

# Do You Feel Financially Secured? The Investigation of Economic Indicators of Financial Well-Being

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## Abstract

The economy has been in downward movement in the past few years in the United States as well as different parts of the world. Consumers' financial situations have been found to influence their purchase behaviors. While some personal finance experts blame consumers' (lack of) spending plans for their financial situations, others suggest that consumers' perception of their financial standing influences their purchase plans. Using a nationwide large scale survey study, we examined the value of applying economic indicators as proxy measure of financial well-being. Instead of income or debts, wealth was found to be the most important economic indicator of financial well-being.

## Introduction

Throughout the current economic recession, we have witnessed the overwhelming pressures that accompany a worldwide credit crisis. Previous studies have shown that many individuals strive for financial success (Kasser and Ryan 1993), which makes the current financial crisis a critical time to further understand how financial situations, and our perceptions of those situations, influence consumer decisions and well-being. One way that financial situations have been proposed to influence consumer decisions is through financial well-being, which is conceptualized as an individual's subjective assessment of the adequacy (Vera-Toscano, Ateca-Amestoy, and Serrano-Del-Rosal 2006) and stability (Poduska 1992) of his or her financial situation. Past work has demonstrated the importance of financial well-being. Increased financial well-being is associated with: (a) lower stress (Norvilitis et al. 2003); (b) higher self-esteem and sense of personal control (Krause, Jay, and Liang, 1991); and (c) lower depression (Rocha and Strand 2004). Fox et al. (2002) found that lower financial well-being predicted an increase in partner violence.

## **Economic Indicators of Financial Well-Being**

Using measurement items like the InCharge Financial Distress scale to capture individual consumers' financial well-being is not always feasible, therefore, it is important and often unavoidable for marketers to use various economic indicators which have been proposed to capture financial well-being such as income (Campbell, Converse, and Rodgers 1976; Hayo and Seifert 2003; Walson and Fitzsimmons 1993), wealth (Hayo and Seifert 2003), debt (Walson and Fitzsimmons 1993), and expenses (Walson and Fitzsimmons 1993). Nonetheless, to our best knowledge, there is no empirical study that examines a variety of economic indicators simultaneously. So, our paper will fill this gap and compare these economic indicators.

One way to understand the importance of financial well-being to consumer decision making, and the underlying mechanism through which economic indicators may be critical for consumers' financial well-being, is via Maslow's (1943) hierarchy of needs. Maslow (1943) originally proposed that human motivation can be classified within a hierarchy of needs where lower needs must be, at least partially, satiated before higher needs become salient. Physiological needs, the lowest needs in the hierarchy, focus individuals on the satisfaction of behaviors concerned with survival, such as food and hydration. Safety needs encompass desires for well-being and stability, both actual and perceived. It is likely that a consumer's financial circumstances can affect both physiological and safety needs. Physiological needs can be satisfied by using one's income and earnings to provide basic survival provisions (Poduska 1992) and associated basic needs (Diener and Biswas-Diener 2002). Likewise, safety needs may be satisfied through the accumulation of savings and wealth (Maslow 1943; Xiao and Noring 1994) assuring the ability to provide food and shelter, while also allowing for the allocation of income that allow higher-order needs to emerge (e.g., belonging, self-esteem, and self-actualization; see Maslow 1943; Poduska 1992). Maslow stated that the desire for financial stability, such as depositing money into a savings account, is one possible manifestation of safety needs. At the other extreme, the accumulation of debt could be an attempt to bypass lower needs in favor of higher needs, such as esteem needs over safety needs (Poduska 1992;). Given that financial well-being is not only a subjective assessment of the adequacy of one's financial situation (Vera-Toscano et al. 2006), but also an evaluation of the stability of one's financial situation to maintain his or her standard of living in the future (Poduska 1992), economic indicators that influence stability, and therefore safety needs, likely impact financial well-being.

