

## **A Health Problem and its Impact on the Savings of Insured and Uninsured Working-Age Households**

**Maude Toussaint-Comeau**

Federal Reserve Bank of Chicago, 230 South LaSalle, Chicago, IL 60604, USA.

**Jonathan Hartley**

Goldman and Sachs, 200 West Street, New York, NY 10282, USA.

The economic consequences of a decline in health can be quite severe. Close to half of personal bankruptcies in the U.S. may be associated with medical problems that trigger both out-of-pocket payments and loss of income. Community affairs specialists and practitioners and financial counselors who are interested in the state of the financial well being of households, should be interested in understanding the implication of health problems and costs on the savings of people. Much less understood is the impact of health on the savings behavior and ultimately on the economic well being of younger working age households, as most previous research on health and socioeconomic impact focus on the retirees. This article seeks to address this important issue, with an examination of what happens to families' savings and asset holdings, as a result of a health problem. Of particular importance is whether having insurance shields them from the impact of illness on their savings. This is hoped to inform financial counselors on a precautionary aspect of savings that is often overlooked.

*Journal of Consumer Education* (2011) 28, (72-87).

<http://www.cefe.illinois.edu/JCE/archives/vol28.html>

Published online April, 2012

Keywords: Health Insurance, Portfolio Choice, Health Conditions, Household Behavior  
JEL: G11; L11; L12; J22; D1

---

### **INTRODUCTION AND OVERVIEW**

Community affairs specialists and practitioners and financial counselors are interested in the state of the financial well being of households, particularly the more vulnerable ones. Their outreach and initiative efforts aimed at helping these households have better access to the financial system have benefited from research on households financial market participation, the ownership of financial instruments such as savings and checking accounts, and the factors underlying such relationship with the formal financial market. For example, in the case of financial access, as often measured by savings and checking accounts ownership, it has been learned that certain barriers to socioeconomic

characteristics, ranging from language, cultural differences, and information asymmetry, may keep from having a relationship with formal banking institutions (Rhine et al, 2006).

Much less understood is the impact of health on the savings behavior and ultimately on the economic well being of these same households. This article seeks to address this important issue, with an examination of what happens to families' savings, asset holdings, and investment decisions as a result of a health problem. This is hoped to inform financial counselors on a precautionary aspect of savings that is often overlooked.

The economic consequences of a decline in health can be quite severe. Close to half of personal bankruptcies in the U.S. may be associated with medical problems that trigger both out-of-pocket payments and loss of income (Himmelstein et al, 2005). A health problem could therefore inhibit savings and undermine ultimately wealth accumulation. For example, Smith (1999) in a seminal study of the socioeconomic impact of illness, reports that negative health shocks lead to a sizable reduction in net worth. Specifically, the onset of a minor illness results in a decrease in wealth accumulation averaging \$3,620 over a four-year period. A major illness resulted in a \$17,000 reduction in wealth accumulation over that period. As explained, health shocks' effect on wealth is in part due to the out-of-pocket medical expenses (Smith, 1999). Based on Smith's calculation, the reduction in wealth coincides with an increase in out-of-pocket health expenditure of \$635 for minor health shocks and \$2,266 for major health shocks.

Most studies in the health economics and finance literature on the subject, including the notable Smith's study, use data from surveys which are done specifically to understand health issues among the older population, 55 and over, particularly, those sampled in the longitudinal Health and Retirement Survey (HRS) and in the Assets and Health Dynamics among the Oldest Old (AHEAD) survey, which covers those who are 70 and above. By contrast, there are virtually no studies that have looked at health for the working-age population. The effect of health shocks for the working-age group warrants particular attention as well, and for obvious reasons. The working-age group should still be engaging in active savings to ensure a safety net for their older years. By directly reducing labor supply, a health problem could result in greater fluctuations and uncertainty in wages and income sources, inhibiting the ability to save.

This article analyzes data from the Survey of Income and Program Participation (SIPP), which contains data on health and savings for a representative population, including individuals who are of working-age (defined between ages 25 and 54). The goal of this article is to document the extent to which working individuals report experiencing a poor health event. Of utmost importance is whether or not these individuals have insurance coverage during such events. We assess the impact that a negative change in health status has on saving and investments of these individuals, and discuss the implications of our findings.

