ACCOUNTING FOR FINANCE STUDENT PERFORMANCE IN THE PACIFIC: A REPORT

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This article provides insights into Pacific Island finance students' academic performance, classified by gender and by financing of studies. To date, there has been no study in this area in the Pacific Island nations. This paper addresses the research questions whether there is a difference in (1) gender; (2) sponsored student academic performance in finance studies in Pacific Island nations; and (3) it also investigates if there is any gender or sponsored/private student dominance in the top and bottom performing groups. Empirical research was undertaken by reviewing student results in three core courses of the finance major program conducted at the University of the South Pacific over 2011, 2012, and 2013. The findings in this study contribute to the literature of gender studies. No statistically significant difference was detected in either gender performance or in sponsored/private student performance in finance studies among Pacific Islanders. However, there is some evidence of sponsored student dominance in the top performing group.

THERE HAS BEEN A GENERAL CONCERN for financial literacy skills in many countries. This paper provides insights into factors that may impact the academic performance in finance studies among students from South Pacific Island nations. Finance is a challenging subject for many students because it involves the understanding of financial concepts as well as applications of financial mathematical skills. Students with strong mathematical skills have an advantage in the learning and understanding of finance. Didia and Hasnat (1998) documented that students who performed better in accounting, economics and math tend to also perform better in introductory finance courses that involve the application of financial mathematical

skills. Maccoby's (1966) and Maccoby and Jacklin's (1974) studies found that males performed better than females in mathematics, which could imply males would perform better in finance as well if Maccoby's findings are associated with that of Didia and Hasnat (1998). Terry (2002) and Borde, Byrd, and Modani (1998) found that male students outperform female students in an introductory finance course. Felder et al. (1995) argue that, if either gender group is disadvantaged in the learning and teaching environment, appropriate measures may be taken to attend to the needs of the disadvantaged group. None of these studies used data relating to students from Pacific Island nations in their analyses.

This paper considers three factors that may impact Pacific Islanders' academic performance in finance studies. First, do female students outperform male students in finance classes? The answer to this question will provide direction regarding the need for specially focused gender-specific learning and teaching activities. Second, do sponsored students, whose fees and possibly a living allowance are met by a scholarship, outperform private students, who are responsible for paying their own fees? Many Pacific Island students are publicly sponsored by government agencies. According to Fiji's Ministry of Strategic Planning, National Development and Statistics, Fiji's annual budget estimates for sponsorship spending on tertiary education have been over FJD21 million per year since 2010. Sponsors are keen to know the academic performance of the sponsored students and to request that their midsemester test performance be reported to the sponsors as soon as the results are available. Third, are the proportion of female to male students and the proportion of sponsored to private students over- or underrepresented among the strongest/weakest performers in class.

The findings from this study will shed light on whether a particular gender group among Pacific Islanders learn finance less effectively, which in turn may have implications on the possible need of specially designed gender-specific learning and teaching activities; will contribute to the literature of gender studies in the Pacific; and will provide information to sponsors who are interested in receiving some information on the performance of sponsored students. The last insight may be useful in the reviews of sponsorship policies.

This article proceeds with a Literature Review that provides an overview of existing studies in gender and academic performance as well as student performance in finance. The Data, Hypotheses, and Methodology section describes the data set, hypotheses, and statistical methods employed for hypothesis testing. The Results and Discussions section analyses and discusses the results. This is followed by sections outlining the areas where further research can usefully be conducted and the Conclusions drawn.

Literature Review

Existing literature on student performance in finance focuses mainly on identifying exogenous and/or endogenous variables that determine student performance. Such variables range over types of grading policies, lecture attendance, class time, class size, students' analytical skills, level of confidence, and performance in math or economic courses. Various studies on these variables are discussed later in this section. Some studies have examined gender performance in finance courses, but no study has been conducted on Pacific Island student performance in finance courses.

Student Performance in Finance

Grover, Heck, and Heck (2010) examined whether student performance on a quantitative pretest given at the beginning of an introductory finance course would be a good predictor of performance in the course. Although the study found gender and grade point average (GPA) to have no predictive value, the pretest scores of math and accounting-based questions were a predictor of student performance in the introductory finance course.

