Consumer Debt Stress Index Report: January 2010

A Good Start for the New Year: Debt Stress for Consumers Continues to Moderate as the Economy Improves

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The Consumer Debt Stress Index (DSI), which measures psychological stress on consumers from all sources of debt, eased up in January in the wake of continuing good news about the economy. The index now stands at 117.4, down from its December reading of 119.8. These figures join the host of hopeful signs coming out from other major economic indicators in the last few weeks, including strong Gross Domestic Product growth and a fall in the national unemployment rate. The most recent DSI numbers show increased confidence among consumers that they will be able to stay on top of their debts and ride out the economic storm that erupted at the end of 2007. This contrasts sharply with picture that emerged from the DSI numbers during the first part of the past year when the DSI peaked at a record high of 155.3 in July. The July figure meant that consumers last summer were experiencing stress levels from their debts that were more than 50 percent higher than they had been in the January 2006 base period when the index had a value of 100. The index has been on a downward trend since that time.

The path of the index since its inception is plotted in Figure 1 below. Looking at the history of the index, it remained in the range of the 90s throughout most of 2006 and the first half of 2007. The index reached its historic low point of 90.3 in May 2007, just before the collapse of the subprime mortgage market. The subprime collapse brought a sharp turnaround in the index; and by October of 2007, the index had jumped over the 100 mark. It continued its upward trajectory -- as shown in the diagram in Figure 1 below -- as the economy slide into recession at the end of 2007 and consumers struggled to manage their debts in the midst of the worse economic downturn since the Great Depression. Another up-tick in debt stress for U.S. households was recorded in the early fall of 2008 amid the turmoil in financial markets brought about by the bankruptcy of Lehman Brothers and a general tightening of credit conditions. The index persisted upward through July 2009 as debt-burdened consumers fought to stabilize their finances in the midst of a high-unemployment economy.

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The data are drawn from a nationwide random digit dialing telephone survey conducted by the Center for Human Resource Research at Ohio State University. The reported figure represents a three-month moving average of the index values, with the average sample size being 673. The sample size for the January index is 567. The months of March and April of 2006 and June through September of 2007 are not represented due to a pause in the survey questions.

Later in the summer, as reports on the economy became more encouraging, the more favorable news clearly brought some psychological relief to consumers. August saw the first signs that debt stress was moderating. The January 2010 DSI value of 117.4 represents its lowest level since August 2008, when the index stood at 117.3 – a 17-month low.

In spite of this good news and the optimistic outlook it brings, we should remember that debt stress remains considerably above the low level reached in May 2007 just before the collapse of the subprime mortgage market. We therefore have some way to go before consumers feel as confident about being able to manage their debts as they did before onset of the recent economic downturn.

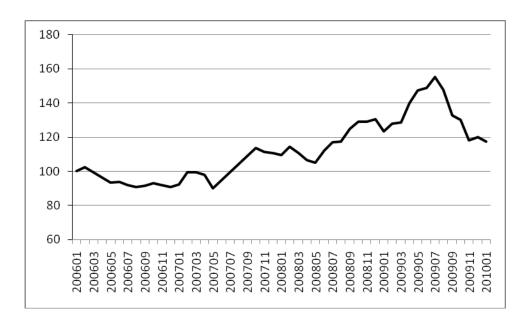


Table 1: OVERALL CONSUMER DEBT STRESS INDEX

Gender Differences: Women More Stressed by Debt

The stark differences between the genders in the survey continued in January, with women in the sample in general showing a greater degree of debt stress than males. Our previous examinations have shown that there are two factors contributing to this gender difference. The first is the fact that the ratio of debt to income is higher for women. Secondly, even *for the same level of debt-to-income*, the amount of debt stress that a woman experiences is approximately a third higher than the debt stress that a man experiences.

The most recent survey results show that debt stress dropped by 3.6 points for men in January, whereas it dropped by only 2.5 points for women. This leaves the stress levels for women 23.7 points higher for women than for men. Nevertheless, the gap in stress between the genders has

been narrowing in recent months. For example, in October of 2008, women registered 50 points higher on the DSI compared to men in the survey.

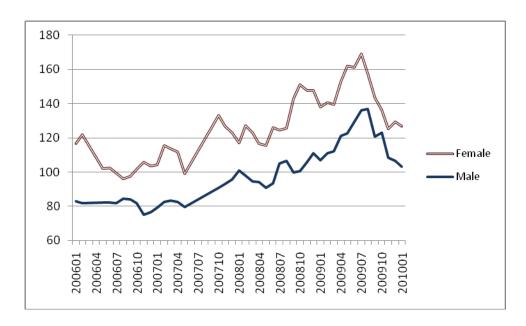


Table 2: CONSUMER DEBT STRESS INDEX BY GENDER

Effects on Family Life, Job Performance, and Health

Further insight into the impact that debt is having on American households can be gleaned from additional questions asked in the survey. These questions probe the degree to which debt has affected the respondent's (a) family life, (b) job performance, and (c) health. Results from these questions are reported on a monthly basis along with the Debt Stress Index so that changes in these critical life aspects for the U.S. population can be tracked over time. The numbers in the tables presented below represent averages for the three-month period ending in the month indicated in the column heading.