## **HEALTH, INSURANCE COVERAGE, HEALTH SERVICE UTILIZATION**

We make use of the 9 waves of the 2001 panel of the Survey of Income and Program Participation (SIPP). More precisely, the SIPP is a longitudinal dataset that surveys

36,700 households every four months. The nine waves of the 2001 SIPP panel data allow us to look at a condensed three-year period (from 2001 to 2003) for the same individuals.

Table 1 provides summary statistics on selected characteristics of individuals, their health status and health care service utilization, averaged across the three-year period. Averages are shown for both married and single individuals as well as for the entire sample population, which in our case are the working individuals, heads of households, 25 to 54 years old. We note that singles are on average younger than individuals, head in married couple households. They also tend to be slightly less educated, and they are twice more likely to be poor. Blacks make up 18 percent of single headed household types compared to 8 percent of married households. Hispanics are somewhat equally represented in single or married couple household type, at between 12 and 11 percent.

Health status is based on the respondent's answer to how they would rate their health on a five-point scale, a 1 referring to excellent health, while a 5 signifying poor health. In this table, we define as healthy, those with a score of 1 to 3 and as sick, those with a score of 4 or 5, as it is commonly done in the health economics literature. Singles tend to report being sick to a slightly higher degree as those who are married (on average 11 percent vs. 10 percent). They are close to twice more likely to have no health insurance than married individuals—21 percent of singles had no health insurance, compared to 11 percent of married couples.

Health care service utilization appears to vary by marital status and insurance coverage. Married individuals visited the doctor on average close to 4 times a year, compared to singles, 3.5 times a year. We note that any individual with no health insurance could still have had health care services, but in general not having health care insurance correlated with less health care service utilization (this occurred at an average 4 times a year for those with health insurance vs. 2.6 times a year for those with no health insurance).

We take a closer look at the characteristics of those individuals who are without health insurance also in Table 1. The data point to substantial differences in not having health insurance across racial groups. For instance, 10.3 percent of those with no health insurance are non-Hispanic Whites. By contrast, 19.3 percent of those with no health insurance are Blacks, and 33.7 percent of those with no health insurance are Hispanics. These numbers are exacerbated for minority individuals without insurance, if they are single, relative to if they are married. A fairly sizeable portion of those without health insurance have dependent children, in fact close to 45 percent of them. A disproportionate number of those without health insurance are also poor. Compared to 10.9 percent for the entire population that is estimated to live below the poverty line, 24.5 percent of those with no health insurance are poor.

We turn now to analyzing savings/financial asset ownership for the sample population and also broken down by marital status in Table 2. Financial assets held as

**Table 1. Demographics, Health, and Insurance Coverage**

	All	Singles	Married
<b>Demographics</b>			
Average age	36.9	31.7	42.4
Average years of education	13.9	13.2	14.6
% Poor	10.9	15.2	7.1
% Non-Poor	89.1	84.8	92.9
% Non-Hispanic White	0.76	0.70	0.81
% Black	0.13	0.18	0.08
% Hispanic	0.12	0.12	0.11
% Female	0.52	0.53	0.52
<b>Health and Insurance Coverage</b>			
% Sick	0.11	0.12	0.10
% No health insurance	0.17	0.21	0.11
<b>Health Service Utilization</b>			
Median Physician Visits Per Year	3.76	3.51	3.99
Median Physician Visits Per Year (have insurance)	3.98	3.75	4.16
Median Physician Visits Per Year (have no health insurance)	2.59	2.53	2.67
<b>Characteristics of Individuals Without Health Insurance</b>			
% Non-Hispanic White	53.8	54.8	52.1
% Black	17.4	22.0	10.6
% Hispanic	30.4	24.7	39.0
% Poor	24.7	25.4	23.6
% Non-Poor	75.3	74.6	76.4
% Have dependent children	44.0	31.5	63.2
% Have no dependent children	56.0	68.5	36.8
N	62,091	20,331	41,760

checking accounts, savings accounts, treasuries, CDOs, etc, are referred here as “savings” or “safe assets”, interchangeably. Households also have other types of financial assets, which are important. We classify them based on the level of risk they entail as investment. There are medium risk assets (i.e., retirement securities and bonds), and high risk assets (i.e., mutual funds and stocks).

