

Financial Distress: Definition, Effects and Measurement

This Research in Progress abstract describes the concept of financial distress, estimates of financially distressed workers in the U.S., development and use of a scale to measure financial distress, and implications for employers, financial educators, and practitioners. Financial distress can be defined as a reaction, such as mental or physical discomfort, to stress about one's state of general financial well being. In particular, this includes perceptions about one's capacity to manage economic resources (such as income and savings), pay bills, repay debts, and provide for the needs and wants of life. Financial distress is a subjective phenomenon. Two individuals in the same financial situation may have different levels of perceived financial distress. Distress about financial matters is increasingly prevalent in society, with half or more adults reporting moderate to high levels of stress and worry about money matters in survey after survey (American Express National Survey, 2003; Credit Card Study, 2004; 2nd American Express, 2004; 2nd Edition, 2004; The MetLife Study of Employee Benefit Trends, 2003).

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Effects of Financial Distress

Workers distressed about financial issues are likely to experience negative spillover effects that influence their effectiveness in the workplace (Garman, Leech & Grable, 1996; Kim & Garman, 2003). Concern about personal finances also has been linked to health (Bagwell, 2000; Drentea, 2000; Drentea & Lavrakas, 2000; Jacobson, et al., 1996; O'Neill, 2004; O'Neill, Xiao, Sorhaindo, & Garman, 2005a, 2005b, 2005c) as has debt burden (Bagwell, 2000; Sorhaindo & Garman, 2002) and credit card debt (Drentea & Lavrakas, 2000). It has been known for decades that financial stressors contribute to marital stress and discord (Freeman, Carlson, & Sperry, 1993; Olson, et al., 1983). Financial distress also has been associated with lower self-esteem (Kernis, Grannemann & Mathis, 1991) and dissatisfaction with one's financial situation (Garman, Sorhaindo, et al., 2005).

Often, with families experiencing financial distress, stressor events are cumulative. Boss (1988) explains the cumulative aspect as a pileup of stressor events such that, before one event can be handled, another is already being felt. Such is the nature of the stressors that contribute to financial distress, as the situation is often characterized by a continual pileup of stressful reminders, including unpaid bills, dunning notices, calls from creditors, etc. For many, financial distress is related to outstanding debt balances that grow worse over time. Paying the minimum payment of about 3 percent of the unpaid balance results in no substantial reduction in total debt owed for many years, and paying toward bills that don't go away is highly stressful (Manning, 2000).

Garman, Sorhaindo, Bailey, Kim, and Xiao (2004) describe financial distress as an intense physical or mental strain that includes concerns and worries about financial matters. Financial distress can last a short time or it can become a persistent state. Stressor events that contribute to financial distress include receiving overdue notices from creditors and collection agencies, issuing checks with funds insufficient to cover them, getting behind on bill payment, and worrying about whether one will be prepared financially for major life events like retirement.

Worry about money, debt, and bill-paying affects many other aspects of a person's life, such as health, workplace productivity, and family relationships, as noted above. Financial distress also affects financial tasks such as retirement planning. A MetLife study (With Fear of Outliving, 2004) found that one in four employees had not done any specific retirement planning; 53% reported being somewhat to significantly behind in reaching retirement goals. Nearly half (48%) believed they would have to work full- or part-time in retirement. Among employees in the 41-to-60 year age group, only 4% have reached their retirement goals. In this age group, 48% of employees list outliving savings as their greatest retirement fear. Putnam Investments found that 46% of current workers know they will struggle financially in retirement (Many Workers, 2004), and another 13% believe they cannot amass enough to retire so have no plans to save for retirement at all.

Estimates of Financially Distressed Workers

A national team of academic scholars and other experts (Garman, Junk et al., 2005) recently concluded that 30 million workers in America -- one in four -- are seriously financially distressed. Not only does this have negative consequences for individual workers, their families, and employers, but it also constitutes a serious social problem. The estimate of financial distress is based on findings from over 2 dozen research studies, national opinion polling data, and newly conducted research. Although most working adults are satisfied with their personal finances and are not financially distressed, a substantial minority is having considerable trouble. They worry about money, debt, bills, and having enough money to live on once they retire and have given up hope of catching up financially. Nearly half of those who are financially distressed also report that worrying about finances negatively impacts their health.