The economic indicator that is studied most frequently in relation to consumer purchases is income. For the most part, small to moderate, though significant, correlations between income and well-being are reported (Diener et al. 1993). Unfortunately, the current methods of measuring income may not be sufficient (Dolan, Peasgood and White 2006). Participants tend to underreport income by focusing on a salary paid by an employer while disregarding other sources (Moore, Stinson, and Welniak 2000). Literature suggested that the weak

correlations found between income and consumer well-being may be due in part to poor measures of income—thus more encompassing better measures may lead to stronger relations between economic standing and well-being (Diener and Biswas-Deiner 2002). The role of expenses (e.g. non-durable expenditures) is often ignored in relation to well-being; Dolan et al. (2006) suggested that measuring expenses as well as income will provide more accurate information regarding someone's financial situation. Aside from income and expenses, wealth (e.g. savings and investments) is another economic indicator investigated in relation to financial well-being. Headey, Muffels, and Wooden (2008) demonstrated wealth affects life satisfaction more than income. They suggested that “wealth confers economic well-being; it enables one to tide over bad times at least for awhile” (66). Similar to Headey et al.'s (2008) hypothesis, Johnson and Krueger (2006) suggested that some negative events might be minor inconveniences to individuals with higher economic resources.

Previous studies involving wealth and well-being often investigated net worth defined as total assets minus total debts (Headey et al. 2008; Johnson and Krueger 2006; Smith et al. 2005). However, there is limited research involving the relationship between debt and well-being (Lange and Byrd 1998), particularly when it pertains to individual debt (Brown et al. 2005).

The importance of debt should not be overlooked. An average U.S. college student is found to owe 24% of his or her annual income to debt and this debt has psychological consequences. Those college students who reported higher amounts of debt also experienced greater stress and lower perceived financial health (Norvilitis et al. 2006). Additionally, heads of British households with higher amounts of outstanding debt are found to have significantly higher levels of psychological distress than individuals with lower amounts of debt (Brown, Taylor, and Price 2005). On the other hand, in addition to reported debt, relative debt is also found to be another possible predictor of financial well-being (McBride 2001). People who perceive their incomes as lower in relation to some standards will report lower subjective well-being. To date, a review of the literature reveals that the issue of relative debt has not been addressed. The main study will explore the economic indicators of financial well-being like relative debt, among others.

## **Main Study**

The current study will expand the literature on consumers' financial well-being by examining potential economic indicators related to financial well-being such as income, wealth, reported debt, relative debt, and expenses. Simultaneously examining multiple attributes that comprise consumers' assessments of financial well-being should reveal a stronger relationship with financial well-being than any single attribute.

## Participants and Procedures

A total of 653 participants from a national consumer panel (76.8% female) completed an online questionnaire in this study. Participants reported on self-reported financial well-being, various economic indicators, and demographic information such as employment status, age, gender, and relationship status.

## Measures

*Financial well-being.* Financial well-being was measured with the InCharge Financial Distress/Financial Well-Being Scale (IFDFW Scale, Prawitz et al. 2006), using a 7-item measure rated on 10-point scales ( $\alpha = .90$ ).

*Economic indicators.* A series of questions were included to assess economic background such as income, wealth, reported debt, relative debt, and expenses. Given that measuring gross income alone may provide an insufficient assessment of actual disposable income (Dolan et al. 2006), *income* was assessed via items on individual and household annual net income, scholarships, and family financial assistance. *Wealth* was assessed via questions regarding the value of savings and investments and other commonly used indicators of wealth such as the number of savings accounts. The number of credit cards possessed and credit card usage predict overall debt (Norvilitis et al. 2006); therefore these items were included to assess *reported debt* along with the total amount of credit card debt and student loan debt. The use of peers and parents as reference groups for social comparisons have been used in studies involving relative income (McBride 2001) and therefore were included in the current study to assess *relative debt*. *Expenses* included items on monthly costs of rent/mortgage, groceries, and car payments, which are consistent with existing literature (e.g., Headey et al. 2008). Economic indicators for analyses were generated by taking the mean of z-scores for each grouping of questions to create five composite variables measuring income, wealth, reported debt, relative debt, and expenses.