In Table 2, we note that a substantial number of singles head of household have no financial asset. Only forty-four percent of them compared to 73 percent of married individuals have a positive amount of any financial assets. Less than half of singles have any savings account, and only 9 percent have a retirement account. The percentages of the financial assets held across other asset class categories are also all much smaller for singles. Only 9 percent hold retirement or bonds (medium risk asset), compared to 25 percent of married. And only 12 percent hold stocks and mutual funds (risky assets), compared to 30 percent of married individuals.

Conditional on having financial assets, the majority of households’ financial assets (67 percent) are held in retirement/bond. This suggests that retirement accounts are an important source of saving and wealth accumulation for households, yet as we noted from the upper panel in Table 2, only 25 percent of individuals are in fact availing themselves of such form of savings. For singles, the number is worse, at only 9 percent.

**Table 2. Financial Asset Ownership and Fractions**

	All	Singles	Married
<b>Any Financial Assets</b>	0.57	0.44	0.73
Any Safe Assets (Savings/checking accounts)	0.55	0.43	0.70
Any Medium Risk Assets (Retirement/bonds)	0.17	0.09	0.25
Any Risky Assets (stocks, mutual funds)	0.21	0.12	0.30
<b>Asset Fractions (cond. on owning)</b>			
Fraction in Safe Assets	0.20	0.28	0.20
Fraction in Medium Risk	0.67	0.57	0.70
Fraction in Risky	0.13	0.15	0.10
N	62,091	20,331	41,760

In Table 3, we present additional statistics showing how financial asset ownership varies with various characteristics, and depending on the health status of individuals in the households. The data suggest that in general sick individuals are less likely to have any asset holdings than the healthy. For example, 61 percent of healthy

people own saving accounts. The analogous figure is 35 percent for sick people. For retirement accounts (medium risk assets), the numbers are 20 percent for healthy people and 8 percent for sick. And for stocks and bonds (risky assets), the numbers are 23 percent for healthy people and 10 percent for sick people. Similar patterns suggesting that those who are sick are much less likely to hold any financial asset are observed by racial group and by age group.

**Table 3. Health Status and the Probability of Financial Assets Holding**

N=36700 Characteristics	Safe Assets		Medium Risk Assets		High Risk Assets	
	Healthy	Sick	Healthy	Sick	Healthy	Sick
All People	0.61	0.35	0.20	0.08	0.23	0.10
<b>Marital Status</b>						
Single	0.45	0.29	0.10	0.05	0.13	0.06
Couples	0.72	0.51	0.27	0.14	0.32	0.17
<b>Insurance Coverage</b>						
Uninsured	0.29	0.21	0.04	0.03	0.05	0.03
Insured	0.67	0.44	0.23	0.11	0.28	0.12
<b>Racial/ethnicity</b>						
Non-Hispanic White	0.68	0.42	0.24	0.11	0.28	0.12
Black	0.41	0.22	0.06	0.02	0.09	0.04
Hispanic	0.41	0.23	0.06	0.03	0.07	0.05
<b>Poverty Status</b>						
Poor	0.28	0.20	0.05	0.01	0.05	0.02
Non-Poor	0.65	0.41	0.21	0.10	0.27	0.13
<b>Age Category</b>						
25-34	0.59	0.39	0.14	0.08	0.20	0.11
35-44	0.67	0.44	0.23	0.11	0.29	0.14
45-54	0.72	0.42	0.30	0.12	0.33	0.13

Those who are uninsured and poor, respectively, as expected also are much less likely to have savings, a situation that gets exacerbated if they are sick. Twenty-eight percent to 29 percent of those who are healthy and uninsured and poor have savings accounts. The number is 21 to 20 percent, if they are sick. Between only 3 to 5 percent of those who are without health insurance have retirement accounts, stocks and bonds (medium or risky asset type), regardless of whether they are sick or not.

In summary thus far, the main observations to retain from Table 3, are that there appears to be a suggestive (negative) relationship between sickness and risky asset ownership. This rings true almost only for those who are insured. For further illustration purpose, we can see this in Figure 1, which reproduces the probability of risky asset ownership for singles and married, by insurance coverage. As can be seen, the line

relating health status and the probability of risky account ownership is markedly negative for those who are sick and insured, and especially in married couple household types.

