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# Estimating the Life Course Dynamics of Asset Poverty 

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# Estimating the Life Course Dynamics of Asset Poverty 

Poverty can be conceptualized and measured in several different ways. The most common approach bas been to rely on a scarcity of income as the basis for poverty. This paper analyzes poverty using a relatively new and alternative measuring stick - that of asset poverty. Using data from the Panel Study of Income Dynamics, we examine the extent to which individuals have enough assets to allow them to live for three months above the official poverty line. Households that fail to bave the necessary amount of assets are considered asset poor. Three different measures of counting assets are used in this paper - net worth; financial wealth; and liquid wealth. We construct a series of life tables that allow us to examine the period, cohort, and age patterns of asset poverty from 1984 to 2004. Our results indicate that asset poverty is widespread across the life course. The vast majority of those in early adulthood will experience asset poverty in terms of their net worth, financial wealth, and liquid wealth. For those in the middle and later stages of the life course, there remains a substantial risk of encountering financial wealth and liquid wealth asset poverty. In addition, individuals who bave less education, are not married, are black, and who do not own a bome, are all significantly more likeely to experience asset poverty. The policy implications of these findings are discussed.

Key words: asset poverty; life course; Panel Study of Income Dynamics; wealth
Within academic and policy circles, poverty has typically been measured through the metric of income. In many ways, this makes much sense. A sufficient income enables households to purchase the goods and services necessary to function in a reasonable and adequate fashion throughout the weeks, months, and years.

There is, however, another key aspect of economic well-being that has been largely neglected within the poverty literature - whether households have accrued enough financial resources to sufficiently tide them over when their income streams slow down or halt. One of the critical functions of accumulated assets is that they allow households to acquire some amount of security in times of economic downturns. Economists refer to this as the ability of assets and savings to protect consumption against unexpected shocks (Cagetti, 2003). As Brondolini et al., (2010, p.268) write,

Assets and liabilities are fundamental to smoothing out consumption when income is volatile. Their insurance role is intertwined with the existence of and access to private or public insurance mechanisms. Indeed, wealth accumulation via "precautionary savings" is the primary means for households to self-insure against income decline.

[^0]Recent research suggests that this function may be of increasing importance in today's society. Using the Panel Study of Income Dynamics (PSID), the work of Rank and Hirschl (2001a; 2001b) has demonstrated that the lifetime risk of experiencing income poverty at some point during adulthood is quite high. For example, between the ages of 20 and $40,36 \%$ of Americans will experience at least one year below the poverty line, between the ages of 40 and $60,23 \%$, and between the ages of 60 and $80,29 \%$ (Rank \& Hirschl, 2001a). The percentages for those falling below 1.50 of the poverty line are $54 \%, 33 \%$, and $43 \%$. Furthermore, one half of American children between the ages of 1 and 20 will reside in a household that uses food stamps for some period of time (Rank \& Hirschl, 2009). By definition, if you are in a household using food stamps, you are also both income and asset poor. Additional work (Sandoval, Rank, \& Hirschl, 2009) has indicated that the life course risk of poverty has been on the increase during the past 30 years, particularly during the1990's, mirroring the increase in job and work insecurity (Fligstein \& Shin, 2004).

Similar findings have been observed cross-culturally as well. For example, Leisering and Leibfried write with regard to their life course analysis of poverty in Germany,

Poverty is no longer (if ever it was) a fixed condition or a personal or group characteristic, but rather it is an experience or stage in the life course. It is not necessarily associated with a marginal position in society but reaches well into the middle class. Poverty is specifically located in time and individual biographies, and, by implication, has come to transcend traditional social boundaries of class (1999, p. 239).

The work of Hacker (2006) and Gosselin (2008) have also documented the increasing prevalence of income volatility, particularly downward mobility. Using the PSID, Hacker demonstrates that income instability in the mid 1990's was significantly higher than in the early 1970's. He notes that such patterns of rising income instability and insecurity mirror an overall trend in the United States, "As both employment-based social benefits and government programs have eroded, social risks have shifted from collective intermediaries - government, employers, large insurance pools - onto individuals and families" (2004, p. 252). And of course the most recent economic recession of 2008 and 2009 has demonstrated the vulnerability of millions of Americans to a financial downturn.

All of this work indicates that more Americans, particularly those in the bottom half of the income distribution, are vulnerable to periods of income deprivation at points along the life course. The presence of assets can partially alleviate the shocks of such deprivation. Yet how widespread are such assets for lower- to middle-income households?

