Consumer Debt Stress Index Report: December 2009

Consumer Debt Stress Rises by Less than Expected Considering Heavy Holiday Shopping and Charging

Lucia F. Dunn & Ida Mirzaie[1]

The Consumer Debt Stress Index (DSI), which measures psychological stress on consumers from all sources of debt, edged up in December, but the increase was relatively small considering the holiday shopping/charging spree that beat analysts' forecasts for the retail sector. The index now stands at 119.8, up less than two points form its November value of 118.0. These figures suggest that consumers continue to gain a measure of confidence about their ability to manage their debts after a year of wrenching economic news that saw the DSI rise to a record high of 155.3 last 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. Recent positive economic signs, including strong Gross Domestic Product growth in the third quarter and some stabilization in the labor market, have helped to ease consumer fears that their debt levels might be more than they could handle without a steep reduction in lifestyle.

The steady drop in the DSI, which began in August and ran through November, was a hopeful sign that retailers would see a strong holiday shopping season. This is because statistical studies show that as consumer debt stress levels drop, their willingness to spend for consumption increases. That was borne out by the 2.9 percent increase in same store sales that was realized in the U.S. in December.

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

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[1] Dr. Dunn and Dr. Mirzaie are Professor and Senior Lecturer respectively in the Department of Economics, Ohio State University, Columbus, Ohio.

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 December index is 456. 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.

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 continued its upward trend through July as debt-burdened consumers fought to stabilize their finances in the midst of a high-unemployment economy.

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 downward trend in stress continued throughout the fall, dropping to the lowest level of the year in November at a value of 118. The index has remained fairly stable in the last two months, with only a slight uptick during the holiday season.

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. At that point, the DSI stood at 90.3. 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.

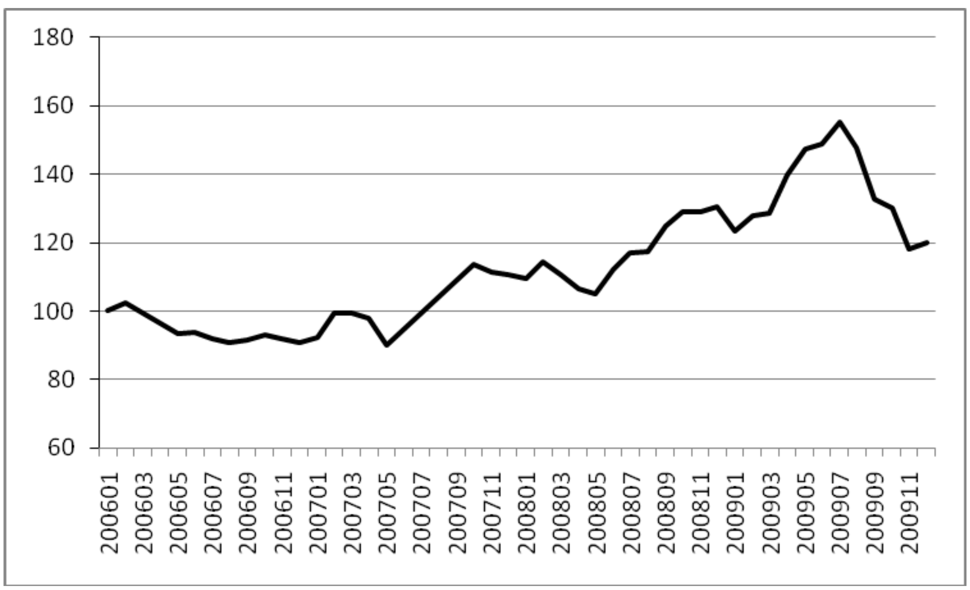

Table 1: OVERALL CONSUMER DEBT STRESS INDEX

Gender Differences: *Women More Stressed by Debt*

The stark differences between the genders in the survey continued in December, 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 rose by 4.1 points for women in December, while men actually experienced a drop in their DSI of 1.7 points. This leaves the stress levels for women 22.6 points higher for women than for men. Nevertheless, the gap in stress between the genders has narrowed substantially in the past year. For example, in October of 2008, women registered 50 points higher on the DSI compared to men in the survey.

