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# Undergraduates with Employer-Sponsored Aid: Comparing Group Differences

By Dagney Faulk and Zhenlei Wang

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Tuition assistance offered by employers is an understudied area of financial aid research. The purpose of this study is to compare the demographic, socioeconomic, academic and financial aid characteristics of college students who receive employer-sponsored financial aid with students who receive traditional financial aid (institutional, state, or federal) and those that receive no aid at public 4-year universities. Using the 2007-08 data from the undergraduate National Postsecondary Student Aid Study (NPSAS:08), we find that there are statistically significant differences between students who receive employer-sponsored aid and those who do not. Students receiving employer aid are older, are more likely to be married, have more children, and are more likely be a business or management major. Students receiving employer aid have higher earnings from work than students receiving traditional financial aid and students receiving no aid and higher total household income than students receiving traditional aid. In addition, the parents of students receiving employer aid are more likely to have only a high school diploma with no further education. Students receiving employer aid are also more likely to take out loans to finance their education than students with no aid but less likely than students with traditional aid.

**Key Words:** Employer-sponsored financial aid, tuition assistance

uition assistance provided by employers is an under researched component of the financial aid spectrum. The 2007-08 National Postsecondary Student Aid Study (NPSAS) indicates that 8.3% of undergraduate students received tuition reimbursement through employers during the 2007-08 academic years. According to federal Internal Revenue Service (IRS) guidelines, employers can contribute up to \$5,250 per year tax free toward an employee's higher education which may include vocational, technical, or academic classes (U.S. Department of the Treasury, 2013). Some businesses cap their reimbursement fee at this maximum amount. Others pay 100%, 75%, or 50% of tuition costs, while others compensate according to grades. Employers set rules for the type of employees and courses that qualify for reimbursement (AllBusiness, 2011). A review of the literature suggests that little analysis has focused on the characteristics of students receiving employer aid.

The price of a college education has increased faster than the general price level as measured by the Consumer Price Index (CPI). From 2003 to 2008, prices of college tuition and fees, one component of the CPI,

increased 42% while the general price level increased 17% (U.S. Department of Labor, 2011). The use of loans to finance higher education has increased as has grant aid. According to data presented in the Digest of Education Statistics, the average amount of grant aid to full-time, full-year undergraduates increased 12.3% in real terms between 2003-2004 and 2007-2008 academic years (National Center for Education Statistics 2005, 2009). Over the same period, the average amount borrowed for undergraduate education (cumulative) for full-time, full-year students increased 2.8% (nominal values) from \$11,800 to \$15,100 (National Center for Education Statistics, 2005, 2009). Since tuition and fees are growing at a faster rate than borrowing and grants, working while in school is likely to be an important source of funds to pay for higher education, and employer-provided funding is likely to fill some of the gap between student's personal resources and financial aid.

The increasing cost of higher education is an impediment to national and state-level goals of increasing higher education attainment among the U.S. population. For example, the Lumina Foundation has set a goal of 60% of the working age population in the U.S. gaining quality credentials by 2025 (Lumina, 2009). State higher education agencies have adopted complimentary strategies to achieve this goal. For example, the Indiana Commission on Higher Education (ICHE) recently released a strategic plan adopting the goal that 60% of Indiana's adult population will have higher education credentials by 2025 (ICHE, 2012). A large portion of this credentialing is likely to occur at colleges and universities, and employer incentives are likely to be an essential part of attaining these goals since many of the population with some college but no degree are likely to already have jobs.

Employer-sponsored aid has implications for economic development and national productivity and competitiveness. Jones (2010) showed that about 30% of students receiving employer-sponsored aid are pursuing science, technology, engineering and mathematics (STEM) or health related degrees, and 20% are in business degree programs. These are fields that are expected to have worker shortages during the coming decades. Jones also showed that the occupations of students receiving employer aid are not highly compensated indicating that these students would be unlikely to pursue additional education without employer aid and that the additional education received is likely to increase earnings and upward mobility.

