

# Journal of Student Financial Aid

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Volume 19 | Issue 3

Article 3

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12-1-1989

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### Recommended Citation

Greene, Laura I. (1989) "Student Borrowers and Education Debt Burdens," *Journal of Student Financial Aid*: Vol. 19 : Iss. 3 , Article 3.  
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# Student Borrowers and Education Debt Burdens

*Laura L. Greene*

*This report contains the results of a survey of Stafford Loan borrowers who were scheduled to enter repayment between September 1, 1988, and June 1, 1989. Conducted in January, 1989, the survey examines the current situation facing Stafford loan borrowers as they begin repayment of their education debt.*

In Pennsylvania the number of postsecondary students who are borrowing to pay for their education is increasing, as are the amounts borrowed annually and cumulatively. Under these circumstances, the potential cost of defaults and the problems of delinquencies are sure to increase. Because about 70 percent of all borrowers who default do so in their first years of repayment, it is important to know more about the situation that borrowers of various characteristics face in their initial repayment months. This article describes the findings of a study focusing on Pennsylvania borrowers' financial and other circumstances during these initial repayment months.

## **The Sample**

The individuals included in the study are Stafford Loan borrowers whose loans guaranteed by the Pennsylvania Higher Education Assistance Agency (PHEAA) were scheduled to enter repayment between September 1, 1988 and June 30, 1989. First, the population was identified: four-year private colleges, four-year public colleges, two-year colleges, nursing schools, vocational/technical schools, and proprietary schools. Undergraduate borrowers within each of these institutional populations were then subdivided into two groups: borrowers who attended one year or less and those who attended between two and five years. Graduate students from four-year colleges comprised the final category.

It was not necessary to stratify the undergraduate population by all school years because previous PHEAA research shows that the characteristics and default probabilities for second, third, and later-year students are similar, while first-year student characteristics and default probabilities are significantly different from those of borrowers who remain in school beyond one year (Davis, 1985, PHEAA).

Random samples were drawn from each of the twelve borrower populations, defined by institution type and attendance years. A total of 6,413 surveys were mailed and 2,257 usable questionnaires were returned for a response rate of 35.2 percent. The characteristics of the sample were compared to the population to determine whether the respondents represented their respective populations. The only under-represented respondent category in the survey results was that of independent students attending proprietary schools. To adjust for this under-representation, the sample was weighted accordingly whenever necessary.

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**Results: Survey  
Respondents' 1989  
Activities**

Of the 2,257 survey respondents, 2,211 indicated their current activities by choosing one or more of the survey instrument's eight activity categories. Table 1 shows these eight choices and the percent of respondents participating in each category. (Percentages will sum to more than 100 percent since respondents were allowed multiple responses.) Over 85 percent of the survey respondents were working, 70 percent full-time and 17 percent part-time; slightly more than 1 percent were serving in the military; and 4 percent were homemakers not currently seeking a job. About 6 percent were enrolled less than half-time in a postsecondary program, 3.6% graduate and 2.6 percent undergraduate. About 23 percent of the respondents were seeking employment; however, some of these were holding one job while seeking another. After adjusting for the borrowers in this group who were employed, the borrowers' unemployment rate was 11.1 percent, more than double the seasonally-adjusted unemployment rate of 4.3 percent in Pennsylvania during the same period.

**TABLE 1  
Respondents' Activities**

	<b>Number Of Responses</b>	<b>Percent Of Respondents</b>	<b>Weighted Total</b>
Working full-time.....	1,532	69.3%	69.2%
Working part-time.....	383	17.3	16.9
Serving in a branch of the military.....	28	1.3	1.2
Homemaker, not seeking employment.....	83	3.8	3.9
Attending graduate school.....	101	4.6	3.6
Doing undergraduate study.....	70	3.3	2.6
Seeking full-time employment.....	394	17.8	19.6
Seeking part-time employment.....	72	3.3	3.1
Number of responses.....	2,663		

This is a disturbing statistic. Studies at PHEAA and elsewhere have shown that the primary reason borrowers default is their lack of a job, or their lack of sufficient income to make loan payments. The high unemployment rate of the survey respondents may be largely attributable to the individuals most recently out of school with the beginning of their repayment obligation still months in the future. However, if this is the case, these borrowers still have only a short time to find employment and become financially established before beginning student loan payments. There is cause to expect a relatively high default rate among the unemployed surveyed borrowers.