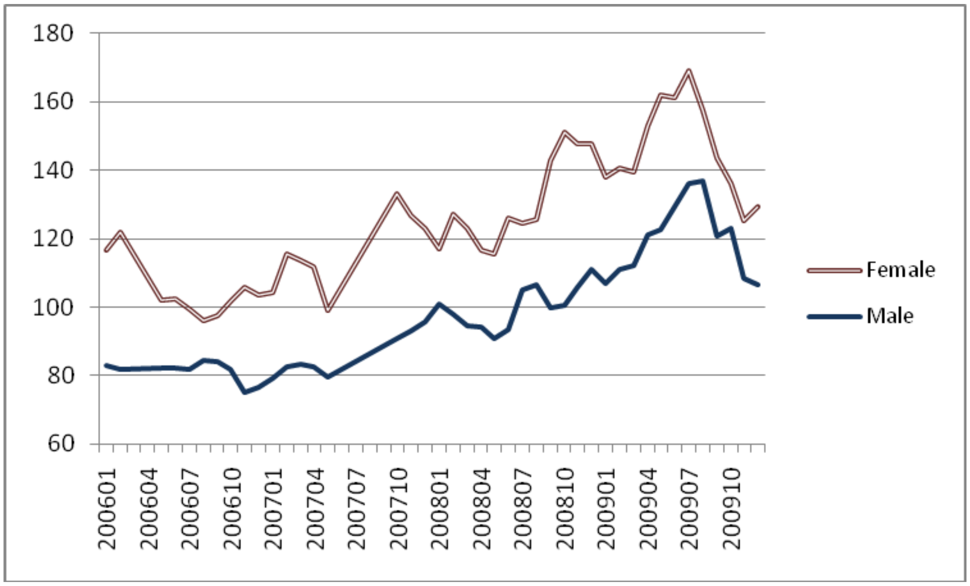

Table 2: CONSUMER DEBT STRESS INDEX BY GENDER

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 been increasing over the past few years since the base period of January 2006. However, these specific areas of debt stress have also shown improvement in the past few months as the overall DSI situation has improved. Most notably, in December the percentage of respondents saying that their debt has caused a medium to extreme problem for their job performance dropped to 7.3 from a value of 10.1 the previous month. There has also been a reduction in the percentage of people responding that debt has caused and "extreme" problem for their family life. Only 3.4 percent of the sample falls in that category now compared to 5.3 percent in November.

The negative impact of debt on health, while down from one year ago, moved up slightly in December. So debt stress from the heavy holiday shopping did weigh in on consumers' health. Although the general trend of improvement in the health area in the past few months has been welcome news, the numbers are still 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***
	December 2009	**November 2009**	**December 2008**	**January 2006**
Extreme Problem	3.4 %	5.3 %	2.5 %	3.4%
Large Problem	5.5	5.1	8.0	2.7
Medium Problem	15.3	11.6	17.1	11.4
Small Problem	21.4	21.6	20.3	19.5
No Problem At All	54.5	56.4	52.1	63.0

* 3-month period sample sizes are: 413 for January 2006; 621 for December 2008; 471 for November 2009; 473 for December 2009.

Problem of Debt for Job Performance

Response Category	***Percentage Response***	***Percentage Response***	***Percentage Response***	***Percentage Response***
	December 2009	**November 2009**	**December 2008**	**January 2006**
Extreme Problem	0.8 %	1.9 %	2.6 %	0.4%
Large Problem	2.6	3.4	3.1	1.8
Medium Problem	3.9	4.8	7.3	6.6
Small Problem	9.5	11.2	10.8	8.7
No Problem At All	83.3	78.7	76.2	82.5

Extent Debt Has Affected Health*

Response Category	***Percentage Response***	***Percentage Response***	***Percentage Response***	***Percentage Response***
	December 2009	**November 2009**	**December 2008**	**January 2006**
Very Much Affected	5.1 %	4.2 %	4.2 %	n.a.
Quite Affected	1.6	3.8	4.7	n.a.
Somewhat Affected	14.4	12.1	14.4	n.a.
Not Much Affected	19.2	18.6	14.1	n.a.
Not At All Affected	58.6	61.3	62.6	n.a.

Appendix A: Historic Series on Debt Stress Index[2]

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

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 Tompson[4] 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.

[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.[5] 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.

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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?