The current analysis is an incremental step to better understand the role of employer aid and the types of students who receive employer-provided financial aid. Using data from the 2007-08 NPSAS, we examine differences in demographic and socioeconomic characteristics of students who receive employer-sponsored financial aid, along with differences in academic performance, work-related characteristics, and types of financial aid received.<sup>2</sup> We compare three groups of students those who receive: 1) employer-sponsored aid, 2) traditional institutional, state, and federal aid (but no employer aid), and 3) no financial aid.<sup>3</sup>

We find that students receiving employer aid are older, are more likely to be married, have more children, and are more likely be a business or management major. Students receiving employer aid have higher earnings from work than students receiving traditional financial aid and students receiving no aid, and higher total household income than students receiving traditional aid. In addition, the parents of students receiving employer aid are more likely to have only a high school diploma with no further education. Students receiving employer aid are also more likely to take out loans to finance their education than students with no aid but less likely than students with traditional aid.

Following this introduction, the "Previous Studies" section provides a brief literature review of studies examining employer-provided financial aid. Research questions, data and statistical methods are discussed in the subsequent section, followed by a discussion of results. The last section offers conclusions and discusses implications.

#### **Previous Studies**

To date, the literature on employer financing of higher education has focused almost exclusively on the impact on employee turnover. These studies find that tuition reimbursement reduces employee turnover while employees are in school but that voluntary and intended turnover increases after earning degrees unless employees are subsequently promoted (Benson, 2006; Benson, Finegold, & Mohrman, 2004; Capelli, 2004; Finegold, Benson, Mohrman, 2002; Pattie, Benson, & Baruch, 2006).

Cappelli (2004) found that firms offering tuition assistance attract better quality employees. Faulk, Srinivasan and Bingham (2012) examined the impact of employer tuition reimbursement on academic outcomes (course grade) using a small sample of undergraduate business majors. They found that employer financing has a strong, positive and significant influence on course grade.

Several studies examine the role of financial aid on retention and persistence to graduation (Alon, 2007; Bettinger, 2004; Dynarski, 2002, 2003; Pascarella & Terenzini, 1991, 2005; Singell, 2004; Singell & Stater, 2006). The general consensus among researchers is that grants and work-study relative to student loans have a larger impact on persistence (Alon, 2007). These researchers generally focus on traditional campuses and traditional-aged students and do not specifically examine employer-sponsored aid.

Several studies have examined the relationship between financial aid and work behavior. Both scholarships and grants decrease the current cost of higher education and may reduce the need for a student to work, or work as much, while in college. Canton and Blom (2010) point out that as the cost of college decreases, recipients are able to rely less on other income sources (such as working while in school or loans) which allows students to focus more time on their studies. Investigating the effect of reducing the duration of grants for higher education in the Netherlands, Belot, Canton and Webbink (2007) find that students affected by this change earned higher grades during their first year of study and did not change work hours or time studying for classes. Employer aid functions as a grant but has different incentive structures relative to a traditional grant. Working full

time is a prerequisite to receiving this type of aid so these students may not have the option of reducing work hours.

Students financing their education primarily through interest-bearing student loans face different incentives. Student loans shift the financial obligations associated with attending college into the future and, generally, increase the cost of higher education by charging interest. Since students pay back loans after completing their degree and over a longer time horizon, the incentive to do well in a particular course may not be as direct. According to Canton and Blom (2010), student loans have competing effects. Loans may influence student persistence in college since after graduation students experience the market benefits of higher education through a job and earnings higher than they would have without a college degree which allows them to pay off their debts. The opposing effect is that higher debt loads may decrease persistence especially if higher debt loads correspond to decreased academic achievement (Alon, 2007). In their examination of the influence of debt load on undergraduate persistence at public and private colleges, Cofer and Somers (2000) find that debt has a greater impact on the persistence of students at private universities than public universities.

Studies have also examined differences in financial aid patterns for various types of students. For example, in a recent study Boyer and Butner (2011) examined the differences in financial aid awarded and awarding patterns among African Americans, Hispanic and white graduate students using 2004 NPSAS data. They found statistically significant differences between African American and white students and/or African American and Hispanic students with African Americans receiving less institutional aid and taking on more debt at both the graduate and undergraduate levels.

