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# *Further Evidence on the Role of Gender in Financial Performance**

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*Using a sample of 160 sole proprietors and controlling for other determinants of performance, we hypothesize and find support for the view that gender is not a significant direct explanation of financial performance differences among small accounting practices. The control variables we employ are practice characteristics, motivations, and individual owner characteristics. Our results indicate that although financial performance appears to be significantly different for females' and males' sole proprietorships, these performance differences are explained by several variables other than gender directly. At the same time we find that gender moderates the effects of other practice and personal characteristics on financial performance. One of the more interesting results is that women with a stronger motivation to establish a public practice to balance work and family experienced more positive financial outcomes, while for men the same motivation reduced financial performance.*

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## Introduction

As noted by Fasci and Valdez (1998) and Moore and Buttner (1997), the ownership of businesses by women has increased throughout North America since the 1970s. This growth has been in terms of absolute numbers and at rates two to three times that of the total businesses created (Dickerson 2001; Mehta 1997; Bank of Montreal 1996; Force and McFerrin 1996).[1] Female-owned businesses thus represent a major segment of the economy and warrant study in relation to male-owned businesses.

This growth in female-owned businesses has resulted in extensive investigation of the impacts of gender in the context of small business management. Some researchers have examined the differing psychological traits of men and women that may characterize a successful entrepreneurial profile (Force and McFerrin 1996; Larson and Starr 1993; Cunningham and Lischeron 1991; Birley 1989). Others have studied the potential impacts of risk-taking propensity, needs for achievement, autonomy, and dominance between male and female business owners (Sexton and Bowman-Upton 1990; Masters and Meier 1988).

There also has been considerable discussion (and conflicting evidence) in the literature about whether inherent differences exist between males and females in human capital inputs to an enterprise that may affect success. Factors such as educational levels, business experience, effectiveness of interpersonal relationships, network effects, and communication skills have been examined to identify the relationship between gender and firm performance (Bloodgood, Sapienza, and Carsrud 1995; Carsrud and Krueger 1995; Fischer, Reuber, and Dyke 1993; Smeltzer and Fann 1989; Birley, Moss, and Sanders 1987; Hisrich and Brush 1984).

Other lines of inquiry have focused on the motivation for starting small businesses. Researchers have found that women typically are motivated by a more complex set of objectives for starting a business than are their male counterparts. Factors related to the desire to achieve flexibility between work and family lives are valued differently by the sexes (Cinamon and Rich 2002; Stephens and Feldman 1997).

A majority of these research studies examining the effects of gender in business ownership has found that female-owned businesses differ on several characteristics compared to male-owned businesses. These differences often have an impact on the economic outcomes of the enterprises; however, the empirical comparison of financial performance in female- versus male-owned businesses has produced mixed results. One group of studies has found that female-owned businesses are less profitable than male-owned businesses (Fasci and Valdez 1998; Reynolds 1993; Loscocco et al. 1991;

[1]Over the past decade in the United States, between five and six million female-owned businesses have been found to account for close to $2.3 trillion in sales while employing 18.5 million workers (Dickerson 2001; Mehta 1997; Force and McFerrin 1996). In Canada during the 1990s the number of female-owned businesses increased by twice the national average of total businesses created, from 8.7 to 19.7 percent (Bank of Montreal 1996). Recently the U.S. Census Bureau redefined *female-owned* businesses, so that now to be classified as such the ownership bar has been raised to 51 percent from 50 percent. For 1997 this means that there were only 5.4 million female-owned businesses as compared to a previously announced 6.4 million businesses. Even at 5.4 million, female-owned businesses increased by 16 percent between 1992 and 1997 in the United States, representing a growth rate triple that for all businesses (Dickerson 2001, p. D3).

Loscocco and Robinson 1989). However, another group of studies has found few performance differences in comparisons of female- and male-owned businesses (Watson 2002; Shim and Eastlick 1998; Chaganti and Parasuraman 1996; Kalleberg and Leicht 1991). Given this mixed evidence, a case exists for further research comparing the performance of female- and male-owned businesses while controlling for a variety of other variables (Fasci and Valdez 1998, pp. 2–3).

The purpose of this paper is to provide additional evidence on the relationship between financial performance and gender in small businesses. Using a sample of sole proprietors (that is, only one owner) of public accounting practices, we examine whether gender is a significant variable in explaining financial performance differences. In our examination of these practices' financial performance, we control for industry sector as well as other personal and practice characteristics. Our findings contribute to our understanding of the differences in the performance of female- versus male-owned firms, as well as the differences in how these owners choose to operate their businesses, their personal motivations, and the relationship between their personal characteristics and their businesses.

This paper is organized in the following way. In the first three sections, we examine relevant literature on the role of gender in the performance of small businesses provide four hypotheses, and discuss our proposed model. In the next three sections, we outline our research methods and sample data, provide a description of our results, and discuss our findings. In the final section we provide conclusions and limitations of this study as well as possible directions for future research.

## *Literature Review*

For small businesses generally, several academic studies have focused on the role of gender with respect to the financial performance of small businesses.[2] These studies provide a background for the present study.