The Garman, Junk et al. (2005) report takes data from a variety of secondary and primary sources and uses deductive logic to conservatively estimate that 25% of working adults are experiencing serious financial distress. Some national surveys have found higher percentages of adults who are financially distressed. This may occur in part because, when working adults are financially distressed, it likely affects spouses, partners, and other adults and children living at home, although these latter populations usually are not surveyed (Garman, Junk, et al, 2005).

According to the Current Population Survey of the Bureau of Labor Statistics and Census Bureau data, there are an estimated 120 to 137 million adults in the U. S. workforce (full and part-time workers). Based upon the 25% figure for financial distress found in many studies, 30 million people are seriously financially distressed. This calculation uses the conservative workforce estimate [$0.25 \times 120M$]; otherwise the number is 34 million [$0.25 \times 137M$]. This is a considerable portion of the U. S. adult population, comprising one in four working adults.

The Garman, Junk et al. (2005) study was released to media outlets nationwide in March 2005 with a summary report that included five conclusions and four recommendations. The five conclusions were:

1. Thirty million workers- -about a quarter of working adults -- are seriously financially distressed.
2. People who are financially distressed often live paycheck-to-paycheck and are dissatisfied with their financial situation.
3. Poor health and financial distress are related.
4. Personal financial problems negatively impact workers' productivity.
5. Financial problems are not confined to lower income levels.

The four recommendations for financially distressed workers were as follows:

1. Follow wise advice to spend less than you earn and save/invest the difference.
2. Make and implement plans to prevent poor money management and reduce financial distress.
3. Determine the best options to relieve financial distress (e.g., increasing income).
4. Get help through the workplace (e.g., financial education programs).

The IFDFW Scale

Given the severe negative spillover effects of financial distress, it is important to be able to measure the constructs of perceived financial distress and financial well being. In so doing, practitioners can provide effective education and counseling interventions and measure whether people's lives are changed for the better as a result (Garman et al., 2004).

The InCharge Financial Distress/Financial Well-being (IFDFW) scale is an 8-question self-report subjective measure of financial distress/financial well-being. It is designed to measure a latent construct representing feelings about one's financial situation on a continuum from overwhelming financial distress/lowest level of financial well being to no financial distress/highest level of financial well being. As with all measures, the IFDFW scale employs correlates of the attribute rather than the attribute itself; thus this measure of perceived financial distress/financial well-being is indirect and provides an approximation of the "real" scale of this attribute (Garman & Sorhaindo, 2005; Garman, Sorhaindo, et al., 2005).

The IFDFW scale (see Appendix A) is standardized in that the items are unweighted, the instrument is short and can be administered quickly, and the results can be calculated readily. Scale administrators need only sum the number of points for each of the eight items and divide the total by 8 to calculate a score. Individual scores can range from 8 (one point on each question) to 80 (10 points on each question). The wide distribution of possible scores (8 to 80) and norming data (Garman, Sorhaindo, et al., 2005) suggest that the IFDFW scale can be used to make numerical statements to represent the amount of perceived financial distress/financial well-being in an individual's life.

The IFDFW scale was developed by teams of researchers over the past 20 years beginning with efforts by faculty and graduate students at Virginia Tech and the staff of the university's National Institute for Personal

Finance Employee Education and culminating more recently with data collections with the InCharge Education Foundation. (Garman, Sorhaindo, et al., 2005; Prawitz, et al., 2006).

IFDFW scale items have been through several early cycles of refinement, starting with examination of past studies and culminating with six recent data collections. When used together as a scale, the items constitute a suitable instrument for repeated use. The IFDFW scale measures perceived financial distress/financial well being as a single factor, and the item responses are well distributed across the 10-point response choices for the general population as demonstrated in national norming data collections.