#### Research Questions

This study uses the following questions to guide the research:

- 1) How do demographic and socioeconomic characteristics differ among three groups of students receiving: employer-sponsored aid, institutional, state and federal aid (but no employer-sponsored aid), and no financial aid?
- 2) How does academic performance differ among these three groups of students?
- 3) How do earnings and hours worked differ among these three groups of students?
- 4) Do students receiving employer aid take on as much debt to finance their education as students receiving traditional aid?
- 5) How do the methods of paying for higher education differ among these three groups of students?

### Data and Method

The data used in this analysis were collected as part of the NPSAS:08 covering the 2007-08 academic year.<sup>4</sup> We examined differences among undergraduate students attending public, nonprofit, four-year, nondoctoral-granting and doctoral-granting universities who work at least 35 hours per week. We limit the sample in this way to provide a more homogeneous group of students for analysis. Students attending private colleges and universities face different cost and financial aid structures, as do students attending two-year colleges. The sample used in the analysis consisted of 6,880 observations divided into three groups: 1) students with no financial aid (1,330 observations); 2) students with institutional, state and federal financial aid but no employer aid (4,750 observations); and 3) students with employer aid (800 observations).<sup>5</sup> Students receiving employer aid may also receive institutional, state or federal aid, but are included only in the employer aid group. The three groups are mutually exclusive.

Variables included in the analysis and definitions are shown in Table 1.

Descriptive statistics for continuous variables are shown in Table 2. The average ages for non-aid, traditional-aid and employer-aid students were 28, 26, and 33, respectively. The group with employer aid had the highest GPA (3.17) compared to the average GPA (2.98) for the overall sample, while Group with no aid has the lowest GPA (2.92).

Descriptive statistics for categorical variables are shown in Table 3. Just over half (53.5%) of the total observations were female and the majority (64.7%) were Caucasian. Minorities include African American (15.7%), Hispanic (11.7%) and Asian (4.2%). The largest share of students had either a business or management major (17.6%). For parents' highest educational level, 26.4% of parents had a high school diploma or equivalent.

Race, gender, and field of study were similarly distributed among the three groups. For the parent's educational attainment for the group with no financial aid, the largest share of parents had a master's degree. Students with employer aid were more likely to be financially independent, married, and have children. Next, we test for statistically significant differences among these three groups of students.

### Statistical Method

Analysis of Variance (ANOVA) with the Bonferroni post-hoc test (Table 4) was used to test for statistically significant differences in characteristics among the three groups of students (continuous variables). For the categorical variables, the Marascuilo procedure was used to test for statistically significant differences among the three groups of students (Table 5). The Marascuilo procedure tests the proportional absolute difference among each group and compares the difference to the absolute critical range.<sup>6</sup> Finally, two-sample t-tests were used to test for differences in the types of financial aid that students with employer aid and students with traditional financial aid receive (Table 6).

#### Table 1. Variable Definitions

Variable	Definition					
Age	Student's age as of December 31, 2007.					
Dependents	Number of dependent children of the student during the 2007-2008 academic year.					
Total income	Total income in 2006 for independent students or parents of dependent students.					
GPA	Student's cumulative Grade Point Average (GPA) for the 2007-2008 academic year. The GPA was standardized to a 4.00 point scale and was multiplied by 100 for this variable.					
Earnings from work	The student's total amount earned from work (excluding work-study, assistantship, and traineeship) during the 2007-2008 academic year.					
Hours worked	The average number of hours worked per week during the 2007-2008 academic year (excluding work-study, fellowships, assistantships, and traineeships).					
Cumulative borrowed	Cumulative amount borrowed for undergraduate education. Includes all loans ever borrowed for undergraduate education in 2007-2008 and prior years.					
Federal loan amount	Cumulative federal loan amounts borrowed for undergraduate education through July 1, 2008.					
Family Contribution	Composite estimate of the federal Expected Family Contribution (EFC) used in need analysis.					
Employer aid	Total amount of aid received from employers during the 2007-2008 academic year. Includes tuition waivers for employees and dependents of employees at postsecondary institutions and employer-paid tuition reimbursements to students or the parents of students.					
Has dependent children	=1 if student had dependents who are children; =0 otherwise.					
Financial Dependent	=1 if student is classified as a financial dependent; =0 otherwise					
Marital Status	=1 if student was married; =0 otherwise					
Gender	=1 if student was male; =0 otherwise					
Race	=1 if student was white; =0 otherwise					
Parent's education level	=1 if the highest education level achieved by either parent was a high school diploma or equivalent; =0 otherwise (One parent could have some postsecondary education or higher).					
Works to minimize debt	=1 if student selected "to minimize the amount of debt you have" as one reason for working while enrolled; =0 otherwise					
Works to pay educational expenses	=1 if student selected "to pay educational expenses" as one reason for working while enrolled; =0 otherwise					
Business major	=1 if student's undergraduate field of study was business/management; =0 otherwise					
Undergraduate loans	=1 if student had no loans for undergraduate education					

