be wealth poor than income poor. The gap is even greater for household heads under 35 years of age. The poverty rates for wealth then decrease with the age of the household head until the years of 75 and over. At that point, the percent of households that are wealth poor increase; however, the increase is minor compared to levels of wealth poverty for younger

households. The percent of households that are both income and wealth poor follow a similar pattern with age, but the curve is much flatter. Many who are younger and have not had time to accumulate wealth are still able to secure a wage that keeps them above the poverty line for income. And while both the levels of income poor and wealth poor increase in old age, the level of poor by both measures does so quite minimally.

In terms of education, the largest reduction in poverty across all measures comes with a high school diploma or GED. The poverty rates then typically decrease with increased education. However, the reduction in wealth poverty does not appear to drop off until a college degree is earned, and the percentages of wealth poverty compared to income poverty are far greater than those with lower education. It is expected that this is due at least in part to the cost of a college education. Using student loans to pay for college is a common practice, which can drive an individual's net worth negative until years later when the loans are paid down. Presumably, the household is financially better off with the education long-term, which can be seen more clearly with the combined measure of poverty across the educational attainment levels.

Marital status is another important aspect to a household's financial well-being. Far less married households are in poverty by any measure, but the contrast is particularly stark for the combined measure of poverty with only 2.7% of married households in poverty compared to 10.6% single-headed households. The opportunity for dual income households for married persons is likely to have a greater effect on the income poverty rate than the wealth poverty rate, at least early in life, but it has a positive effect across all measures.

A household headed by someone who has a managerial or professional occupation is much less likely to be categorized as poor by any measure. Outside of homeowners, this is the group least likely to be found both income and wealth poor at 1.2%. Unexpectedly, however, the poverty of wealth for households headed by an individual with an occupation in the technical, sales, and services fields (20.9%) as well as other operators, laborers, and farmers (17.3%) are at or approach the same level as those who are not working (20.9%). The incomes from these occupations, however, preclude many of the households from experiencing a poverty of both wealth and income compared to the unemployed.

The last classification, and perhaps the most significant, is tenure or homeownership. A household that owns rather than rents is much less likely to be income poor (5.2% vs. 24.2%), wealth poor (2.7% vs. 49.0%), and both income and wealth poor (0.3% vs. 18.3%). The difference makes intuitive sense as there is typically a financial barrier to home ownership. That is, a household typically must already have some amount of savings to put toward a home to be able to make the purchase. With the purchase, the savings becomes equity in a nonfinancial asset that is more likely to grow than dwindle over time. However intuitive the results may be, the differences are significant. The findings, of course, only go through 2007. With falling house prices associated with the recession of December 2007 – December 2009, there likely have been effects on the wealth of households across the U.S. that have not yet been fully documented.

Conclusion

The first poverty rate for the United States was recorded more than five decades ago. Despite flaws it has continued to provide useful information about the population for analysis, planning, and program management. The concept and understanding of poverty has evolved over the years but the measurement itself in the U.S. has largely remained a financial one using income as its indicator. Wealth, or net worth, has received increased attention in recent years proving to be an important feature of a household's socioeconomic status. Only loosely related to income, it provides greater financial security in addition to status, political power, and autonomy (Keister & Moller, 2000; Wright, 2000). Likewise, it has relationships with important factors, such as health-related outcomes and child achievement, independent of income (Kennickell, 2007; Orr, 2003; Shanks, 2007). However, from a poverty perspective, wealth has largely been ignored.

The focus on poverty of income in the U.S. has revealed key demographic differences. The African American and Hispanic populations have been shown to be more prone to poverty as well as those with lower educational attainment and female-headed households (U.S. Census Bureau, 2010). Levels of wealth are thought to follow the life cycle hypothesis, which would leave young households more prone to poverty (Chen & Finke, 1996). However, empirical results show that this is just one vulnerable group. Nonwhite families are more likely to have negative net worth, for instance (Kennickell, 2003). In addition, divorce and increased family size have negative effects on levels of wealth (Keister & Moller, 2000). Results on education have not been clear,

which is likely due to young individuals borrowing against future potential earnings to pay for the cost of tuition.

The few studies that have looked at a measure that combines income and wealth have documented substantially lower poverty rates (Heady, 2008; Wolff, 1990).

However, the trends and demographics have not been clear.

The study herein applied poverty thresholds for income and wealth to data from the Survey of Consumer Finances between 1989 and 2007. Wealth poverty was considered to be four months' worth of income at the poverty thresholds set by the U.S. Census Bureau. Differences were shown between key demographic characteristics for the most recent survey in 2007.