These additional questions show that the problems created by debt for respondents' family life and job performance have also shown upward tendencies over the past few years since the base period of January 2006. However, these specific areas of debt stress have either stabilized or shown some small improvements in the past few months as the overall DSI situation has improved.

The negative impact of debt on health, as recorded in the top three stress categories, is still somewhat higher than the levels of a year ago in January 2009. So this area of debt stress continues to be troubling. The health issues arising from debt stress have been explored in detail by Lavrakas and Tompson in the 2008 annual Associated Press poll, which showed that debt

stress is positively associated with migraines, back problems, ulcers, heart problems, and other debilitating conditions.

Problem of Debt for Family Life*

| Response Category | Percentage Response | Percentage Response | Percentage Response | Percentage Response |
|----------------------|------------------------|------------------------|------------------------|------------------------|
| | January 2010 | December 2009 | January 2009 | January 2006 |
| Extreme Problem | 3.6 % | 3.4 % | 3.2 % | 3.4% |
| Large Problem | 4.4 | 5.5 | 7.2 | 2.7 |
| Medium Problem | 13.3 | 15.3 | 15.0 | 11.4 |
| Small Problem | 20.3 | 21.4 | 20.1 | 19.5 |
| No Problem At | 58.4 | 54.5 | 54.5 | 63.0 |
| All | | | | |

^{* 3-}month period sample sizes are: 413 for January 2006; 574 for January 2009; 473 for December 2009; and 586 for January 2010.

Problem of Debt for Job Performance

| Response Category | Percentage Response | Percentage Response | Percentage Response | Percentage Response |
|----------------------|------------------------|------------------------|------------------------|------------------------|
| | January 2010 | December 2009 | January 2009 | January 2006 |
| Extreme Problem | 1.1 % | 0.8 % | 4.0 % | 0.4% |
| Large Problem | 3.1 | 2.6 | 2.5 | 1.8 |
| Medium Problem | 2.4 | 3.9 | 6.8 | 6.6 |
| Small Problem | 8.7 | 9.5 | 9.2 | 8.7 |
| No Problem At | 84.8 | 83.3 | 77.5 | 82.5 |
| All | | | | |

Extent Debt Has Affected Health*

| Response Category | Percentage Response | Percentage Response | Percentage Response | Percentage Response |
|---------------------|------------------------|------------------------|------------------------|------------------------|
| | January 2010 | December 2009 | January 2009 | January 2006 |
| Very Much | 4.9 % | 5.1 % | 3.1 % | n.a. |
| Affected | | | | |
| Quite Affected | 1.8 | 2.6 | 6.3 | n.a. |
| Somewhat Affected | 16.6 | 14.4 | 11.2 | n.a. |
| Not Much Affected | 17.0 | 19.2 | 13.0 | n.a. |
| Not At All Affected | 59.8 | 58.6 | 66.4 | n.a. |

Appendix A: Historic Series on Debt Stress Index²

| Date | Debt Stress Index |
|----------------|--------------------------|
| January 2006 | 100.0 |
| February 2006 | 102.5 |
| May 2006 | 93.4 |
| June 2006 | 93.7 |
| July 2006 | 91.8 |
| August 2006 | 90.9 |
| September 2006 | 91.5 |
| October 2006 | 93.2 |
| November 2006 | 92.0 |
| December 2006 | 90.9 |
| January 2007 | 92.2 |
| February 2007 | 99.5 |
| March 2007 | 99.5 |
| April 2007 | 98.0 |
| May 2007 | 90.3 |
| October 2007 | 113.5 |
| November 2007 | 111.3 |
| December 2007 | 110.5 |
| January 2008 | 110.0 |
| February 2008 | 114.3 |
| March 2008 | 110.8 |
| April 2008 | 106.5 |
| May 2008 | 105.0 |
| June 2008 | 112.3 |
| July 2008 | 116.9 |
| August 2008 | 117.3 |
| September 2008 | 125.0 |
| October 2008 | 129.0 |
| November 2008 | 129.0 |
| December 2008 | 130.6 |
| January 2009 | 123.3 |
| February 2009 | 127.9 |
| March 2009 | 128.6 |
| April 2009 | 139.9 |
| May 2009 | 147.2 |
| June 2009 | 148.7 |
| July 2009 | 155.3 |
| August 2009 | 147.6 |
| September 2009 | 132.8 |

² The months of March and April of 2006 and June through September of 2007 are not represented due to a pause in the debt stress survey questions.

| Date | Debt Stress Index |
|---------------|--------------------------|
| October 2009 | 130.1 |
| November | 118.0 |
| December 2009 | 119.8 |
| January 2010 | 117.4 |

Appendix B: Background to the Index

The Consumer Debt Stress Index (DSI) was developed by researchers at the Ohio State University. It is derived from data taken in a nationwide household survey and is released on a monthly basis to systematically track the psychological stress that consumer debt is causing in the U.S. population.