Kalleberg and Leicht (1991) compared business performance on the basis of the owner's gender for three industries in Indiana. In this study the authors controlled for such variables as industry differences (for example, industry classification and size); business characteristics (for example, age of business, incorporation status, and number of products); and owner attributes (for example, age, years in industry, prior self-employment, "confidence," and internal locus of control). Kalleberg and Leicht (1991) found no differences in growth of business earnings based on the owner's gender. As noted by the

[2]Academic studies have provided research on many aspects associated with public accounting practices (for example, Fasci and Valdez 1998; Bernardi and Arnold 1997; Lynn, Cao, and Horn 1996; Schaefer and Zimmer 1995; Anderson, Johnson, and Reckers 1994; Schaefer and Welker 1994; Collins 1993; Pillsbury, Capozzoli, and Ciampa 1989; Trapp, Hermanson, and Turner 1989). Additionally, articles published in outlets aimed at accounting practitioners also have examined issues related to these businesses (for example, *CGA Magazine* 1994a, 1994b; Davidson and Dalby 1994; de Martigny 1994; Hooks and Cheramy 1994; McKeen and Bujaki 1994; Olson and Frieze 1986). Several of these articles specifically have examined or have reported on gender-based issues in public accounting practices (for example, Fasci and Valdez 1998; Bernardi and Arnold 1997; Lynn, Cao, and Horn 1996; Anderson, Johnson, and Reckers 1994; *CGA Magazine* 1994a, 1994b; Collins 1993; Trapp, Hermanson, and Turner 1989; Olson and Frieze 1986). With the exception of Fasci and Valdez (1998), the relationship between small accounting practices' financial performance and the owner's gender relatively has been left unexplored.

authors, there were several limitations in this study: concerning the access to only a few of the owners' variables and attributes, the use of three industries, and the use of a sample taken from a small geographic region.

In a study of small businesses in New England, Loscocco et al. (1991) found that female-owned businesses generated both less sales volume and earned less income compared to male-owned businesses. In their regression analysis these authors controlled for industry, personal factors, business characteristics, personal business practice preferences, and family situation. While acknowledging that the results were not generalizable easily to a national population, Loscocco et al. (1991) did not indicate whether they controlled for regional or population center differences that may exist within New England. In an economically diverse region, this may have affected the results.

Lustgarten (1995) found that self-employed women-owned businesses had lower earnings compared to self-employed men. This study used a regression model that controlled for a number of variables related to the owner (for example, number of children, age, marital status, education, and time spent working in the business). However, Lustgarten (1995) failed to control for business variables such as size and age of the business.

Fasci and Valdez (1998) examined the performance of small accounting practices in the United States based on ownership by females and males. Using a questionnaire, Fasci and Valdez collected data from a sample of certified public accountants (CPAs) that consisted of 328 females and 276 males, all of whom operated their own practices and who had less than five professional employees. These data were employed in a regression model to explore these small businesses where the dependent variable was a productivity measure, income/profit.[3] Several independent variables captured the characteristics of the individuals in their sample. These variables were education level, gender, age, work experience, and marital status. In addition, two motivations for establishing an independent practice were included—for challenge and income and for flexibility. Age of business, home-based, number of professional staff, and hours put into business provided information about the firm characteristics. Fasci and Valdez's (1998) regression analysis found gender "to have the highest impact" (p. 5) in explaining the differences in economic performance of small accounting practices. Additionally, they found that the age of the business, owner's work experience, marital status, hours put into the business, whether the business was home-based, and the two reasons for starting the business were significant explanatory variables of the income/profit earned by the business.

While the Fasci and Valdez (1998) study provides insights into possible reasons for economic performance differences, their study has several key limitations. We do not see how the differences in the way in which men and women choose to run their practices influence the Fasci and Valdez results. Their results raise several questions to be addressed. For example, to what extent do men and women differ in the use of home-based business? And to the extent that both men and women use home-based businesses, is that influence the same on revenue and profits for both men and women? We could ask the same questions about education. The Fasci and Valdez (1998) regressions control for the effect of education, but we would like

[3]Please note that Fasci and Valdez (1998, p. 3) use *income* as a synonym for gross revenue, and their ratio then is actually gross revenue divided by net profit.

to know if there are differences in the education profiles of male and female accounting practitioners and whether the influence of education on profits and revenues is consistent across gender. Fasci and Valdez (1998) also fail to examine whether men and women differ in their motivations for engaging in sole proprietorship accounting practices. Additionally, they used a sample of sole proprietors of small accounting practitioners from the entire United States. Unfortunately, they failed to control for either differences in regional economic performance or the CPA qualification requirements that vary by state.

Finally, we have some concerns with the dependent variable used by Fasci and Valdez (1998). Sole proprietorships in the accounting profession have some unique characteristics. These small businesses rarely possess much in the way of assets. This lack of assets results from the practices either being home-based or because they are located in rented office space. The few assets that may be owned by the business would include a computer, some related software, desks, and chairs. This lack of assets, in turn, means that operating expenses are relatively low because there will be only a small amount of depreciation or amortization. As well, depending on the number of employees, the sole practitioners may be paying out little in the way of salaries and benefits. For many sole-proprietorship accounting practices, there may be only a small difference between their net profits and revenues, resulting in a large net profit ratio. Fasci and Valdez (1988, p. 3) provide the means for their "profit ratio," defined as gross revenues divided by net profit. The mean ratios support our concerns regarding their sample's dependent variable, because these are 48 percent for the female-owned businesses and 42 percent for the male-owned businesses in their sample. For firms with no employees, these ratios would approach 100 percent and hence are extremely sensitive to firm size in terms of presence and number of employees compared to larger firms or firms in other industries.

In a recent study, Watson (2002) explored the performance of female- and male-owned small and medium-sized businesses in Australia by examining output measures (sales and profit) while relating them to appropriate input measures (total assets and total equity). The businesses were compared on their return on equity, return on assets, and total income to total assets. While it appeared that there was a significant difference in these performance measures, these differences were not significant once three control variables (industry, age of business, and the number of days a business operated) were introduced.

