

Discussant Comments

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- “Living in the Shadow of the Past: Financial Profiles, Health and Well-Being”
- by ANDREW E. CLARK, CONCHITA D’AMBROSIO, and RONG ZHU

Main Findings

- **1. The paper looks at the link between individual financial profiles over time and well-being, as measured by life satisfaction for over 24,000 individuals in Australian panel data from 2002 to 2016. The four main findings are:**
- **First, satisfaction falls (rises) with a contemporaneous major financial worsening (improvement), with worsening having the larger effect**

Main Findings (cont.)

- **Second, the experience of these financial events in the past continues to negatively affect current well-being.**
- **Third, only the order of financial improvement spells matters for well-being: a given number of past years where finances deteriorated has the same effect on current well-being whether the deterioration occurred in one continuous spell or was interrupted.**

Main Findings (cont.)

- **Fourth, these effects are heterogeneous over the distribution of well-being and affect individual smoking, drinking, exercise and sleep quality.**

Previous Literature

- **1. Three main findings: (i) within each country at a given point in time, richer people are more satisfied; (ii) on average, individuals living in richer countries are more satisfied with their lives than are their counterparts in poorer countries; and (iii) rising average income within country over time is generally not associated with higher life satisfaction [see Clark, et. al., 2016].**

Previous Literature (cont.)

- **2. Only a small number of papers have looked at the effect of monetary factors beyond income on well-being. Headey and Wooden (2004) showed that life satisfaction is positively related to household net wealth. Regarding debt, Keese and Schmitz (2014) find that this is negatively related to mental well-being, and Brown et al. (2005) emphasize the role of unsecured, as opposed to secured, debt in this respect.**

Previous Literature (cont.)

- **3. Bridges and Disney (2010) explore the link between self-reported depression and both objective and subjective debt measures, concluding that subjective debt is most associated with depression. Brown and Gray (2016) also show that subjective well-being is positively associated with net wealth and assets, but negatively correlated with both total and unsecured debt.**

Previous Literature (cont.)

- **4. The existing literature on financial situation and subjective well-being is however atemporal, with contemporaneous financial measures being correlated with current well-being.**
- **5. This paper focuses on the role of the time profiles of both major financial improvements (e.g., winning a lottery or receiving an inheritance) and major financial worsening (e.g., going bankrupt) in determining life satisfaction, using longitudinal data from the Household Income and Labour Dynamics in Australia (HILDA) Survey.**

Previous Literature (cont.)

- **6. In contrast to existing research on contemporaneous correlations with financial variables, the analysis here is intertemporal. Although where individuals are now (financially) is important, how they got there is also key in understanding their current well-being. Conditional on the present, the past matters here for at least two reasons.**
- **7. The first is the scarring effect of past negative events, which can continue to affect current well-being even conditional on the current situation: this has been demonstrated for both past poverty (Clark et al., 2015) and past unemployment (Clark et al., 2001; Clark and Lepinteur, 2018). An analogous ‘anti-scarring’ effect may well be at play for past positive effects**

Previous Literature (cont.)

- **8. Second, the sum of previous financial events may provide some measure of wealth.**

Methodology

- **1. The paper relates well-being at time t to both individual variables at the same point in time (t) and their past values up to time $t-1$. For the latter they use two intertemporal measures from the recent literature on economic inequality: (i) the chronicity index of Foster (2009) (which measures the frequency of financial shocks) and (ii) the persistence index in Bossert et al. (2012) (which considers the continuity of financial-shock spells)**

Methodology (cont.)

- **2. They also employ the panel data quantile regression model with fixed effects developed by Canay (2011). This provides a complete picture of the relationship between financial profiles and the entire distribution of well-being, controlling for individual fixed effects.**

The Data

- **1. They use panel data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. Beginning in 2001, HILDA is a nationally-representative household panel survey in Australia that collects annual information on economic well-being, income, life events and labour-market dynamics. As the first wave (2001) does not include relevant information, they concentrate on the remaining 15 HILDA waves (2002–2016). Following Clark et al. (2016), they focus on individuals who are aged over 16. They also impose an upper age bound of 65, which is the current qualifying age for the Australian Age Pension. After dropping observations with missing information on the core variables the final sample comprises 159,926 observations on 24,436 Australians.**

The Data (cont.)

- **2. They use life satisfaction as the main measure of subjective well-being (Di Tella and MacCulloch, 2006; Clark et al., 2008). In each wave, HILDA respondents are asked the following question: “All things considered, how satisfied are you with your life?”. Subjects answer on a scale of 0 to 10, where 0 refers to Not Satisfied at All and 10 to Completely Satisfied.**

The Data (cont.)

