

## Do commissions level the playing field for female producers in the financial services industry?

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### Abstract

Producers in the financial services industry have recently included a greater percentage of women in this traditionally male dominated business. The focus of this study is an examination of potential differences by gender and the gross and net earnings achieved by individuals in a field that is primarily compensated by commission. Results of both logistic and ordinary least square regressions show that there are differences by gender in demographic characteristics, earnings, professional designations, business mix, and opinions on factors contributing to and detracting from success. © 2011 Academy of Financial Services. All rights reserved.

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### 1. Introduction

The division of the financial service industry into distinct categories such as financial planning, insurance, banking, brokerage, investment banking, and investment management becomes much less apparent with the passage of the Financial Modernization Act of 1999 (also known as the Gramm-Leach-Bliley Act, 1999). Congress passes this act to allow for the

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merger of commercial banks and investment banks that are prohibited by the Glass-Steagall Act of 1933, and it allows for more direct competition of insurance companies, banks, and securities firms. Cross selling of many different types of financial products are facilitated and the movement of individuals to a much wider variety of firms occurs.

A common problem facing financial services firms is the recruitment and retention of individuals who are known in the industry as *producers* because they serve their clients and distribute the products that generate revenue for a firm. Industry studies on the male to female ratio range between three and four males to one female (LIMRA, McKinsey & Company, 2009). Because American women represent about 51% of the United States population (U.S. Census Bureau, 2009) and will control more than half the nation's wealth (Sweetser, 2006), financial services firms are increasingly looking to recruit and retain more female producers.

Leyes (2007) suggests that for those producers who are life insurance agents and have been in the business for four years, the retention rate is 19% for males and 15% for females. This high turnover rate is costly for firms and the individuals who must change jobs. An understanding of the factors that distinguish between male and female producers and their income levels may shed light on the turnover rate, improve retention rates, and encourage more women to become financial service producers.

Commission is the primary compensation system for this industry and this should allow females to compete on a level playing field with males. Is that the case? Do personal demographics data such as age, education, marital status, or having children affect results? Do those who earn professional designations have greater income and does it differ by gender? This study provides evidence on these questions and others based on an on-line survey of 1,575 individuals who are working on or have completed designations offered by The American College or other entities that accept the educational coursework that the college offers.

This section is followed by a review of the literature and Section 3 explains the data and methodology used in the study. Section 4 provides results of the study and a summary and conclusions drawn are presented in Section 5.

## 2. Review of the literature

There is a long history of criticism of compensation being based solely on commission in the insurance industry. Ingraham (1973) states that criticisms include too high a cost to acquire life insurance, poor service, less than ethical sales practices, too heavy a turnover of agents, and that only the top producers can “earn an adequate living.” Attracting individuals into the life insurance industry as producers is a continuing problem, according to Dorfman (1976), who attributes it to commission as the sole basis of compensation.

A survey of 25 multiline insurance firms in a metropolitan area is undertaken by Dubinshky and Yammarino (1985) to examine the role of field (local) managers who supervise life insurance agents. Results indicate that if an agent has a higher level of autonomy, more attention from the supervisor, and makes greater efforts to perform, he or she tends to be more satisfied and exhibits a higher level of performance. A sample of 166 insurance agents attending continuing education classes are surveyed by McElroy, Morrow,

Power, and Iqbal (1993). To improve retention, they suggest mentoring, college agents programs, educational goal setting, continuing education, and certificate programs that yield rewards for the agent.

Catalyst, a nonprofit organization that focuses on women's issues, conducts the first comprehensive study of women in the securities segment of the industry as a requirement of the settlement of Martens et al. versus Smith Barney (2001). The focus of the study is on individuals who work in brokerage, investment banking, and investment management firms in 1998, and a total of 838 surveys are completed. The MBA degree is earned by 35% and 44% have a bachelor's degree. Average age of respondents is 43, median number of years in the industry is 16, married or living with a partner accounts for 94% of the men and 73% of the women, and 88% of the men and 58% of the women have children. When asked their primary reasons for choosing a career in the financial services industry the first choice is "pursue intellectually challenging work" followed by "to make a lot of money."

The overwhelming majority indicate strength of commitment to work is the most important advancement strategy, followed by consistently exceeding performance expectations. Women see the barriers to advancement at their firm as "lack of mentors (70%), commitment to personal and family responsibilities (69%) and lack of women role models (65%)." Men see the barriers to advancement as "personal and family responsibilities (53%) and lack of management or line experience (47%)." Women have to work harder than men to get the same reward according to 65% of the women and 13% of the men.

Does the age when a woman has her first child make a difference in her earnings? Taniguchi (1999) argues that children's negative effect on women's wages is well established and that career interruption is particularly negative for women in male dominated occupations. Results of the study indicate that there is a significant wage penalty for women who give birth between ages 20 and 27. Women who wait to have children after age 27 have work experience that is predictive of wage gains for mothers, although education reduces the child wage penalty for younger mothers.

Are there solutions to the problem of women being in a minority position in a particular occupational field such as financial services producers? Yoder's (2001) psychology research suggests that one solution to the gap between men's and women's wages is to integrate women into better paying occupations that are predominately occupied by men. She points out that as much as 33% of the difference in wages may be because of occupational segregation, with men and women predominant in different fields.

The term token ("...any group comprising a subgroup of less than 15% as skewed, labeling scarce members "tokens" and proportionally plentiful members "dominants") is taken from a 1977 book by Rosabeth Moss Kanter (1977). She studies 20 saleswomen in a 300 person sales force of a multinational Fortune 500 firm and her solution to the problems she observes is the need to add more women. Yoder, Adams, Grove, and Priest (1985) find that senior women who are tokens in their organization are too stressed to serve as mentors to junior women. The remedies for tokenism (Yoder, 2001) must include reaching specific percentages of women in a work force (35% or more), very specific training and recognition of women leaders by their organization.

A study of MBA graduates (Goldberg, Finkelstein, Perry, & Konrad, 2004) finds men's salaries increase with age but women's salaries do not. Women earn "somewhat" higher

salaries in masculine-type jobs, but men earn “considerably” higher salaries in feminine-type jobs. They cite U.S. Census Bureau statistics that show that regardless of educational levels, women earn only 74% of what men earn who have the same level of education. Another study of business school graduates (Chauvin and Ash, 1994) finds that women earn significant less pay when contingent pay (commissions) are examined and the authors suggest this may reflect differential treatment of men and women by firms.

Lyness and Thompson (1997) study a matched sample of financial services executives in the same organization who differ by gender but have similar compensation and work attitudes. Females having significantly fewer subordinates reporting to them, which the authors interpret as they have less authority than males. The female executives report that there is less perceived fit with their organization’s culture than women at lower levels in the organization. Females are significantly less likely to be married or have children than the males and they are more likely to be in dual career relationships while the males are more likely to have nonworking spouses.

Small accounting firms that are owned by individuals who have a Certified Public Accountant (CPA; Wikipedia, 2009) designation are examined by Fasci and Valdex (1998) to determine if there is a gender-based differential. Reasons for starting a business include either a desire for flexibility or a desire for challenge and income. Those who chose flexibility have significantly lower profit ratios and are predominantly females. Those with older businesses, more work experience and that work more hours have significantly higher profitability ratios.