While the Watson (2002) study used a large sample, there are two problems with his model. First, Watson does not indicate whether he controlled for geographical differences. Given that Australia is a large country with diverse communities, this raises the possibility that additional control variables needed to be included in his model. Second, the measures he chose to use (for example, return on equity, return on assets, and net income to total assets) are inappropriate for comparisons of professional accounting practices in general and sole-proprietorship practices in particular. Accounting practices, regardless of size, typically own few assets, and therefore comparison measures employing assets or equity may have little or no meaning.

Our paper builds on and extends the previous studies of the financial performance of small businesses and owner's gender by choosing more transparent dependent variables. We do this while controlling for owner and business characteristics as well as for regional differences by drawing our sample of small public accounting practitioners from only one region of Canada and by

controlling for type of community. Further, we compare the personal and practice characteristics of female- and male-owned practices to examine whether these characteristics have the same impact on the business's performance despite the owner's gender.

## Hypotheses

Before we examine whether firms owned by women and men differ in terms of performance, we consider possible differences in the characteristics of the females and males and their practices in our sample. In particular we examine demographic, motivational, and practice characteristics that have been examined in previous studies. These variables include measures of financial performance (Watson 2002; Fasci and Valdez 1998; Lustgarten 1995; Kalleberg and Leicht 1991; Loscocco et al. 1991); age of the business owner (Fasci and Valdez 1998; Lustgarten 1995; Kalleberg and Leicht 1991); number of children (Lustgarten 1995; Loscocco et al. 1991); education (Fasci and Valdez 1998; Lustgarten 1995); business characteristics such as whether the business is home-based (Fasci and Valdez 1998; Loscocco et al. 1991); number of hours worked (Fasci and Valdez 1998; Lustgarten 1995); and motivation of the owner (Cinamon and Rich 2002; Fasci and Valdez 1998; Lustgarten 1995).

Females and males may choose to operate their practices differently because of their unique personal situations and motivations. For example, females and males may differ in their family situations, in their need to earn income, in their balance of work and family, and in their need for control. As well, given changes in the participation rates by females in the work force, women on average are likely to be younger and better educated than a sample of their male counterparts. This leads to our first hypothesis stated in the alternative form:

*H1: Female and male sole proprietors will differ in terms of age, number of children, education, size of practice, home-based practice, number of years in practice, location of practice, hours of work, and motivations for starting their own practice.*

Our second hypothesis follows on the earlier cited studies that examine the link between financial performance and gender of the small business owner. While previous literature has found mixed results with respect to gender and financial performance, in this study we expect to find that male-owned businesses will exhibit stronger financial performance when gender alone is considered. Therefore, we further hypothesize that

*H2: Differences in gender of the owner are related significantly to differences in financial performance of small businesses operating in the same industry.*

We next provide two hypotheses that represent two different ways to examine the gender–financial performance relationship. The third hypothesis proposes the direct effect of gender on financial performance after controlling for other variables. The fourth hypothesis takes a somewhat different position and looks at the indirect effect of gender as a moderator on the other independent variables (for example, business characteristics, owner characteristics, owner motivations, and regional differences). The third and fourth hypotheses examine both the direct and indirect effects of gender.

While H1 recognizes that male- and female-owned businesses will vary in terms of both the respondents' characteristics and how they operate their practices, H3 proposes that there will be differences in performance depending on owners' gender even after controlling

for the diversity of respondent characteristics. Consistent with Fasci and Valdez (1998), Lustgarten (1995), Kalleberg and Leicht (1991), Loscocco et al. (1991), and Watson (2002), we test this hypothesis using a regression in which we specifically control for business and owner characteristics as well as owner motivations and regional differences. Our third hypothesis is

*H3: Differences in gender of the owner are related to financial performance of small businesses operating in the same industry after controlling for other explanatory variables.*

Additionally, we follow our test of the direct effects of gender with an examination of whether the effects of nongender independent variables on financial performance differ by gender. Our fourth hypothesis is

*H4: The independent variables have different influences on financial performance depending on whether the small business owner is a female or a male.*

H4 is tested using regressions. By employing the same independent variables for female-owned and male-owned businesses, we are able to identify and to examine the different effects these variables have on business performance by the owner's gender.

## Proposed Model

In this study two dependent variables are used to capture different aspects of financial performance: gross revenue dollars and net profit dollars. We run two regressions to capture both the productivity (gross revenue as the dependent variable) and managerial efficiency (net profit as the dependent variable) aspects of these public accounting practices' financial performance.[4] The profit ratio, used by Fasci and Valdez (1998), was not employed in this study as the dependent measure of interest because it represents a more limited view of performance.

The independent variables were chosen to capture characteristics of the business as well as the demographic characteristics and motivations of the sole proprietors in the sample. In this study we use (1) *number of years in public practice*; (2) *numbers of part-time and full-time employees*; (3) and *home-based business* to measure the longevity of the business and the size of the business, respectively. The personal demographic variables we employ are (1) *gender*; (2) *age*; (3) *hours worked per week*; (4) *live in large city versus small city/rural area*; (5) *number of dependent children*; and (6) *education*.[5] Education is included in the regressions as dummy variables and is classified as follows: (1) *secondary school only*; (2) *some postsecondary education*; (3) *college or technical school diploma*; and (4) *university degree*.