**Employment,  
Occupations, and  
Income**

About 70 percent of the survey respondents were employed full-time, either in civilian jobs or by the military. Of these respondents, about 16 percent were employed in clerical occupations and 14 percent as nurses, pharmacists, dieticians, therapists and physicians'

**TABLE 2**  
**Respondents' Occupations When Employed Full-time**  
**By Type of Institution**

Occupation	4-Year Private	4-Year Public	2-Year	Nursing	Vo-Tech	Proprietary	Total All Types	Weighted Total
Agriculture, Forestry.....	0.0%	0.3%	0.9%	0.0%	0.0%	0.5%	0.3%	0.3%
Clerical Occupations.....	4.2	9.1	26.8	0.0	4.4	31.4	13.3	16.4
Construction.....	1.0	2.1	1.8	0.0	0.0	0.5	1.0	1.0
Engineers, Architects.....	10.7	4.9	0.9	0.0	0.0	5.7	5.6	6.4
Executive, Manager.....	16.0	12.4	8.0	0.0	1.5	5.7	9.5	9.9
Health-Diagnostic.....	17.0	10.3	0.9	0.0	0.0	0.0	7.2	7.3
Health Technologists.....	6.0	5.8	9.8	14.7	2.9	1.3	6.0	4.7
Marketing, Sales.....	5.8	8.2	5.4	0.0	1.4	8.3	6.0	6.9
Material Handlers								
Laborers.....	1.0	1.5	0.9	0.0	2.9	3.0	1.5	1.8
Mechanics, Repairers.....	0.0	0.3	1.8	0.0	2.9	8.3	2.4	3.4
Military Service.....	0.7	1.8	0.0	0.0	0.0	0.0	0.6	0.6
Scientists,								
Mathematicians.....	0.7	1.2	0.0	0.0	0.0	0.0	0.5	0.5
Nurses, Pharmacists.....	13.9	9.1	24.1	83.6	81.2	3.8	22.5	14.0
Production Occupations...	1.0	2.1	1.8	0.0	1.4	6.7	2.6	3.4
Service Occupations.....	2.8	4.3	1.8	0.0	0.0	8.1	3.9	4.9
Social Work, Lawyers.....	8.8	7.6	1.8	0.0	0.0	0.3	4.4	4.4
Teachers, Librarians.....	4.1	12.7	0.9	0.6	0.0	0.8	4.4	4.4
Technologists,								
Technicians.....	2.8	2.7	5.3	0.0	1.4	6.5	3.5	4.1
Transportation.....	0.2	0.3	0.0	0.0	0.0	1.3	0.5	0.6
Writers, Artists.....	1.2	0.9	0.0	0.0	0.0	3.0	1.3	1.7
Other.....	2.1	2.4	7.1	1.1	0.0	4.8	3.0	3.3
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number.....	431	330	112	177	69	372	1,491	

assistants (see Table 2). Almost 10 percent were employed in executive, administrative, and managerial occupations, 7 percent were health-diagnosing and treating practitioners, 7 percent were in marketing and sales, and 6 percent were engineers and architects.

In regard to employment and type of institution attended, respondents who had attended four-year private institutions or nursing schools were more likely to be working full-time, while those who had attended four-year public institutions, vo-tech schools, or proprietary schools were more likely to be seeking full-time employment. Almost one-third of the respondents who attended proprietary schools and one-fourth of those who attended two-year institutions were employed in clerical occupations. About 83.6 percent of those who attended nursing schools, 81.2 percent of those who attended vo-tech schools, 24.1 percent of those from two-year institutions, and 13.9 percent of those from four-year private institutions were nurses. Respondents from four-year private or four-year public institutions were more likely to be health-diagnosing and treating practitioners or to hold executive, administrative and managerial positions than were those from other institution types. Respondents from four-year

private institutions were more likely to become engineers and architects, 10.7 percent versus 3.6 percent.