## Results

*Inter-Correlations of Economic Indicators and Financial Well-Being.* We first examined the relationships among economic indicators. Although all the economic indicators measured are theoretically related, they showed marginally weak correlations ( $\gamma = .44$  for wealth,  $\gamma = .25$  for income,  $\gamma = -.25$  for reported debt, and  $\gamma = -.40$  for relative debt) suggesting that they captured different economic constructs. Financial well-being was significantly correlated to income, wealth, reported debt, and relative debt ( $ps < .001$ ). Expenses were not significantly correlated with financial well-being ( $p > .72$ ).

**TABLE 1: Correlations of Economic Indicators and Consumer Well-Being**

	Financial Well-being	Income	Wealth	Reported Debt	Relative Debt	Expenses
Financial Well-being	--					
Income	.25***	--				
Wealth	.44***	.18***	--			
Reported Debt	-.25***	.10*	-.05 <i>ns</i>	--		
Relative Debt	-.40***	-.03	-.19***	.45***	--	
Expenses	-.19	.15**	.12**	.21***	.12**	--

Note.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

N = 653

*Predicting Financial Well-Being from Economic Indicators.* Multiple regression analysis was used to determine the unique variance explained in financial well-being by each economic indicator. Wealth was the strongest predictor of financial well-being (explaining 11% of the variance). The second strongest predictor was relative debt (explaining 5.7% of the variance). Income (explaining 4% of the variance) and reported debt (explaining 1% of the variance) were also significant predictors of financial well-being. In other words, wealth explains more variance of financial well-being than income, relative debt, reported debt, and expenses combined. In addition, none of the demographic variables (age, gender, and relationship status) were significant ( $ps > .44$ ), suggesting that these demographic variables are not direct indicators for financial well-being.

Because of the direct implication of employment status in financial well-being (Krueger and Mueller 2012), we used multiple regression analysis to examine the unique variance explained in financial well-being by each economic indicator across employment status (full-time employed vs. part-time employed vs. not employed). Many of the patterns held across all employment groups: (a) wealth explained the most variance in financial well-being (8.6%, 10.5%, and 13.6% for full-time, part-time, and not employed, respectively) and relative debt was the second best predictor (6.7%, 4.6%, and 7.1% for full-time, part-time, and not employed, respectively); (b) income explained a significant amount of variance in financial well-being – though quite a bit less for part-time workers (5.1%, 2.4%, and 5.3% for full-time, part-time, and not employed, respectively); and (c) expenses did not provide significant variance explained (variances explained  $< 0.1\%$ ). However, reported debt was a significant predictor of financial well-being for those

participants without a job ( $p < .001$ ), but for those with a job (full- or part-time), reported debt was not a significant predictor ( $ps > .05$ ).

**TABLE 2: Predicting Financial Well-being from Economic Indicators and Consumer Demographic Background**

Explanatory Variables	Without Consumer Demographic Background			With Consumer Demographic Background		
	<i>B</i>	$\beta$		<i>B</i>	$\beta$	
Income	.86***	.21***		.88***	.20***	
Wealth	.97***	.35***		.95***	.34***	
Reported Debt	-.39**	-.11**		-.31*	-.10**	
Relative Debt	-.60***	-.27***		-.61***	-.27***	
Expenses	-.07 <i>ns</i>	-.02 <i>ns</i>		-.11 <i>ns</i>	-.04 <i>ns</i>	
Age				.01 <i>ns</i>	.03 <i>ns</i>	
Gender				-.26 <i>ns</i>	-.06 <i>ns</i>	
Employment status				-.21 <i>ns</i>	-.05 <i>ns</i>	
Relationship status				.06 <i>ns</i>	.02 <i>ns</i>	
Ethnicity				No	No	
<i>R</i> <sup>2</sup>	.34			.35		

Note.

N = 653

Gender is coded as 0 for male and 1 for female.