## Prior Research

In spite of the importance of assets in providing protection against the life course risk of periodic spells of economic deprivation, there is substantial empirical evidence that indicates for the bottom half of the population, assets are often in short supply. Empirical research reveals that a significant percentage of the population are lacking in assets, particularly financial assets such as savings or stocks. Oliver and Shapiro (1990) found that one-third of American households had no financial assets at all. Wolff (1998) has shown that families in the middle income quintile have financial assets that would maintain their standard of living without income for only 1.2 months, while those in the bottom quintile would not be able to replace their income for any period of time. In a more recent analysis, Wolff (2007) found that the bottom $40 \%$ of the population actually had negative financial wealth (in other words, their financial debts outweighed their financial assets). This was true for $1983,1988,1991,1994,1997,2000$, and 2003 using the Survey of Consumer Finances. In addition, overall net worth for the bottom $40 \%$ of U.S. households averaged only $\$ 2,200$ in 2004.

Carney and Gale (2001) report that $20 \%$ of all households have no basic transaction accounts (i.e., a savings or checking account) and that more than half of all households have less than $\$ 5,000$ in financial assets. Those in the bottom $25 \%$ of the income distribution have virtually no financial assets whatsoever.

Using the Survey of Income and Program Participation (SIPP) panels for 1984 to 1992, Gruber (2001) analyzed the level of financial assets for workers experiencing a spell of unemployment. He found that for the median worker, financial asset holdings were sufficient to replace 5.4 weeks of earnings, and approximately three quarters of the realized income loss from unemployment spells. However, for nearly one third of workers, not even $10 \%$ of their lost income could be replaced through their financial asset holdings.

One measure recently developed to assess the lack of adequate assets has been that of asset poverty. As Haveman and Wolff write, "Asset poverty measures the extent to which American households have a stock of assets which is sufficient to sustain a basic needs level of consumption during temporary hard times" (2004, p. 145). Although suggested by Oliver and Shapiro (1995), Haveman and Wolff (2000) were the first to operationalize the concept. They defined the condition as a "household or person being asset poor if the access that they have to wealth-type resources is insufficient to enable them to meet their basic needs for some limited period of time." Haveman and Wolff then constructed several different measures of asset poverty based upon this overall definition. For example, "wealth-type resources" can be defined in terms of a household's overall net worth, "basic needs" might consist of being above the official poverty line, while "limited period of time" can be represented by a three-month period. Consequently, a household that does not have sufficient net worth to sustain itself above the poverty line for three months would be considered asset poor using this definition.

Using these and similar measures, Haveman and Wolff (2004) were able to estimate the crosssectional rates of asset poverty for the years 1983, 1989, 1992, 1995, and 1998 using the Survey of Consumer Finances. Their findings indicated that the incidence of asset poverty was quite high among households, typically between $25 \%$ and $45 \%$. As with income poverty, the risk of asset poverty varied with respect to race, education, age, homeownership, and family structure. Those individuals who were nonwhite, possessing less education, younger, not homeowners, and in single parent families were more likely to experience asset poverty.

Using the PSID data for the years 1984, 1989, 1994, and 1999, Caner and Wolff (2004) also examined the prevalence of asset poverty. Similar to Haveman and Wolff (2000), they found that the overall rates of asset poverty during these years varied between $26 \%$ and $42 \%$. Measures of asset poverty that relied on net worth were on the lower side, while measures using only liquid wealth were higher. They also found that asset poverty was greatest during young adulthood, and then decreased as individuals reached their $40 \mathrm{~s}, 50 \mathrm{~s}$, and 60 s . Race, education, and owning a home were important factors affecting the likelihood of asset poverty, as well as changes in family structure. Finally, they found that for those experiencing asset poverty in one survey year, the chances were fairly strong that they would also be asset poor five years later in the next survey wave ( $60 \%$ for net worth asset poverty, and $70 \%$ for net worth minus home equity asset poverty).

These prior studies have begun to answer some important questions regarding the prevalence of asset poverty. However, they have not (with the exception of Caner and Wolff's analysis of asset poverty across two time periods) examined asset poverty within a longitudinal context. Furthermore, they have not fully analyzed asset poverty with respect to the risk across the life course. We seek to expand the understanding of asset poverty by using six waves of the PSID to construct a series of life tables that will examine the life course risk of asset poverty, and how that risk varies by several key attributes.

## Methodology

## Data Set

In order to assess the life course dynamics of asset poverty over time, we utilize the Panel Study of Income Dynamics (PSID). The PSID began in 1968 as an annual panel survey (biennial after 1997) and is nationally representative of the nonimmigrant U.S. population. The PSID initially interviewed approximately 4,800 U.S. households in 1968, which included detailed information on roughly 18,000 individuals within those households. It has since tracked these individuals, including children and adults who eventually broke off from their original households to form new households (e.g., children leaving home, separations, divorce). Thus, the PSID is designed so that in any given year the sample is representative of the entire nonimmigrant U.S. population (for detailed information regarding the PSID sample and its representativeness, see Duncan et al., 2004; Fitzgerald et al., 1998; Kim \& Stafford, 2000; PSID Users Guide, 2007).