Source: U.S. Department of Education, National Center for Educational Statistics, 2007-08 National Postsecondary Student Aid Study.

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Table 2. Descriptive Statistics for Continuous Variables

-	Total $(n = 6,880)^a$		No Financial Aid $(n = 1,330)^a$		Traditional Financial Aid $(n = 4,750)^a$		Employer Aid $(n = 800)^a$	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Age	27.28	8.41	28.46	9.00	26.00	7.48	32.92	9.88
Dependents	0.48	0.95	0.42	0.90	0.43	0.93	0.82	1.11
Total income	50,210.00	46,826.00	65,424.00	55,688.00	43,567.00	42,569.00	64,288.00	45,787.00
GPA	298.52	67.16	292.24	69.44	297.17	66.28	317.04	65.44
Earnings from work	21,039.00	20,437.00	26781.00	24,553.00	16,979.00	16,207.00	35,589.00	25,821.00
Hours worked	39.77	9.22	41.68	7.77	38.86	9.58	42.06	8.36
Cumulative borrowed	12,439.00	14,405.00	4,067.00	9,761.00	15,369.00	14,551 .00	9,007.00	13,798.00
Federal loan amount	10,189.00	13,112.00	3,380.00	8,734.00	12,613.00	13,459.00	7,159.00	12,482.00
Family Contribution	8,645.00	12,123.00	12,726.00	14,847.00	6,928.00	10,584.00	12,032.00	13,257.00
Employer aid	319.00	1,206.00	_	_	_	_	2,751.00	2,417.00

Note: <sup>a</sup> NCES requires restricted data sample size to be rounded to the nearest 10.

Table 3. Descriptive Statistics for Categorical Variables

	Total $(n = 6,880)$		No Financial Aid (n = 1,330)		Traditional Financial Aid (n = 4,750)		Employer Aid (n = 800)	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Has dependent children	1,750	25.4	300	4.4	1,100	16.1	340	5.7
Is a financial dependent	2,630	38.3	430	6.2	2,070	30.1	130	1.9
Is married	1,760	25.6	370	5.4	1000	14.6	390	5.7
Male	3,170	46.0	680	9.9	2,110	30.7	370	5.4
White	4,450	64.7	960	13.9	2,950	42.8	550	7.9
Parent's education level	1,810	26.4	280	4.0	1,320	19.2	220	3.2
Works to minimize debt	2,590	37.6	390	5.7	2,020	29.3	180	2.6
Works to pay educational expenses	3,330	48.4	500	7.3	2,600	37.7	230	3.3
Business major	1,210	17.6	240	3.5	760	11.1	200	2.9
Undergraduate loans	2,280	33.2	940	13.7	950	13.8	390	5.7

#### Results Differences in Demographic and Socioeconomic Characteristics

Students receiving employer aid were statistically, significantly older than students receiving no financial aid (4.46 years older) and students receiving traditional aid (6.92 years older) and have more children (Table 4). These differences were expected since workers often have to work at an employer for a set amount of time before they qualify for employer aid programs, so students receiving employer aid are likely to be older and to have longer employment tenures than the traditional student population.

