



Is Household Wealth Sustainable?

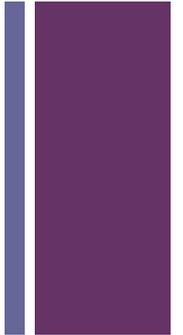
An Examination of Asset Poverty Reentry after an Exit

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+ Asset Poverty

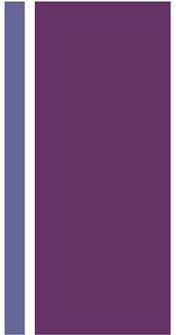


- Measure of poverty based on assets (stocks of financial wealth) rather than income (flows of financial wealth)
- Assets may improve self-sufficiency even in the face of temporary income shortfalls

...but do they?

...under what circumstances?

+ Research Question

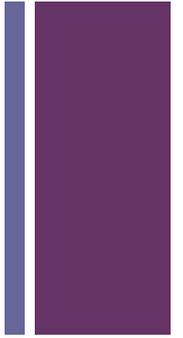


Once a family has accumulated enough assets to exit asset poverty, what factors are related to sustaining the non-asset poor position?

+ A Family is Asset Poor if they do not have enough net worth to sustain income for 3 months above the federal income poverty level

(Haveman & Wolff 2005)

- 31-16% of US households are asset poor (Ratcliffe & Vinopal 2009, 2007 Survey of Consumer Finance)
- Asset poverty is persistent: 60% of all asset poor households remain asset poor 5 years later (Caner & Wolff 2004)
- Little is known about the transition between asset poor and not asset poor



+ Why is the transition from asset poor to non-asset poor important?

- Asset poverty is associated with life cycle stages, but individuals under 50 tend to save to meet a target wealth-to-permanent income ratio rather than following a life-cycle pattern (Carol 1996, Carroll 1997)
- Programs that encourage long-term savings are more abundant for higher-income consumers (e.g. matched retirement accounts, tax rate reduction on long-term capital gains)
- Asset eligibility rules of some public benefit programs (e.g. Medicaid and Supplementary Security Income) may de-incentivize asset accumulation (Chen & Lerman 2005)

Policy designed to encourage asset accumulation as a path to self-sufficiency for low-income families requires an understanding of the transition from asset poor to not asset poor.

+ A Conceptual Framework for Understanding Asset Poverty Transitions



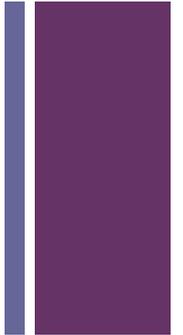
- Micawber Threshold—a level of wealth above which individuals over time can achieve higher standards of living while below which individuals are likely to fall into a poverty trap (Stevens 1999)
- Carter & Barrett, 2006: If asset returns are locally increasing and there is a barrier to acquisition of high-return assets (such as a minimum initial investment)—a Micawber threshold will exist
- Zimmerman & Carter, 2003: Assuming imperfect credit and insurance markets, households below the Micawber threshold do not invest in more risky productive assets because the risk of not being able to provide for basic needs is nontrivial

+ Hypothesis

1. There exists some asset level threshold above which the risk of future asset poverty decreases, while below which the risk of future asset poverty increases
1. Households with asset portfolios containing productive assets exhibit a decreased likelihood of future asset poverty



+ Model



- We use a Cox proportional hazard model to understand the relationship between the duration of the time out of asset poverty and key covariates
- **Independent variable:** hazard rate (or **likelihood of re-entry into asset poverty**)

+ Data

- Panel Study of Income Dynamics
 - Nationally representative, longitudinal
 - Detailed asset information every two years, 1997-2007

- Covariates
 - **Variables Characterizing the Exit from Asset Poverty:**
Level of asset accumulation, History of asset poverty, Year of exit from asset poverty
 - **Household Demographics:**
Head age, Race/Ethnicity of Head
 - **Household Status Variables:**
Automobile Ownership, homeownership, Kids in household, Education of head, Overall health, Health insurance, Income, Single female/male head and interaction with kids, Percentage of assets invested in productive assets, Non-mortgage debt as a percentage of all assets