Based on recent national data, standards were established for scale scores on a continuum from 1 to 10, where 1 = overwhelming financial distress/worst financial well being and 10 = no financial distress/excellent financial well being. The mean score of 5.7 ($SD = 2.4$) for the general population was located at approximately the midpoint on the continuum, since the midpoint of the range of possible scores is 5.5. About 30% of the respondents scored between 1 and 4 (more financial distress/less financial well being); these people were seriously financially distressed and dissatisfied with their personal financial situations. Note that 42% scored between 7 and 10 (less financial distress/more financial well being); these people enjoyed low or little financial distress and were quite satisfied with their financial condition. Approximately 28% of scores clustered around the midpoint markers of 5 and 6 on the continuum.

The eight-item IFDFW scale, with a robust Cronbach's alpha of 0.956, exceeds the desirable standard for internal consistency/reliability, indicating that the instrument is measuring only one latent construct. It is a valid and reliable instrument. The IFDFW scale is available for use by financial practitioners, researchers and others with usage approved on a case-by-case basis and subject to scale use policies developed by its authors.

Financial practitioners may find the IFDFW scale a useful communications device when working with clients and students. Items on the scale require people to evaluate their current financial situation, as well as their reactions to that state of economic affairs. One's subjective perception of financial well-being may, in fact, differ from an objective review by a third party, such as a financial counselor or advisor. The IFDFW scale can be used to assess efforts to reduce financial distress and improve financial well being. These efforts might involve information, education, counseling, and advice. The IFDFW scale can also be used to track the changes and progress individuals, families and the general population make in their financial condition over time.

Research is needed to better understand financially distressed consumers, such as the degree of their distress, reasons for distress, negative impacts of distress, and psychological factors associated with reducing distress, including, perhaps, locus of control and self-esteem. Such findings hopefully can help various organizations to be successful in helping people who are distressed about their finances. If the degree of perceived financial distress/financial well-being is known about an individual or population, programs can be designed and delivered to help reduce individual and family distress about personal finances and help improve financial well-being.

Scale Performance in 2005

The intention of researchers at the InCharge Education Foundation was to continue gathering data about the IFDFW scale, not only to get more information on reliability but also to gauge trends in financial wellness among U.S. consumers. Therefore, it was decided to conduct quarterly surveys on a national basis starting with the first quarter of 2005. Ipsos, a survey research vendor, was contracted to randomly telephone U.S. consumers and ask the eight wellness questions. For each quarterly survey 1,000 responses were obtained. The responses for individual items were then analyzed and summarized into the scale. The performance of the scale is depicted in Figure 1. The scale is graduated from 1 to 10, where 1 denotes the lowest level of financial wellness (highest stress) and 10 denotes the highest level of financial wellness (virtually no stress). The data points are for the four quarters of 2005. U.S. consumer financial wellness as measured by the scale trended upwards in 2005. Economic growth slowed a little between the second and third quarters but resumed the growth experienced in the first half of the year in the last quarter. There was a similar behavior in consumer economic sentiments measured by the Index of Consumer Sentiment (data used in the nation's Index of Economic Indicators) at the University of Michigan between the second and third quarter.

Figure 1

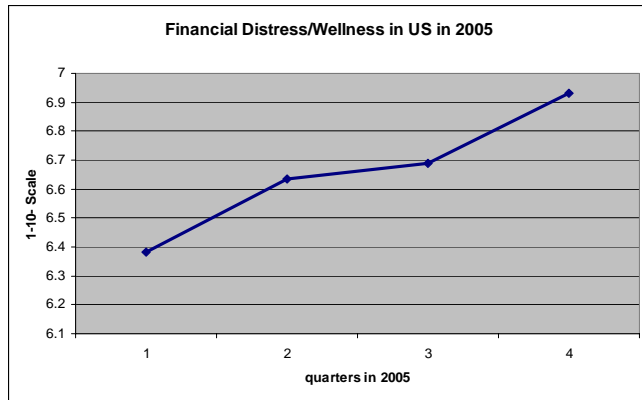
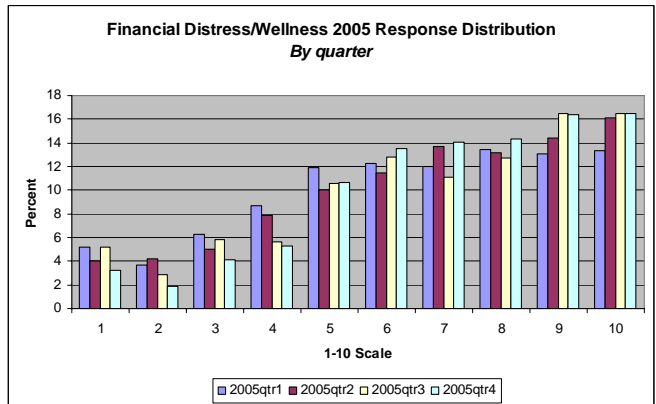