Male respondents were more likely either to have a full-time job or to be seeking full-time employment, while female respondents were more likely to be employed part-time or to be seeking part-time employment (see table 3).

Although only 4 percent of the respondents were homemakers, female respondents were 5 times more likely to be homemakers than male respondents.

It is interesting that of the six most common occupation categories, two were dominated by females and three by males. There was not a significant gender difference in the respondents who were

**TABLE 3**  
**Respondents' Occupations When Employed Full-time,**  
**By Gender**

	Unweighted		Weighted		Unweighted	Weighted
	Male	Female	Male	Female	Total	Total
Agriculture, Forestry.....	0.5%	0.1%	0.5%	0.2%	0.3%	0.3%
Clerical Occupations.....	3.0	18.9	2.9	25.0	13.3	16.4
Construction.....	2.7	0.0	2.6	0.0	1.0	1.0
Engineers, Architects.....	12.5	2.1	12.8	2.3	5.6	6.4
Executive, Manager.....	11.9	8.0	11.4	9.0	9.5	9.9
Health-Diagnostic.....	13.4	4.1	11.9	4.3	7.2	7.3
Health Technologists.....	4.1	7.0	2.8	5.9	6.0	4.7
Marketing, Sales.....	4.5	6.7	4.9	8.2	6.0	6.9
Material Handlers, Laborers.....	2.9	0.7	3.3	0.9	1.5	1.8
Mechanics, Repairers.....	6.4	0.0	8.7	0.0	2.4	3.4
Military Service.....	1.2	0.3	1.0	0.3	0.6	0.6
Scientists, Mathematicians.....	0.9	0.4	0.7	0.3	0.5	0.5
Nurses, Pharmacists.....	7.0	31.0	4.4	20.1	22.5	14.0
Production Occupations.....	4.8	1.2	6.1	1.7	2.6	3.4
Service Occupations.....	3.6	4.0	4.1	5.4	3.9	4.9
Social Work, Lawyers.....	5.4	4.0	4.9	4.1	4.4	4.4
Teachers, Librarians.....	3.4	5.3	3.2	5.1	4.4	4.4
Technologists, Technicians.....	7.1	1.4	8.3	1.4	3.5	4.1
Transportation.....	0.7	0.3	0.9	0.5	0.5	0.6
Writers, Artists.....	1.3	1.4	1.6	1.7	1.3	1.7
Other.....	2.7	3.1	3.0	3.6	3.0	3.3
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number.....	560	963			1,523	

**TABLE 4**  
**Median Incomes of Respondents**

	N	Median Income
All Respondents Employed Full-time.....	1,488	\$18,027
Married Respondents Employed Full-time.....	343	20,999
Combined Income—Respondents Employed Full-time and Spouses .....	328	32,759

employed in marketing and sales. Almost half of the female respondents, 45 percent, were employed either in clerical occupations, or as nurses, pharmacists, dietitians, therapists and physicians' assistants. The median salary of respondents who were employed full-time was \$18,027, with over one-fourth earning less than \$12,000 per year, and 13.8 percent more than \$27,000 per year.

About 15 percent of the respondents were married and employed full-time. The median income for this group was \$20,999, 16.5 percent higher than the median income of all single respondents who were employed full-time. The median combined income of the respondents and their spouses was \$32,759.

The incomes and occupations of individual respondents who were employed full-time were significantly related as shown in Table 5. Because several of the occupation categories contained a scant number of observations, the data contained in the analysis of these specific occupation categories are virtually useless. However, this does not diminish the significance of the income analysis when considering the total sample or the categories containing relatively large portions of the sample.