Fields (2013) commented that, although there have been many studies in prerequisite performance in introductory finance courses, very few studies related prerequisite scores and student performance in higher level finance courses. Specifically, Fields (2013) studied the relationship between scores in prerequisite tests and the grades in an intermediate finance course; these two variables are found to be strongly and positively related. Marcal and Roberts (2001) documented that students who performed well in a statistics course tend to perform better in the Principles of Finance course. However, those students who delayed taking finance until after a statistics course tend not to perform as well.

Terry (2002) found gender, GPA, major, exam type, performance in prerequisites, and whether the course was taken in summer (in which the form of delivery is usually intensive) to be significantly related to student performance. Specifically, male students received better grades than did female students in the Principles of Corporate Finance course. Interestingly, when the sample is categorized into classes with or without multiple choice exams, gender and major become insignificant explanatory variables in classes in which multiple choice exams are used as assessments. Borde, Byrd, and Modani (1998) found males to outperform females in introductory finance courses although the sample female students had higher grade point averages than did male students.

Other studies on exogenous determinants have examined a variety of factors, ranging from class time to class attendance. Wilson (2002) studied

the exogenous determinants of student performance and attitudes. Exogenous variables such as class size, class duration, class time, and instructor status (part-time or full-time) were included in the study. Using the data of students from the first finance course at the California State University during years 1995–2000, the study found that there were differences in student performance from different class times and class duration. Students in classes with longer meeting time but meeting less frequently, performed better than did students in shorter class duration but meeting more frequently. Also, class size was found to make a difference in students' final course grades. Surprisingly, students taught by adjunct instructors were found to outperform those taught by full-time faculty. Burrus and Graham (2009) also studied class time and student performance. The authors documented that finance students in classes scheduled earlier in the morning tend to perform better when the students have enough sleep. Students who have sufficient sleep, work fewer hours outside of class, take more credit hours of study, do not work at night, and complete their studies in one single university tend to perform better.

Chan, Shum, and Wright (1997) investigated the relationship between class attendance and student performance. The authors found class attendance to be positively related to Principles of Finance students' performance and suggested that professors should encourage students to attend finance classes regularly. Simpson and Sumrall (1979) studied the determinants of objective test scores by finance students and documented grades to be positively related to students' age, major, and previous experience in economics. Trine and Schellenger (1999) found academic aptitude scores and past academic performance, including grades in basic finance and financial accounting courses and cumulative grade point average, to be significant predictors of academic performance in an upper level finance course.

Gender and Academic Performance

Some studies have examined student performance classified by gender in non–finance courses. Felder et al. (1995) did a thorough study on gender performance and attitudes at North Carolina State University. The authors found that male engineering students outperformed female students. Despite no significant differences in the pre–college SAT scores between male and female, female engineering students in the sample demonstrated diminishing performance level and self-confidence as they progressed over the years of undergraduate studies. Possible causes of differences in performance were identified, and possible supports for female students

were recommended as follows. The authors identified possible causes for differences in performance to be doubts about the suitability of women being engineers; the possibility that instructional styles delivered by engineering professors may not suit the learning styles of female students; discrimination by teaching staff and advisors; the possibility that women may be less active in cooperative learning groups; the speculation that women's contributions in mixed-group work are frequently ignored or undervalued; the suggestion that there are very few female role models in engineering school; and the theory that male and female students place different priorities to relationships and schoolwork. Possible assistance that could be provided to female students include identifying more female role models and mentors; strengthening institutional support to female students in relation to career guidance and emotional support; designing cooperative learning activities that give equal benefits to male and female students; and raising awareness of teaching staff and academic on the problems faced by female students and their needs for academic support.

Hanks and Shivaswamy (1985) studied 435 students' (206 female and 229 male) performance by gender and found female students to perform as well as male students in junior level accounting classes. Female students are also documented to be frequently top students in these classes. Maccoby's (1966) and Maccoby and Jacklin's (1974) studies concluded that males outperformed females in mathematics. However, a more recent study by Hyde and Mertz (2009) found that there was no statistically significant difference in performance in mathematics courses between the genders in the United States; they also found this result in a number of other countries.