Results indicate that a higher percentage of households have a deprivation of wealth compared to income, but when a household is only considered poor if it falls below both thresholds, the poverty rate is much lower, 6.0% in 2007 compared to 11.1% of households experiencing income poverty and 17.2% of households experiencing wealth poverty. The lower rate for the combined measure is encouraging in the fact that fewer households appear to neither have a basic level of income nor a basic level of wealth, but the opposite is also true. A full 22.4% of households experienced either poverty of income or poverty of wealth in 2007, indicating that more than one in five households in the U.S. may not be financially stable. The trend for all measures appears to be decreasing slightly from 1989 to 2007. However, the full impact of the recession that began in December of 2007 is not yet known.

Demographic findings from the 2007 cross-sectional analysis indicate that

African American and Hispanic households are much more likely to be in poverty of both

income and wealth when compared to other ethnic groups; the difference between the ethnic groups was greater than the difference for income poverty alone. Unusually, while African American and Hispanic households have very similar rates of income poverty (21.3% and 21.0%), African American households are worse off in terms of wealth poverty (35.1% vs. 30.9%). Research presents various arguments for the racial gap including structural barriers, discrimination, portfolio behavior, and education among others. Any cultural differences that would explain the difference in wealth poverty between African American and Hispanic households are less clear.

Poverty rates decrease as the age of the household head increases, but they increase slightly again in retirement age. Younger households are much more likely to be experiencing wealth poverty, which follows the life cycle hypothesis. Poverty rates also typically decrease with an increase in educational attainment with the largest decrease in poverty coming with a high school diploma. The exception to this relationship with education is in regards to poverty of wealth. After a high school diploma is achieved, the poverty rate does not drop again until a college degree is earned. Those with some college, perhaps, have the cost of education without yet realizing the benefit of an increased income.

Married households as expected have much lower levels of poverty than single-headed households across all measures as do households headed by someone in a managerial or professional role. Unexpectedly, occupations of technical, sales, and services or other operators, laborers, and farmers have levels of wealth poverty at or near those who are out of work. The incomes of those out of work may be buttressed by private and government transfer payments (i.e. unemployment benefits, rental assistance,

welfare payments, etc.), which could lessen or negate any reduction in wealth while out of work. Alternatively, there may be differences in savings rates, educational attainment, or job-related expenditures between the occupations that impede the accumulation of wealth for the occupation groups experiencing higher wealth poverty. The difference between owners and renters, on the other hand, was expected and is particularly large for those experiencing poverty of both income and wealth (0.3% vs. 18.3%).

Implications

As predicted in the literature the poverty rates are much lower when wealth is incorporated into the measure. This is a positive finding from the perspective that there are likely fewer households than reported by the income measure alone that are experiencing a bleak financial situation. Some households below the income poverty line may be experiencing a temporary condition or actually living off a large amount of stored wealth. It also presents an opportunity for programs concerned with poverty alleviation to focus on this more concentrated poverty group, potentially allowing dollars to be spent more effectively.

The finding that over a fifth of the nation's households experienced either a poverty of income or a poverty of wealth should also raise awareness about the financial stability of households across the U.S. The additional households that have a deprivation of wealth are unable to sustain themselves for four months at the poverty line for income without assistance. The concern, of course, is subjective about how much risk is acceptable for a household, how much wealth a household should have, and where support should come from in times of crisis. Attempting to reduce the number of households experiencing a deprivation of wealth raises difficult questions, such as how

youth are supposed to build wealth at a time when they are often borrowing for education. Households tend to fare better financially with an education long-term, but in order to benefit, the person or household typically needs opportunity for employment and time to accumulate savings. Financial risk goes up when there is a recession and fewer jobs available.

Race also cannot be ignored in the discussion on wealth. The gap in poverty of income between the races has been documented, but the extent of the gap is far greater when wealth is incorporated into the measure. This is of special import considering the relationships wealth has with health and child achievement. Greater awareness around cultural and structural barriers may be an option to help alleviate the high numbers of African American and Hispanic households from the throes of poverty. In addition, it would be helpful to understand why there are differences in wealth poverty between African American and Hispanic households despite a relatively similar rate for income poverty.

Limitations

The results reveal much about the financial poverty of the U.S., but there are some limitations to the research conducted. These are due to the poverty definitions used and complications in working with the SCF data.

The poverty thresholds used by the U.S. Census Bureau have already been studied and shown to be flawed due to changes in household finances over the years, including a family's expenditures on health care as well as regional differences in the cost of living (Citro & Michaels, 1995). However, the study herein did not address any of the shortcomings. It instead used the traditional measure for consistency of measurement.

Parties interested in the exact number and percentage of people and households living in poverty should consult other sources and understand the differences between the definitions, samples, and methodologies. Likewise, there is no standard definition for the poverty of wealth. The definition used here was guided by the work of others, but there would likely be some debate over a standard measure.