Engineers and architects earned an average salary of \$24,897 per year, 42.3 percent higher than the remainder of the sample's average annual income. Social workers and lawyers earned 35.1 percent more than the rest of the respondents who were employed full-time.

The median income of white respondents was 87 percent higher than that of black respondents and 22 percent less than the median income of respondents from other ethnic groups. The low income of black respondents is largely due to the fact that they were less likely to be employed full-time and more likely to be seeking a job.

**Educational Experiences**

Past research has shown that students who complete their study program are more likely to repay their education loans. Specifically, a PHEAA loan default study conducted in the fall of 1988 found a strong positive relationship between a borrower's completion of his or her education program and probability that he or she will repay the loan (Greene, 1988). The vast majority of the survey respondents in this study, 83 percent, indicated that they had completed the postsecondary program in which they were enrolled at the time of their last PHEAA guaranteed loan.

Since program completion has been found to be such a strong indicator of loan repayment, the characteristics which identify these two borrower groups become very important. Completion rates differed significantly by race. The completion rate of black respondents was 69 percent, significantly less than that of white respondents or those from other ethnic groups whose completion rates were 83 percent and 86 percent respectively.

**TABLE 5**  
**Median Income of Respondents Employed Full-time**  
**By Occupation**

<b>Occupation</b>	<b>N</b>	<b>Median Income</b>
Agriculture .....	4	\$ 9,000
Clerical Occupations .....	198	11,277
Construction .....	13	13,499
Engineers, Architects .....	87	27,133
Executive, Managers .....	136	20,863
Health/Diagnostic .....	113	22,970
Health Technologists .....	87	18,428
Marketing, Sales .....	83	13,749
Material Handlers, Laborers .....	21	10,499
Mechanics, Repairers .....	36	19,999
Military Service .....	10	8,249
Scientists, Mathematicians .....	9	18,749
Nurses, Pharmacists .....	320	21,168
Production Occupations .....	38	10,999
Service Occupations .....	58	10,799
Social Work, Lawyers .....	67	21,000
Teachers, Librarians .....	69	18,461
Technologists, Technicians .....	49	18,000
Transportation .....	5	15,000
Writers, Artists .....	20	13,499
Other .....	45	11,332
<b>Total .....</b>	<b>1,461</b>	<b>\$18,027</b>

**TABLE 6**  
**Median Incomes of Respondents**  
**By Race**

<b>Race</b>	<b>N</b>	<b>Median Income</b>
White .....	1,952	\$13,655
Black .....	117	7,285
Other .....	71	17,499

**TABLE 7**  
**Program Completion by Ethnic Group**

	White	Black	Other	Total
Completed program .....	83.3%	69.7%	86.1%	82.7%
Didn't Complete program .....	16.7	30.3	13.9	17.3
Number .....	1,979	119	72	2,170

The current income reported by respondents who completed their postsecondary programs showed no distinct pattern and were fairly constant across each income range. However, respondents who did not complete their postsecondary programs were much more likely to have an income at the low end of the scale, with about 70 percent having incomes below \$12,000 and 23.8 percent having incomes below \$3,000.

Respondents' completion rates, shown in Table 8, also varied by their major study area. The highest completion rates were found in architecture and engineering, law, and health professions, each about 91 percent. Other two-year majors and other four-year majors had the lowest completion rates of 67 percent and 50 percent respectively. These two categories contained a large portion of respondents who were indecisive about their major area of study, i.e., "Other" sometimes indicated indecision or no major study area. Thus, the lowest completion rates were found in categories of majors where students did not seem to have solid future goals and appear to have been less committed to using their education for a specific purpose.

The respondents who did not complete their education were asked to indicate the factors which contributed significantly to their action.

Because respondents were given a list of eleven reasons and could choose as many as were appropriate, Table 9 contains more responses than respondents.

About 40.5 percent of the respondents indicated that insufficient financial resources contributed significantly to the termination of their postsecondary program. One-fourth indicated that indecision about a career or major was influenced by work demands that conflicted with school. About one-fifth of the respondents indicated that they were influenced by either their dissatisfaction with the college or school they were attending or by family obligations. Less than 10 percent of the respondents indicated that housing and roommates or transportation influenced their decision to discontinue their education.