We examined the household income of parents for students who were dependents and the student (and their spouse) for students who were financially independent. The annual household income of students who did not receive financial aid was significantly higher (by over \$21,000) than those that received traditional aid. These results suggest that students who did not receive aid were from higher income households rather than students from lower income households who would qualify but did not apply for financial aid. There was no significant difference in the average incomes of students who did not receive financial aid and those who received employer aid. The average household income of students receiving traditional financial aid was significantly lower (over \$20,000 lower) than students receiving employer aid. These results indicate that among students who were dependent and those who maintained independent households, total income was higher for students receiving no aid and those receiving employer aid.

Table 4. ANOVA Results for Continuous Variables

Difference Between Means (n = 6,880)

			(n - 0,800)				
	Degree of Freedom	Fisher's F ratio	No Financial Aid vs. Traditional Financial Aid	No Financial Aid vs. Employer Aid	Traditional Financial Aid vs. Employer Aid		
Age	2	267*	2.46.00 *	-4.46 *	-6.92 *		
Dependent children	2	58*	-0.01	-0.39 *	-0.38 *		
Total income	2	161*	21,858.00 *	1,137.00	-20,721.00 *		
GPA	2	37*	-4.94	-25.00 *	-19.87 *		
Earnings from work	2	388*	9,802.00 *	-8,809.00 *	-18,611.00 *		
Hours worked per week	2	78*	2.82 *	-0.38	-3.20 *		
Cumulative borrowed	2	385*	-11,303.00 *	-4,940.00 *	6,363.00 *		
Federal loan amount	2	307*	-9,233.00 *	-3,779.00 *	5,454.00 *		
Family Contribution	2	161*	5,797.00 *	694.00	-5,104.00 *		

*Note:* \* p < .05.

We examined a variety of demographic characteristics. The proportion of students receiving employer aid who were married and who had dependent children was significantly higher at 49% and 42%, respectively, than the other two groups while the percentage of students receiving employer aid who were classified as financial dependents was lower (17%) than the other two groups (Table 5). The group of students receiving traditional financial aid had a significantly higher proportion of males than the group receiving no financial aid. This was the only significant gender difference among these three groups. Relative to the traditional financial aid group (65%), there was a significantly higher proportion of students who were white in both the group that did not receive any financial aid (74%) and the group that received employer aid (71%).

We also examined parent's education level and found that the parents of students who receive no aid are more educated (at a statistically significant level) than the parents of students receiving traditional aid or employer aid. This result is consistent with the findings for household income which find that household income of students receiving no aid is higher.

#### Differences in academic characteristics

A measure of academic performance included in the NPSAS is GPA. There was no statistical difference between the average GPA of students receiving no financial aid and those receiving traditional financial aid. There

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Table 5. Marascuilo Procedure Results for Categorical Variables

**Difference Between Proportions** 

	No Financial Aid	Traditional Financial Aid	Employer Aid	No Financial Aid vs. Traditional Financial Aid	No Financial Aid vs. Employer Aid	Traditional Financial Aid vs. Employer Aid
Has dependent children	0.23	0.23	0.42	0.01	0.19 *	0.19 *
Is a financial dependent	0.32	0.44	0.17	0.11 *	0.15 *	0.27 *
Is married	0.28	0.21	0.49	0.07 *	0.21 *	0.28 *
Male	0.49	0.55	0.53	0.07 *	0.04	0.02
White	0.74	0.65	0.71	0.09 *	0.03	0.06 *
High school is parent's highest education level	0.35	0.47	0.48	0.11 *	0.12*	0.01
Works to minimize debt	0.57	0.59	0.63	0.01	0.06	0.04
Works to pay educational expenses	0.74	0.75	0.81	0.02	0.07	0.05
Business/management major	0.25	0.23	0.35	0.02	0.10 *	0.12 *
No loans for undergraduate degree	0.70	0.20	0.49	0.50 *	0.21 *	0.29 *

*Note:* \* p < .05.

were significant differences between each of these groups of students and students receiving employer aid. The average GPA of students receiving employer aid was 25 points higher (on a 400 point scale) than students receiving no aid and 19.87 points higher than students receiving traditional financial aid (Table 4). We expected GPA to be higher for students receiving employer aid because this type of aid is often tied explicitly to grades providing a strong incentive for students to do well in courses. Depending on how employers structure the program, students receiving an A in a course may receive a higher level of reimbursement than students earning lower grades and/or grades below a C may receive no tuition reimbursement.