The SCF data brought about additional challenges and limitations due to its extensive weighting procedures for the dual-frame sample and use of the multiple imputation technique to handle missing and incomplete data. The most notable limitations were the absence of variance and standard error measurements, significance testing, and multiple regression analysis due to the complexity of the procedures. For those interested in the additional statistical robustness, there are some tools and information available (see Kennickell, McManus, & Woodburn, 1996 as well as the 2004 SCF codebook and Montalto & Sung, 1996). Some background in Bayesian theory and SAS programming is recommended.

Additional limitations included not being able to apply all the thresholds of poverty to the SCF data because of different household definitions and variables. The SCF looks at the primary economic unit and excludes other independent adults in the analysis. Also, the SCF in general is aimed at analyzing the population as a whole and particularly the wealthy as opposed to other government surveys that focus on the lower distributions of the population, which would be the case for a study on poverty.

Future Research

Future research could be extended in several directions. It could, for instance, be useful to apply the concept of wealth poverty to the Survey of Income and Program

Participation (SIPP), which is used by the U.S. Census Bureau for the measurement of poverty in the U.S. The focus on lower distributions of the population would likely prove useful and serve as a better comparison for current measures. However, careful understanding of wealth differences should be noted as previous comparisons of SIPP estimates of wealth and (versus) SCF estimates of wealth have revealed shortcomings in the SIPP data (U.S. Social Security Administration, Office of Policy, 2003/2004).

Additional research could also focus on what an appropriate threshold for wealth poverty should be. Qualitative research seeking to understand what it means to be poor from a wealth perspective could help in this regard.

Additional statistical rigor in a similar analysis would also be beneficial to highlight the significance of the differences found in the demographics as well as provide additional insight into the relationships through the use of regression.

References

- Brimmer, A. F. (1988). Income, wealth, and investment behavior in the Black community. *The American Economic Review*, 78(2), 151-155.
- Bucks, B. K., Kennickell, A. B., Mach, T.L., & Moore, K. B. (2009). Changes in U.S. family finances from 2004 to 2007: Evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin*, 95, A1-A55.
- Chen, P. & Finke, M.S. (1996). Negative net worth and the life cycle hypothesis. *Financial Counseling and Planning*, 7, 87-96.
- Citro, C. & Michaels, R. (Eds.). (1995). *Measuring poverty: A new approach*.

 Retrieved from

 http://www.census.gov/hhes/povmeas/methodology/nas/report.html
- Firebaugh, G. (2000). The trend in between-nation income inequality. *Annual Review of Sociology*, 26, 323-339.
- Heady, B. (2008). Poverty is low consumption and low wealth, not just low income. Social Indicators Research, 89, 23-29.
- Hendricks, L. (2007). Retirement wealth and lifetime earnings. *International Economic Review*, 48(2), 421-456.
- Keister, L.A & Moller, S. (2000). Wealth Inequality in the United States. *Annual Review of Sociology*, 26, 63-81.
- Kennickell, A. B. (1998). *Multiple imputation in the Survey of Consumer Finances*(September 1998). Retrieved from Survey of Consumer Finances website:

 http://www.federalreserve.gov/pubs/oss/oss2/method.html

- Kennickell, A. B. (2003). *A rolling tide: Changes in the distribution of wealth in the*U.S., 1989-2001 (September 2003). Retrieved from Survey of Consumer

 Finances website: http://www.federalreserve.gov/pubs/oss/oss2/method.html
- Kennickell, A. B. (2007). What's the difference? Evidence on the distribution of wealth, health, life expectancy and health insurance coverage (September 2007).

 Retrieved from Survey of Consumer Finances website:

 http://www.federalreserve.gov/pubs/oss/oss2/method.html
- Kennickell, A. B. (2009). *Ponds and streams: Wealth and income in the U.S., 1989 to 2007* (2009-13). Retrieved from Survey of Consumer Finances website: http://www.federalreserve.gov/pubs/oss/oss2/method.html
- Kennickell, A. B., McManus, D. A., & Woodburn, R. L. (1996). Weighting design for the 1992 Survey of Consumer Finances (December 1996). Retrieved from Survey of Consumer Finances website:

 http://www.federalreserve.gov/pubs/oss/oss2/method.html
- Kochar, R. (2004). *The wealth of Hispanic households: 1996 to 2002* (October 18, 2004). Retrieved from Pew Hispanic Center website: http://pewhispanic.org/files/reports/34.pdf
- Levitan, M. K. & Wieler, S. S. (2008). *Poverty in New York city, 1969-99: The influence of demographic change, income growth, and income inequality* (July 2008). Retrieved from Federal Reserve Bank of New York Economic Policy

 Review: http://www.newyorkfed.org/research/epr/08v14n1/0807levi.pdf
- Montalto, C. P. & Sung, J. (1996). Multiple imputation in the 1992 Survey of Consumer Finances. *Financial Counseling and Planning*, 7, 133-146.