Their reasons for failing to complete their programs were somewhat influenced by the respondents' dependency status at the time of their loan. Respondents who were financially dependent were more



likely to have experienced indecision about their career or major, 33 percent versus 11 percent, or to have had grades which were too poor to allow them to continue in their program, 15 percent versus 7 percent. They were also more likely to have been dissatisfied with either their institution, 28 percent versus 10.1 percent, or their study program, 20 percent versus 9.4 percent. Respondents who were independent were more likely to have had work demands that conflicted with school, 33 percent versus 16 percent, and to have experienced conflicting family obligations, 33 percent versus 12 percent.

**Education Loans and Borrower Indebtedness**

Survey respondents had an average Stafford debt of \$6,951, as shown in Table 10. Respondents who borrowed only from the Stafford program averaged \$5,515. However, not only did those who borrowed from other programs have a higher average Stafford debt of \$10,196, they had loans from other sources averaging \$8,850. This \$8,850 is misleading because the range of loan amounts is very large, \$113 to \$92,000. Thus, a more accurate statistic is the median amount borrowed from other sources of \$3,000. Of the respondents who borrowed from other sources: average Perkins debt was \$3,167; average Supplemental Loan for Students (SLS) debt was \$3,363; average

**TABLE 8  
Program Completion by Major Area of Study**

Major	Complete	Not Complete	Completion Rate
Math/Science .....	2.5%	4.3%	73.8%
Architecture/Engineering .....	5.4	2.4	91.5
Social Sciences .....	5.5	6.2	81.2
Business Management .....	13.9	14.6	82.2
Humanities .....	1.6	1.6	82.4
Education .....	4.7	9.7	70.0
Fine Arts .....	1.8	2.7	76.7
Health Professions .....	23.5	11.9	90.5
Law .....	3.4	1.6	91.0
Business Technology .....	6.6	12.4	71.8
Secretarial Technology .....	6.2	5.2	85.4
Health Technology .....	11.4	8.1	87.1
Mechanical/Service Tech .....	11.2	11.4	82.6
Other 4-Yr. ....	1.0	4.9	50.0
Other 2-Yr. ....	1.3	3.0	67.7
	100.0%	100.0%	
Number .....	1,789	370	

Health Education Assistance Loans (HEAL) debt was \$27,835; average Health Professional Student Loans (HPSL) debt was \$5,690; and the average debt from other, unspecified education loan programs was \$4,336. One out of six respondents borrowed from family members, with an average debt to family members of \$7,460. Since the Stafford Program is so large, there is a tendency to overlook the fact that students also borrow from other programs. A significant number of borrowers responding to this survey, 31 percent, have acquired relatively high debt levels from multiple sources.

Of the 540 married respondents, one-fourth had spouses with education loans that averaged \$10,368. Total cumulative debt for these couples averaged \$31,714.

To accurately assess the effects of the respondents' education debt, their income must also be considered. Income information was provided by 95 percent of the sample; only these respondents will be examined in this section. The specific term of each loan was determined, as shown in Table 11. The interest rate, term and minimum monthly repayment of Stafford Loans, Perkins Loans, SLS, HEALs and HPSLs were taken from the regulations governing each of these loan programs. The loans made by other loan programs, those not specifically mentioned in the survey, were calculated using a 9 percent interest rate, a 10-year repayment period, and a \$50 minimum monthly payment. These figures were approximations of the requirements of an average education loan program. Debt figures for loans made by relatives were calculated, using the Treasury Bill rate occurring on May 8, 1989, a ten year repayment period, and no minimum

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*"Individuals in the highest income category spent the lowest portion of their income, 6.5 percent, on education loan repayment."*

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**TABLE 9**  
**Reasons for Not Completing Education Program**  
**By Dependency Status at Time of Loan**