While education generally has not been found to be significantly different for men and women by both Fasci and Valdez (1998) and Loscocco et al. (1991), we have kept this variable in our study. For the sole practitioners in our study, many of them earned their accounting certifications prior to

[4]Other dependent variables also were examined. The three variables examined were meant to capture the owners' satisfaction with their revenue, profit, and growth. These variables were dropped from analysis because the independent variables had no significant influence on them.

[5]Because 86 percent of our sample was married, we did not use marital status as a dependent variable.

a university degree being required. Because we do not know whether these individuals possessed a university degree at the date of certification or whether they continued their education post certification, we thought it prudent to examine this variable despite the previous findings.

Five motivation variables are used to explain financial performance. First, three motivations are included that closely mirror those used by Fasci and Valdez (1998). These motivations are (1) *to make more money*; (2) *flexibility to balance personal, family, and professional responsibilities*; and (3) *desire to be more independent*. Additionally, we include two variables that reflect a desire to have control over and variety in one's life and career. These are (1) *ability to control work situations*; and (2) *desire to deal with a variety of issues*. We include these two motivation variables because our sample respondents rated them to be more important in their lives than earning more money.

We predict that 12 of the independent variables we use will be related positively to the financial performance variables (Table 1). Eleven of these variables are (1) *age*; (2) *hours worked per week*; (3) *number of years in public practice*; (4) *number of dependent children*; (5) *number of full-time employees*; (6) *number of part-time employees*; (7) *some postsecondary school*; (8) *college or technical school diploma*; (9) *university degree*; (10) *live in large city versus small city or rural area*; and (11) *to make more money*. The 12th variable, *gender*, is a dummy variable that takes on a value of one for males and zero for females. It is expected from previous research that male accounting practitioners have better financial performance than female accounting practitioners.

We predict that *home-based business* will be related negatively to the dependent variables. Consistent with Fasci and Valdez (1998), we expect that a home-based business, all other things being equal, will earn less revenue and will be less profitable than a business run external to the home.

For four motivation variables, (1) *desire to deal with a variety of issues*; (2) *flexibility to balance personal, family, and professional responsibilities*; (3) *to be more independent*; and (4) *ability to have control over work situation*, we think these could be related either positively or negatively to financial performance. For example, a small business owner who desires more flexibility and balance in life may accept lower revenues or net profits to achieve this balance, meaning that the relationship between the dependent and independent variables is negative. Alternatively, a sole proprietor may earn higher gross revenues and net profits by being able to exercise better control over her or his life through the flexibility provided by operating one's own business. This latter relationship would mean that the flexibility motivation is related positively to the dependent variables. However the fifth motivation variable, *to make more money*, should be related positively to revenue and profits.

## Research Methods and Data

A detailed mail questionnaire was designed to explore several aspects of small accounting practices. Measures of financial success collected included gross revenues, net profit, growth, and satisfaction with these measures. These financial items were collected using 15 categories ranging from less than $20,000 to more than $1,000,000 in order to reduce response inhibitions. Also included in the survey instrument were questions dealing with demographic characteristics of the respondents and their businesses as well as perceptual measures of their financial success, such as satisfaction with profit and revenues, and whether profits and revenues

## Table 1
## Predicted Signs of the Independent Variables for Dependent Variables Gross Revenue or Net Profit

| Independent Variable | Hypothesized Effect |
|---|---|
| Number of Full-Time Employees | + |
| Number of Part-Time Employees | + |
| Number of Years in Public Practice | + |
| Home-Based Business | − |
| Hours Worked per Week | + |
| Motivation: Make More Money | + |
| Motivation: More Independence | −/+ (?) |
| Motivation: Flexibility to Balance Work and Family Responsibilities | −/+ (?) |
| Motivation: Deal with Variety of Issues | −/+ (?) |
| Motivation: Ability to Have Control over Work Situation | −/+ (?) |
| Age | + |
| Some Postsecondary Education | + |
| College or Technical School Diploma | + |
| University Degree (Undergraduate and Graduate) | + |
| Live in Large City versus Small City or Rural Area | + |
| Number of Dependent Children | + |
| Gender for H2/H3 | +/0 |

met expectations.[6] Measures of motivations asked the respondents to rate the importance of each motivation in their decision to go into their own public accounting practice using a 10-point Likert scale ranging from 1 (least) to 10 (most).

The sample was comprised of certified general accountants (CGAs) in public practice in British Columbia. As background, there are three Canadian accounting organizations: CGAs, chartered accountants (CAs), and certified management accountants (CMAs). Many CGAs and CAs operate as public accounting practitioners performing audits, preparing tax returns, and acting as business consultants, with only a few CMAs operating as public accounting practitioners in Canada. While both CGAs and CAs have members with small practices, some of the CA public practices are quite large and are members of international accounting firms. For these reasons, the CGAs were chosen as potential participants in this study because they were more likely to be representative of small businesses.

[6]The questionnaire covered many topics including motivation for starting a business, networking, skill sets, expectations of business, and components of the business. Only certain business and owner characteristics along with financial performance indicators and motivations were used in this study. As noted earlier, the perceptual measures eventually were dropped from the analysis because there were no significant relationships between them and the independent variables.

The geographical regions selected for study include a large, world-class city; smaller population centers; and rural areas. While the rules to be a CGA are set nationally by agreement of the affiliate provinces, the provincial organization—the Certified General Accountants Association of British Columbia (CGA-BC)—administers the rules. This means that all CGA-BC public accounting practitioners must meet the same educational, practical work experience, and continuing professional development requirements. Given these facts, British Columbia was chosen as the regional focus for our study.