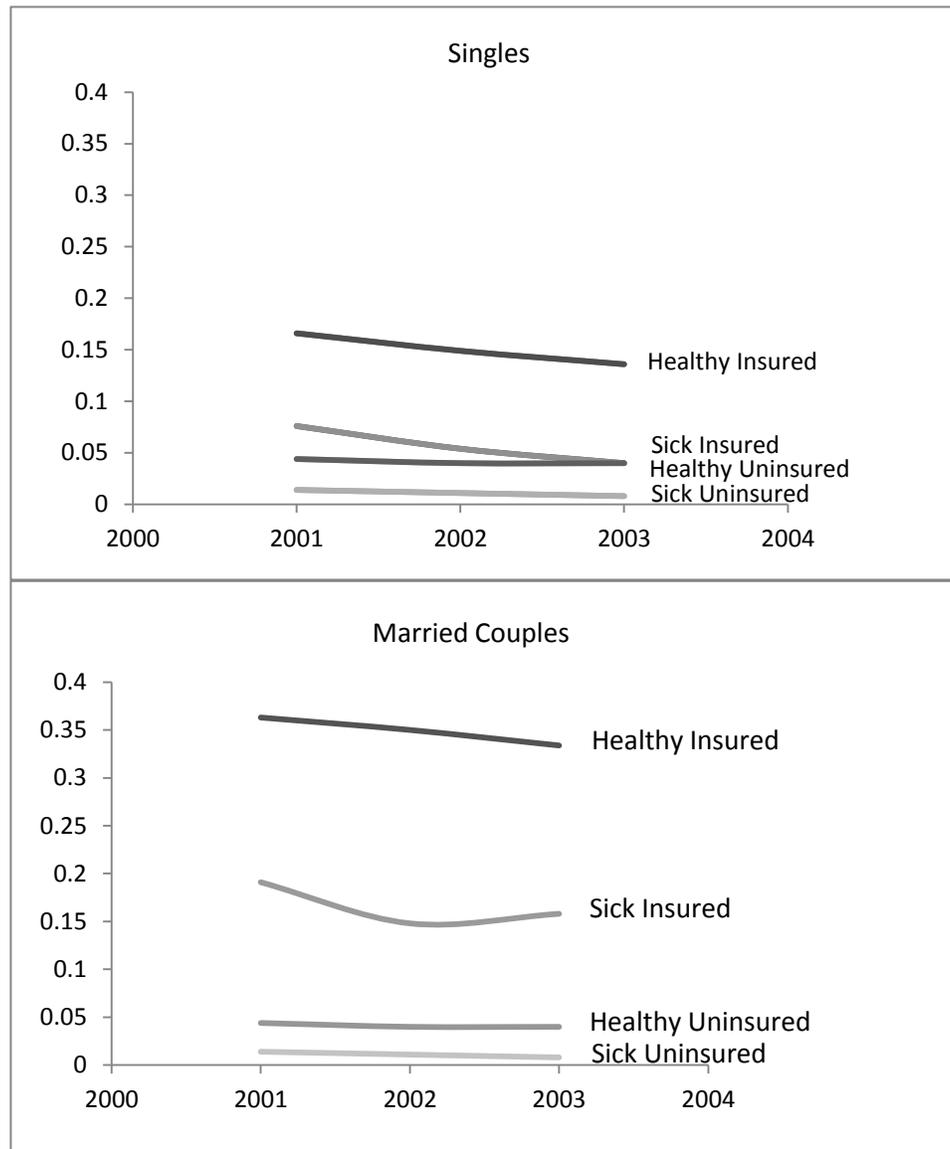
## **HEALTH STATUS, INSURANCE COVERAGE, AND ACCOUNT CLOSING**

So far, the descriptive statistics suggest that there is a strong association between health and financial asset ownership, and especially risky asset ownership. This is actually not very surprising. There is a well-known correlation between health and socioeconomic status—those who are poorer and have less wealth (are less able to afford better care) are likely to be relatively unhealthier. We look now at the extent to which there is in fact actual account closing among individuals who become sick, compared to those whose health either improves or remains unchanged. We do this again also comparing those with and without health insurance (Table 4).