	Dependent	Independent	Total
Insufficient Finances .....	40.4%	41.3%	40.5%
Career Indecision .....	33.3	10.9	25.0
Work Demands .....	15.6	33.3	22.6
Dissatisfied with Institution .....	28.0	10.1	21.2
Family Obligations .....	12.4	33.3	20.4
Dissatisfied with Program .....	20.0	9.4	16.3
Poor Grades .....	14.7	7.3	11.7
Illness or Injury .....	9.3	11.6	10.1
Housing or Roommates .....	8.4	8.0	8.4
Transportation .....	8.0	5.1	6.8
Other .....	15.6	25.4	19.0
Number .....	225	138	363

**TABLE 10**  
**Average Loan Amounts**

	Number of Borrowers	Average Loan Amount	Minimum Loan Amount	Maximum Loan Amount
Stafford Loan:				
All Respondents .....	2,257	\$ 6,951	\$ 250	\$ 37,352
Only Stafford .....	1,565	5,515	250	35,000
Multiple Loans .....	692	10,196	884	37,352
Perkins Loan .....	368	3,167	250	25,000
SLS .....	147	3,363	250	20,000
HEAL .....	72	27,835	2,000	80,000
HPSL .....	58	5,690	250	41,000
Other Loan .....	275	4,336	113	44,000
Relative Loan .....	372	7,460	200	150,000
Spouse Loan .....	130	10,368	625	85,000

monthly payment. Since respondents did not provide interest rate or term data on the loans they received from relatives, current market interest rates were used.

The specific characteristics of each type of loan found in Table 11 were applied to borrowers' loans. The average monthly payment of each loan was calculated, taking into consideration that all of the government loan programs contain a required minimum monthly payment. Each borrower's monthly payments were summed and the total annual debt payment was determined. The ratio of the annual debt payment to the borrower's annual income produced the percentage of a respondent's total income required for the repayment of the education debts.

Table 12 contains the percentage of annual income which must be available for education loan repayment. Individuals in the highest income category spent the lowest portion of their income, 6.5 percent, on education loan repayment. For all individuals earning at least \$6,000 per year, the portion of their annual income required to service their education loans fluctuated between 6.5 percent and 13.5 percent. Past research which has attempted to estimate manageable debt levels for student borrowers has reached no definitive conclusions concerning the level of borrowing which can be termed "excessive." However, manageable debt has been broadly defined as that requiring between 3 percent and 15 percent of the borrower's pre-tax income. When judged by this criteria, respondents with incomes of \$6,000 or more had manageable debt levels on average (Boyd & Martin, 1985; Horsch, 1984).

This is not the case for borrowers whose incomes were less than \$6,000 per year. For respondents whose annual incomes were be-

*“Manageable debt has been broadly defined as that requiring between 3 and 15 percent of the borrower’s pre-tax income.”*

tween \$3,000 and \$6,000, 19.4 percent of their annual income was required to make payments on education loans. Respondents earning less than \$3,000 per year owed 68.8 percent of their annual income to educational lenders—either colleges, relatives or financial institutions.

Table 13 clearly illustrates the fact that the respondents most affected by their education debt were those in the lowest income categories. This table includes data on only the 895 borrowers, 35.4 percent of the respondents, who were required to spend at least 10 percent of their income on repayment of their education debt. All of the respondents earning less than \$6,000 per year are included in this group. Furthermore, the percentage of respondents in each income category who were required to spend at least 10 percent of their income on education debt repayment declined as their incomes increased. Almost half of the respondents in the \$6,000 to \$8,999 income category and 27.6 percent of those with incomes between \$9,000 and \$11,999 had a debt burden of 10 percent or more. With the exception of those earning between \$24,000 and \$26,999, 16 percent to 18 percent of the respondents in the five highest income categories experience a debt burden of at least 10 percent. Examination of the distribution of total debt levels within income categories showed that 59.2 percent of the respondents who earned less than \$3,000 and 73.3 percent of the respondents who earned between \$3,000 and \$5,000 had total debt below \$6,000. Almost 60 percent of the respondents who earned between \$6,000 and \$8,999 borrowed between \$3,000 and \$8,999.