We pretested our questionnaire using six CGA volunteers (three females and three males) who were public accounting practitioners. Their comments were addressed to improve the clarity of the survey instrument. Our university's ethics committee approved the questionnaire in its final form. A complete list of CGA accounting public practitioners for 1999 was obtained from CGA-BC. This list included a total of 937 names: 280 females, 630 males, and 27 individuals whose gender could not be determined by the names. Having used three females and three males to pretest the questionnaire, 277 females and 627 males were left as the potential sample. We sent questionnaires to all 277 females and to a stratified, random sample of approximately the same number of males. The sample of males was chosen to achieve the same geographical distribution within British Columbia as represented by the females. This resulted in a sample of 283 males. From two mailings, we received 206 (103 females and 103 males) useable questionnaires providing a response rate of 37 percent.[7] From this sample of 206, we were able to identify a subsample of 160 (86 females and 74 males) who are sole practitioners operating public accounting practices.

## *Results*

### Practice and Personal Characteristics of the Accounting Sole Proprietorships

Table 2 contains the descriptors of the sample for females and males.

*Practice Characteristics.* An examination of the financial performance indicators and the respondents' satisfaction with these measures provide some interesting information about the sample. Male-owned firms on average earned statistically significantly higher gross revenue dollars and were more profitable compared to female-owned firms. However, the percentage revenue growth means are not significantly different by gender. If we look at perceptual measures of performance, none are significantly different between genders. The means for satisfaction with gross revenue dollars, net profit dollars, and growth, as well as the ratings of practice success and satisfaction with their practice, are not significantly different between the two groups. Hence, our focus is on gross revenue dollars and net profit dollars as relevant measures of financial performance.

Turning to indicators of how these sole proprietors run their practices, we see that there are several significant differences. Accounting practices owned by men employ more full-time employees on average and are home-based less often. On average, females and males employ about the same number of part-time employees. The hours an

[7]This response rate falls within the usual range for studies with accountants as subjects. Useable response rates for such studies range from 19 percent (Thorne and Magnan 2000) for a questionnaire requiring approximately the same time to complete as our questionnaire to 48 percent (Ott and Donnelly 1999) for a shorter questionnaire.

## Table 2
## Sample Descriptors by Gender

| | Men | | | Women | | | |
|---|---|---|---|---|---|---|---|
| | *N* | Mean/ Percent | Standard Deviation | *N* | Mean/ Percent | Standard Deviation | Significance of Difference |
| Independent Variables | | | | | | | |
| Number of Full-Time Employees | 69 | 1.43 | 1.66 | 74 | 0.88 | 1.61 | 0.04 |
| Number of Part-Time Employees | 68 | 0.75 | 0.90 | 73 | 0.79 | 1.08 | 0.79 |
| Number of Years in Public Practice | 73 | 16.27 | 8.17 | 81 | 11.07 | 6.72 | 0.00 |
| Home-Based (Percent) | 73 | 37.00 | | 81 | 58.10 | | 0.01 |
| Hours per Week | 73 | 42.00 | 15.32 | 84 | 37.36 | 15.36 | 0.06 |
| Make More Money[a] | 71 | 6.28 | 2.23 | 81 | 5.99 | 2.63 | 0.46 |
| More Independence[a] | 68 | 7.97 | 1.74 | 82 | 7.84 | 2.43 | 0.71 |
| Balance Work/ Family[a] | 69 | 7.20 | 2.20 | 83 | 8.01 | 2.21 | 0.03 |
| Deal with Variety of Issues[a] | 69 | 6.61 | 2.07 | 79 | 6.59 | 2.83 | 0.97 |
| Control over Work Situation[a] | 70 | 6.97 | 1.94 | 75 | 6.63 | 2.65 | 0.37 |
| Age | 73 | 50.08 | 7.67 | 85 | 44.06 | 7.61 | 0.00 |
| Secondary (Percent) | 74 | 13.50 | | 85 | 23.50 | | 0.15 |
| Some Postsecondary (Percent) | | 24.30 | | | 29.40 | | |
| College/Technical School (Percent) | | 25.70 | | | 24.70 | | |
| University (Percent) | | 36.50 | | | 22.40 | | |
| Large versus Small City or Rural Area (Percent) | 74 | 77.00 | | 86 | 65.00 | | 0.10 |
| Number of Dependent Children | 72 | 1.36 | 1.43 | 84 | 1.11 | 1.21 | 0.23 |
| Dependent Variables | | | | | | | |
| Gross Revenue $s | 71 | 163,239 | 138,767 | 80 | 104,125 | 134,773 | 0.01 |
| Net Profit $s | 70 | 69,428 | 54,050 | 77 | 46,883 | 60,962 | 0.02 |
| Satisfied with Gross Revenue[b] | 73 | 6.23 | 1.89 | 81 | 6.12 | 2.04 | 0.73 |
| Gross Revenue Meets Expectations[b] | 73 | 6.14 | 1.72 | 81 | 6.14 | 1.51 | 0.99 |
| Satisfied with Growth[b] | 70 | 6.01 | 2.36 | 72 | 6.39 | 2.49 | 0.36 |
| Revenue Growth Meets Expectations[b] | 69 | 6.09 | 2.15 | 70 | 6.06 | 1.98 | 0.93 |
| Satisfied with Net Profit[b] | 73 | 5.62 | 2.14 | 80 | 5.79 | 2.10 | 62 |
| Net Profit Meets Expectations[b] | 73 | 5.77 | 2.00 | 80 | 5.90 | 1.72 | 0.66 |

[a]Scale: 1 = Least Important; 10 = Most Important.
[b]Scale: 1 = Very Dissatisfied/Much less than Expected; 10 = Very Satisfied/Much more than Expected.

owner devotes to her or his accounting practice recognizes the time resource applied to the firm. In our sample men reported working significantly more hours per week than did women. We also find that more respondents live in large cities than in smaller cities or rural areas; however, the men are more likely to live in larger cities as compared to the women in this sample.