Caputo and Dolinsky (1998) conclude that women are more likely to become entrepreneurs if their spouses have self-employment income and experience and they have young children so they can eliminate the need for outside child care. A survey of MBAs motivation for becoming entrepreneurs by DeMartino and Barbato (2003) find that women choose their own business because it allows them flexibility to balance career and family while men do so to create wealth and career advancement. The differences are largest when married women and men have dependent children.

The CPA designation, according to Nelson and Nelson (2001) is the most common and well recognized professional designation, followed by the Chartered Life Underwriter (CLU). The CPA designation represents the earning of an accounting degree from an accredited university or college, successful passage of an examination known as the Uniform Certified Public Accountant Examination, experience in the field, and licensure in an individual state. There must be an association, agency, or accredited educational institution to establish a program of either certification or designations, administer the necessary educational components and tests, and provide the marketing. The earning of a designation can provide information on the professional qualifications of an individual for consumers seeking help with a specific financial decision making situation. The problem for consumers is determining which designations they should recognize and trust (Boone, 2000).

The American College (2011), a nonprofit accredited educational institution, offers a variety of professional designation, with the oldest one being the CLU, which is considered the most respected designation in the life insurance industry. It requires the individual to complete eight courses in areas such as life insurance, estate planning, and investments, pass rigorous examinations and meet continuous education requirements. Other financial service

industry designations that The American College offers include the Chartered Financial Consultant (ChFC), the Chartered Advisor in Philanthropy (CAP), the Chartered Advisor for Senior Living (CASL), the Chartered Leadership Fellow (CLF), the Registered Employee Benefits Consultant (REBC) and the Registered Health Underwriter (RHU). In addition, the college offers the required educational coursework for the Certified Financial Planner (CFP) that is issued by the Certified Financial Planner Board of Standards and the Life Underwriter Training Council Fellow (LUTCF) that is jointly offered by The American College and the National Association of Insurance and Financial Advisors (NAIFA).

The current study's contribution to the literature is that it represents the first examination of producers across all areas of the financial services industry. These individuals are primarily entrepreneurs who sell a financial services product, are responsible for the costs of doing so, and are paid commission based on their success in sales. The focus of the study is a determination of the differences, if any, between men and women, as suggested in the Catalyst study (Catalyst, 2001).

### 3. Data and methodology

A survey instrument is developed that contains 52 questions and is sent electronically on January 13<sup>th</sup> by The American College and final returns are received by January 30, 2009. Response rates on this type of survey can be reported using several different measures. A total of 55,913 individuals actually receive the e-mail and 2,302 provide a completed survey for a response rate of 4.12%. Of those who receive it, 13,081 opened the e-mail for a response rate of 17.60% and 8,495 unique clicks are recorded for a response rate of 27.10%. Of the 2,302 responses received, 1,575 are producers and are the subject of the analysis in this study. Survey Monkey is used for both construction of the survey questions and tabulation of respondent's answers.

Data analysis involves descriptive statistics that include both frequencies and cross tabulations including covariates with Pearson Chi Square tests of significance that provide an initial picture of producers in the financial services industry. Logistic regression analysis is employed to determine which factors allow identification by gender using independent variables that include demographic data, compensation, business experience, and satisfaction with career. Finally, linear regression analysis is utilized to determine factors that influence gross and net income.

### 4. Results

Respondents live in every state in the United States, with the highest number coming from California (129), followed by Pennsylvania (122), Texas (88), Ohio (76), and Illinois (75). The results by gender are provided for 1,186 (75.3%) males and 389 (24.7%) females, and these percentages are comparable to industry studies.

#### 4.1. Differences in demographic data by gender

The first cross tabulation (Table 1, Panel A) examines levels of education by gender to determine if this variable provides any evidence of differences. For the entire sample, 77% have at least a four year college degree, indicating a well educated group of financial services professionals. The results are statistically significant by gender, with males having a higher percentage of bachelor's, master's, and doctoral degrees with the percentage at the master's level being very close.

To be sure that the sample represents individuals who are still active in their careers, only individuals who are less than 66 years of age are sent a survey. The average age for the sample is 49.4 years of age (Table 1, Panel B), with males being statistically significantly older than females. The average respondent is near his or her peak earning years and provides a picture of a career individual in the financial services industry.

Table 1, Panel C, examines marital status by gender and the results are significant with 87.9% of males and 69.2% of females being married. Female producers are much more likely to report living by themselves than male producers because they are single, divorced or widowed with the largest percentage being divorced. One approach to examining the impact of marital status is to determine if the individual's spouse or domestic partner works outside of the home. Respondents could answer yes, no, or not applicable to this question. A total of 31.1% of males and 10.2% of females answered no and the results are significant. If someone is home full time they could provide help with the business and/or take on home and child rearing responsibility that would free the working individual to spend more time on business.

A second potential impact of marital status is having children and when it is analyzed as shown in Table 1, Panel D, there is a significant difference by gender for those that are married or have domestic partners. There is no significant difference in having children for those who are single, divorced, or widowed.

Does the number of children differ by gender? Table 1, Panel E, shows that 1,299 respondents have children, with the largest number having two children. Female respondents report a higher percentage of having one child and males report have a higher percentage of three or more children. There is a significant difference by gender, with females having fewer children. One possible interpretation of the difference is that females may simply not feel they have the time to have a full time career and a large family.

#### 4.2. Differences in primary business and years in business by gender

Respondents are asked to select their *primary source of revenue* and given a choice of 14 primary businesses (Table 2). The largest group (37.3%) consists of the first four primary businesses and is a combination of registered representatives, dual registered representatives, and independent registered investment advisors (not affiliated and affiliated). They can be working for a national or regional broker-dealer, bank, credit union, or savings and loan institutions. Registered representatives have a Series 6 (mutual fund and variable contracts license) or Series 7 (comprehensive securities license) and are not held to a fiduciary standard. A dually registered representative and an investment advisor representative (IAR)

Table 1 Differences in demographic data by gender

Panel A: Education level by gender							
Level of education	Male	% Education level	% Male	Female	% Education level	% Female	Total
High school	10	45.45%	0.84%	12	54.55%	3.08%	22
Some college	176	69.57%	14.86%	77	30.43%	19.79%	253
Associate degree	61	69.32%	5.15%	27	30.68%	6.94%	88
Bachelors	656	77.91%	55.41%	186	22.09%	47.81%	842
Masters	258	75.44%	21.79%	84	24.56%	21.59%	342
Doctorate	23	88.46%	1.94%	3	11.54%	0.77%	26
Total	1184		75.27%	389		24.73%	1573
$\chi^2$ significant at 0.01 level							

  