Figure 2

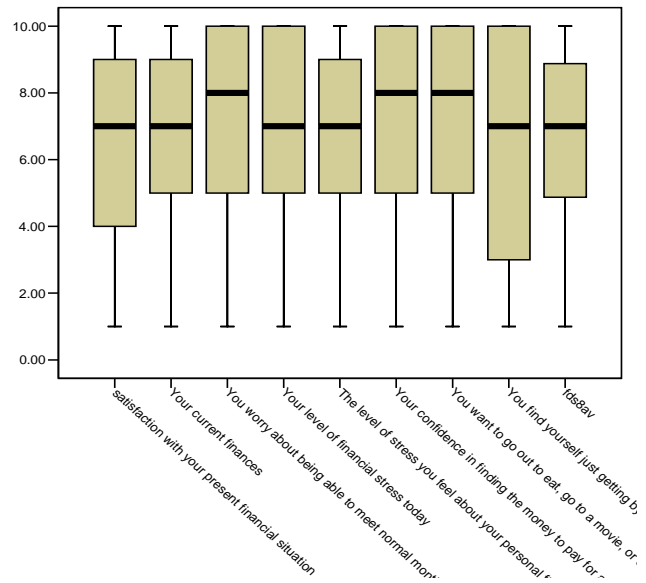


In Figure 2 consumers in the score range of 4 or less on the IFDFW scale can be regarded as seriously financially distressed. For the four quarters of 2005 a pattern is evident. The proportion of consumers scoring 4 or less decreased for all quarters except the third. There was a counterbalancing upward trend in the proportion of consumers in the 6 to 10 score range as the year progressed. It seemed that, with the economy doing better in 2005, personal financial wellness increased in stride.

Table 1

US Consumer Financial Distress/Wellness in 2005		
	Mean	Median
Satisfaction with your present financial situation	6.3	7
Your current finances	6.6	7
You worry about being able to meet normal monthly living expenses.	6.9	8
Your level of financial stress today	6.6	7
The level of stress you feel about your personal finances in general	6.5	7
Your confidence in finding the money to pay for a financial emergency that costs about \$1,000	7.0	8
You want to go out to eat, go to a movie, or other social activity and don't because you can't afford to.	6.8	8
You find yourself just getting by financially and living paycheck to paycheck	6.5	7
Ave of 8-item scale	6.7	7

Figure 3



To get a different perspective, data for all four quarters were combined and summary statistics calculated for the pooled information. Again, statistics were calculated for the individual scale items and the scale. On average, for all of 2005, U.S. consumers reported financial wellness registering 6.7 on the scale. This was up from the 5.7 recorded in August of 2004 national norming study from a random sample of 1,300 consumers from around the nation. The latter survey was conducted by the InCharge Education Foundation. Again, the scores on the IFDFW scale seemed to resonate with the state of the economy and consumer sentiment as measured over the recent two years. In 2005, the employment situation improved over 2004. Looking at the IFDFW scale components and their mean and medians (data not shown), it is noticeable that the measures were mainly lower for items reflecting worry

and feelings. These have averages below 6.8. Some of the items with averages greater than or equal to 6.8 seem associated with specific realities of day-to-day financial life, such as, ...meeting normal living expenses, ...confidence in finding \$1,000 for a financial emergency, ...being able to have money to go out. It is as if consumers felt worse than was warranted by their actual condition.