*Personal Characteristics.* Our sample also contains several significant differences in the personal characteristics of male and female accounting practitioners. The number of years an accountant has been in public practice provides an indication of expertise, while the owner's age indicates life experience. The correlation between age and years in public practice, while statistically significant, is actually quite small for both genders ($r$ = 0.26 for men and $r$ = 0.39 for women), which provides support for using these two distinct variables. Men tend to be older and to have more experience in the practice of public accounting. With respect to educational backgrounds, the differences were not significant for females versus males. Males were more likely to have a university degree compared to the women, with more females than males having only secondary school.

When we examine the motivations of men and women for going into their own accounting practices, women rated *flexibility to balance personal, family, and professional responsibilities* significantly more important as a motivation than the men in this sample. We find that the men reported the motivations of *to make more money*, and to a lesser degree, *to be more independent* and *the ability to have control over work situation*, as more important than did their female counterparts, although the differences were not statistically significant. The fifth motivation, *desire to deal with a variety of issues*, had virtually identical means for females and males.

## Influence of Gender on Performance

We considered the influence of gender directly on performance by including it as one of the explanatory variables in the performance models. Table 3 provides the results of the two regressions used to examine the determinants of gross revenue and net profit. The independent variables representing practice and personal characteristics explain close to 80 percent of the variance in *gross revenue*. Five independent variables have significant coefficients. Significant practice characteristics include *number of full-time employees*, *number of part-time employees*, and *large city versus small city or rural area*. The only personal characteristics to make a significant difference on gross revenue were *number of years in public practice* and *some postsecondary education*. Gender had no statistically significant effect,[8] although the direction of the coefficients suggest that male-owned firms earned slightly more per year on average than female-owned firms once other practice and personal characteristics were controlled.

Only 48 percent of the variance in *net profit* dollars is explained by the independent variables. Greater *number of full-time employees* and, to a lesser extent, more *years in public practice* as

[8]Because gross revenue is the model with the best fit to our data, we also ran regressions using gross revenue adjusted by number of employees as the dependent variable. This provided a check on our results. The "gross revenue adjusted by employees" regressions are not reproduced here because the results are similar to those provided in the paper. Of note, gender is not significant in these regressions.

## Table 3
## Regressions Both Genders (Dependent Variables Gross Revenues and Net Profits)

| Gross Revenues<br>Independent Variables | *B* | Beta | Significance |
|---|---|---|---|
| (Constant) | −95499.55 | | 0.16 |
| Number Full-Time Employees | 67172.52 | 0.80 | 0.00 |
| Number Part-Time Employees | 15006.87 | 0.11 | 0.03 |
| Number of Years in Public Practice | 2189.66 | 0.12 | 0.02 |
| Home-Based | −5845.84 | −0.02 | 0.72 |
| Hours per Week | 237.31 | 0.03 | 0.60 |
| Make More Money | 2632.82 | 0.05 | 0.33 |
| More Independence | −2281.35 | −0.04 | 0.50 |
| Balance Work/Family | 2400.38 | 0.04 | 0.48 |
| Deal with Variety of Issues | 982.99 | 0.02 | 0.72 |
| Control over Work Situation | 4610.14 | 0.08 | 0.13 |
| Age | 143.84 | 0.01 | 0.88 |
| Some Postsecondary | 34968.89 | 0.11 | 0.06 |
| College/Technical School Diploma | 15578.28 | 0.05 | 0.41 |
| University Degree | 4175.53 | 0.01 | 0.83 |
| Large City versus Small City or Rural Area | 24368.39 | 0.08 | 0.09 |
| Number of Dependent Children | 6598.89 | 0.06 | 0.22 |
| Gender | 3920.54 | 0.01 | 0.79 |
| $R^2$ | 0.80 | | |

| Net Profits<br>Independent Variables | *B* | Beta | Significance |
|---|---|---|---|
| (Constant) | −76837.93 | | 0.09 |
| Number Full-Time Employees | 19140.97 | 0.54 | 0.00 |
| Number Part-Time Employees | 471.91 | 0.01 | 0.92 |
| Number of Years in Public Practice | 1048.64 | 0.14 | 0.09 |
| Home-Based | 943.70 | 0.01 | 0.93 |
| Hours per Week | 488.87 | 0.13 | 0.11 |
| Make More Money | 4433.09 | 0.18 | 0.02 |
| More Independence | −1814.96 | −0.07 | 0.43 |
| Balance Work/Family | 1011.06 | 0.04 | 0.66 |
| Deal with Variety of Issues | 1950.84 | 0.08 | 0.30 |
| Control over Work Situation | 48.32 | 0.00 | 0.98 |
| Age | 294.78 | 0.04 | 0.65 |
| Some Postsecondary | 18583.36 | 0.14 | 0.13 |
| College/Technical School Diploma | 10381.63 | 0.08 | 0.42 |
| University Degree | 14379.59 | 0.11 | 0.26 |
| Large City versus Small City or Rural Area | 16723.53 | 0.13 | 0.08 |
| Number of Dependent Children | 6801.79 | 0.15 | 0.06 |
| Gender | −2706.05 | −0.02 | 0.79 |
| $R^2$ | 0.48 | | |

well as more *hours worked per week*, contribute to more profitable practices. Practices located in *larger cities* were more profitable than those in smaller cities and towns. Statistically significant personal characteristics included the motivation *to make more money*, which had a positive impact on net profits, and the *number of dependent children*, which was also positive. Although it was not statistically significant, gender had the opposite influence on net profit from gross revenue: Men had lower net profit on average compared to women.