Although extensive income data has been gathered during each wave of the PSID, comparable data on assets was only first acquired during the 1984 wave. Since then, the PSID has included a module of asset holding questions for the 1989, 1994, 1999, 2001, 2003, 2005, and 2007 waves. In this analysis, we look at the life course dynamics of asset poverty across five year blocks of time. Hence we use the 1984, 1989, 1994, and 1999 waves. In addition, we combine the 2003 and 2005 waves to create a comparable five year point in time for 2004.

Throughout the analysis we employ the sampling weights to ensure that the PSID sample accurately reflects the U.S. population. Specifically, we utilize the weights assigned to individuals for each given wave to take advantage of the PSID practice of periodically adjusting the weights to account for nonresponse bias (Hill, 1992)

## Measuring Asset Poverty

Our approach to measuring asset poverty is based upon Haveman and Wolffs (2000) operationalization of the concept. Asset poverty is defined as residing in a household that does not possess a level of assets that would enable them to remain above the official poverty line for three months. For example, if a two person household in 2004 had a level of assets below $\$ 3,084$ (derived by taking the annual poverty line of $\$ 12,334$ for a family of two in 2004 , and dividing this by four), they would be considered asset poor. As discussed earlier, the concept behind this measure is whether households have accrued enough value in their assets to allow them to weather a brief period of time (three months) without having a stream of income.

Within the PSID asset module, the following components of household wealth are available: 1) net value of one's home; 2) other real estate holdings: 3 ) farm and business assets; 4) stocks; 5) checking and savings accounts; 6) other savings such as bond funds; and 7) debts (see Caner \& Wolff, 2004, for a more detailed description of the PSID asset module). In this analysis, three different measures are used for determining a household's monetary level of assets: net worth, financial wealth, and liquid wealth. Net worth in this analysis consists of the sum of items 1 through 6, minus 7. Financial wealth is identical to net worth, but does not include item 1. Liquid wealth is the sum of items 4,5 , and 6 . Net worth represents one's entire portfolio of assets minus any debts; financial wealth is the same except that it does not include home equity; while liquid wealth represents the degree to which households have readily available assets that they could quickly be used in an emergency situation.

## Life Table Approach

In describing the life course patterns of asset poverty dynamics over time, we rely upon the life table as our major analytical technique. Life tables are a concise method for describing how the odds of experiencing a specific event change as individuals age over time. The life table is most closely associated with biological and demographic studies of mortality, but can be easily applied to estimate the occurrence of other events as well (Allison, 1995; Namboodiri \& Suchindran, 1987).

Throughout the analysis our focus is upon the risk of asset poverty with respect to aging across the life course. Given that the PSID individual panel waves are separated by five year intervals, we construct our life table analyses with age categories that have been collapsed into five year intervals. Consequently, we look at the likelihood of asset poverty for individuals 25 to 29,30 to 34 , 40 to 44 , 45 to 49,50 to 54,55 to 59,60 to 64,65 to 69,70 to 74,75 to 79 , and 80 to 84 . It should be noted that our estimates of asset poverty using this approach will be underestimates of the true incidence of asset poverty based upon yearly household asset data. In effect, we are sampling individuals at one point during these age intervals, rather than at five points, resulting in lower life time estimates than if one used yearly panel data.

Three analytical strategies are taken with respect to describing the life course dynamics of asset poverty. First, we examine the effects of period upon the risk of asset poverty across age categories. Consequently, for each of the five separate waves of data, we estimate the incidence of asset poverty within each of our 11 age categories. This shows the extent to which the risk of asset poverty has changed over time within a cross-sectional framework. Levels of asset poverty are estimated for 25 to 29 year olds through 80 to 84 year olds in 1984, 1989, 1994, 1999, and 2004. In addition, this approach shows us the extent to which asset poverty varies depending upon one's stage in the life course.

Second, we construct a series of life tables that follow three different age cohorts beginning in 1984 through 2004. These three cohorts are represented by individuals who were between the ages of 25 to 29 in 1984 (and therefore were born between 1955 and 1959), those who were between the ages of 40 to 44 in 1984 (and consequently were born between 1940 and 1944), and those who were between the ages of 60 to 64 in 1984 (and therefore were born between 1920 and 1924). A set of life tables are constructed for each of these three cohorts by estimating the age-specific probabilities of experiencing asset poverty during each age category, and from these age-specific probabilities, calculating the cumulative probabilities across the various age categories for each cohort. This allows us to estimate for these three specific age cohorts the likelihood during a 21 year interval that they will encounter asset poverty.