Sulaiman and Mohezar (2006) attempted to identify the key predictors of academic performance for students in a Master of Business Administration (MBA) program at the University of Malaya. The independent variables examined include age, gender, ethnicity, work experience, undergraduate discipline, and undergraduate cumulative grade point average. The authors found undergraduate grades to be the best predictor of MBA student performance and the undergraduate discipline to be the second-best predictor. The other variables, including gender, are not significant predictors of the MBA student performance.

Nguyen, Allen, and Fraccastoro (2005) studied the personality traits and gender performance of students from an undergraduate management course taught by the same professor. The results showed that emotional stability and intellect positively and significantly predicted the academic performance for male students but not for female students.

Ravenscroft and Buckless (1992) proposed the possibilities of grading policies having an influence on gender performance. Grading policies were defined as weight allocated to assessments such as tests, quizzes, and homework. The sample size of 1,797 comprised students from introductory accounting courses from three state universities. It was found that, in course grades, male students received higher final exam scores and course grade when homework was not part of course grade. However, in a course where homework was allocated in course grades, female students received higher course grade although their final exam scores were similar to male students.

Sponsorship and Student Performance

There are only a handful of academic studies of the impact of sponsorship on student performance. Sponsorship or scholarship (the terms "sponsorship" and "scholarship" are used interchangeably in this study) schemes can be classified as competitive and noncompetitive. Certain universities such as Harvard and Yale focus on giving sponsorship based on students' need instead of merit, whereas some other universities offer a one-year sponsorship (Organ 2011). For the one-year sponsorships, students would have to reapply each year for sponsorship, and their chance of getting the sponsorship for another year would depend on their academic performance. Sponsored students who fail a certain number of courses in consecutive semesters may lose their sponsorship.

Johnson (1999) investigated whether scholarship affects high school students' academic performance. The author documented some evidence that sponsored students tend to perform better than non–sponsored students in the tenth and eleventh grades. For high schools with high dropout rates, sponsored students are found to perform significantly better. High school–sponsored students are also found to be more likely to attend a four-year instead of a two-year college in the first and second year after they graduate from high school.

Academic Performance among Pacific Island Students

The only study on factors influencing academic performance within Pacific Island communities has been undertaken by Patel and Patel (2005). They tested the academic performance of accounting students by ethnicity in Fiji. Ethnic Indians comprise a significant minority of Fiji's population. However, they outnumber the ethnic Fijian's students undertaking tertiary studies in accounting and finance courses.

The authors find that Indo-Fijian students outperformed Ethnic-Fijian students in first-year accounting, although Ethnic-Fijians studying the course delivered via distance mode performed better than the Ethnic-Fijians who enrolled in face-to-face class. However, there was no significant difference in the performance of Indo-Fijian students in these two modes of course delivery. Gender performance was not examined in that study.

Data, Hypotheses, and Methodology

In this study, the samples include students from three different finance courses taught by the same lecturer in three consecutive years. The three courses comprise one course from each of the three levels of the under-graduate finance program. For the 300- and 200-level courses, the classes held in 2011–13 are included in the study. However, for the 100-level course, 2011 is not included because the author taught only part of this course in that year; thus, there are a total of eight finance classes in the sample set. All classes were taught using similar teaching methods. The textbook for each course remained the same during the sample years. The performance evaluation or assessment methods were also similar in all courses. The tests and exams include multiple choice questions, calcula-tion-based problems, and discussion-based problems. In cases where there were absences from a test or exam, those students were excluded from the sample.

All students in the sample are from the Pacific region. The University of the South Pacific is a regional institution serving the nations of Cook Islands, Fiji, Kiribai, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tonga, Tokelau, Tuvalu, and Vanuatu. It is the largest tertiary institution located in the Pacific Island nations.