The(DSI) is based on questions which probe stress from all consumer debt sources including mortgages, credit cards, home equity loans, car loans, student loans, etc. Using a five-point scale, the survey questions elicit the following: (a) frequency of worry over debt; (b) amount of stress from debt; (c) extent of expected problems from debt over the next five years; and (d) concern about the inability to ever pay off debt. The questions were developed at the Ohio State University under the leadership of Dr. Paul J. Lavrakas, as reported in the *American Statistical Association Proceedings*, 2000.³ They have been implemented in a monthly survey of a national random sample of US households by the Center for Human Resource Research at the Ohio State University since 2005. The index is designed so that it has a value of 100 in an initial month, or base period, which is January 2006. Its values in subsequent months show how the level of stress over debt has been changing over time for households.

This index is a compliment to debt stress measures arising from the annual Associated Press poll as reported by Lavrakas and Tompson⁴ using the same survey questions. The monthly DSI reported here will allow for a more frequent reading of the stress situation. It is also computed in a different way so as to show the percentage change in stress among the U.S. population from the original base period.

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³ The wording of the questions used in the index appears in Appendix C.

⁴ Paul J. Lavrakas and Trevor N. Thompson, "New Research on the Measurement of Debt Stress," MAPOR Annual Conference, November 2008; Paul J. Lavrakas and Trevor N. Thompson, "New Research on the Measurement of Debt Stress and Related Health Problems," AAPOR Annual Conference, May 2009.

Appendix C: Construction of Debt Stress Index and Survey Questions

The Debt Stress Index is based upon four survey questions which are presented below. The five possible response categories are coded from zero to four with zero being the lowest stress category, as well as the category that contains respondents with no debt. Each month the four response numbers $X_{i,j}$ for each individual respondent are averaged. To obtain the "raw score" for the index from the individual scores, we next average across the n individuals in the sample for that month. Finally, we incorporate a base period.

Incorporating a base period into the construction of an index is critical for allowing a given period's index value to be compared to the value of the index from another period of interest. For example, the Index of Consumer Sentiment computed by the Survey Research Center at the University of Michigan chooses 1966 as its base year and constructs its index to have a value of 100 in that year. For the Debt Stress Index presented here, the initial period of available data, January 2006, was chosen as the base period, and the raw score value of the index in that period is 0.9460 Dividing each period's raw score by this base period (and multiplying by 100), the base period is thus defined to have the value of 100 and subsequent monthly periods are defined relative to that initial period.

The computation of the index, referred to as the DSI, can thus be represented as follows:

$$DS_{i} = \frac{1}{4} \left(X_{i,1} + X_{i,2} + X_{i,3} + X_{i,4} \right)$$
$$DSI = \frac{100}{0.946} \times \frac{1}{n} \sum_{i=1}^{n} DS_{i}$$

To enhance the statistical reliability of the index, we have used a rolling three-month technique whereby the index is based on three months of data, with data from the most recent month added and data from the oldest month dropped in a rolling fashion. Thus, for example, the September index is based on data from July, August, and September.

Index Questions

The wording of the survey questions is presented below.

1. Overall, how often do you worry about the total amount you (and your spouse/partner) owe in overall debt? Would you say you worry (a) all of the time; (b) most of the time; (c) some of the time; (d) hardly ever; or (e) not at all?

 $^{^{5}}$ The responses of the sample are weighted using U.S. Census data to more accurately reflect the socioeconomic make-up of the general population.

- 2. How much stress does the total debt you (and your spouse/partner) are carrying cause to you? It is (a) a great deal of stress; (b) quite a bit; (c) some stress; (d) not very much; or (e) no stress at all?
- 3. Now, thinking ahead over the next five years, how much of a problem, if any, will the total debt you (and your spouse/partner) have taken on be for you? Will it be (a) an extreme problem; (b) a large problem; (c) medium problem; (d) small problem; or (e) no problem at all?
- 4. How concerned are you that you (and your spouse/partner) will *never* be able to pay off these debts? Are you (a) very much concerned; (b) quite concerned; (c) somewhat concerned; (d) not very concerned; or (e) not at all concerned?

Questions for Additional Areas of Impact for Debt Stress – Not Part of DSI

- 1. How much of a problem, if any, has your debt caused for your family life? Is it an extreme problem, a large problem, a medium problem, a small problem, or no problem at all?
- 2. How much of a problem, if any, has your debt caused for your job performance? Is it an extreme problem, a large problem, a medium problem, a small problem, or no problem at all?
- 3. To what extent has your debt affected your health. Very much affected, quite affected, somewhat affected, not much affected, or not at all affected?