Panel B: Age by gender							
Age grouping	Male	% Age group	% Male	Female	% Age group	% Female	Total
Low to 30	74	64.91%	6.24%	40	35.09%	10.28%	114
31 to 40	188	77.37%	15.85%	55	22.63%	14.14%	243
41 to 50	358	72.47%	30.19%	136	27.53%	34.96%	494
51 to 60	450	77.19%	37.94%	133	22.81%	34.19%	583
61 to 65	116	82.27%	9.78%	25	17.73%	6.43%	141
Total	1186		75.30%	389		24.70%	1575
$\chi^2$ significant at 0.01 level							

  

Panel C: Marital status by gender							
Marital status	Male	% Marital status	% Male	Female	% Marital status	% Female	Total
Single	77	61.60%	6.49%	48	38.40%	12.34%	125
Married	1042	79.48%	87.86%	269	20.52%	69.15%	1311
Divorced	57	49.57%	4.81%	58	50.43%	14.91%	115
Widowed	4	66.67%	0.34%	2	33.33%	0.51%	6
Partner	6	33.33%	0.51%	12	66.67%	3.08%	18
Total	1186		75.30%	389		24.70%	1575
$\chi^2$ significant at 0.01 level							

  

Panel D: Having children and marital status												
Marital status	Male			% Male			Female			% Female		
	Child	No child	Total	With child	Without child	Total	Child	No child	% Total	With child	Without child	% Total
Single	11	66	77	0.93%	5.56%	6.49%	9	39	48	2.31%	10.03%	12.34%
Married	961	81	1042	81.03%	6.83%	87.86%	212	57	269	54.50%	14.65%	69.15%
Divorced	51	6	57	4.30%	0.51%	4.81%	45	13	58	11.57%	3.34%	14.91%
Widowed	3	1	4	0.25%	0.08%	0.34%	2	0	2	0.51%	0.00%	0.51%
Partner	2	1	6	0.17%	0.08%	0.51%	4	8	12	1.03%	2.06%	3.08%
Total	1028	155	1186	86.68%	13.07%		272	117	389	69.92%	30.08%	
$\chi^2$ significant at 0.01 level												

(Continued)

Table 1 (Continued)

Panel E: Number of children by gender								
Number of children	Male	% With number of children	% Male	Female	% With number of children	% Female	Total	% Total
1	148	68.50%	14.40%	68	31.50%	25.00%	216	16.60%
2	458	79.10%	44.60%	121	20.90%	44.50%	579	44.60%
3	261	82.90%	25.40%	54	17.10%	19.90%	315	24.20%
4	107	84.90%	10.40%	19	15.10%	7.00%	126	9.70%
5	30	83.30%	2.90%	6	16.70%	2.20%	36	2.80%
6	13	81.20%	1.30%	3	18.80%	1.10%	16	1.20%
7	3	75.00%	0.30%	1	25.00%	0.40%	4	0.30%
8	7	100.00%	0.70%	0	0.00%	0.00%	7	0.50%
Total	1027			272			1299	

$\chi^2$  significant at 0.01 level

affiliated with a national or regional broker dealer hold Series 65 licenses and are held to fiduciary standards. Those with RIAs also hold a Series 65 license, are held to fiduciary standards and must have registered principals, record keeping and documentation requirements that exceed those for IARs. When these four primary businesses are categorized by gender, an almost equal percentage of female and male respondents indicate this business area.

The second largest category for primary business is life insurance agent/broker. Property and casualty insurance is third in terms of primary business and has the largest percentage of females (24.9%). The last four primary types of business are different types of supervisors that include managing partner, district manager, office of supervisory jurisdiction, and compliance officer. It is the field leader category that has the smallest percentage of females, with a total of 5.4% of female respondents compared with 11.6% of male respondents.

Table 2 Primary source of revenue by gender

Primary business	Male	% Pri Bus	% Male	Female	% Pri Bus	% Female	Total	% Total
1. Registered representative	235	73.90%	20.70%	83	26.10%	23.20%	318	21.30%
2. Dual register representative	127	77.40%	11.20%	37	22.60%	10.40%	164	11.00%
3. Independent RIA (not affiliated)	19	82.60%	1.70%	4	17.40%	1.10%	23	1.50%
4. Independent RIA (affiliated)	46	88.50%	4.00%	6	11.50%	1.70%	52	3.50%
5. Life insurance agent	305	78.40%	26.80%	84	21.60%	23.50%	389	26.00%
6. Disability insure agent	5	71.40%	0.40%	2	28.60%	0.60%	7	0.50%
7. Long term care agent	10	66.70%	0.90%	5	33.30%	1.40%	15	1.00%
8. Health Insurance Agent	45	62.50%	4.00%	27	37.50%	7.60%	72	4.80%
9. Property and casualty agent	212	70.40%	18.60%	89	29.60%	24.90%	301	20.10%
10. Professional liability agent	2	66.70%	0.20%	1	33.30%	0.30%	3	0.20%
11. Field leader manage partner	50	90.90%	4.40%	5	9.10%	1.40%	55	3.70%
12. Field leader district manager	67	84.80%	5.90%	12	15.20%	3.40%	79	5.30%
13. Field leader officer supervision jurisdiction	10	90.90%	0.90%	1	9.10%	0.30%	11	0.70%
14. Field leader compliance officer	4	80.00%	0.40%	1	20.00%	0.30%	5	0.30%
Total	1,137			357			1,494	

$\chi^2$  significant at 0.01 level



Table 3 Level of experience in primary area of business by gender

Years of experience	Male	% Experience	% Male	Female	% Experience	% Female	Total	% Total
0 to 5	230	69.30%	21.40%	102	30.70%	30.40%	332	23.60%
6 to 10	217	75.10%	20.20%	72	24.90%	21.50%	289	20.50%
11 to 16	157	74.10%	14.60%	55	25.90%	16.40%	212	15.10%
Greater than 16	469	81.60%	43.70%	106	18.40%	31.60%	575	40.80%
Total	1,073			335			1,408	

$\chi^2$  significant at 0.01 level

Responses to individual's primary business indicate that all of the major areas of the financial services industry are represented in this sample and that there is a significant difference by gender and primary business.

To determine the level of experience in the primary area of business, individuals are asked how many years they have worked in this area and the results are shown in Table 3. The largest percentage occurs with respondents who have 16 or more years of experience, followed by those with the least experience of 0–5 years. There is a significant difference by gender, with the smallest percentage of females in the category of 11–15 years of experience.

#### 4.3. Differences in gross earnings and net earnings by gender

Women consistently earn less than men when the income for a given career is reported. One of the attractions of sales work that is common in the financial services industry is the ability to avoid a cap on income. To test this opportunity for equality in earnings, respondents are asked to report both their total gross and total net earnings in one of eight specific categories as shown in Table 4.

The eight income categories are divided by the four categories of years of experience, the percentages of gross income by gender, and percentages by years of experience are calculated and shown. The mean and median gross earning category is \$100,000–\$150,000 with the largest percentage of respondents reporting a gross earnings of over \$250,000 and the smallest percentage reporting \$0–\$25,000. The majority of males earn more than \$100,000 and the majority of females earn less than \$100,000. There is a significant difference when gross earnings are examined by years of experience and gender with males earning more than females.