As displayed in Table 1A, the ethnic backgrounds of these students are mainly Fijians (iTaukei and Indo-Fijians); a small number of students are from other Pacific Island nations such as Kiribati, Marshal Islands, the Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. These students were mostly pursuing the Bachelor of Commerce degree with double majors in Accounting and Finance or in Accounting and Banking. Most graduates end up getting jobs in the related fields in accounting firms, banks, government agencies, or local companies. After graduation, sponsored students will have to work in their home country for a number of years specified by their sponsors. In most cases, sponsored students will have to find jobs on their own, just as the private students will have to do.

TABLE 1A. **Student Counts by Country of Origin.**

Level-year	Class Size	Fiji	Samoa	Solomon Islands	Tonga	Vanuatu	Others
300-2013	93	83	0	3	2	4	Tuvalu:1
300-2012	98	89	1	3	2	2	Tuvalu:1
300-2011	54	50	1	2	0	1	Federated States of Micronesia (1)
200-2013	152	124	2	14	3	6	Kiribati:1 Marshall Islands:1 Palau:1
200-2012	83	76	0	4	0	2	Tuvalu:1
200-2011	94	87	0	3	2	2	0
100-2013	106	88	0	11	4	2	Palau: 1
100-2012	151	127	2	12	2	5	Kiribati:1 Tuvalu:2

TABLE 1B. **Descriptive Statistics on Class and Group Sizes.**

		Gender	Sponsorship		
Course-year	Class Size	Female: Male Ratio	Sponsored: Private Ratio	Sponsored Female: Male Ratio	Private Female: Male Ratio
300-2013	93	1.38 [54:39]	1.16 [50:43]	0.92 [24:26]	43 [30:13]
300-2012	98	1.28 [55:43]	1.88 [64:34]	1.21 [35:29]	1.43 [20:14]
300-2011	50	1.78 [32:18]	1.78 [32:18]	1.46 [19:13]	2.6 [13:5]
200-2013	152	1.27 [85:67]	1.92 [100:52]	1.08 [52:48]	1.74 [33:19]
200-2012	82	1.16 [44:38]	1.65 [51:31]	1.22 [28:23]	1.07 [16:15]
200-2011	94	1.19 [51:43]	3.09 [71:23]	1.09 [37:34]	1.56 [14:9]
100-2013	106	1.38 [62:45]	1.04 [54:52]	1.00 [27:27]	2.06 [35:17]
100-2012	143	1.70 [90:53]	2.25 [99:44]	1.36 [57:42]	3.00 [33:11]

TABLE 1C. **Descriptive Statistics on Weighted Grades.**

	Mean (SD)			
Course-year	F	M	S	P
300-2013	55.94 (10.06)	58.21 (13.38)	58.40 (9.99)	55.14 (13.05)
300-2012	55.94 (15.44)	59.05 (13.07)	59.40 (15.37)	53.37 (11.78)
300-2011	46.83 (19.18)	52.06 (19.90)	47.96 (17.88)	50.05 (22.35)
200-2013	53.45 (18.18)	58.76 (18.64)	56.44 (18.18)	54.54 (19.26)
200-2012	61.88 (14.94)	60.62 (16.51)	63.42 (14.09)	57.81 (17.48)
200-2011	65.43 (15.93)	65.98 (13.18)	66.66 (15.17)	62.65 (12.77)
100-2013	52.50 (13.96)	57.48 (16.43)	53.28 (13.99)	55.90 (16.32)
100-2012	47.15 (15.89)	55.62 (17.27)	51.23 (17.22)	48.18 (16.03)

The hypotheses for the first two research questions are stated as follows:

1. Gender performance

$$H_0 : \mu_F - \mu_M = 0$$
$$H_A : \mu_F - \mu_M \neq 0$$

The null hypothesis states that "there is no significant difference in the mean scores of female (μ_F) and male (μ_M) finance students."

The alternative hypothesis states that "there is a significant difference in the mean scores of female and male finance students."

2. Sponsored student performance

$$H_0 : \mu_S - \mu_P = 0$$
$$H_A : \mu_S - \mu_P \neq 0$$

The null hypothesis states that the "mean scores of sponsored students (μ_S) are not significantly different from those of private students (μ_P)."

The alternative hypothesis states that the "mean scores of sponsored students are significantly different from those of private students."