- Narayan, D. (2000). *Voices of the poor: Can anyone hear us?* New York: Oxford University Press, Inc.
- Orr, A. J. (2003). Black-white differences in achievement: The importance of wealth. Sociology of Education, 76(4), 281-304.
- Sen, A. (1993). Capability and well-being. In M. Nussbaum & A. Sen (Eds.), *The quality of life* (pp. 30-53). New York: Oxford University Press, Inc.
- Shanks, T. R. (2007). The impacts of household wealth on child development. *Journal of Poverty*, 11(2), 93-116.
- Stern, S. M. (2008). *Poverty dynamics: 2001-2003* (May 15, 2008). Retrieved from U.S. Census Bureau website:

 http://www.census.gov/hhes/www/poverty/index.html
- The Federal Reserve Board. (2009). *About the Survey of Consumer Finances* (February 17, 2009). Retrieved from http://www.federalreserve.gov/pubs/oss/oss2/about.html
- The Federal Reserve Board. (2010). *SCF working papers and bibliography* (November 1, 2010). Retrieved from http://www.federalreserve.gov/pubs/oss/oss2/method.html
- Torche, F. & Spilerman, S. (2009). Intergenerational influences of wealth in Mexico. *Latin American Research Review*, 44(3), 75-101.
- U.S. Census Bureau. (2010). *Income, poverty, and health insurance coverage in the United States:* 2009 (Issued September 2010). Retrieved from

 http://www.census.gov/hhes/www/poverty/data/incpovhlth/2009/index.html

- U.S. Census Bureau. (2011). *How the Census Bureau measures poverty*. Retrieved from http://www.census.gov/hhes/www/poverty/about/overview/measure.html
- U.S. Social Security Administration, Office of Policy. (2003/2004). Survey estimates of wealth: A comparative analysis and review of the Survey of Income and Program Participation. *Social Security Bulletin*, 65(1). Retrieved from http://www.ssa.gov/policy/docs/ssb/v65n1/v65n1p63.html
- Wolff, E. N. (1990). Wealth holdings and poverty status in the U.S. *Review of Income* and Wealth, 36(2), 143-165.
- Wright, E. O. (2000). Reducing income and wealth inequality: Real utopian proposals.

 Contemporary Sociology, 29(1), 143-156.

Appendix A

Table A1

Poverty Thresholds for Income in 2007 U.S. Dollars

	Related children under 18 years									
Size of									Eight	
family unit	None	One	Two	Three	Four	Five	Six	Seven	or more	
One person										
(< 65 yrs)	10,787									
(>= 65 yrs)	9,944									
Two people										
Householder										
(< 65 yrs)	13,884	14,291								
Householder										
(>= 65 yrs)	12,533	14,237								
TI	40.040	40.000	40.705							
Three people	16,218	16,689	16,705	04.400						
Four people	21,386	21,736	21,027	21,100						
Five people	25,791	26,166	25,364	24,744	24,366					
Six people	29,664	29,782	29,168	28,579	27,705	27,187				
Seven people	34,132	34,345	33,610	33,098	32,144	31,031	29,810			
Eight people	38,174	38,511	37,818	37,210	36,348	35,255	34,116	33,827		
Nine or more	45,921	46,143	45,529	45,014	44,168	43,004	41,952	41,691	40,085	

Note: Provided by the U.S. Census Bureau, the poverty thresholds are updated each year using the change in the average annual Consumer Price Index for All Urban Consumers (CPI-U)

Table A2

Calculated Poverty Thresholds for Wealth in 2007 U.S. Dollars

	Related children under 18 years									
Size of family unit	None	One	Two	Three	Four	Five	Six	Seven	Eight or more	
One person (< 65 yrs) (>= 65 yrs)	3,596 3,315									
Two people Householder (< 65 yrs) Householder (>= 65 yrs)	4,628 4,178	4,764 4,746								
Three people Four people Five people Six people Seven people Eight people	5,406 7,129 8,597 9,888 11,377 12,725	5,563 7,245 8,722 9,927 11,448 12,837	5,568 7,009 8,455 9,723 11,203 12,606	7,033 8,248 9,526 11,033 12,403	8,122 9,235 10,715 12,116	9,062 10,344 11,752	9,937 11,372	11,276		
Nine or more	15,307	15,381	15,176	15,005	14,723	14,335	13,984	13,897	13,362	

Note. All thresholds are one-third or 4 months' worth of income at the 2007 poverty threshold for income.

Appendix B