When respondents are asked to indicate their net earnings category (Table 5), the question states that their figure should be after overhead but before tax annual earnings. The mean and median net earnings category is \$75,001–\$100,000, with the largest percentage of respondents reporting earnings of \$50,001–\$75,000 and the smallest percentage reporting \$200,001–\$250,000. When years of experience is considered, the same significant difference in gross earnings is found for net earnings by gender.

The logical place to look for the difference in net earnings is the percentage of those who pay overhead by gender. There is a statistical difference by gender in payment of overhead, with 65.7% of males and 56.3% of females paying it. This only increases the puzzle as males have a higher net earnings and a higher percentage of them pay overhead.

Table 4 Gross earnings

Gross earnings	Years of experience	Male	% Gross income	% Years of experience	% Total	Females	% Gross income	% Years of experience	% Total
\$0 to \$25,000	0 to 5 years	20	69.00%	8.80%	1.90%	15	83.30%	14.90%	4.60%
	6 To 10 Years	2	6.90%	0.90%	0.20%	1	5.60%	1.40%	0.30%
	11 to 16 years	2	6.90%	1.30%	0.20%	0	0.00%	0.00%	0.00%
	Over 16 years	5	17.20%	1.10%	0.50%	2	11.10%	1.90%	0.60%
\$25,001 to \$50,000	0 to 5 years	44	58.70%	19.50%	4.20%	37	61.70%	36.60%	11.30%
	6 to 10 years	16	21.30%	7.50%	1.50%	11	18.30%	15.30%	3.40%
	11 to 16 years	7	9.30%	4.50%	0.70%	6	10.00%	11.50%	1.80%
\$50,001 to \$75,000	Over 16 years	8	10.70%	1.70%	0.80%	6	10.00%	5.80%	1.80%
	0 to 5 years	65	47.40%	28.80%	6.20%	22	34.90%	21.80%	6.70%
	6 to 10 years	35	25.50%	16.40%	3.30%	2	31.70%	27.80%	6.10%
\$75,001 to \$100,000	11 to 16 years	12	8.80%	7.80%	1.10%	6	9.50%	11.50%	1.80%
	Over 16 years	25	18.20%	5.40%	2.40%	15	23.80%	14.60%	4.60%
	0 to 5 years	36	24.80%	15.90%	3.40%	10	26.30%	9.90%	3.00%
\$100,001 to \$150,000	6 to 10 years	43	29.70%	20.20%	4.10%	12	31.60%	16.70%	3.70%
	11 to 16 years	15	10.30%	9.70%	1.40%	4	10.50%	7.70%	1.20%
	Over 16 years	51	35.20%	11.10%	4.80%	12	31.60%	11.70%	3.70%
\$150,001 to \$200,000	0 to 5 years	30	15.50%	13.30%	2.80%	3	7.70%	3.00%	0.90%
	6 to 10 years	48	24.90%	22.50%	4.60%	12	30.80%	16.70%	3.70%
	11 to 16 years	32	16.60%	20.80%	3.00%	7	17.90%	13.50%	2.10%
	over 16 years	83	43.00%	18.00%	7.90%	17	43.60%	16.50%	5.20%
\$200,001 to \$250,000	0 to 5 years	13	10.20%	5.80%	1.20%	5	17.90%	5.00%	1.50%
	6 to 10 years	23	18.00%	10.80%	2.20%	7	25.00%	9.70%	2.10%
	11 to 16 years	29	22.70%	18.80%	2.80%	10	35.70%	19.20%	3.00%
	Over 16 years	63	49.20%	13.70%	6.00%	6	21.40%	5.80%	1.80%
Over \$250,000	0 to 5 years	5	6.20%	2.20%	0.50%	5	17.90%	5.00%	1.50%
	6 to 10 years	13	16.20%	6.10%	1.20%	2	7.10%	2.80%	0.60%
	11 to 16 years	17	21.20%	11.00%	1.60%	10	35.70%	19.20%	3.00%
	Over 16 years	45	56.20%	9.80%	4.30%	11	39.30%	10.70%	3.40%
Over \$250,000	0 to 5 years	13	4.90%	5.80%	1.20%	4	7.40%	4.00%	1.20%
	6 to 10 years	33	12.40%	15.50%	3.10%	7	13.00%	9.70%	2.10%
	11 to 16 years	40	15.00%	26.00%	3.80%	9	16.70%	17.30%	2.70%
	Over 16 years	181	67.80%	39.30%	17.20%	34	63.00%	33.00%	10.40%

$\chi^2$  significant at 0.00 level

Differences in both gross and net earnings may be a function of firm's production grids, with significant weight compensation to the top producers. In addition, many firms have bonus programs that follow the same pattern. As such, it is not unusual for top producers (those generating \$250,000 or more in gross dealer commission) to earn higher payouts (e.g., +85% of gross dealer concession). Generally, those high producers have been in the business for more than ten years, may have professional designations and have large books of existing business. On the other side, marginal producers payout can be as low as 30% of gross dealer commission. Those who have not yet reached a top producer status, have to work even harder for less money. For those who cannot work longer hours or may be newer to the business, there are significant compensation challenges to overcome. In addition, those with more tenure have more trailing compensation. These two factors are obstacles that women who need to balance work/life and family responsibilities may find it difficult to address.

The literature suggests that when life insurance agents income is examined, males earn twice the income of females. There is a significant difference in income for this study with 43.7% of males earning more than \$100,001 and 28.2% of females. For property and casualty