Hypothesis testing is conducted on the weighted grades, which represent the weighted test and exam scores, with the exams bearing relatively heavier weights than the tests. The weighted grades exclude assessments on group work because groups consist of members of different genders and sponsorships.

The statistical method of independent sample t-test is adopted to test the hypotheses. First, the normality condition required for using t-test is checked for each sample group. The Shapiro-Wilk test is used to test for normality because the sample sizes are small. For sample groups that display normality of population distribution of scores, the independent sample t-test is used. If the null hypothesis of normal distribution of scores is rejected, then a nonparametric test, Mann-Whitney U-test, is used instead.

The hypotheses for the third research question are expressed as follows:

3a. Gender performance

"The female to male (F:M) ratio of the top 5% group is similar to the F:M ratio in the bottom 5% group."

3b. Sponsored and private student performance

"The sponsored to private (S:P) ratio of the top 5% group is similar to the S:P ratio in the bottom 5% group."

The top (bottom) "5%" refers to the top (bottom) group of students that falls in the highest (lowest) 5% category according to the weighted grades. Hypotheses 3a and 3b are addressed via ratio analysis. The F:M ratio of the top 5% group is compared to the F:M ratio of the bottom 5% group for each sample class. The S:P ratio of the top 5% group is compared to the S:P ratio of the bottom 5% group of a given class.

Results and Discussions

This section first discusses the descriptive statistics on the sample. This is followed by the discussions of the results for hypotheses testing and ratio analyses.

Tables 1B and 1C report the descriptive statistics for all sample groups. As displayed in Table 1B, the class sizes range from fifty to 152 students. There were relatively more females than males and more sponsored than private students in all classes. Among the sponsored students, the female to male ratios in seven of eight classes are lower than those of the entire class. In other words, there are proportionately more male sponsored students in these finance classes.

Table 1C shows the mean and standard deviation for the weighted grades. The means for males are higher than those of females in seven of the eight finance classes. Of all courses, the range of standard deviations of weighted grades is from 10.06–19.18 for females and 13.07–19.90 for males. The range of weighted-grade standard deviations for females is broader than that of males. The range of standard deviations for weighted grades for sponsored students is from 9.99–18.18 and for private students is from 11.78–22.35 for all sample groups. The private students' scores have slightly broader range of standard deviations than do the sponsored students.

The test statistics for first and second hypothesis-testing are reported in Tables 2 and 3. For each sample, the normality of population random variable is first tested using Shapiro-Wilk test. The choice of Shapiro-Wilk test over the Kolmogorov-Smirnov test is because of the small sample size in this study. If the Shapiro-Wilk test shows normal distribution of the scores, then independent t-test is used for the hypothesis testing. If the Shapiro-Wilk test statistics indicates non-normality distribution, then the Mann-Whitney U-test is applied. If the t-test is used, the test statistics are presented with the significance values and confidence intervals of the difference. If Mann-Whitney U-test is used, its p-value is reported at the bottom of the table. Because Mann-Whitney U-tests use ranked data that are non-normally distributed, discussions of the Mann-Whitney U descriptive statistics is not meaningful; thus, the mean difference and upper and lower intervals are not presented when Mann-Whitney U-test is used.

TABLE 2. **Test Statistics for Gender Performance.**

Level-year	t	Sig. (2-tailed)	Mean Difference (SE Difference)	95% Confidence Interval of the Difference	
				Lower	Upper
300-2013	−0.93	0.355	−2.26 (2.43)	−7.09	2.57
300-2012	−1.05	0.30	−3.10 (2.94)	−8.93	2.74
200-2013	−1.77	0.079	−5.314 (3.00)	−11.249	0.62
200-2012	0.36	0.72	1.257 (3.47)	−5.65	8.17
200-2011	−0.18	0.86	−0.55 (3.05)	−6.60	5.51
100-2013	−1.68	0.06	−4.98 (2.96)	−10.85	0.90

H_0: Mean scores of females are equal to those of males.
Mann-Whitney U-test p-values:
300-2011 = 0.40.
100-2012 = 0.004*.
Level of significance is 0.05.
* = significant at 5% level.