Our final analytical approach focuses on understanding the risk of asset poverty with respect to age, by pooling the data across the various waves and cohorts. This approach is similar to prior life table work with respect to income poverty (Rank \& Hirschl, 2001a). For example, the life table for younger age adults begins by combining all waves of individuals who are between the ages of 25 and 29. Consequently, some are at this age in 1984, others in 1989, and so on. We then estimate the age-specific probabilities of asset poverty for this group as a whole. Those who experience asset poverty are then eliminated from progressing further in the life table. We then estimate the age specific probability of asset poverty for those who have progressed to age 30 to 34 and have yet to experience asset poverty (this would include individuals who are now in the waves of 1989, 1994, 1999, and 2004). By the time we reach age 45 to 49 in the life table analysis, all such individuals will be in the 2004 wave, since they began in 1984 and have aged accordingly across the 21-year period
without encountering asset poverty. From this set of age-specific probabilities, we can then calculate the cumulative probabilities of experiencing asset poverty between the ages of 25-29 and 45-49. In this fashion, we construct a hypothetical cohort across the various waves of the PSID which allows us to look at the risk of asset poverty as individuals age. As in the cohort analysis, the individual life tables start at three different ages representing early adulthood (25-29), middle adulthood (40-44), and older adulthood (60-64). There is no left censoring present in any of the analyses described above, since all individuals are entering at the starting points of each life table. In summary, the three approaches described here are designed to understand the period, cohort, and age dynamics of asset poverty within the American population.

In addition to understanding the overall patterns of asset poverty, we also seek to understand how particular factors affect the odds of experiencing asset poverty. We look at the influence of several key variables which have been shown to be important in affecting the likelihood of asset poverty, including race (white, black, other), gender, education (less than 12 years, 12 years, 13 to 15 years, 16 or more years), marital status (married, not married), family size, number of children in the household, and homeownership. The life table data are pooled, and we then utilize logistic regression modeling to examine the effects of our independent variables upon the likelihood of experiencing asset poverty for early age adults, middle age adults, and older age adults.

## Results

## Period Analysis

Table 1 looks at the risk of asset poverty by age categories across the years 1984, 1989, 1994, 1999, and 2004. Three general patterns are apparent. First, regardless of the age or year, the risk of asset poverty is lowest when using a measure of net worth. This results from the fact that the major asset for most households is their home, particularly as they enter middle and older age (U.S. Bureau of the Census, 2008). Using the metric of financial wealth or liquid wealth produces much higher levels of asset poverty.

Second, the likelihood of experiencing asset poverty is highest for younger aged Americans, and then gradually declines as one ages through the life course, leveling off in the mid 50's. This is particularly the case with net worth asset poverty. The rates of net worth asset poverty averaged across the five periods by age are: 25 to $29-49 \%$; 30 to $34-37 \%$; 35 to $39-28 \%$; 40 to $44-23 \%$; 45 to $49-18 \% ; 50$ to $54-15 \% ; 55$ to $59-12 \% ; 60$ to $64-11 \% ; 65$ to $69-12 \% ; 70$ to $74-12 \%$; and 75 to 79-12\%.

Third, Table 1 allows an examination of how the risk of asset poverty has changed between the years of 1984 and 2004 by particular age categories. In general, it appears that for those between the ages of 30 and 59 , there has been an increasing risk of experiencing net worth and financial wealth asset poverty across this 21 year period. However, for those aged 60 and over, there has
been a decline in financial wealth and liquid wealth asset poverty (with the exception of those aged 65-69).

Table 1. Period Analysis of Proportion of Population Experiencing Asset Poverty by Age Categories

| Year | Asset Poverty |  |  |
| :---: | :---: | :---: | :---: |
|  | NW | FW | LW |
| 25-29 |  |  |  |
| 1984 | . 47 | . 64 | . 59 |
| 1989 | . 43 | . 58 | . 53 |
| 1994 | . 49 | . 59 | . 65 |
| 1999 | . 57 | . 72 | . 60 |
| 2004 | . 47 | . 68 | . 54 |
| Average | . 49 | . 64 | . 58 |
| 30-34 |  |  |  |
| 1984 | . 33 | . 58 | . 55 |
| 1989 | . 33 | . 51 | . 45 |
| 1994 | . 40 | . 52 | . 56 |
| 1999 | . 40 | . 60 | . 51 |
| 2004 | . 41 | . 66 | . 51 |
| Average | . 37 | . 57 | . 52 |
| 35-39 |  |  |  |
| 1984 | . 19 | . 45 | . 47 |
| 1989 | . 28 | . 44 | . 43 |
| 1994 | . 30 | . 45 | . 51 |
| 1999 | . 32 | . 53 | . 49 |
| 2004 | . 33 | . 57 | . 49 |
| Average | . 28 | . 49 | . 48 |
| 40-44 |  |  |  |
| 1984 | . 15 | . 39 | . 38 |
| 1989 | . 15 | . 36 | . 33 |
| 1994 | . 25 | . 42 | . 47 |
| 1999 | . 28 | . 46 | . 42 |
| 2004 | . 31 | . 51 | . 43 |
| Average | . 23 | . 43 | . 41 |