Table 5 Net earnings

Net earnings	Years of experience	Male	% Net income	% Years of experience	% Total	Females	% Net income	% Years of experience	% Total
\$0 to \$25,000	0 to 5 years	38	52.80%	16.80%	3.60%	27	64.30%	27.30%	8.30%
	6 to 10 years	14	19.40%	6.60%	1.30%	4	9.50%	5.60%	1.20%
	11 to 16 years	7	9.70%	4.50%	0.70%	1	2.40%	1.90%	0.30%
	Over 16 years	13	18.10%	2.80%	1.20%	10	23.80%	9.80%	3.10%
\$25,001 to \$50,000	0 to 5 years	68	44.70%	30.10%	6.40%	35	40.70%	35.40%	10.70%
	6 to 10 years	38	25.00%	17.80%	3.60%	21	24.40%	29.20%	6.40%
	11 to 16 years	13	8.60%	8.40%	1.20%	13	15.10%	24.50%	4.00%
\$50,001 to \$75,000	Over 16 years	33	21.70%	7.20%	3.10%	17	19.80%	16.70%	5.20%
	0 to 5 years	62	32.80%	27.40%	5.90%	23	35.90%	23.20%	7.10%
	6 to 10 years	48	25.40%	22.50%	4.50%	16	25.00%	22.20%	4.90%
\$75,001 to \$100,000	11 to 16 years	26	13.80%	16.80%	2.50%	8	12.50%	15.10%	2.50%
	Over 16 years	53	28.00%	11.50%	5.00%	17	26.60%	16.70%	5.20%
	0 to 5 years	24	13.00%	10.60%	2.30%	6	15.40%	6.10%	1.80%
\$100,001 to \$150,000	6 to 10 years	42	22.70%	19.70%	4.00%	13	33.30%	18.10%	4.00%
	11 to 16 years	33	17.80%	21.30%	3.10%	9	23.10%	17.00%	2.80%
	Over 16 years	86	46.50%	18.70%	8.20%	11	28.20%	10.80%	3.40%
\$150,001 to \$200,000	0 to 5 years	23	11.70%	10.20%	2.20%	5	10.60%	5.10%	1.50%
	6 to 10 years	30	15.30%	14.10%	2.80%	13	27.70%	18.10%	4.00%
	11 to 16 years	31	15.80%	20.00%	2.90%	11	23.40%	20.80%	3.40%
\$200,001 to \$250,000	Over 16 years	112	57.10%	24.30%	10.60%	18	38.30%	17.60%	5.50%
	0 to 5 years	5	4.50%	2.20%	0.50%	1	4.00%	1.00%	0.30%
	6 to 10 years	22	19.80%	10.30%	2.10%	4	16.00%	5.60%	1.20%
Over \$250,000	11 to 16 years	21	18.90%	13.50%	2.00%	5	20.00%	9.40%	1.50%
	Over 16 years	63	56.80%	13.70%	6.00%	15	60.00%	14.70%	4.60%
	0 to 5 years	1	1.90%	0.40%	0.10%	0	0.00%	0.00%	0.00%
Over \$250,000	6 to 10 years	9	17.00%	4.20%	0.90%	0	0.00%	0.00%	0.00%
	11 to 16 years	9	17.00%	5.80%	0.90%	3	33.30%	5.70%	0.90%
	Over 16 years	34	64.20%	7.40%	3.20%	6	66.70%	5.90%	1.80%
Over \$250,000	0 to 5 years	5	5.20%	2.20%	0.50%	2	14.30%	2.00%	0.60%
	6 to 10 years	10	10.30%	4.70%	0.90%	1	7.10%	1.40%	0.30%
	11 to 16 years	15	15.50%	9.70%	1.40%	3	21.40%	5.70%	0.90%
Over \$250,000	Over 16 years	67	69.10%	14.50%	6.40%	8	57.10%	7.80%	2.50%

$\chi^2$  significant at 0.00 level

agents, the literature suggests no difference in income by gender. For the respondents in this study, there is a significant difference with 45.4% of males earning more than \$100,001 and 32.0% of females.

Can differences in earnings be explained by examining those who have achieved a professional designation? The most recognized designation in the life insurance industry is the CLU, and 518 individuals in the sample have earned this designation. When it is analyzed by gender, there is a significant difference with more males than females holding the designation. A cross tabulation of net earnings by CLU designation is shown in Table 6, and indicates a significant difference, with 54.3% of those with the designation earning \$100,001 or more and 31.4% of those without the designation earning this amount. This same pattern holds for the ChFC with 450 individuals and the CFP designation with 239 individuals.

One last factor that is examined in an effort to explain differences in both gross and net earnings is the number of hours a week that is worked and when this is examined by gender there is a significant difference. When the choice is 40–49 hours, fewer males than females report working this number of hours. A greater percentage of females than males report

Table 6 Net earnings and designation by gender

Panel A: CLU designation

Net earnings	Male designation		%Net earnings		%Designation		Female designation		%Net earnings		%Designation	
	CLU	Non-CLU	CLU	Non-CLU	CLU	Non-CLU	CLU	Non-CLU	CLU	Non-CLU	CLU	Non-CLU
\$0 to \$25,000	17	56	23.30%	76.70%	4.00%	8.90%	8	34	19.00%	81.00%	8.90%	14.30%
\$25,001 to \$50,000	24	128	15.80%	84.20%	5.60%	20.30%	13	73	15.10%	84.90%	14.40%	30.80%
\$50,001 to \$75,000	64	125	33.90%	66.10%	15.00%	19.90%	17	47	26.60%	73.40%	18.90%	19.80%
\$75,001 to \$100,000	82	103	44.30%	55.70%	19.20%	16.40%	12	27	30.80%	69.20%	13.30%	11.40%
\$100,001 to \$150,000	98	98	50.00%	50.00%	22.90%	15.60%	19	28	40.40%	59.60%	21.10%	11.80%
\$150,001 to \$200,000	55	57	49.10%	50.90%	12.90%	9.10%	12	12	48.00%	52.00%	13.30%	5.50%
\$200,001 to \$250,000	32	21	60.40%	39.60%	7.50%	3.30%	6	4	60.00%	40.00%	6.70%	1.70%
Over \$250,000	56	41	57.70%	42.30%	13.10%	6.50%	3	11	21.40%	78.60%	3.30%	4.60%
Total	428	629					90	237				

$\chi^2$  significant at 0.00 level

Panel B: ChFC designation

Net earnings	Male designation		%Net earnings		%Designation		Female designation		%Net earnings		%Designation	
	ChFC	Non-ChFC	ChFC	Non-ChFC	ChFC	Non-ChFC	ChFC	Non-ChFC	ChFC	Non-ChFC	ChFC	Non-ChFC
\$0 to \$25,000	10	63	13.70%	86.30%	2.70%	9.20%	5	37	11.90%	88.10%	6.60%	14.70%
\$25,001 to \$50,000	24	128	15.80%	84.20%	6.40%	18.70%	4	82	4.70%	95.30%	5.30%	32.70%
\$50,001 to \$75,000	43	146	22.80%	77.20%	11.50%	21.40%	14	50	21.90%	78.10%	18.40%	19.90%
\$75,001 to \$100,000	75	110	40.50%	59.50%	20.10%	16.10%	14	25	35.90%	64.10%	18.40%	10.00%
\$100,001 to \$150,000	88	108	44.90%	55.10%	23.50%	15.80%	22	25	46.80%	53.20%	28.90%	10.00%
\$150,001 to \$200,000	46	66	41.10%	58.90%	12.30%	9.70%	10	15	40.00%	60.00%	13.20%	6.00%
\$200,001 to \$250,000	27	26	50.90%	49.10%	7.20%	3.80%	4	6	40.00%	60.00%	5.30%	2.40%
Over \$250,000	61	36	62.90%	37.10%	16.30%	5.30%	3	11	21.40%	78.60%	3.90%	4.40%
Total	374	683					76	251				

$\chi^2$  significant at 0.00 level

Panel C: CFP designation

Net earnings	Male designation		%Net earnings		%Designation		Female designation		%Net earnings		%Designation	
	CFP	Non-CFP	CFP	Non-CFP	CFP	Non-CFP	CFP	Non-CFP	CFP	Non-CFP	CFP	Non-CFP
\$0 to \$25,000	5	68	6.80%	93.20%	2.50%	8.00%	0	42	0.00%	100.00%	0.00%	14.50%
\$25,001 to \$50,000	17	135	11.20%	88.80%	8.40%	15.80%	5	81	5.80%	94.20%	13.50%	27.90%
\$50,001 to \$75,000	24	165	12.70%	87.30%	11.90%	19.30%	5	59	7.80%	92.20%	13.50%	20.30%
\$75,001 to \$100,000	41	144	22.20%	77.80%	20.30%	16.80%	12	27	30.80%	69.20%	32.40%	9.30%
\$100,001 to \$150,000	37	159	18.90%	81.10%	18.30%	18.60%	8	39	17.00%	83.00%	21.60%	13.40%
\$150,001 to \$200,000	23	89	20.50%	79.50%	11.40%	10.40%	4	21	16.00%	84.00%	10.80%	7.20%
\$200,001 to \$250,000	14	39	26.40%	73.60%	6.90%	4.60%	2	8	20.00%	80.00%	5.40%	2.80%
Over \$250,000	41	56	42.30%	57.70%	20.30%	6.50%	1	13	7.10%	92.90%	2.70%	4.50%
Total	202	855					37	290				