Employment status is coded as 0 for “not employed” and 1 for “employed”.

Relationship status is coded as 0 for single and 1 for married.

Ethnicity is coded by using 7 dummy variables (0,1) for African American, Hispanic, Caucasian, Asian American, Native American, South Asian/Indian, and multi-racial.

*B* = unstandardized coefficient;  $\beta$  = standardized coefficient.

\*\*  $p < .01$ , \*\*\*  $p < .001$

## Discussion

Our findings suggest that wealth and relative debt are the best predictors of financial well-being, with wealth contributing to financial well-being and relative debt negatively influencing financial well-being. Further analyses revealed that various demographic variables contribute significantly to financial well-being. Also, although three of the five economic indicators only weakly correlated with life satisfaction, a stronger positive relationship emerged between financial well-being and life satisfaction; this finding is consistent with previous research (Hayo and Seifert 2003; Norvilitis et al. 2003).

**TABLE 3: Economic Indicators as Predictors of Financial Well-being across Employment Status**

Economic Indicators	Not-Employed (n = 164)			Part-time Employment (n = 358)			Full-time Employment (n = 131)		
	<i>B</i>	$\beta$	<i>sr</i> <sup>2</sup>	<i>B</i>	$\beta$	<i>sr</i> <sup>2</sup>	<i>B</i>	$\beta$	<i>sr</i> <sup>2</sup>
Income	.91***	.23***	5.3%	.72***	.16***	2.4%	1.10***	.27***	5.1%
Wealth	1.06***	.37***	13.6%	1.02***	.34***	10.5%	.77***	.34***	8.6%
Reported Debt	-.74***	-.24***	4.1%	-.30 <sup>ns</sup>	-.09	.5%	-.16 <sup>ns</sup>	-.05	0.1%
Relative Debt	-.67***	-.28***	7.1%	-.59***	-.26***	4.6%	-.62***	-.30***	6.7%
Expenses	-.08 <sup>ns</sup>	-.03 <sup>ns</sup>	0.07%	-.06 <sup>ns</sup>	-.02 <sup>ns</sup>	0.03%	-.10 <sup>ns</sup>	-.05 <sup>ns</sup>	0.1%
<i>R</i> <sup>2</sup>	.40			.29			.42		

Note.

*B* = unstandardized coefficient;  $\beta$  = standardized coefficient; *sr*<sup>2</sup> = effect size (semi-partial correlation squared).

\*\* *p* < .01; \*\*\* *p* < .001

The current study also found that wealth was the best predictor of financial well-being. It is possible that wealth is more important to financial well-being than other economic indicators because it confers additional feelings of well-being by serving as a buffer to cushion people's level of well-being from negative life events, such as the onset of disability (Smith et al. 2005) or financial hardship (Headey et al. 2008; Johnson and Krueger 2006). Individuals with greater wealth would be in a better position to handle certain negative life events than individuals who lacked wealth (Johnson and Krueger 2006) and were living paycheck to paycheck (Headey et al. 2008;). That is, individuals with higher wealth are in a more stable financial situation than individuals who are solely dependent on current income. Given that financial well-being is a subjective assessment regarding the adequacy and stability of an individual's financial situation (Vera-Toscano et al. 2006), individuals with greater perceived financial stability due to higher wealth are likely to experience greater financial well-being.

Likewise, aspects that reduce the stability of someone's financial situation are likely to negatively affect financial well-being. Based on the theoretical framework of Maslow's (1943) hierarchy of needs, people who accumulate excessive debt via loans, mortgages, or credit cards may be attempting to bypass survival and safety needs in order to satisfy esteem needs through gaining approval of their peers, which may actually endanger stability and have a detrimental effect on financial well-being (Poduska 1992). However, in the current study only relative debt was a significant predictor of financial well-being while reported debt was a rather meaningless predictor (i.e., explaining less than 1% of the variance) for those with some form of employment. A previous study found that relative income effects influenced consumers' financial situations to a greater extent than reported income (McBride 2001). Given that excessive debt may be prompted by attempts to gain a positive social evaluation from one's peers, relative debt is likely to be particularly detrimental to financial well-being, which is supported in the present study.