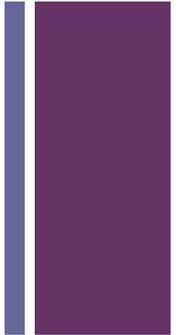
+ Sample

- In order to apply the hazard model, we must be able to identify when households exit poverty

Table 3. Asset Characteristics of PSID Households (N=9,295)

	Asset Poverty Definition			
	Networth 1	Networth 2	Financial Wealth	Liquid Wealth
Never observed to be in asset poverty	5311 (57.1%)	4278 (46%)	2395 (25.8%)	2819 (30.3%)
Always observed to be in asset poverty	2201 (23.7%)	3302 (35.5%)	4937 (53.1%)	4618 (49.7%)
Observed to have entered asset poverty but have not exited	551 (5.9%)	454 (4.9%)	538 (5.3%)	569 (6.1%)
Exit period cannot be established due to non-response	134 (1.4%)	170 (1.8%)	141 (1.5%)	122 (1.3%)
Observed to have exited asset poverty (exit period can be established)	1074 (11.6%)	1069 (11.5%)	1217 (13.1%)	1155 (12.4%)

+ Networth 2



This definition of assets includes

- Net value of ones home (home equity)
- Non-home real-estate holdings
- Farm and business assets
- Checking and savings accounts
- Other savings (e.g. bond funds)
- Stocks
- Debt (subtracted from total assets)



Networth 1



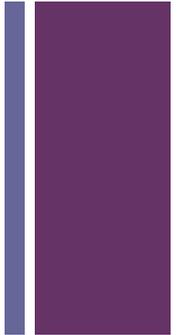
This definition of assets includes

- **Automobile Ownership**
- Net value of ones home (home equity)
- Non-home real-estate holdings
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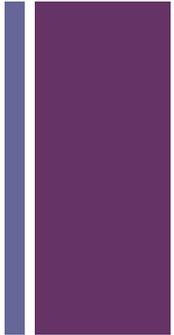
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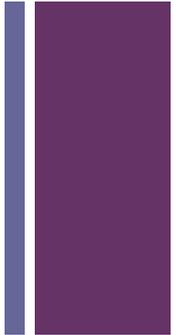
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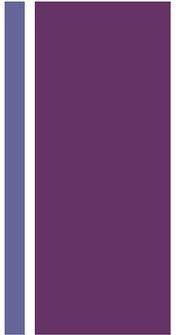


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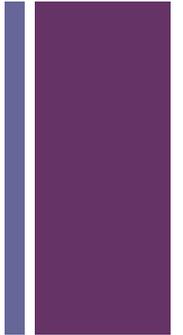
+ General Results

- **Variables related to a decreased likelihood of asset poverty reentry:**
 - Older head of household
 - More years of education
 - Automobile and homeownership
 - Higher income* (for some definitions of Asset Poverty)
 - Exiting poverty with a higher threshold of assets
 - Acquiring productive assets *after* exiting asset poverty
 - Acquiring health insurance (if previously uninsured) *after* exiting asset poverty



+ General Results

- **Variables related to an increased likelihood of asset poverty reentry:**
 - A longer history of asset poverty (being asset poor in 1994)
 - Being African American
 - Having a higher debt to asset ratio
 - Becoming a single-female-headed household *after* exiting asset poverty



+ Results

All variables held constant at their values at the time of exit from asset poverty

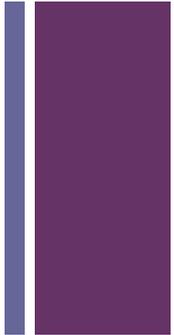
Selected Estimated Hazard Ratios

	Hazard Ratio
% Assets in Productive Assets	1.00
Debt to Asset Ratio	1.007
Threshold 0.75	0.727