$\chi^2$  significant at 0.00 level

Table 7 Net earnings by 40 to 49 hours of work per week by gender

Net earnings	Male	%Net earnings	%Male	Female	%Net earnings	%Female
\$0 to \$25,000	30	75.00%	7.20%	10	25.00%	6.50%
\$25,001 to \$50,000	61	58.70%	14.60%	43	41.30%	28.10%
\$50,001 to \$75,000	76	68.50%	18.10%	35	31.50%	22.90%
\$75,001 to \$100,000	77	77.80%	18.40%	22	22.20%	14.40%
\$100,001 to \$150,000	87	82.90%	20.80%	18	17.10%	11.80%
\$150,001 to \$200,000	47	77.00%	11.20%	14	23.00%	9.20%
\$200,001 to \$250,000	15	75.00%	3.60%	5	25.00%	3.30%
Over \$250,000	26	81.30%	6.20%	6	18.80%	3.90%
Total	419			153		

$\chi^2$  significant at 0.00 level

working 30–39 hours a week and conversely a greater percentage of males than females report working 50–59 hours a week. The logical conclusion might be drawn that males earn more than females because on average, they work more hours. When the number of hours worked is held constant at 40–49 hours for both males and females and their gross earnings are examined as shown in Table 7, there is a significant difference in earnings with males earning more. The same holds true when net earnings are analyzed. These results indicate that the number of hours worked is not the explanation for differences in earnings.

#### 4.4. Logistic regression with gender as the dependent variable

Logistic regression has a dependent variable that is binary and can be used to look at the variance in the dependent variable that is predicted by the independent variables (SPSS). It can also determine the relative importance of the independent variables by estimating the odds of the dependent variable occurring. In the current study, logistic regression is used to analyze gender differences where the dependent variable is gender (male = 1 and female = 2), with female being the predicted variable. The model shown in Table 8 has an overall percentage of 79.4 in correctly predicting gender.

A total of 21 independent variables appear in the logistic regression. If the  $\text{Exp}(B)$  is greater than one, then the odds increase that the individual is female and if it is less than one, the odds decrease that the individual is female. The first variable is higher education (HiEd) and the odds are that the higher the level of education, the less likely the individual is female. Marital status (MarStat) indicates very strong odds that the individual is female and that she is less likely to be married. The strongest odds of an individual being female are the independent variable children (Children) and the  $\chi^2$  analysis shows that females are significantly less likely to have children. The demographic characteristics of age, number of children, children's age, and a spouse or partner not working outside of the home are not significant in predicting the gender of a respondent and do not appear in the results.

Both gross and net earnings are tested and the results have the same significance, so net earnings (NetErn) are reported based on an earlier finding of a puzzling gender difference for this independent variable. The odds ratio for net earnings indicates that the higher the net earnings, the less likely the individual is female. The importance of a joint work and

Table 8 Logistic regression with dependent variable gender

	$\beta$	SE	Wald	df	Sig.	Exp(B)
HiEd	-0.24322	0.070585	11.87352	1	0.001	0.784098
MarStat	0.698008	0.138084	25.5524	1	0.000	2.009746
Children	1.483527	0.189915	61.02034	1	0.000	4.408469
ImpMntr	0.168191	0.05168	10.59171	1	0.001	1.183162
HrsWk	-0.19959	0.074613	7.1554	1	0.007	0.819068
NetErn	-0.19514	0.044151	19.5344	1	0.000	0.82272
override01	-1.18113	0.305355	14.96181	1	0.000	0.306933
bOutDom01	1.035428	0.175415	34.84244	1	0.000	2.816311
bRecAct01	-0.82031	0.14999	29.91127	1	0.000	0.440293
CFPdes01	-0.74426	0.222626	11.17639	1	0.001	0.475085
LUTCFdes01	-0.37872	0.184039	4.234614	1	0.040	0.684739
bmFxAnu01	-0.02922	0.007539	15.02084	1	0.000	0.971202
bmLifin01	-0.00856	0.003213	7.096004	1	0.008	0.991477
bmLgTmCr01	0.028912	0.011715	6.09096	1	0.014	1.029334
T3TraProg	-0.16872	0.076935	4.809491	1	0.028	0.844743
T3OffEnvr	-0.27609	0.118164	5.459221	1	0.019	0.758745
T3FlexHr	0.285133	0.097218	8.60207	1	0.003	1.329938
T3Indep	-0.20075	0.083067	5.840643	1	0.016	0.818115
T3IncmPot	-0.14519	0.068971	4.431208	1	0.035	0.86486
D3UnPrePay	-0.16393	0.077928	4.425105	1	0.035	0.848803
D3LacTran	-0.22366	0.090982	6.043004	1	0.014	0.79959
Constant	-1.58326	0.615059	6.626295	1	0.010	0.205305

mentoring early in the individuals career (ImpMntr) indicates, based on the odds ratio, that this is more likely to be a female. The number of hours a week worked (HrsWk) is less than one, indicating that the more hours worked, the less likely the respondents is female.

Respondents are asked to indicate their business mix by showing the percentage of each type of product that adds to their income with the total summing to 100%. Each of the 14 products are tested in the logistic regression, and the only ones that indicate a difference by gender is fixed annuities (bmFxAnu01), life insurance (bmLifin01), and long term care insurance (bmLgTmCr01). Both fixed annuities and life insurance have an odds ratio less than one, indicating that if part of the business mix includes these products, the producer is less likely to be female. Long-term care insurance is greater than one, indicating that if that product is included the producer is more likely to be female.

When earned designations are tested, two designations are significant. Both CFP (CFPdes01) and LUTCF (LUTCFdes01) have an odds ratio less than one, so holding either designation indicates that the producer is less likely to be female. Earning any of the other designations offered by The American College does not predict an individual's gender.

The only method of payment that shows up in this regression is override (override01) with an odds ratio of less than one, indicating that that there is less likelihood of being female. Salary, bonus, fees, commission, deferred compensation, stock options, and years of experience are not significant in predicting gender.

Respondents are asked to indicate the top three factors that contributed to their success when they first started in the business. When the 13 choices listed in the question are tested, five appear in the logistic regression. The five include training program (T3TraProg), office

environment (T3OffEnvr), independence (T3Indep), income potential (T3IncmPot), and flexible hours (T3FlexHr). The only positive odds ratio is for flexible hours, indicating that reason is likely to be given by females. The eight responses that are not significantly different by gender are mentor and/or field leader, support of spouse or domestic partner, office location, reputation of company, quality of product/services offered, interest in career desire to succeed, and recognition and mean that these responses do not identify an individual by gender.