This exercise is done looking at changes from wave 3 to wave 6 as well as from wave 6 to wave 9, reflecting one year time intervals over a three year period. Becoming sick is defined here as having had any deterioration in reported health's score over the period. Account closing is defined as any negative change in the asset ownership indicator, conditional on ownership in the initial period. Individuals who have closed all accounts in one particular asset class are those who held some amount of assets in the previous period and reported no asset ownership in the next.

We point here where we see some of the more interesting differences. We note first and foremost that here again these changes are really with respect to closing of risky assets. Between waves 3 and 6, when looking at the difference-in-differences among singles and closing of risky asset holding, of those who do have health insurance, 13 percent who remain healthy close their risky asset accounts, while 24 percent who report a decline in health close their respective risky asset accounts. The uninsured are overall much more likely to close their accounts, irrespective of their health status, as 32 percent of those who remain healthy and only 33 percent of those who get sick drop their risky asset accounts, reflecting minor variation with changes in health status. We should recall however that for the uninsured these percentages represent much fewer individuals, since only a small percentage of the uninsured actually have assets to start with, irrespective of whether or not they are healthy or sick.

**Figure 1.**  
**Health Status, Insurance Coverage and the Probability of Risky Asset Ownership**



**Note:** In these sets of panel in fig. 1, sick people are defined as those who have a lapse in health between 2001 and 2002 and 2002-2003.

With respect to the differences for risky asset closing between waves 6 and 9, among singles, of those with health insurance, 13 percent who remain healthy close their risky asset accounts, while 21 percent who report a decline in health close their respective

accounts. Among insured couples, between waves 6 and 9, 13 percent of individuals who remain healthy close their risky asset accounts, while 15 percent who report a decline in health close their respective accounts. We also note that married individuals without health insurance who became sick tapped quite heavily into their retirement and bonds in wave 3 to 6, relative to those who remain healthy.

**Table 4. Account Closings Between Years**

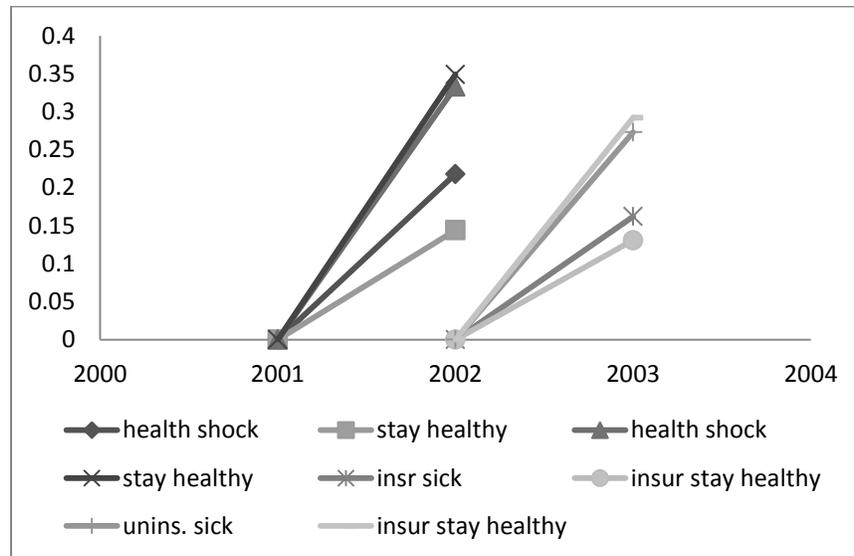
	Safe Assets		Medium Risk		Risky Assets	
	w6-w3	w9-w6	w6-w3	w9-w6	w6-w3	w9-w6
<b>Singles</b>						
<b>All</b>	0.06	0.11	0.10	0.11	0.16	0.15
<b>Uninsured</b>						
Become Sick	0.08	0.22	0.20	0.25	0.33	0.20
Remain Healthy	0.07	0.21	0.20	0.25	0.32	0.25
<b>Insured</b>						
Become Sick	0.05	0.12	0.03	0.06	0.24	0.21
Remain Healthy	0.05	0.08	0.09	0.08	0.13	0.13
<b>Couples</b>						
<b>All</b>	0.05	0.06	0.09	0.09	0.15	0.14
<b>Uninsured</b>						
Become Sick	0.10	0.28	0.38	0.15	0.29	0.33
Remain Healthy	0.07	0.2	0.21	0.18	0.37	0.33
<b>Insured</b>						
Become Sick	0.06	0.07	0.14	0.05	0.21	0.15
Remain Healthy	0.04	0.05	0.09	0.09	0.14	0.13
N (those starting w/ acct)	17,567	17,523	5,900	6,008	7,606	7,169

Notes: we define uninsured as not having health insurance either in wave 3 or wave 6 and insured as having coverage in either period.