Table 1 continued

| Year | Asset Poverty |  |  |
| :---: | :---: | :---: | :---: |
|  | NW | FW | LW |
|  | 45-49 |  |  |
| 1984 | . 13 | . 35 | . 34 |
| 1989 | . 11 | . 31 | . 29 |
| 1994 | . 18 | . 36 | . 38 |
| 1999 | . 22 | . 40 | . 38 |
| 2004 | . 24 | . 47 | . 41 |
| Average | . 18 | . 38 | . 36 |
|  | 50-54 |  |  |
| 1984 | . 12 | . 28 | . 30 |
| 1989 | . 11 | . 32 | . 27 |
| 1994 | . 16 | . 36 | . 34 |
| 1999 | . 16 | . 33 | . 32 |
| 2004 | . 19 | . 38 | . 31 |
| Average | . 15 | . 33 | . 31 |
|  | 55-59 |  |  |
| 1984 | . 09 | . 24 | . 26 |
| 1989 | . 09 | . 25 | . 25 |
| 1994 | . 13 | . 34 | . 36 |
| 1999 | . 14 | . 28 | . 28 |
| 2004 | . 14 | . 32 | . 30 |
| Average | . 12 | . 29 | . 29 |
|  | 60-64 |  |  |
| 1984 | . 09 | . 24 | . 26 |
| 1989 | . 09 | . 23 | . 21 |
| 1994 | . 14 | . 31 | . 33 |
| 1999 | . 12 | . 31 | . 27 |
| 2004 | . 09 | . 19 | . 19 |
| Average | . 11 | . 26 | . 25 |

Table 1 continued

| Year | Asset Poverty |  |  |
| :---: | :---: | :---: | :---: |
|  | NW | FW | LW |
|  | 65-69 |  |  |
| 1984 | . 12 | . 20 | . 23 |
| 1989 | . 10 | . 21 | . 23 |
| 1994 | . 11 | . 31 | . 30 |
| 1999 | . 12 | . 23 | . 22 |
| 2004 | . 13 | . 28 | . 26 |
| Average | . 12 | . 25 | . 25 |
|  | 70-74 |  |  |
| 1984 | . 14 | . 28 | . 30 |
| 1989 | . 08 | . 19 | . 22 |
| 1994 | . 16 | . 40 | . 38 |
| 1999 | . 10 | . 24 | . 22 |
| 2004 | . 11 | . 23 | . 23 |
| Average | . 12 | . 27 | . 27 |
|  | 75-79 |  |  |
| 1984 | . 09 | . 31 | . 32 |
| 1989 | . 13 | . 23 | . 24 |
| 1994 | . 16 | . 37 | . 35 |
| 1999 | . 12 | . 29 | . 29 |
| 2004 | . 08 | . 19 | . 16 |
| Average | . 12 | . 28 | . 27 |

NW = Net Worth; FW = Financial Wealth; LW = Liquid Wealth

## Cohort Analysis

In Table 2 we present a life table analysis for three different birth cohorts entering the 1984 wave of the PSID. The top panel looks at those entering the life table between the ages of 25 and 29, the middle panel examines those who are entering between the ages of 40 and 44 , while the bottom panel follows those who enter between the ages of 60 to 64 . We follow each of these three groups across the five waves of the PSID, resulting in longitudinal estimates of the risk of asset poverty across the three stages of the life course.

Table 2. Cohort Analysis of Cumulative Proportion of Population
Experiencing Asset Poverty for Three Different Birth Cohorts

|  | Asset Poverty |  |  |
| :--- | :--- | :---: | :--- |
| Age | NW | FW | LW |


| $25-29$ | .47 | .67 | .65 |
| :--- | :--- | :--- | :--- |
| $30-34$ | .55 | .77 | .72 |
| $35-39$ | .60 | .81 | .76 |
| $40-44$ | .61 | .81 | .78 |
| $45-49$ | .62 | .84 | .78 |

## Born 1940 to 1944

| $40-44$ | .16 | .40 | .42 |
| :--- | :--- | :--- | :--- |
| $45-49$ | .21 | .51 | .50 |
| $50-54$ | .25 | .53 | .52 |
| $55-59$ | .26 | .55 | .55 |
| $60-64$ | .27 | .60 | .56 |

## Born 1920 to 1924

| $60-64$ | .13 | .18 | .30 |
| :--- | :--- | :--- | :--- |
| $65-69$ | .18 | .22 | .36 |
| $70-74$ | .28 | .31 | .52 |
| $75-79$ | .28 | .31 | .54 |
| $80-84$ | .28 | .31 | .57 |

NW = Net Worth; FW = Financial Wealth; LW = Liquid Wealth
Between the ages of 25-29 to 45-49, $62 \%$ of individuals will experience at least one year of net worth asset poverty, $84 \%$ will encounter at least one year of financial wealth asset poverty, and $78 \%$ will experience at least one year of liquid wealth poverty. For those between the ages of 40-44 and $60-64,27 \%$ will encounter net worth asset poverty, $60 \%$ financial wealth asset poverty, and $56 \%$ liquid wealth poverty. Finally, for those between the ages $60-64$ and $80-84,28 \%$ will
experience net worth asset poverty, $31 \%$ financial wealth asset poverty, and $57 \%$ liquid wealth asset poverty.