Gender Performance

The test statistics in Table 2 show that the mean difference between male and female students in the 300- and 200-level finance classes is not statistically significant in all sample years. These observations are consistent with the findings by Didia and Hasnat (1998) and Grover, Heck, and Heck (2010) in finance gender performance and Hanks and Shivaswamy (1985)

TABLE 3. **Test Statistics for Sponsored-Private Student Performance.**

Level-year	t	Sig. (2-tailed)	Mean Difference (SE Difference)	95% Confidence Interval of the Difference	
				Lower	Upper
300-2013	1.36	0.18	3.26 (2.39)	−1.49	8.01
300-2012	2.00	0.05*	6.04 (3.02)	0.04	12.04
200-2013	0.60	0.55	1.90 (3.17)	−4.37	8.17
200-2012	1.59	0.12	5.61 (3.52)	−1.40	12.61
200-2011	1.14	0.26	4.01 (3.51)	−2.96	10.98
100-2013	−0.89	0.38	−2.63 (2.95)	−8.47	3.22

H_0: Mean scores of sponsored students are equal to those of private students.
Mann-Whitney U-test p-values:
300-2011 =0.90.
100-2012 = 0.29.
Level of significance is 0.05.
* = significant at 5% level.

and Hyde and Mertz (2009) in accounting and mathematics gender performance, respectively. On the other hand, the test statistics for the 100-level class in 2012 suggest the rejection of the null hypothesis, indicating that the performance of male students is significantly higher than those of female students. Overall, the answer to the first research question is that, seven of the eight classes show no statistically significant difference in gender performance.

Sponsored-Student Performance

As reported in Table 3, except for the 300-level class in 2012, the *t*-test results for all classes indicate that the null hypothesis should not be rejected at a 0.05 level of significance, suggesting that on average there was no significant difference in the performance between the sponsored and private students in these classes. For 300-level class in 2012, the null hypothesis is weakly rejected at 0.05 level of significance, implying that there was a weakly significant difference in performance between sponsored and private students, with the mean scores of sponsored students being higher than those of private students.

In answering the second research question, the results show no significant difference in performance between sponsored and private students in seven of the eight classes. It is reasonable to expect that sponsored students would study very hard to sustain their eligibility for sponsorship. Apparently, many private students must have studied very hard as well because they are responsible for their own tuition fees. For most private students, their parents pay for the tuition fees and living expenses. Many parents have to work extra hard to support their children's education. This situation may have influenced the study attitude and commitment of the private students.

Top and Bottom Performers

This section explores the third research question of whether the proportion of female to male students and the proportion of sponsored to private students are similar in the top and bottom performing groups in the sample classes.

Table 4 reports the top and bottom 5% groups, classified by gender. For both top and bottom 5% groups, in five of eight classes, the female percentage is higher than their class proportion. In four of eight classes, the female percentages in the top are greater than that in the bottom. One class, 200-level 2011, has the same female-to-male (F:M) ratio. This shows there is no dominance of gender in the top and bottom performing groups.

TABLE 4. **Top and Bottom 5% Performance by Gender.**

Level-year (N; n)	Female % of Class	Ratio F:M	Female, F/(F+M), %	Male, M/(F+M), %	Top > Bottom (F%)	Ratio F:M	Female, F/(F+M), %	Male, M/(F+M), %
			Top				Bottom	
300-2013 (93;5)	58	2:3	40	60		3:2	*60	40
300-2012 (98; 5)	56	3:2	*60	40		4:1	*80	20
300-2011 (50; 3)	64	3:0	*100	0	×	2:1	*67	33
200-2013 (152; 8)	56	5:3	*63	37	×	4:4	50	50
200-2012 (82; 4)	54	4:0	*100	0	×	1:3	25	75
200-2011 (94; 5)	54	4:1	*80	20		4:1	*80	20
100-2013 (106; 5)	58	2:3	40	60	×	1:4	20	80
100-2012 (143; 7)	63	4:3	57	43		5:2	*71	29

N = class size; n = number of students in the top 5% category.
* = percentage is greater than the class percentage.