For further illustrative purpose, Figure 2 shows the probability of risky account closing for those who become sick and those who remain or become healthy, by insurance coverage. Note that in this figure, we are looking at the account closing probabilities conditional on an individual owning a risky asset account in a) 2001, or b) 2002. The year we condition on is the year at which the account closing probabilities are defined at 0, hence we have two segments of our graph, which show account closings for different people, but give us almost the same probability of account closing for either year. Also with regard to what is important in Figure 2, the account closing probabilities graph demonstrates that 1) the uninsured are more likely to close a risky account

generally, and 2) when the insured get sick they are significantly more likely to close their risky asset accounts than their healthy counterparts.

**Figure 2. Health Status, Insurance Coverage and the Probability of Risky Asset Closing**



### AVERAGE CHANGES IN ASSET FRACTIONS

We also conduct an analysis of portfolio allocation decisions when one becomes sick, conditioned on having some assets in an initial period. So by contrast to the decision at the extensive margin (owning or not owning), we are now asking a slightly different question regarding the decision at the intensive margin.

Table 5 compares the changes in asset fractions when people experience a decline in health between those with and without health insurance. (The wealth fractions were defined as the amount of asset holdings within a specific class divided by the individual's net worth, being applied to each asset class). Pointing to the more interesting differences, we note that between waves 3 and waves 6, uninsured singles that stay healthy decrease their asset fraction by 15.6 percent while the uninsured who get sick decrease their asset fraction by 19 percent. This 3 percent difference in how the uninsured reallocate on the intensive is a much smaller difference compared to the insured whose average change in risky asset fraction is 27 percent lower for those who get sick.

Interestingly for singles who experience a decline in health between waves 6 and 9, the uninsured sick actually increase their risky portfolio shares 0.16 more than their healthy counterparts. This result is actually consistent with the prediction of theory of portfolio choice. The finance literature identifies the risk of future health spending as a

crucial trigger of precautionary saving. If people are risk adverse, when they are sick, they adjust their expectation of their future health risk, and as a result accumulate wealth to deal with future problems and expenses. Savings (safe asset holding as opposed to riskier assets) then, the theory predicts, could rise when the prospect of poor health increases (Rosen and Wu, 2004). Consistent with this theory, we also note that the insured with declining health also demonstrate risk aversion by decreasing their risky asset portfolio share by 0.03 more than the insured singles who remained healthy. (We should remember that those percentages are also based on a very small base of individuals in the sample who are single uninsured, owning risky assets, to start).

For couples between these same waves, uninsured individuals who get sick increase their risky portfolio shares in financial wealth by 2 percent relative to those who stay healthy, a jump understandably smaller than that demonstrated by uninsured singles. Insured couples display risk aversion as well, as those who become sick between these years decrease their risky portfolio shares by 14 percent relative to the healthy.

**Table 5. Average Asset Fraction Changes Between Years**

	Safe Assets		Medium Risk		Risky Assets	
	w6-w3	w9-w6	w6-w3	w9-w6	w6-w3	w9-w6
<b>Singles</b>						
All	.116	-.085	.308	.062	.069	-.003
Become Sick	.044	.019	.235	.045	-.191	-.005
Remain Healthy	.139	-.083	.331	.065	.083	-.003
<b>Uninsured</b>						
Become Sick	-.032	-.043	-.027	-.282	-.190	.204
Remain Healthy	-.175	.028	.032	-.236	-.157	.044
<b>Insured</b>						
Become Sick	.070	.031	.312	.103	-.191	-.042
Remain Healthy	.200	-.105	.363	.100	.108	-.009
<b>Couples</b>						
All	-.017	-.007	.187	-.122	.160	-.015
Become Sick	-.016	.014	-.142	-.103	-.049	-.013
Remain Healthy	-.020	-.008	.186	-.121	.077	-.015
<b>Uninsured</b>						
Become Sick	-.043	.036	-.044	-.344	-.393	.243
Remain Healthy	-.018	-.014	-.082	.040	3.36	-.033
<b>Insured</b>						
Become Sick	-.026	.010	-.150	-.090	-.044	-.029
Remain Healthy	-.020	-.008	.192	-.126	-.013	-.015
N (those starting w/ acct)	52438	52406	17684	18008	22785	21490