Consequently, by following individuals longitudinally across the life course, we find that the chances of asset poverty are reduced as individuals go from early adulthood to middle adulthood to later adulthood, but they are still quite high across all three periods. This is particularly the case for financial wealth and liquid wealth asset poverty.

## Age Analysis

Rather than looking at individual birth cohorts across time, Table 3 pools all the data together in order to examine the impact of age upon the risk of experiencing asset poverty in a life table context. These results are quite similar to those found in Table 2.

Once again, the risk of asset poverty is quite high across all three stages of the life course, but is particularly extreme during young adulthood. Consequently, between the ages 25-29 and 35-39, $59 \%$ of individuals have encountered at least one year of net worth asset poverty, $77 \%$ have experienced financial wealth asset poverty, and $71 \%$ have experienced liquid wealth asset poverty.

We can also see that after 15 years within each panel of the table, the chances of experiencing asset poverty levels off. Consequently, if individuals have not experienced asset poverty after three waves, they probably will not do so in the future.

Finally, as is the case in Tables 1 and 2, there is a greater likelihood that individuals will experience financial wealth and liquid asset poverty, rather than net worth poverty. We would argue that in many respects, financial wealth and liquid assets are the more relevant assets in terms of dealing with an immediate financial crisis. We discuss this further in the concluding section.

Table 3. Age Analysis of Cumulative Proportion of Population Experiencing Asset Poverty Across Different Stages of the Life Course

| Age | Asset Poverty |  |  |
| :---: | :---: | :---: | :---: |
|  | NW | FW | LW |
|  | Younger Age Adults |  |  |
| 25-29 | . 46 | . 64 | . 58 |
| 30-34 | . 56 | . 74 | . 67 |
| 35-39 | . 59 | . 77 | . 71 |
| 40-44 | . 60 | . 79 | . 73 |
| 45-49 | . 61 | . 80 | . 73 |
|  | Middle Age Adults |  |  |
| 40-44 | . 17 | . 38 | . 36 |
| 45-49 | . 23 | . 49 | . 46 |
| 50-54 | . 25 | . 52 | . 49 |
| 55-59 | . 27 | . 53 | . 50 |
| 60-64 | . 27 | . 55 | . 51 |
|  | Older Age Adults |  |  |
| 60-64 | . 14 | . 25 | . 30 |
| 65-69 | . 20 | . 34 | . 40 |
| 70-74 | . 27 | . 43 | . 51 |
| 75-79 | . 29 | . 45 | . 55 |
| 80-84 | . 29 | . 45 | . 58 |

NW = Net Worth; FW = Financial Wealth; LW = Liquid Wealth
Taken together, Tables 1-3 indicate that whether measured through net worth, financial wealth, or liquid assets, asset poverty is prevalent throughout the life course. It is highest during the early stage of the adult life course, and is most pronounced in terms of financial wealth and liquid asset poverty. In facing an economic crisis where resources are needed immediately, these are perhaps the two most relevant measures of asset poverty.

Table 4. Parameter Estimates for Partial Likelihood Coefficients of Asset Poverty (Slopes and Standard Errors)