The top three factors that are detractors from success when they first started in the business are tested and two of the choices indicate gender. They are unpredictable pay (D3UnPrePay) and lack of training (D3LacTran), which both have odds ratios less than one, indicating that they are less likely to be female responses. None of the other reasons are significant indicators of gender and include long hours, lack of mentor or field leader, lack of support from spouse or domestic partner, family/children sacrifice, lack of recognition, lack of peers, having to pay overhead, poor quality of products, need to meet production quota, or overwhelming.

The last two independent variables that appear in the logistic regression deal with the respondents approach to balancing work and personal life, given nine choices. Employing outside services for domestic help (bOutDomo1) has the second strongest odds ratio, and indicates that this is more likely a response from a female. Recreational activities (bReAct01) have an odds ratio less than one and indicate that this response is not likely to be given by a female. The other choices include curtail personal and/or family interest, share personal responsibilities with spouse or partner, hand over personal responsibilities to spouse or partner, postpone having children, rely on supportive relatives other than spouse or partner, work at home and work part-time. There is no difference by gender for these other choices.

#### 4.5. *Linear regression analysis for gross and net earnings as dependent variables*

Ordinary least square (OLS) linear regression analysis is used to identify those factors that explain the variation in the dependent variable gross earnings or net earnings for producers. Results begin with gross earnings being the dependent variable.

##### 4.5.1. *Gross earnings regression*

This version of the regression has an  $R^2 = 0.466$  and an  $F = 30.923$  and appears in Table 9. It starts with demographic independent factors that include higher education (HiEd), gender (Gendr1M2F), age, marital status (MarStat), mate at home (MatO/SHm), children, and years of experience (YrCurr). Higher education, gender, age, and years of experience are significant in explaining the variance in gross earnings. Higher education is positive and indicates that the higher the level of education, the higher the gross earnings. Both gender and age have a negative coefficient, indicating that females earn less than males and that the older the individual the lower their gross earnings. The years of experience is positive and has the highest  $t$ -score (15.32) of any of the independent variables, indicating a very strong factor in explaining the variance in gross earnings.

The CLU, ChFC, and the CFP designations are added to the model as proxies for the

Table 9 Gross earnings

	$\beta$	SE	<i>t</i>	Sig.
(Constant)	1.393215162	0.582687829	2.391014696	0.017
HiEd	0.230377435	0.044454566	5.182312098	0.000
Gendr1M2F	-0.274446508	0.11516383	-2.383096401	0.017
Age	-0.014744548	0.005559343	-2.652210576	0.008
MarStat	0.0461777	0.093497615	0.493891739	0.621
MateO/SHm	0.068838122	0.039391942	1.747517851	0.080
Children	-0.206198035	0.134690797	-1.530899213	0.126
YrCurr	0.704164824	0.045962698	15.32035447	0.000
CLU Designation	0.380741398	0.114918527	3.313141991	0.001
ChFC Designation	0.379601808	0.117773976	3.223138254	0.001
CFP designation	0.298150128	0.138017315	2.160237128	0.031
salary01	-0.260022147	0.133823038	-1.943029774	0.052
Bonus01	0.13538776	0.106979906	1.26554383	0.206
fees01	0.429092181	0.130735206	3.282147122	0.001
Comis01	0.291382032	0.162327268	1.795028252	0.073
override01	0.632509136	0.158642239	3.98701595	0.000
defcmp01	1.184025116	0.197231438	6.003227123	0.000
stkopt01	-0.024620916	0.303269796	-0.08118486	0.935
PriBus1-14	0.064098044	0.020071376	3.19350523	0.001
bmFeFinP01	0.002020007	0.005708645	0.353850504	0.724
bmFeInv01	0.015650178	0.003719474	4.207631877	0.000
bmFxAAnu01	-0.001739392	0.004318139	-0.402810624	0.687
bmVarAn01	0.000553692	0.003858542	0.143497711	0.886
bmLifin01	-0.008612248	0.002863693	-3.007392503	0.003
bmHeal01	0.002845082	0.003545858	0.802367726	0.422
bmDisIn01	0.011513486	0.008541962	1.347873615	0.178
bmLgTmCr01	-0.012417086	0.007750184	-1.602166601	0.109
bmpropcas01	0.013739605	0.002763611	4.971612908	0.000
bmproLib01	-0.011987083	0.017712431	-0.676761004	0.499
bmMutFd01	0.002290551	0.004199179	0.545475863	0.586
bmSec01	0.015049369	0.006147548	2.448027753	0.015
bmOvRnt01	0.000598136	0.00454537	0.131592427	0.895
bmSpltInt01	0.005186869	0.009422659	0.550467734	0.582
CngPriCo	0.300515347	0.100293443	2.996360848	0.003
ImpMntr	-0.066977741	0.030534286	-2.193525737	0.028
HrsWk	0.135193995	0.046519144	2.906201271	0.004

importance of designations in increasing earnings, and all three are significant and positive. This indicates that the respondents who have these designations have greater gross earnings.

The type of compensation is based on the selection of salary (salary01), bonus (Bonus01), fees (Fees01), commission (Comis01), override (override01), deferred compensation (defcmp01), and stock option (stkopt01). The three that are significant in explaining the variance in gross earnings are fees, override, and deferred compensation and their coefficients are all positive. The primary type of financial service business (PriBus 1-14, See Table 2) is significant and positive, supporting earlier findings that type of business influences earnings. Business mix variables that are significant include fee-based investments (bmLifin01), life insurance ((bmFeInv01), property and casualty (bmpropcas01), and securities (bmSec01). Business mix variables that are not significant include fee-based financial plans (bmFeFinP01), fixed annuities (bmFXAnu01), variable annuities (bmVarAn01), health insurance



(bmHeal01), disability insurance (bmDisIn01), professional liability insurance (bmproLib01), mutual fund (bmMutfd01), override (bmOvRid01), and split-joint work (bmSplJnt01). Of the variables that are significant, only life insurance has a negative coefficient that indicates this type of product reduces gross earnings.

The decision by an individual to change firms (ChgPriCo) is significant and has a positive effect on gross earnings. When respondents are asked how important joint work and mentoring are early in their career (ImpMntr), they can choose six levels starting with not at all important to did not have mentor or joint work opportunities. The mean for this variable is 4.12, indicating that the largest number of individuals choose important as their choice. The variable is significant and negative indicating that this opportunity decreases gross earnings. Recall that this variable is significant in predicting that a producer is female, and may add additional support that females have lower gross earnings than males. The last variable is the average hours worked per week (HrsWk), and it is significant and positive indicating that the more hours worked the higher the gross earnings.

#### 4.5.2. *Gross earnings regression without work experience*

In an effort to determine what happens to the results without the very statistically strong variable, years of experience, the regression is rerun. First the amount of variance explained in gross earnings decreases, with the  $R^2$  dropping from 0.466 to 0.363 and the  $F$  dropping from 30.923 to 20.828. This result lends support to the idea that this one variable may be so strong an influence on the variance that it swamps the importance of some of the other variables.