## THE EFFECT OF ILLNESS ON SAVINGS AND INVESTMENT

Is the association between health and financial assets/savings/investment suggested by the data above, in fact causal? That is, accounting for whether or not one has health insurance, does experiencing a poor health event actually causes people to close off their accounts at the extensive margin? And, if they do not divert completely, to what extent do they withdraw from these assets in response to a health problem, assuming they have insurance, or do not have insurance?

Indeed it is fairly difficult to establish true causal relationship, without the benefit of survey data, which ask specifically of respondents these questions. However, based on econometric techniques developed and reported in a separate publication (Toussaint-Comeau and Hartley, 2009), we were able to address these questions. We computed (random effects and fixed effects) regression estimates, from a model of the financial asset ownership decision and portfolio allocation of individuals, isolating the effect of a “health shock” and insurance coverage and measured its effect on savings and investment. We summarize here the empirical results that specifically tests for the causal effect of poor health and lack of insurance coverage, based on the more rigorous research design. We also discuss what we think are some of the implications of these results.

- The analysis confirms that for those at a working-age, health status does not affect safe asset holdings. This result suggests that this source of more liquidity and smaller source of savings may not be consequential enough to draw from in response to an unexpected health shock and high medical costs that this may entail. Although, the empirical analysis did confirm that married couples who are without health insurance are significantly more likely to close their safe assets over the period, irrespective of whether or not they are sick, (with a fixed-effects estimate of -0.410). This reflects the fact that in general, individuals who are without health insurance are more subject to savings variability and uncertainties.
- The cross-sectional correlations that were noted with married couples and closing of retirement accounts (between wave 3 and wave 6) do not necessarily imply causality, as this association vanishes when we submit the analysis to more robust causal estimation technique. There are heavy costs and penalty for withdrawing retirement accounts, before being retired, which possibly explain why working households would be reluctant to draw down from these types of medium assets. Also, the majority of the sample did not have such accounts, so the result may also have been subjected to sample size issues.
- By contrast, for married individuals, the empirical estimates confirm that health status is a significant predictor of not holding any risky assets, (with a fixed-effect estimate of - 0.097). We looked further into this finding by comparing those with and without health insurance coverage, respectively. Interestingly, we find that our result of a significant effect of health on risky asset is true only among married individuals who are insured. When they are hit by a negative change in their health they have a greater tendency to drop their high-risk assets.

- Such divestment of risky asset is not found with singles (especially the uninsured one). The lack of statistical evidence linking this group's health and asset ownership and holding may be due to the fact that in general this group is less likely to own any asset, to start with. Also, the dynamics of savings and health for this group are likely so complex that it makes it impossible to fully isolate a direct "health shock effect" on savings ((i.e., in econometric terms the "health effect" is subject to the heterogeneity (differences and particular circumstances) of different individuals in the group)). Recalling that in the data we found that a disproportionate number of the uninsured were singles and especially single mothers leaving below the poverty line. Programs like Medicaid are specifically designed to assist demographics such as these. So it could be that also that simply some of these individuals may be receiving free health care services and therefore their savings behavior is much less related and responsive to their health status. But still this could not fully explain this result. Medicaid programs are only available in 35 states and the District of Columbia, which, in addition to other accessibility constraints, these households may still be heavily leveraged, especially if they have to face a medical problem.

- Going back to the result for insured married households (who are relatively in a better socioeconomic condition), of being sick and closing and divesting their risky assets as a result. This merits further attention. It suggests that the typical middle-class household in the US may be quite vulnerable to health shocks, and such event may seriously undermine their long-term wealth accumulation prospect. According to risk and risk management models, in general households should be able to use savings (and other formal and informal means of insurance such as networks) to smooth out consumption (including medical expenditures) in the face of idiosyncratic shocks, such as an unexpected health problem (Dercon, 2002; Townsend, 1995). In other words, health insurance should mitigate households' risks when faced with health expenditure. Therefore in the presence of health insurance, we should not see an impact of health on wealth. In practice, however, as Smith (1999, 2003) and Levy (2002) find, while health insurance does reduce some out-of-pocket payments, it still does not seem to fully protect households against income risk. They found that older households' long-term wealth is still affected. We see that this well known result for the old and the retired is also pervasive in our analysis which focuses on the working-age younger population.