Our findings also suggested that all economic indicators, except expenses, significantly explained the consumer's financial well-being. More importantly, variances explained by these economic indicators, including income, wealth, and relative debt, for consumers who were not employed at the time were higher than those for full-time or part-time employed consumers. It demonstrated that people's feelings of being financially secured were more based on what they have and what they owe financially when they don't have jobs. When people have jobs, they feel more comfortable about their current financial situations and are more optimistic about their futures (Krueger and Mueller 2012). Therefore, their current income, debt, or wealth levels are not as important as those for unemployed people.

## **Conclusion and Limitations**

We searched for the best economic indicators for financial well-being. Although further work is needed in this area before definitive conclusions can be drawn, the potential implications are broad. Diener and Oishi (2000) stated that after basic



physiological needs are met, financial resources spent to pursue status or on material goods would not improve well-being. Despite such knowledge, western society is dominated by a capitalist perspective on the importance of financial success (Kasser and Ryan 1993) while government and domestic policies often focus on income to determine the well-being of the populace (Dolan et al. 2006) based on the misguided assumption that a higher income automatically leads to improved well-being (Diener and Oishi 2000; Diener and Seligman 2004). There may be “substantive psychological cost associated with consumer credit culture” (Brown et al. 2005, 659). The current policy of many governments of focusing on income and consumption may improve the economy, but is hurting the financial well-being. Our finding supports that financial well-being is changed by wealth and relative debt, future government public policies could progress toward encouraging people to actively improve their financial well-being by limiting debt accumulation and encouraging saving behavior.

On the other hand, all economic indicators in the current study demonstrated weak to moderate inter-correlations, indicating that each economic indicator is measuring separate facets of one’s financial circumstance. Michalos (1985) suggested that satisfaction within a domain of well-being is partly the result of discrepancies between what people have and what they want. Thus, one plausible explanation for the weak inter-correlations is that individuals accumulate different patterns of wealth and debt independently from income due to desire discrepancies. Previous studies found that (a) desire discrepancies predict income satisfaction (Solberg et al. 2002); and (b) people within the same income bracket can accumulate different amounts of wealth (Johnson and Krueger 2006) and different amounts of debt (Brown et al., 2005). The different patterns may be an individual difference where people with the financial means to meet their material desires are able to accumulate wealth (Diener and Biswas-Diener 2002) and people with material desires beyond their financial means might accumulate debt. Therefore, whether an individual chooses to accumulate wealth or debt may be driven more by desire discrepancies than income. Therefore, we believe that future research including consumer well-being is a promising direction that could potentially make contributions to current research stream.

There are other areas for future research. First, the results of the current paper are based on self-report measures; however, such a method may be preferable to obtain subjective judgment responses and efforts to demonstrate that reports of economic indicators were not significantly influenced by socially desirable responding. Efforts were undertaken to assess the complete financial situation of participants by including additional financial questions geared toward students that covered family financial assistance, student loans, credit card debt related to school expenses, and scholarships. Next, our findings show that expenses were not a significant predictor of financial well-being in contrast to a previous study that employed more extensive questions of consumption patterns and found expenses were significant predictors of life satisfaction and satisfaction with standard of living (Headey et al. 2008), indicating a more thorough investigation of expenses

may be required in the future. Last, but not least, based on our findings and previous research (e.g., Krueger and Mueller 2012), level of employment showed differential but non-linear effects in financial well-being. Prior research focused on the level of employment and indicated income generated from employment was the origin of employment level effect. Our study suggested employment status has more than income effect.

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**Relevance to Marketing Practitioners:** This research is relevant to those marketing practitioners who are interested in consumers' financial well-being and how different economic factors influence it. With the economy being down for years, this research area has become one of the most promising fields in marketing research.

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**TRACK: Consumer Behavior**