Of the six remaining demographic variables, two become statistically significant. Having a spouse or partner that stays home is now significant and the variable is positive, leading to higher gross earnings. Having children becomes significant, but this variable is negative indicating that having children reduces gross earnings. Gender is significant in both versions of the regression and has a negative coefficient that becomes larger in this version of the regression. This may indicate that being female and having children reduces gross earnings when compared to being male and having children.

There is no change in the significance of designations, which remains significant. However, the coefficient for all three designations is positive and increases. This may indicate that females can compensate for lower gross earnings by obtaining professional designations to demonstrate their commitment to the profession and increasing their knowledge.

The significance of the different methods of compensation are not affected by removing the experience variable nor is the primary business variable. When business mix products are examined, the only change occurs in the variable long term care which is now statistically significant. It continues to have a negative coefficient, indicating that for those respondents who have this as a part of their business mix, there is less gross earnings.

Lastly, the change in firms and the importance of mentoring early in the career stay significant. However, the number of hours worked is no longer statistically significant. Based on dropping the variable of years of experience, several of the variables that are strongly associated with females become significant in explaining the variance in gross earnings.

Table 10 Net earnings

	$\beta$	SE	$t$	Sig.
<b>Beta</b>				
(Constant)	1.600451074	0.616104929	2.597692372	0.009
HiEd	0.147821641	0.044813518	3.298594856	0.001
Gendr1M2F	-0.327943785	0.115573715	-2.837529155	0.005
Age	-0.008757102	0.005569494	-1.572333458	0.116
MarStat		0.093476676	-0.038551215	0.969
MateO/SHm	0.069830968	0.039415361	1.771668849	0.077
Children	-0.111370368	0.136037107	-0.818676395	0.413
YrCurr	0.545761957	0.046279094	11.79284025	0.000
CLU Designation	0.257807865	0.115248727	2.236969303	0.025
ChFC Designation	0.473331877	0.118115121	4.007377508	0.000
CFP Designation	0.412879738	0.137533895	3.0020217	0.003
salary01	0.194332915	0.140283986	1.385282242	0.166
Bonus01	0.079175402	0.107328597	0.737691575	0.461
fees01	0.266943692	0.131801311	2.025349298	0.043
Comis01	-0.096281383	0.164118205	-0.58665876	0.558
override01	0.627200348	0.159490547	3.932523654	0.0005
defcmp01	0.957551649	0.198867998	4.815011254	0.000
stkopt01	0.288414894	0.303687353	0.949709928	0.342
PriBus1-14	0.05394869	0.020135837	2.679237559	0.007
bmFeFinP01	-0.002869823	0.005740299	-0.499943064	0.617
bmFeInv01	0.013984459	0.003745618	3.733551607	0.000
bmFxAAnu01	-0.001559874	0.004360711	-0.357711056	0.721
bmVarAn01	0.003436372	0.003903549	0.880320082	0.379
bmLifin01	-0.002879447	0.00293333	-0.98163096	0.326
bmHeal01	0.000683772	0.003597753	0.19005527	0.849
bmDisIn01	0.006605726	0.008591367	0.768879501	0.442
bmLgTmCr01	-0.010600565	0.007801489	-1.358787331	0.174
bmpropcas01	0.006697119	0.002841117	2.357213363	0.019
bmproLib01	-0.023530232	0.017724556	-1.327549841	0.185
bmMutFd01	-0.000149317	0.004233507	-0.035270278	0.972
bmSec01	0.012674986	0.006155652	2.059081093	0.040
bmOvRid01	0.002266781	0.004603558	0.492397653	0.623
bmSplJnt01	0.004457159	0.009445036	0.471904949	0.637
CngPriCo	0.177852077	0.100880509	1.762997413	0.078
ImpMntr	-0.036036012	0.030606502	-1.177397297	0.239
HrsWk	0.077519461	0.046621602	1.662736965	0.097
PayOvrHd	-0.118408659	0.114443767	-1.034644887	0.301

#### 4.5.3 Net earnings with work experience

Net earnings as the dependent variable in the OLS regression reflects the cost of paying overhead but not paying taxes. The same independent variables are used to test if they do as good a job in explaining net earnings. One logical variable that is added is payment of overhead (PayOvrHd) and the results are shown in Table 10.

In comparing the results when gross earnings is the dependent variable, the  $R^2 = 0.355$  and the  $F$  is 18.858, which is lower than when years of experience is removed as a independent variable.

For the seven demographic variables, the difference with net earnings is that the  $t$ -test

values are smaller and age is no longer significant. The largest *t*-score is still years of experience and is statistically significant as is level of education and gender.

A change in the significance of the three professional designations occurs, with only the ChFC now being significant at the 0.01 level where in the gross earnings regression both the CLU and the ChFC are significant at that level. The size of the coefficients for both the ChFC and the CFP have increased and the size of the CLU has decreased. The largest change in net earnings will occur from holding the ChFC designation for net earnings.

When the types of compensation are examined, the same independent variables remain significant with lower *t*-scores and coefficients. The primary business remains the same as does the business mix. A change in firms, the importance of mentoring in the early career, the hours of work per week, and the payment of overhead are the last four independent variables. None of them are significant.

## 5. Summary and conclusions

A total of 1,575 respondents to a survey to producers in the financial services industry are analyzed to determine potential gender differences in this commission dominated field. The playing field for women producers in this industry is found to not be level, based on the statistically significant differences by gender. Explanations for the differences can be found in the analysis of demographic data, designations earned, primary business, business mix, opinions about early successes and difficulties, and problems in balancing work and personal lives.

Respondents live in every state in the United States and work for a wide variety of firms in the financial services industry. For the sample, 77% have at least a four year college degree and provide a picture of a career individual in the industry. Females are much more likely to be single or divorced and to not have a spouse or partner that stays home full time. Males have more children than females and the largest number of respondents report having two children. Demographic results suggest that fewer women enter this career having young children.

The largest single category for primary business is securities brokerage, followed by life insurance agent/broker and then property and casualty insurance. The field leader category has the smallest percentage of females. Mean and median gross earnings are in the \$100,000-\$150,000 category, with the largest percentage reporting income over \$250,000. Gender differences found in other occupations is evident in the financial services industry. The most common type of compensation is commission. Those who hold the CLU, ChFC, and the CFP designations have significantly higher gross and net earnings. Encouraging women, in particular, to gain advanced designations may be an important compensation equalizer.

What conclusions can be drawn from the analysis of data in this study? If more women are to be attracted to this industry, succeed financially, and be satisfied with their careers, then changes need to occur. Efforts must be extended to increase the number of females into field manager positions. Given the significant differences by gender, industry leaders should make a concerted effort to offer mentoring and training to women that meet their career

needs. In addition, industry compensation programs, including forms (commission, fees, and salary) and significant weighting towards the highest producers should be reexamined if firms wish to recruit and retain more female producers.

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