- We should note that our data does not provide information on medical costs. Unlike Smith, we were not therefore able to account specifically how much households spend as a result of a health problem. We did proxy for medical spending with the number of doctor visits (assuming those with more medical visits have reasonably more frequently out of pocket spending to make) and we still found, as noted, that a negative change in health had a direct effect on long-term savings sources, such as mutual funds and stock ownership and holdings. The fact that the insured and married households drew upon their risky assets, where they typically allocate more of their portfolio money (besides their retirement accounts) as a result of a negative change, suggests that in assessing middle-class long-term financial security prospect, health issues should be one

of the imperatives to consider. Increased medical care costs, especially if insurance coverage fall short of meeting would undeniably impair long-term financial viability of working middle-class families.

## CONCLUDING REMARKS

Looking at the effect of health, not just for the old, but for younger working-age households is important. As poor health decreases household labor while increasing medical expenses, this could lead to lower savings, an essential element of wealth accumulation. It was expected that particularly among more vulnerable households, and for those who are not covered by health insurance, health problem would undermine further their economic well being. We were not able to fully link health with savings behavior of these groups, as their savings is low to begin with, irrespective of health status, and also, their circumstances vary. Undeniably some of the effects of medical needs for the poor and uninsured are being mitigated by programs like Medicaid.

One of the more pervasive finding in this research, however, is that it confirms based on a fairly methodologically robust manner, that financial positioning and net worth may be compromised among those who are in married couple households with health insurance, a group that we typically view as being better off. Rising medical costs are likely to exacerbate such situation and undermine long-term economic well being of this large segment of middle-class working families.

These findings should hopefully help better inform policies and initiatives which are concerned with knowing how leveraged households may become, and how vulnerable they may be in the face of unexpected and uncontrollable life events. They also have relevance for policies related to how individuals may cope with health care costs.

## REFERENCES

- Dercon, S., "Income Risk, Coping Strategies, and Safety Nets," *World Bank Research Observer*, 2002, 17(2): 141-66.
- Himmelstein, David, Elizabeth Warren, Deborah Thorne, and Steffanie Woolhandler, "Market Watch: Illness And Injury As Contributors To Bankruptcy" *Health Affairs*, February 2005.
- Levy, H., "The Economic Consequences of Being Uninsured," ERIU Working Paper, 2002, 12.
- Rhine, Sherrie, L. W., William H. Greene, and Maude Toussaint-Comeau, "The Importance of Check-Cashing Businesses to the Unbanked: Racial/Ethnic Differences," *Review of Economics and Statistics*, 2006, 88(1), pp. 146-157.
- Rosen, Harvey and Stephen Wu, "Portfolio Choice and Health Status," *Journal of Financial Economics*, 72(3), 2004, pp. 457-484.

Journal of Consumer Education, 28, 72-86, 2011  
Copyright © The Illinois Consumer Education Association  
<http://www.cefe.illinois.edu/JCE/archives/vol.28.html>

Smith, James P., "Healthy Bodies and Thick Wallets: The Dual Relation Between Health and Economic Status," *Journal of Economic Perspectives* 13(2), 1999, pp. 145-166.

Smith, James P., "Consequences and predictors of new health events," Institute for Fiscal Studies Working Paper, 2003, WP03/02.

Toussaint-Comeau, Maude and Jonathan Hartley, 2009, "Health and the Savings of Insured versus Uninsured, Working-Age Households in the U.S." [http://www.chicagofed.org/digital\\_assets/publications/working\\_papers/2009/wp2009\\_23.pdf](http://www.chicagofed.org/digital_assets/publications/working_papers/2009/wp2009_23.pdf), retrieved on March 2012.

Townsend, R. M. "Consumption Insurance: An Evaluation of Risk-Bearing Systems in Low-Income Economies." *Journal of Economic Perspectives*, 1995, 9(3): 83-102.