Table 5 reports the top and bottom 5% groups, classified by sponsorship. For the top performing group, in four of eight classes, the sponsored-student percentages are higher than their class proportions. Interestingly, for the bottom 5% group, in seven of the eight classes, the sponsored-students' percentages are lower than their class proportion. In five of eight classes, the percentages of sponsored students in the top 5% group are higher than those in the bottom 5% group.

In answering the third research question, there is no gender dominance in the top and bottom 5% groups. However, there are proportionately less sponsored students in the bottom 5% group. The observations of proportionately less sponsored students in the bottom performing group is consistent with the logical expectations that sponsored students have the on-going pressure to at least pass their courses so that they are able to maintain their sponsorship throughout their programs of studies.

Poorly Performing Sponsored Students

Although there are proportionately fewer sponsored students in the bottom performing group, there is still a considerable number of sponsored

TABLE 5. **Top and Bottom 5% Performance by Sponsorship.**

Level-year (N; n)	Sponsored % of Class	Top				Top > Bottom (S%)	Bottom			
		Sponsored (F:M)	S/(S+P), %	Private (F:M)	P/(S+P), %		Sponsored (F:M)	S/(S+P), %	Private (F:M)	P/(S+P), %
300-2013 (93; 5)	54	1 (0:1)	20	4 (2:2)	80		2 (2:0)	40	3 (1:2)	60
300-2012 (98; 5)	65	5 (3:2)	*100	0	0	×	4 (3:1)	*80	1 (1:0)	20
300-2011 (50; 3)	64	1 (1:0)	33	2(2:0)	67		1 (1:0)	33	2 (1:1)	67
200-2013 (152; 8)	66	4 (2:2)	50	4 (3:1)	75		4 (2:2)	50	4 (2:2)	50
200-2012 (82; 4)	62	3 (3:0)	*75	1 (1:0)	25	×	2 (1:1)	50	2 (0:2)	50
200-2011 (94; 5)	76	5 (4:1)	*100	0	0	×	3 (2:1)	60	2 (2:0)	40
100-2013 (106; 5)	51	2 (0:2)	40	3 (2:1)	60	×	1 (1:0)	20	4 (3:1)	80
100-2012 (143; 7)	69	6 (3:3)	*86	1 (1:0)	14	×	4 (3:1)	57	3 (2:1)	43

N = class size; n = number of students in the top 5% category.

* = percentage is greater than the class percentage.

students failing finance courses. This subsection presents additional infor-
mation on the proportions of students who failed the finance courses and
their sponsorship classifications. The intention is to lay ground for future
research on sponsorship and student performance.

Table 6 reports the percentages of sponsored students who failed the
finance courses. The proportion of failed sponsored to failed private
students ranges from 38% to 75% in these eight courses. Interestingly, in
only one (300-level 2011) of eight classes, the percentage of sponsored
students accounts for more than their respective class proportion.

The figures in Table 7 indicate that the sponsors for Fijian students are
mainly the Department of Multi Ethnic Affairs and the Ministry of Fijian
Affairs Board. Sponsors for other Pacific Island nations include government
sponsorships and Australia and New Zealand third world country awards.
To discover whether these sponsorships are based on student merits or
financial status, a survey on students will have to be conducted.

Further Studies

The major limitation of this research is that observations are limited to
three offerings of two courses and two offerings of the third. While having
the same lecturer in all sample classes can be a limitation, the advantage is
the consistency of delivery and assessments. There is much more to explore
on the student learning of finance in the Pacific. Identification of exoge-
nous or endogenous variables that contribute to effective learning of finance
in the Pacific may be useful for teachers–facilitators to promote learning
and teaching activities suited to the learning styles of the students in the
Pacific.

TABLE 6. **Poor-Performing Sponsored-Private Student Ratios.**

Level-year	Sponsored % of Class $(S/(S+P))$	Failed Sponsored $S_{failed}/(S_{failed}+P_{failed})$, %	Failed Sponsored: Private Ratio
300-2013	54	38	0.625 [5:8]
300-2012	65	62	1.63 [13:8]
300-2011	64	*75	3 [18:6]
200-2013	66	60	1.5 [24:16]
200-2012	62	47	0.875 [7:8]
200-2011	76	71	2.5 [5:2]
100-2013	51	44	0.79 [11:14]
100-2012	69	66	1.96 [49:25]

* = percentage of sponsored students accounts for more than their respective class
proportion.