|  | Young Adults |  |  | Middle Adults |  |  | Older Adults |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Characteristics | NW | FW | LW | NW | FW | LW | NW | FW | LW |
| Race $=$ Black | . 430 *** | . 242 *** | . $322^{* * *}$ | . 780 *** | . $534 * *$ | . $562^{* * *}$ | $1.040^{* * *}$ | . $832{ }^{* * *}$ | . $892^{* *}$ |
|  | (.034) | (.031) | (.032) | (.054) | (.041) | (.042) | (.107) | (.084) | (.079) |
| Race $=$ Other | .238* | . 119 | . 138 | . 383 * | . 246 | . 350 ** | -. 208 | .709** | . $873^{* * *}$ |
|  | (.115) | (.106) | (.110) | (.187) | (.137) | (.134) | (.508) | (.227) | (.194) |
| Gender=Male | . 014 | -. 031 | -. 039 | . 018 | . 029 | . 011 | . 025 | . 021 | . 021 |
|  | (.033) | (.029) | .(030) | (.051) | (.038) | (.038) | (.107) | (.075) | (.070) |
| Education $=$ Less than 12 | .599*** | . $424^{* * *}$ | . $970{ }^{* * *}$ | $1.223{ }^{* * *}$ | . $802{ }^{* * *}$ | $1.278{ }^{* * *}$ | $1.089^{* * *}$ | . 939 *** | $1.326^{* * *}$ |
|  | (.061) | (.055) | (.063) | (.099) | (.072) | (.078) | (.247) | (.166) | (.166) |
| Education=12 | . $409^{* * *}$ | . $326^{* * *}$ | . $864^{* * *}$ | . $858{ }^{* * *}$ | . $6988^{* * *}$ | $1.047^{* * *}$ | . $645^{*}$ | . $651^{* * *}$ | . $869^{* * *}$ |
|  | (.053) | (.047) | (.056) | (.092) | (.063) | (.071) | (.252) | (.167) | (.168) |
| Education $=13$ to 15 | . $266{ }^{* * *}$ | . $182^{* * *}$ | . $570{ }^{* * *}$ | . $645^{* * *}$ | . $513{ }^{* * *}$ | . $781{ }^{* * *}$ | .651* | . 384 | . 540 ** |
|  | (.052) | (.050) | (.060) | (.100) | (.069) | (.077) | (.280) | (.196) | (.109) |
| Marital Status=Not Married | . $300{ }^{* * *}$ | .096** | . $120{ }^{* * *}$ | . $610{ }^{* * *}$ | . $179^{* * *}$ | . $172^{* * *}$ | . 904 *** | . 299 *** | . $282{ }^{* * *}$ |
|  | (.035) | (.033) | (.034) | (.055) | (.045) | (.045) | (.105) | (.079) | (.074) |
| Family Size=GE 5 | . 122 | -. 027 | -. 020 | . 014 | -. 003 | -. 113 | -.383* | -247* | -. 323 ** |
|  | (.057) | (.052) | (.051) | (.087) | (.064) | (.062) | (.158) | (.118) | (.109) |
| Children=0 | $-.319^{* * *}$ | -. 181 ** | $-.346^{* * *}$ | . 002 | -. 092 | -. 087 | - | - | - |
|  | (.065) | (.060) | (.060) | (.102) | (.078) | (.077) |  |  |  |
| Children=1 to 2 | -.199*** | -. 041 | -. 103 | -. 167 | -. 051 | -. 063 | - | - | - |
|  | (.059) | (.055) | (.054) | (.094) | (.070) | (.069) |  |  |  |
| Housing=Not Owner | - | . $461{ }^{* * *}$ | . $302{ }^{* * *}$ | - | . $511^{* * *}$ | . $422^{* * *}$ | - | . $694^{* * *}$ | . $421^{* * *}$ |
|  |  | (.033) | (.033) |  | (.042) | (.042) |  | (.079) | (.074) |

NW = Net Worth; FW = Financial Wealth; LW = Liquid Wealth
${ }^{*}$ significant at the .05 level; ${ }^{* *}$ significant at the .01 level; ${ }^{* * *}$ significant at the .001 level

## Multivariate Analysis

Table 4 examines the association between several sociodemographic factors and the risk of asset poverty. These include race (omitted category white), education (omitted category 16 years or more), gender, marital status (omitted category married), family size (omitted category less than 5), number of children in the household (omitted category 3 or more children), and homeownership status. The findings in Table 4 are consistent with prior work examining asset poverty, as well as correlates of income poverty. Race, education, marital status, and homeownership are significantly correlated with the risk of asset poverty. Being black, unmarried, having less education, and not being a homeowner are all related to an increased risk of net worth, financial wealth, and liquid wealth asset poverty.

On the other hand, gender shows no significant effect on the risk of asset poverty. Family size is also insignificant for young and middle age adults, but is significant for older adults, while the presence of children significantly increases the likelihood of asset poverty for young adults.

## Discussion

As is often noted, the difference between income and wealth can be illustrated in the contrast between a river and a reservoir. Income represents a flowing river. The river may be shallow or deep depending upon the size of an individual's income, but in either case, an individual is able to use the water to address their current needs. Yet beyond this, one might also decide to divert part of the river's flow into a pond or reservoir in order to anticipate future uncertainties in their water supply. This reservoir represents the accumulation of assets and wealth.

Now imagine that the river unexpectedly dries up for some period of time. By building a reservoir, our hypothetical river dweller can still access their water, but for the time being it is drawn from the pond rather than the river itself. Of course, his or her supply will last only as long as the size of the reservoir and the amount of time the river is dry, but assuming that the river resumes its flow, the depleted pond will have served its purpose and can be gradually built up in anticipation of the next dry spell.

The basic question we have addressed in this paper is the extent to which Americans are able to build such reservoirs during their adulthood. In recent years Americans have become less judicious in their savings behavior (Vyse, 2008). In addition, a number of households have extended themselves beyond their means by leveraging their home equity in order to finance current consumption needs. As Stuart Vyse puts it in his book Going Broke, "The combination of high levels of debt, no savings, and a strained household budget is a formula for disaster. Any sizable jolt, such as illness or loss of a job, can sink the ship, and for an increasing number of Americans, there are more than enough jolts to go around" (2008, pp. 10-11). Consequently, whether Americans have built sufficient levels of savings and assets to protect themselves against economic uncertainties is a question of vital policy importance.