Table 14 contains data concerning the respondents who were required to spend at least 15 percent of their income on repayment of their education debt, 25.8 percent of the sample. Some income categories were combined to retain a significant response rate. Once again, all of the respondents who earned less than \$5,999 and 32.9

**TABLE 11**  
**Interest Rate, Term and Minimum Payment**  
**Of Each Type of Loan**

Loan Program	Interest Rate	Term	Minimum Payment
Stafford Loan .....	8.00	10 Yr	\$50
Perkins Loan .....	5.00	10	30
SLS .....	10.27	10	50
HEAL .....	9.25	10	50
HPSL .....	9.00	10	15
Other Loans .....	9.00	10	50
Relative Loans .....	8.97 *	10	0

\* T-bill Rate for week of May 8, 1989

**TABLE 12**  
**Annual Debt Burden of Respondents**

Income Interval	No.	Weighted Avg. Annual Debt	Debt as Pct. Of Income
\$0 to \$2,999 .....	270	\$1,032	68.8%
\$3,000 to \$5,999 .....	236	871	19.4
\$6,000 to \$8,999 .....	219	1,015	13.5
\$9,000 to \$11,999 .....	243	909	8.7
\$12,000 to \$14,999 .....	207	1,259	9.3
\$15,000 to \$17,999 .....	198	1,216	7.4
\$18,000 to \$20,999 .....	227	1,669	8.6
\$21,000 to \$23,999 .....	188	2,310	10.3
\$24,000 to \$26,999 .....	141	2,098	8.2
\$27,000 and Above .....	211	1,944	6.5
All Incomes .....	2,140	1,378	17.8
Above \$6,000 .....	\$1,634	\$1,508	9.1

**TABLE 13**  
**Income and Total Debt of Respondents Whose Debt Burden is at Least Ten Percent**

Total Debt	Income									
	\$0-\$2,999	\$3,000-\$5,999	\$6,000-\$8,999	\$9,000-\$11,999	\$12,000-\$14,999	\$15,000-\$17,999	\$18,000-\$20,999	\$21,000-\$23,999	\$24,000-\$26,999	\$27,000 and Above
\$0 to \$2,999 .....	33.3%	41.5%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
\$3,000 to \$5,999 .....	25.9	31.8	23.6	9.0	0.0	3.1	0.0	0.0	0.0	0.0
\$6,000 to \$8,999 .....	13.0	11.5	35.3	11.9	2.2	0.0	0.0	0.0	0.0	0.0
\$9,000 to \$11,999 .....	11.5	7.6	13.7	40.3	15.6	0.0	0.0	0.0	0.0	0.0
\$12,000 to \$17,999 .....	11.1	3.8	14.7	26.9	37.8	34.4	19.5	4.5	0.0	0.0
\$18,000 to \$23,999 .....	1.1	2.5	4.9	7.4	13.3	28.1	26.8	6.8	9.1	0.0
\$24,000 to \$35,999 .....	3.3	0.9	1.0	3.0	17.8	6.3	9.8	22.7	30.3	52.8
\$36,000 to \$47,999 .....	0.4	0.4	0.0	1.5	0.0	12.5	7.3	11.5	18.2	16.6
\$48,000 and Above .....	0.4	0.0	2.9	0.0	13.3	15.6	36.6	54.5	42.4	30.6
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number .....	270	236	102	67	45	32	41	33	33	36
Percent of All Respondents										
At This Income .....	100.0%	100.0%	46.6%	27.6%	21.7%	16.2%	18.1%	17.6%	23.4%	17.1%
TOTAL = 895 or 35.4%										