We found a significantly larger proportion of students receiving employer aid were business or management majors (35%) relative to the other two groups.

#### Differences in earnings and hours worked

We examined student earnings and hours worked per week excluding work study jobs and assistantships to focus on off-campus employment. Earnings from work were significantly higher for students receiving employer aid, over \$18,000 per year higher, than students receiving traditional aid and

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over \$8,800 per year higher than students receiving no aid. Students receiving no aid earned \$9,800 more per year than students receiving traditional financial aid.

We found that students receiving no financial aid worked almost three hours more per week than students receiving traditional financial aid and that students receiving employer aid worked three hours or more per week more than students receiving traditional aid. There was no statistical difference between students receiving no aid and employer aid in the number of hours worked.

There was no statistically significant difference in the proportion of students in each group who report working to minimize debt or to pay educational expenses (Table 5). We hypothesized that a higher proportion of students receiving no aid might work primarily to pay for educational expenses and a higher proportion of students receiving traditional aid might work to minimize debt, but we are not able to confirm this with the NPSAS:08 data.

#### Differences in borrowing for undergraduate education

We examine the cumulative amount borrowed and owed for undergraduate education. Students receiving traditional financial aid borrow significantly more to finance their education and owe more than the other two groups. The expected family contribution is significantly higher for students receiving no financial aid and for students receiving employer aid compared to students receiving traditional aid.

Over 70% of students receiving no financial aid have never had a loan (Table 5) which is significantly higher than the percentage of students receiving traditional aid or employer aid. Similarly, 49% of students receiving employer aid have never taken a loan to finance their higher education which is significantly higher than students receiving traditional financial aid.

## Differences in Financial Aid

We also examined differences in the various types of financial aid received by students with traditional financial aid and students with employer aid (Table 6). Students receiving employer aid also received other types of financial aid. There were significant differences between the two groups of students. Students receiving traditional financial aid received substantially higher amounts (usually double or more) of aid on average than students who received employer aid with the exceptions of institutional non-need and merit grants and outside grants, which includes employer aid. Average institutional merit-only grants and need-based grants are each higher for students receiving traditional financial aid. The only grant category where students with employer aid receive higher average amounts is outside grants (private and employer), which is expected.

Table 6. Comparison of Financial Aid, by Source and Type

**Traditional** Financial Aid **Employer Aid** (n = 4,750)(n = 800)Standard Standard Standard Standard Variable Mean Deviation Mean Deviation Mean Deviation Mean Deviation 1,214 0 10,000 851 0 10,000 Federal campus-based aid\* 453 165 Federal need-based aid\* 3,887 20,110 2,941 16,796 4,080 0 1,466 0 Federal work-study\* 274 991 0 6,000 111 719 0 6,000 Total federal aid (excludes 5,561 4,738 0 22,293 2,234 4,057 0 17,810 parent PLUS and veterans)\* Total federal aid (includes 6,147 5,210 0 39,617 2,547 4,387 21,310 veterans)\* Total federal grants\* 1,598 2,215 0 12,630 486 1,434 0 14,754 Total federal grants 1,856 2,589 0 17,985 749 2,043 16,310 and veterans/DOD\* Institutional aid total\* 769 2,443 0 43,112 486 1,604 15,687 Institutional loans\* 748 0 22,792 0 464 50 1 16 Institutional grants 609 2,045 0 32,600 444 1,557 15,687 total (alternate)\* Institutional merit-only 250 1,247 0 20,000 68 489 0 8,188 grants\* Institutional need-based 316 1,340 0 20,000 107 770 0 15,226 grants\* 293 0 Institutional non-need 1,402 0 20,000 337 1,322 13,708 & merit grants 30,948 Aid subject to federal 5,849 5,417 0 49,255 5,173 5,186 100 EFC limit\* Outside grants (private 179 1,032 0 20,000 2,771 2,569 0 20,663 & employer)\*

*Note:* \* p < .05, two-sample t-tests, one-tailed (directional) tests.