As a check on multicollinearity, the tolerance factor and the variance of inflation factor (VIF) have been used.[9] The tolerances for the two regressions indicate there were no serious multicollinearity problems, as they were all well within the acceptable limits.

Even though gender had no statistically significant effect directly, it is possible that the effect of the other independent variables on gross revenue and net profits differ between male and female sole proprietors. In order to test H4, a single regression was estimated, which added interaction effects between gender and all other independent variables. Although these regressions are not reproduced here, the gender specific model explains 85 percent of the variance in gross revenues. A Chow test[10] was conducted to estimate the additional explanatory power of the gender specific model. The results were statistically significant ($F = 1.90$, $p < 0.05$) for gross revenue and for net profit ($F = 1.43$ $p < 0.10$). Therefore, adding the gender-specific effects made a statistically significant improvement in model fit. However the interactions model suffered from a very high degree of multicollinearity, with tolerance levels for several variables well below the minimum acceptable level of 0.10 (Hair et al. 1998). This is not uncommon in nonexperimental models with interactions, especially with dummy variables. Although multicollinearity does not create any problems for the overall measures of variance explained used in the Chow test, it limits our ability to test the significance of individual variables and to make sense of the coefficients (Hair et al. 1998, p. 189). Therefore, this paper presents the results of separate regressions for men and women.

With respect to differences in the effects of practice characteristics, male-owned firms generate less revenue than female-owned firms per full-time and part-time employee (Table 4). Home-based businesses had a modest positive effect on gross revenues for women and just the opposite for men. However, male-owned practices earn more gross revenue per hour worked and with each year in public practice. Whereas female practices earned only slightly higher revenues in larger cities compared to smaller cities, male-owned practices in the larger cities generated much higher revenues than their counterparts in small cities.

The effects of motivations on gross revenues were mixed for men and

[9]The VIF for $X_j$ is defined as $1/1 - RSQ_j$, where $RSQ_j$ is the $R^2$ from the regression of $X_j$ on the remaining $k - 1$ predictors. If $X_j$ is highly correlated with the remaining predictors, its VIF is very large.

[10]A Chow test compares the ratio of the difference of sum of squared errors between restricted and unrestricted models to the sum of squared errors of the unrestricted model controlling for number of restrictions and degrees of freedom (Kmenta 1986, p. 422). In this case the unrestricted model includes the gender specific effects captured via the interaction effects. The restricted model includes only the main effects of the independent variables including gender.

# Table 4
## Gender Specific Regressions (Dependent Variables Gross Revenues and Net Profits)

| Gross Revenues Independent Variables | Men | | | Women | | |
|---|---|---|---|---|---|---|
| | *B* | Beta | Significance | *B* | Beta | Significance |
| (Constant) | −53717.93 | | 0.64 | −114080.88 | | 0.20 |
| Number Full-Time Employees | 65429.63 | 0.78 | 0.00 | 72518.77 | 0.87 | 0.00 |
| Number Part-Time Employees | 11519.98 | 0.08 | 0.33 | 18959.79 | 0.15 | 0.05 |
| Number of Years in Public Practice | 4252.32 | 0.25 | 0.00 | −884.17 | −0.04 | 0.55 |
| Home-Based | −4278.47 | −0.01 | 0.86 | 4215.22 | 0.02 | 0.85 |
| Hours per Week | 149.25 | 0.02 | 0.83 | −272.79 | −0.03 | 0.66 |
| Make More Money | −7514.61 | −0.12 | 0.10 | 8415.90 | 0.16 | 0.02 |
| More Independence | −6904.91 | −0.09 | 0.32 | −1440.22 | −0.03 | 0.71 |
| Balance Work/Family | 629.08 | 0.01 | 0.90 | 8116.04 | 0.13 | 0.10 |
| Deal with Variety of Issues | 9958.97 | 0.15 | 0.07 | −5529.96 | −0.12 | 0.09 |
| Control over Work Situation | 4943.31 | 0.07 | 0.40 | 4946.76 | 0.10 | 0.15 |
| Age | −57.71 | 0.00 | 0.97 | 873.51 | 0.05 | 0.51 |
| Some Postsecondary | 25000.42 | 0.08 | 0.46 | 36378.95 | 0.12 | 0.12 |
| College/Technical School Diploma | 30130.24 | 0.10 | 0.41 | −12007.26 | −0.04 | 0.63 |
| University Degree | −12244.82 | −0.04 | 0.73 | 12636.60 | 0.04 | 0.62 |
| Large City versus Small City or Rural Area | 27580.22 | 0.08 | 0.28 | 2393.72 | 0.01 | 0.90 |
| Number of Dependent Children | 7563.43 | 0.08 | 0.34 | 5473.16 | 0.05 | 0.48 |
| $R^2$ | 0.82 | | | 0.84 | | |