Other findings in 2005 data collections relating to U.S. financial wellness included:

- Financial wellness for men was higher than that for women.
- Married people were less financially stressed than people who were not.
- Financial wellness was directly related to education status.
- People 65 years and over enjoyed the most financial wellness.
- Whites and Asians reported higher financial wellness than Blacks, Hispanics and Native Americans
- There was generally more financial wellness in the West than in the other regions of the country (i.e. Northeast, Midwest and South). The Northeast reported the least financial wellness.

See Appendix B for graphical depiction of these findings.

Acknowledgments

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Appendix A: InCharge Financial Distress/Financial Well-Being Scale©

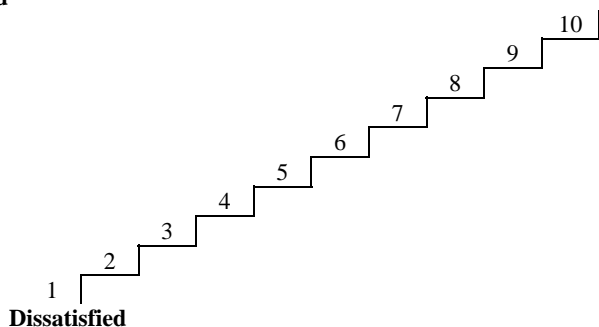
Directions: Circle or check the responses that are most appropriate for your situation.

1. What do you feel is the level of your financial stress today?

1	2	3	4	5	6	7	8	9	10
Overwhelming Stress		High Stress			Low Stress			No Stress at All	

2. On the stair steps below, mark (with a circle) how satisfied you are with your present financial situation. The “1” at the bottom of the steps represents complete dissatisfaction. The “10” at the top of the stair steps represents complete satisfaction. The more dissatisfied you are, the lower the number you should circle. The more satisfied you are, the higher the number you should circle.

Satisfied



3. How do you feel about your current financial situation?

1	2	3	4	5	6	7	8	9	10
Feel Overwhelmed		Sometimes Feel Worried			Not Worried			Feel Comfortable	