#### Conclusion

In this study, we examined differences in characteristics among three groups of students: 1) those who do not receive financial aid, 2) those receiving traditional financial aid and 3) those receiving employer aid using data from the 2007-08 NPSAS. Recipients of employer aid were older by 4 to 7 years, more likely to be married and had more children which are likely related to their older age. These students also had higher total household income (over \$20,000 per year higher) than students receiving traditional aid. Students receiving employer aid also had higher earnings from work than students receiving traditional aid (over \$18,000 more per year) and those receiving no financial aid (\$8,800 more per year).

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The demographic characteristics show that students receiving employer aid were more likely to be white than recipients of traditional financial aid. The parents of students receiving employer aid were more likely to have a high school diploma and no further education than students receiving no aid.

The academic characteristics show that students receiving employer aid were more likely to be a business or management major and had higher GPAs than students receiving traditional financial aid or no aid (1.99 points and 2.48 points, respectively).

Employer-aid recipients were more likely to take out loans to finance their education than students with no aid but less likely to take out loans than students with traditional aid. These students also received less federal and institutional aid with the exception of non-need merit grants and outside grants (which includes employer aid).

Employer-provided aid provides benefits to the individuals receiving the aid, businesses offering the aid and the broader economy. Previous research has shown that businesses offering employer-provided aid have lower labor turnover in the short-term and attract better quality workers. For individuals and families, this type of aid is instrumental for degree attainment and associated professional promotions, higher salaries and wages, and upward mobility associated with degree attainment. Economywide benefits of this type of aid include increasing the skills and productivity of the U.S. workforce which has implications for economic development and competitiveness. Additional analysis is needed to quantify these benefits associated with employer-provided aid.

#### Nexus: Connecting Research to Practice

- Recipients of employer-sponsored financial aid are an understudied component of financial aid recipients and are likely to increase in the future as the cost of higher education continues to increase.
- Among undergraduate students attending public, nonprofit, four-year universities and who work at least 35 hours per week, those students receiving employer aid are older, have more children, have higher GPAs, and higher earnings from employment than students receiving traditional aid or no financial aid.
- Students receiving employer aid are also more likely to be married, pursuing a degree in business/management, and are less likely to take out loans to finance their education.

#### References

AllBusiness. (2011). Establishing a tuition reimbursement program. Retrieved March 29, 2011, from http://www.allbusiness.com/ human-resources/employee-development/1163-1.html

Alon, S. (2007). The influence of financial aid in leveling group differences in graduating from elite institutions. *Economics of Education Review*, 26, 296-311.

Belot, M., Canton, E., & Webbink, D. (2007). Does reducing student support affect scholastic performance? Evidence from a Dutch reform. *Empirical Economics*, 32(2-3), 261-275.

Benson, G. S. (2006). Employee development, commitment and intention to turnover: A test of "employability" policies in action. *Human Resource Management Journal*, 16(2), 173-192.

Benson, G. S., Finegold, D., & Mohrman, S. A. (2004). You paid for the skills, now keep them: Tuition reimbursement and voluntary turnover. *Academy of Management Journal*, 47(3), 315-331.

Bettinger, E. (2004). How financial aid affects persistence. In C. M. Hoxby (Ed.), *College choices: The economics of where to go, when to go and how to pay for it* (pp.207-237). Chicago: University of Chicago Press.

Boyer, P. G., & Butner, B. (2011). Advancing or hindering the next generation? A look at financial aid for minority graduate students. *Journal of Student Financial Aid*, 41(2), 22-36.

Canton, E., & Blom, A. (2010). Student support and academic performance: Experiences at private universities in Mexico. *Education Economics*, 18(1), 49-65.

Cappelli, P. (2004). Why do employers pay for college? *Journal of Econometrics*, 121(1-2), 213-241.