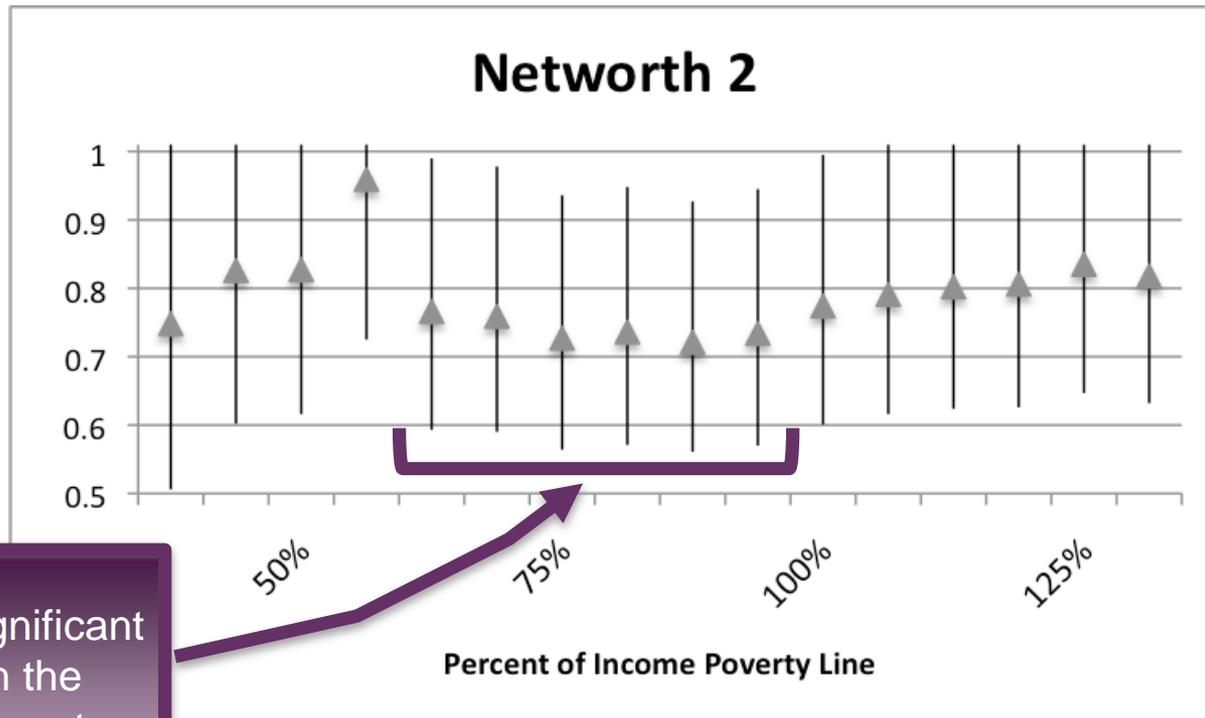
- Asset diversification at the time of exit from asset poverty is unrelated to the likelihood of reentry
- Households who exit asset poverty with higher debt ratios are less successful at staying out of asset poverty
- Households who exit asset poverty with assets at 3 times the asset poverty threshold are more likely to stay out of asset poverty



Is there a threshold effect for asset accumulation?



Estimated Hazard Ratio and Error Bars for
Threshold 0.50 through Threshold 1.31



Statistically significant reduction in the likelihood of reentry



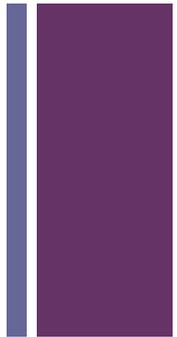
Results

Model with Time-Varying Covariates (TVC)

Selected Estimated Hazard Ratios

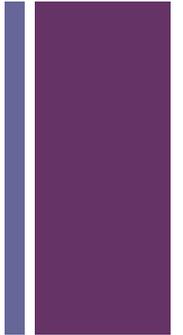
	Hazard Ratio
TVC--% Assets in Productive Assets	0.993
TVC--Debt to Asset Ratio	1.022
Threshold 0.75	0.721