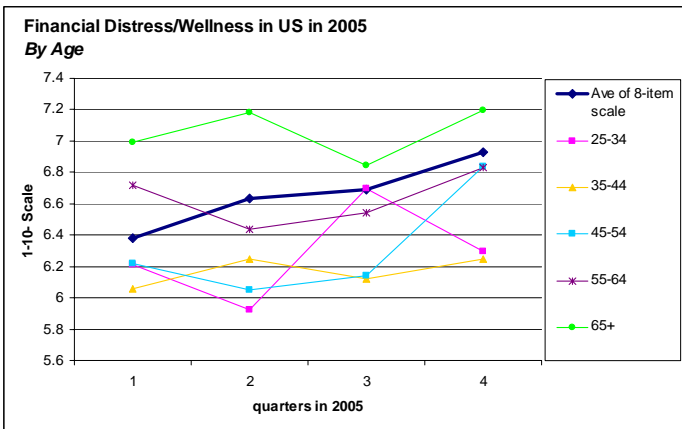
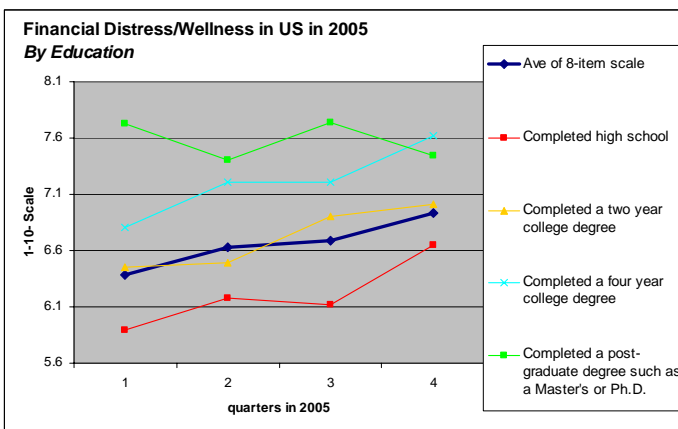
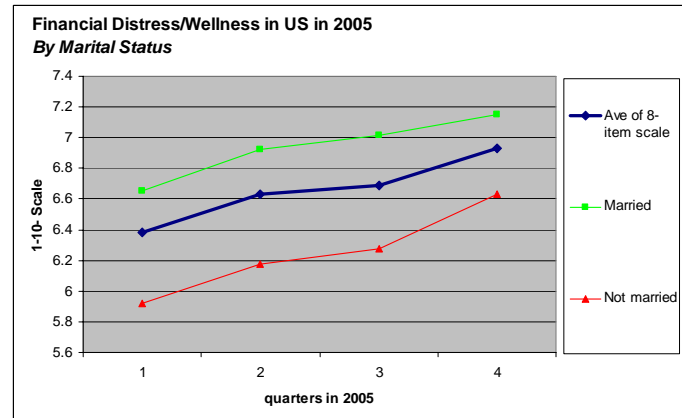
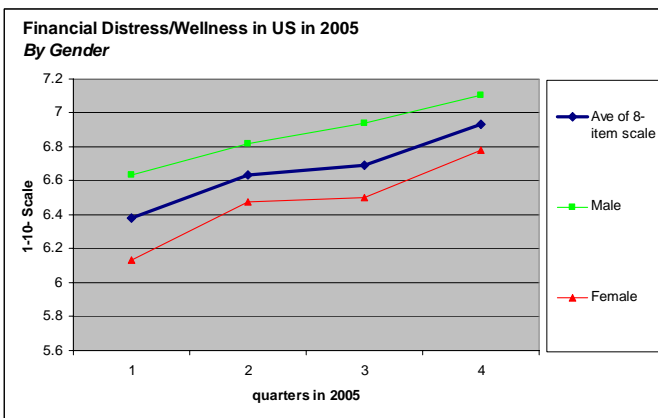
4. How often do you worry about being able to meet normal monthly living expenses?

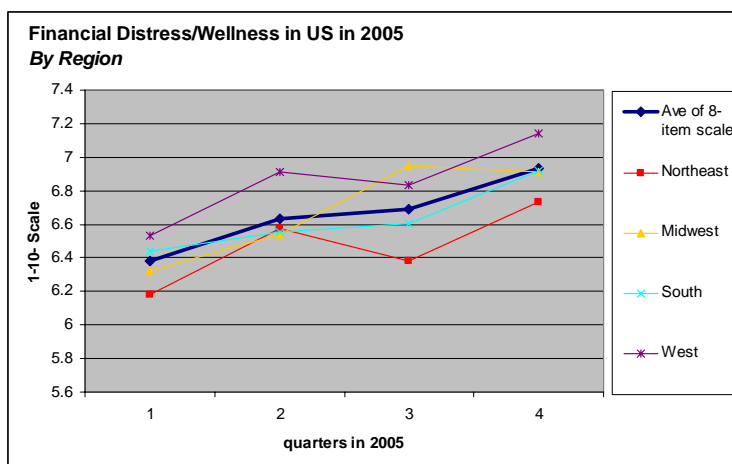
1	2	3	4	5	6	7	8	9	10
Worry		Sometimes			Rarely			Never	

- 1 2 3 4 5 6 7 8 9 10
- No Little Some High
Confidence Confidence Confidence Confidence
- 1 2 3 4 5 6 7 8 9 10
- All the time Sometimes Rarely Never
- 1 2 3 4 5 6 7 8 9 10
- All the time Sometimes Rarely Never
- 1 2 3 4 5 6 7 8 9 10
- Overwhelming High Low No Stress
Stress Stress Stress at All

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Appendix B: InCharge Financial Distress/Financial Well-Being Scale© 2005 Findings by Demographic Group





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Endnotes

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