Cofer, J., & Somers, P. (2000). A comparison of the influence of debtload on the persistence of students at public and private colleges. *Journal of Student Financial Aid*, 30(2), 39-58.

Dynarski, S. (2002). The behavioral and distributional implications of aid for college. *American Economic Review*, 92(2), 279-285.

Dynarski, S. (2003). Does aid matter? Measuring the effect of student aid on college attendance and completion. *American Economic Review, 93*(1), 279-288.

Faulk, D. Srinivasan, A. K., & Bingham J. (2012). Sources of funding and academic performance in economics principles courses. *Journal of Economic Education*, 43(2), 165-181.

Finegold, D., Benson, G.S., & Mohrman, S. A. (2002). Harvesting what they grow: Can firms get a return on investments in general skills? *Organizational Dynamics*, 31(2), 151-164.

Indiana Commission on Higher Education. (2012, March). Reaching higher achieving more: A success agenda for higher education in Indiana. Retrieved June 29, 2012, from http://www.in.gov/che/files/2012\_RHAM\_4\_26\_12.pdf

Jones, G. (2010). Who benefits from section 127? A study of employee education assistance provided under section 127 of the Internal Revenue Code. Retreived January 4, 2014 from http://i.bnet.com/blogs/tax-break-college.pdf.

Lumina Foundation for Education. (2009). Lumina foundation's strategic plan goal 2025. Retrieved June 29, 2012, from http://www.luminafoundation.org/wp-content/uploads/2011/02/Lumina\_Strategic\_Plan.pdf

National Center for Education Statistics. (2005). Digest of education statistics. Retrieved April 14, 2011, from http://nces.ed.gov/Programs/digest/

National Center for Education Statistics. (2009). Digest of education statistics. Retrieved August 9, 2010, from http://nces.ed.gov/Programs/digest/

Pascarella, E.T., & Terenzini, P.T. (1991). How college affects students: Findings and insights from twenty years of research. San Francisco: Jossey-Bass.

Pascarella, E.T., & Terenzini, P.T. (2005). How college affects students, Volume 2: A third decade of research. San Francisco: Jossey-Bass.

Pattie, M., Benson, G. S., & Baruch, Y. (2006). Tuition reimbursement, perceived organizational support, and turnover intention among graduate business school students. *Human Resources Development Quarterly*, 17(4), 423-442.

Singell, L. (2004). Come and stay a while: Does financial aid effect retention conditioned on enrollment at a large public university? *Economics of Education Review*, 23(5), 459-471.

Singell, L., & Stater, M. (2006). Going, going, gone: The effects of aid policies on graduation at three large public institutions. *Policy Sciences*, 39(4), 379-403.

U.S. Department of Labor. (2011). Consumer price index. Retrieved August 11, 2011, from http://www.bls.gov/data/

U.S. Department of the Treasury. (2013, February 18). Tax benefits for education (Internal Revenue Service, Publication 970). Retrieved June 6, 2013, from http://www.irs.gov/pub/irs-pdf/p970.pdf

#### **Endnotes**

- <sup>1</sup> A similar percentage of respondents reported receiving employer aid in the 2004 NPSAS.
- <sup>2</sup> NPSAS:08 includes three categories of employer aid: Aid received from the student's employer as tuition reimbursement, tuition aid received from parent's employers, and tuition waivers for employees and dependents of employees at postsecondary institutions. Students receiving employer aid may also receive institutional, state and/or federal aid.
- <sup>3</sup> Throughout the paper, we use the term "traditional" financial aid to mean financial aid that students receive from the institution that they attend and state and federal governments. Students receiving employer aid may also receive institutional, state and/or federal financial aid.
- <sup>4</sup> NPSAS:08 is a nationally representative sample, but as noted in the documentation, information about employer provided aid is substantially under reported by institutions, and information on employer aid was gathered primarily through student interviews.
- <sup>5</sup> Sample sizes were rounded to the nearest 10 according the NCES requirements.
- <sup>6</sup> Since the test is based on absolute values, the sign on the difference is always positive unlike the ANOVA results.