- A 1 percentage point increase in the asset allocation towards “productive assets” decreases the likelihood of reentry by 0.7 percentage points
- A 1 percentage point reduction in debt as a percent of assets after an exit from asset poverty reduces the likelihood of reentry by 2.2 percentage points
- Households who exit asset poverty with assets at 3 times the asset poverty threshold are more likely to stay out of asset poverty



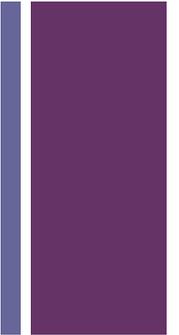
+ Conclusions

- Asset accumulation greater than or equal to 75 percent of the income poverty line has a statistically significant association with less reentry.
 - This level is 3 times the current standard “typically” used for assessing asset poverty
 - The insulating affect of having greater asset accumulations doesn’t have an incremental impact as assets increase; this is suggestive of a threshold effect.
 - Support for Hypothesis 1



+ Conclusions

- Higher debt ratios are associated with an increased likelihood of re-entry
 - Is there an optimal, or “safe range” for debt ratios--
-a topic for the next study!

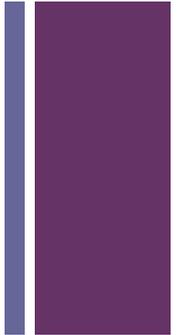


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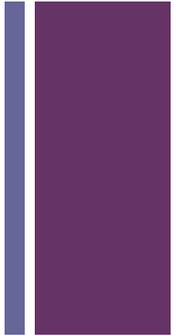
- Households who invest in more productive assets after they exit asset poverty are more likely to remain out of asset poverty.
 - Support for Hypothesis 2
 - Relationship does not hold when considering only the position in productive assets at the time of exit from asset poverty
 - May be related to the need to establish sufficient financial wealth before investing in productive assets
 - There is a risk-reward trade-off when considering productive assets---a definite role for financial advice and assistance for households who are transitioning from asset poor to non-asset poor status

+ Future Inquiry

- Results for debt ratio and investment in productive assets may be attributed to unobservables: financial sophistication, time and risk preferences, changes in ownership of other types of assets—other data sets might investigate these potential alternatives
- Results for the threshold effect of having assets greater than 75 % of income poverty line are suggestive---more frequent report of asset data will allow for a better analysis

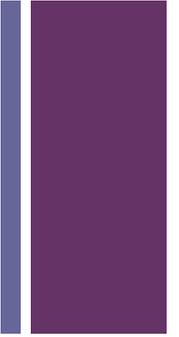


+ Policy Thoughts



- A focus on bridging the transition from asset poor to non-asset poor----not just on hitting a target level of assets
- Policies should support and encourage households as they continue to build assets beyond the conventional asset poverty level, or assets equivalent to 25 percent of income poverty level
- Education that focuses on risk management within the asset portfolio after households have accumulated some assets

+ Questions



+ Econometric Model

- We wish to examine the correlates of the duration of exits from asset poverty

t = duration time; the time from an exit from asset poverty to the subsequent reentry into asset poverty

- We estimate a Cox proportional hazard model:

Baseline
Hazard

$$h(t, M, X, V) = h_o(t) \exp (M\beta_1 + X\beta_2 + V\beta_3)$$

Hazard Rate: rate at which households are likely to reenter asset poverty after a duration of t periods

Parameterized expression that models the ordered duration times

Efron method for tied cases (Efron 1977) and robust standard error estimator (Lin & Wei 1989)

+ Data

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 - Nationally representative, longitudinal
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■ Covariates

■ Variables Characterizing the Exit from Asset Poverty:

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2 Models:

- (1) Household Status Variables held constant at their poverty exit levels
- (2) Household Status Variables included as time-varying covariates (TVC)

Endogenous;
We hold them constant at their initial level in the TVC model