Our analysis has sought to examine one key aspect of financial preparedness, that is, the life course dynamics of asset poverty. Asset poverty represents an important indicator of the financial preparedness of American households should they suddenly lose their stream of income. Research indicates that income volatility and job insecurity appear to have risen in America. Certainly the latest economic recession of 2008 and 2009 is emblematic of this. For many Americans, the question of whether they have accrued enough assets to get them through difficult economic times is becoming increasingly relevant.

Assets are also an important but neglected component in policy discussions surrounding the concept of poverty. As Cramer et al. (2008, p. 222) note,

> Dimensions of poverty and its distribution among different social groups are significantly different when approached from an assets perspective in contrast to an income perspective. Those with a low stock of resources to draw on in times of need are asset poor. This asset poverty may leave them vulnerable to unexpected economic events and unable to take advantage of opportunities offered by a prosperous society. Many families in the United States have little financial cushion to sustain them in the event of a job loss, illness, or other income shortfall.

Our results indicate that asset poverty is quite widespread across the life course. The vast majority of those in early adulthood will experience asset poverty in terms of net worth, financial wealth, and liquid wealth. Those in the middle and later stages of the life course are much less likely to experience net worth asset poverty, but are still quite likely to encounter financial wealth and liquid wealth asset poverty. In addition, being black, having less education, not being married, and not owning a home are all highly associated with a greater risk of asset poverty.

The fact that financial wealth asset poverty and liquid asset poverty are particularly likely to touch a widespread segment of the population is troubling. During a personal financial crisis, having easily accessible and sufficient economic resources at hand is vitally important in being able to ride out such an economic spell, as is being able to access a strong social safety net. The fact that most Americans do not have sufficient liquid assets at various points across the life course, particularly in light of America's relatively weak social safety net, is cause for concern from a policy perspective.

Given these widespread patterns of asset poverty across the life course, we would argue that social policy should focus not only on income-based policies in addressing poverty, but on asset-based policies as well. The ability of individuals and households to build a reserve of financial assets can be an effective strategy for warding off short spells of income poverty, and can serve as a long-term tool to furthering one's development and human capital. Social policy initiatives should encourage asset building, particularly for those at the lower-to-moderate end of the income distribution.

A variety of policy initiatives and ideas could be considered in terms of addressing the widespread existence of asset poverty across the American life course. One specific policy directed to lowerincome households is Individual Development Accounts (IDAs). First proposed by Sherraden (1991), IDAs are matched savings accounts, in which a community organization partners with a financial institution in providing IDAs. Funding for such programs is generally provided by federal and state governments. The various programs allow lower-income individuals to save and receive a matched contribution (typically one-to-one, two-to-one, or three-to-one). The accrued assets can then be used for homeownership, education, or small business start ups, but they can also be used as an emergency fund should an economic crisis occur. Such programs are found throughout the United States and abroad, and have been shown to be successful in raising the level of savings among participants (Sherraden, 2008).

However, given our findings of widespread asset poverty across the population, more universal savings programs would also appear to be called for. Examples of such programs are the Child Trust Fund (CTF) in the United Kingdom, and the Central Provident Fund in Singapore. These programs allow all households to build their levels of financial assets over time. For example, the CTF has provided every child born in the UK after 2005 with a savings account (the amount depending on the income of the family). It is estimated by the U.K. government that "by age 18 account holders will having savings ranging (in real terms) from U.K. $£ 911$ (with no additional savings) to U.K. $£ 14,854$ (assuming savings of U.K. $£ 40$ per month)" (Sherraden \& McBride, 2010, p. 248). Current policy discussions and initiatives over the past five years have seriously considered the idea of developing a similar children's development account in the United States.

In addition, asset accumulation programs might have a complimentary rainy day fund component that could be designed or strengthened within various savings policies and financial products and services. These would include $401(\mathrm{k}) \mathrm{s}$, the Thrift Savings Plan for federal employees, the bipartisan ASPIRE (America Saving for Personal Investment Retirement and Education) Act introduced in Congress each year since 2004, and the various IRAs currently available on the market.

In conclusion, policies and programs that encourage and facilitate the rate of savings among Americans are clearly called for. Our data show the overall necessity of encouraging greater levels of savings and asset accumulation across the life course, and designing social policy initiatives to further such savings. As Sherraden (2008) notes, "Ultimately, savings outcomes result from the interaction of individual and institutional characteristics. But the policy effort should lean toward creation of effective institutions for saving and, to a somewhat lesser extent, toward improving individuals so that they save more effectively" (p. 200). Policies designed along such lines can have a significant impact on encouraging savings and asset accumulation, which in turn, can decrease the prevalence of asset poverty in the United States.

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