**TABLE 14**  
**Income and Total Debt of Respondents Whose**  
**Debt Burden is at Least Fifteen Percent**

Total Debt	Income					
	\$0-\$2,999	\$3,000-\$5,999	\$6,000-\$8,999	\$9,000-\$14,999	\$15,000-\$20,999	\$21,000 & Above
\$0 to \$2,999 .....	33.3%	3.3%	4.2%	0.0%	0.0%	0.0%
\$3,000 to \$5,999 .....	25.9	28.3	22.2	0.0	0.0	0.0
\$6,000 to \$8,999 .....	13.0	29.3	25.0	0.0	0.0	0.0
\$9,000 to \$11,999 .....	11.5	19.6	15.3	4.8	0.0	0.0
\$12,000 to \$17,999 .....	11.1	9.8	20.8	28.6	0.0	0.0
\$18,000 to \$23,999 .....	1.1	6.5	6.9	26.2	13.2	0.0
\$24,000 to \$35,999 .....	3.3	2.2	1.4	23.8	15.8	7.2
\$36,000 to \$47,999 .....	0.4	1.1	0.0	2.4	18.4	21.7
\$48,000 and Above .....	0.4	0.0	4.2	14.2	56.6	71.0
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number .....	270	92	72	42	38	69
Percent of All Respondents At This Income .....	100.0%	39.0%	32.9%	9.3%	8.9%	12.8%
TOTAL = 583 or 25.8%						

percent of those who earned between \$6,000 and \$8,999 were required to forfeit at least 15 percent of their income to the repayment of education debt. The portion of respondents included in the table who earned over \$9,000 was much smaller than those included in Table 13. Between 9 percent and 13 percent of the respondents who earned over \$9,000 had a debt burden of 15 percent or more.

The debt levels for those with debt burdens of more than 15 percent were patterned similarly to those in Table 13. About 60 percent of the respondents who had incomes of less than \$3,000 had total debts below \$6,000. About 57.6 percent of those who earned between \$3,000 and \$5,999 and 47.2 percent of those who earned between \$6,000 and \$8,999 had total debts between \$3,000 and \$9,000. Over half of the respondents with incomes between \$9,000 and \$14,999 had total debts between \$15,000 and \$20,000 and 71 percent of those with incomes over \$21,000 had total education debts of \$48,000 and above.

There has been speculation among financial aid researchers that married persons who both have student loans face an even greater repayment burden. Thus, married respondents who indicated that their spouse also had a student loan were examined. The weighted

average wage of \$30,731 was derived by considering the average income of each category and the ratio of the number of respondents whose household income fell into the given category to the total number of married respondents whose spouse had an education loan. The weighted average annual debt payment is calculated in the same manner as that of individual respondents, with the additional consideration of the spouses' loans. These loans were calculated using an interest rate of 9 percent, a repayment period of 10 years, and a minimum monthly payment of \$50. As with the "other loans" category, these figures were approximations of an average education loan program's requirements and were used because specific regulations concerning spouses' loans were not provided by the respondents in the survey instrument.

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*"There has been speculation among financial aid researchers that married persons who both have student loans face an even greater repayment burden."*

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The weighted average loan payment was \$3,826 for married respondents and their spouses when both had loans. Thus, 12.5 percent of the combined household income was required to fulfill payment obligations on the households' education loans. About 41.3 percent of the respondents who were married to an individual with an education loan, 50 families, required at least 10 percent of their combined incomes to make payments on education debt. Further, 36 families, or 29.8 percent of the respondents whose spouse had an education loan, were required to allot more than 15 percent of their income to education debt repayment. These couples borrowed an average \$69,388, which required 36.6 percent of their income for loan payments.

## Conclusions

This study has identified the situations faced by a group of Stafford borrowers in their initial repayment months, including a measure of some of the factors traditionally associated with delinquencies and defaults. Given the recent increases in the number of students who borrow to finance their postsecondary education, and the amounts they borrow, this knowledge of the various circumstances of borrowers is especially valuable.

However, this study provides only descriptive information on the borrowers' abilities to cope with their initial repayment months, not on the borrowers' abilities to cope with their circumstances. To answer this question, a follow-up study has been planned for 1990. Its goal will be to assess the success of borrowers' reactions to the various situations associated with their first repayment months. ♦

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