- **3. HILDA respondents are asked at each wave which major life events from a list of 21 have occurred to them over the past 12 months. Two of these 21 refer to financial events: (i) “a major improvement in the financial situation, including having won a lottery or having received an inheritance” (which they will denote by MIF_{it}); and (ii) “a major worsening in the financial situation, including having gone bankrupt” (denoted by MWF_{it}). These two key financial variables are thus dummies based on self-reported events.**

Methodology

- **1. They explicitly include time in a number of different ways. First, they calculate two dummy variables for ever having had a major financial improvement or major financial worsening in the past observational period (up to time $t-1$) covered by the HILDA data (denoted by PastMIF_{it-1} and PastMWF_{it-1}).**

Methodology (cont.)

- **2. They also distinguish chronic financial improvement (or worsening) from persistent financial improvement (or worsening). In the recent literature, the former refers to the frequency of occurrence, while in the latter the financial events occur in periods that are more linked together, conditional on their frequency.**
- **3. Chronicity applies to a situation in which an individual experiences financial improvement for a certain proportion of the time periods under consideration, without paying any attention to the durations of unbroken financial-improvement spells. On the contrary, persistence explicitly takes the continuity of financial improvement spells into account.**

Methodology (cont.)

- **4. The chronicity measure of Foster (2009) is simply the average financial improvement (or worsening) that an individual has experienced over time. That is:**
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- **Foster^{MIF}_{it} = (1/t) $\sum_{i=\tau}^t$ MIF_{i τ}**
-
- **is the chronic measure of major financial improvement up to date t, with MIF_{i τ} being the dummy for a major financial improvement for individual i in period τ . The chronic index of major financial worsening, Foster^{MWF}_{it}, is defined analogously .**

Methodology (cont.)

- **5. They measure persistence in major financial improvements using an index which weighs each spell by its length (denoted by l_T). The $BCDMIF_{it}$ index is the weighted average of major financial improvements up to date t , with the weight being given by the length of the spell to which the period belongs:**
 - $$BCDMIF_{it} = (1/t) \sum_{i=T}^t MIF_{iT}$$
 -
- **The persistent index for major worsening in finances, $BCDMWF_{it}$ is constructed analogously.**

Methodology (cont.)

- 6. They assume that subjective well-being can be described by the following equation
- $WB_{it} = FP_{it}\beta + X_{it}\gamma + \mu_i + \varepsilon_{it}$
- where WB_{it} is a well-being measure for individual i in period t , FP_{it} is a vector of individual-level financial-profile variables, X_{it} a vector of time-varying explanatory variables, including age, education, marital status, employment status, number of children, the log of annual equivalent household regular disposable income, a dummy for living in a major city, and State and wave dummies. The μ_i term here is the individual fixed effect, which picks up any time-invariant unobserved heterogeneity. Last, ε_{it} is the idiosyncratic error term.
- 7. They use a fixed effects (FE) panel estimation.

Results

- **1. About 14 percent of Australians reported at least one major financial improvement over the 2002–2016 period, with 12 percent reporting a major financial deterioration over the same period.**
- **2. The chronicity index and the persistence index had similar values for financial improvements and financial worsening.**

Results (cont.)

- **3. With respect to subjective well-being, the average value of life satisfaction is close to eight on the zero to ten scale, corresponding to the very typical left-skew found in many well-being measures.**

**Table 2: The effects of financial profiles on well-being
(FE estimates)**

MIF_{it}	0.129***	0.170***	0.149***	0.150***
MWF_{it}	-0.567***	-0.596***	-0.591***	-0.591***
PastMIF_{it-1}		0.117***		
PastMWF_{it-1}		-0.130***		
FOSTERMIF_{it-1}			0.167***	0.156***
FOSTERMWF_{it-1}			-0.368***	-0.361***
BCDMIF_{it-1} - FOSTERMIF_{it-1}				0.769**
BCDMWIF_{it-1} - FOSTERMWF_{it-1}				-0.157
R-Square	0.048	0.065	0.066	0.066

Comments and concerns

- **1. As the authors indicate, a limitation of the study is that the core variables of interest (major financial improvement, and major financial worsening) are self-reported. Self-reports, particularly on past events, are often subject to recall error.**
- **2. As the authors also indicate, as the information is based on a vague question in HILDA, respondents' answers may refer to changes in net worth of different sizes. It would be preferable to know whether the financial improvement or worsening was a major or minor one.**

Comments and concerns (cont.)

- 3. While Bridges and Disney (2010) find evidence that subjective financial measures matter more for well-being than objective ones, it would be preferable to have both types of financial measures to check the robustness of their findings.

Comments and concerns (cont.)

- **4. Though the basic regression model includes a variable for household income as a control variable, there is no variable included measuring household wealth. There is actually household wealth data available for 2002, 2006, 2010, and 2014. Since wealth represents an accumulation over time, current wealth should reflect contemporaneous and past financial improvements and worsenings. The inclusion of this variable would help identify whether current subjective well being depends more on changes in wealth or (current) wealth levels. The authors might consider running regressions on these four years only (a pooled cross-sectional, time-series analysis).**

Comments and concerns (cont.)

- **5. As a side-note, I wonder whether Trump's election in 2016 in the USA was partially a result of a considerable number of people in the USA experiencing financial worsenings over the previous few years.**