TABLE 7. **Poor-Performing Sponsored Students by Country of Origin and Sponsorship.**

Level-year	Country of Origin	Counts	Source of Sponsorship (Counts)
300-2013	Fiji	5	Department of Multi Ethnic Affairs (2) Ministry of Fijian Affairs Board (3)
300-2012	Fiji	10	Department of Multi Ethnic Affairs (7) Ministry of Fijian Affairs Board (3)
	Solomon Islands	1	Solomon Islands Government (1)
	Vanuatu	2	Government of Vanuatu (1) New Zealand Third Country Award (1)
300-2011	Fiji	16	Department of Multi Ethnic Affairs (15) PSC (Public Service Commission)— Student Loan Scheme (1)
	Samoa	1	Australian Third Country Award (1)
	Solomon Islands	1	Australian Third Country Award (1)
200-2013	Fiji	16	Department of Multi Ethnic Affairs (6) Ministry of Fijian Affairs Board (8) Public Service Commission (1) The University of the South Pacific (1)
	Samoa	2	New Zealand Third Country Award (1)
	Solomon Islands	6	Solomon Islands Government (1)
200-2012	Fiji	6	Department of Multi Ethnic Affairs (2) Ministry of Fijian Affairs Board (4)
	Solomon Islands	1	Solomon Islands Government (1)
200-2011	Fiji	7	Department of Multi Ethnic Affairs (7)
100-2013	Fiji	4	Ministry of Fijian Affairs Board (3) PSC Tertiary Education Loan Scheme (PSC–TELS) (1)
	Solomon Islands	5	Solomon Islands Government (5)
	Tonga	1	Australian Third Country Award (1)
	Vanuatu	1	Government of Vanuatu(1)
100-2012	Fiji	37	Department of Multi Ethnic Affairs (12) Ministry of Fijian Affairs Board (23) PSC—Student Loan Scheme (1) Public Service Commission (1)
	Samoa	1	New Zealand Third Country Award (1)
	Solomon Islands	8	Solomon Islands Government (8)
	Tonga	1	Australian Third Country Award (1)
	Vanuatu	2	Government of Vanuatu (2)

A survey on students can be conducted to collect information on whether the sponsorship is by students' merit or by financial status; factors that may hinder the performance of the students (for example, whether the students live off campus, their daily travelling time, whether they work part-time or full-time, whether they have internet access from home); country of origin; learning experiences prior to attending USP; other factors that students

think may have affected their performance; areas that the students think they need help to improve their performance, etc. A larger data base than that currently available would be required to undertake a rigorous analysis of all these variables. With such information, institutions and teacher–facilitators will be able to understand more of students' needs and can have better focus on students who failed or who may need specific help to improve their performance.

Conclusions

This article is the first that analyses gender and sponsored-student performance in finance studies in the Pacific Islands. The findings provide new knowledge to the literature of gender studies in the Pacific Islands in that, on average, female students learn finance as effectively as do male students and the current learning and teaching environment does not favor one gender. Consequently, there is no need for any specially designed gender-specific learning and teaching activities to support the learning of any particular gender group as in the case of Felder et al. (1995). The findings also present new information to sponsors who are interested to know more about the performance of sponsored students in finance in the Pacific.

The answers for the first and second research questions indicate no statistically significant difference in gender performance and in sponsored/private student performance, a few observations have been documented on the top and bottom performing groups. In answering the third research question, there is no gender dominance in the top and bottom performing groups. Interestingly, for the bottom 5% group, there are proportionately fewer sponsored students than private students. However, there are still a considerable number of sponsored students failing these courses.

It would be beneficial to focus on the factors contributing to the poor performance of the Pacific students in finance. Appropriate measures may be taken to help these students improve their academic performance. Specifically, causes of failure of publicly sponsored students can be identified. Such findings will provide more insights to sponsors as a reference as well as for policy reviews.

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