| Net Profits Independent Variables | Men | | | Women | | |
|---|---|---|---|---|---|---|
| | *B* | Beta | Significance | *B* | Beta | Significance |
| (Constant) | 16855.14 | | 0.81 | −152036.84 | | 0.03 |
| Number Full-Time Employees | 14642.10 | 0.45 | 0.00 | 28334.09 | 0.75 | 0.00 |
| Number Part-Time Employees | 883.08 | 0.01 | 0.90 | 979.58 | 0.02 | 0.89 |
| Number of Years in Public Practice | 2626.86 | 0.40 | 0.00 | −1274.90 | −0.14 | 0.26 |
| Home-Based | 3641.90 | 0.03 | 0.80 | 12133.78 | 0.10 | 0.48 |
| Hours per Week | 217.18 | 0.06 | 0.61 | 597.02 | 0.15 | 0.21 |
| Make More Money | −475.96 | −0.02 | 0.86 | 5737.05 | 0.25 | 0.04 |
| More Independence | −3737.12 | −0.12 | 0.37 | −1232.38 | −0.05 | 0.68 |
| Balance Work/Family | −1347.28 | −0.05 | 0.67 | 4026.92 | 0.15 | 0.28 |
| Deal with Variety of Issues | 6001.09 | 0.23 | 0.07 | 298.00 | 0.01 | 0.90 |
| Control over Work Situation | −897.83 | −0.03 | 0.80 | 278.79 | 0.01 | 0.91 |
| Age | −599.10 | −0.08 | 0.51 | 1357.60 | 0.17 | 0.18 |
| Some Postsecondary | 10838.74 | 0.09 | 0.59 | 21913.64 | 0.16 | 0.21 |
| College/Technical School Diploma | −658.84 | −0.01 | 0.98 | 18365.53 | 0.13 | 0.33 |
| University Degree | −15648.34 | −0.14 | 0.46 | 37629.06 | 0.26 | 0.05 |
| Large City versus Small City or Rural Area | 13918.43 | 0.11 | 0.36 | 16953.25 | 0.13 | 0.25 |
| Number of Dependent Children | 6833.10 | 0.18 | 0.16 | 6528.81 | 0.13 | 0.27 |
| $R^2$ | 0.57 | | | 0.56 | | |

women. The motivation *to make more money* had a significant positive effect for women but was just the opposite for men. For women, greater motivation to have *more independence* and the *desire to deal with a variety of issues* both led to lower gross revenues. Again, the situation for men was reversed. For women, stronger motivation to *balance work and family* produced higher gross revenue. For men, the degree to which they were motivated by a desire for balance had very little effect on revenues on average. Stronger motivation to obtain greater *control over the work situation* produced greater revenues for both men and women, with very little difference between the two groups.

While *age* had a positive effect on revenues for women, it had a small negative effect for men. However, *years in public practice* made a relatively large positive difference in gross revenues for male-owned practices compared to a smaller but negative effect on female practices. As hypothesized, the *number of children* had a positive effect on the gross revenues of men's and women's practices, with a slightly greater effect on the men. Having *some postsecondary*, *college*, or *university* education was more beneficial for women than for men.

The results are quite similar for the gender specific models of net profit (Table 4). Again, the contribution to net profit made by an additional employee is less for male-owned than for female-owned practices. *Home-based businesses* compared to offices outside the home are much more productive for women. Interestingly, *hours worked* has a more positive effect on net profits for female-owned practices, which is opposite to the results for gross revenues. Another reversal occurs for location. In terms of gross revenues, *large cities* had a relatively more positive effect for men compared to that for women. The opposite is true for net profits. The difference in *net profits* between practices in *large cities* compared to *small cities* is greater for women. The effects of *number of children* on net profits are much more similar for men and women than for gross revenues.

## Discussion

The first hypothesis we examine is whether female and male sole proprietors differ in terms of practice and personal characteristics. We found that the two groups differed significantly with respect to most practice characteristics: *number of full-time employees*; prevalence of *home-based practice*; *hours worked*; and the *location of the practice*. The significant differences in personal characteristics between men and women were *number of years in public practice*; *age*; and the *motivation to balance work and family*. This evidence provides some support for H1 but does not hold for every item measured.

We find support for H2—that differences in gender of the owner are related significantly to differences in financial performance of small businesses operating in the same industry without controlling for other variables. From Table 2, female-owned accounting practices earned less gross revenue and had significantly less net profit than did male-owned accounting practices. However, it is important to emphasize that there were no significant differences between men and women in their satisfaction with their practice's performance or success. This raises the question of whether we should be concerned with this issue at all. One cannot assume that small business owners are driven only to maximize financial performance. Other goals, as well as the perceived returns from additional revenues and profits, may be factors in owners' satisfaction with their firm's performance.

Given the results of H1 and H2, we are led to ask whether the differences in financial performance can be attributed to gender alone or to the differences we

have observed in how men and women operate their practices and in their personal characteristics. H3 examines whether the owner's gender is a significant variable in directly explaining the financial performance of small businesses operating in the same industry when we control for practice and personal characteristics. *Gender* was not a significant variable in explaining financial performance in both the regressions we ran to test this hypothesis (Table 3). Thus, our findings fail to support H3. Our findings indicate that while there were significant differences between female- and male-owned public accounting practices for both gross revenue dollars and net profit dollars, these differences were not attributed directly to gender once we controlled for other variables. This result contradicts the findings of Fasci and Valdez (1998), who find significant direct effects of gender for their sample of public accounting practitioners. Perhaps this contradiction is due to the fact that our study has a more homogeneous sample in terms of region and qualifications. However, our results are consistent with Watson (2002), who has a very diverse sample of sole proprietors across a variety of industries.

In the present study, the independent variables that are statistically significant in explaining financial performance in terms of gross revenue dollars (productivity) for our sample are *number of full-time employees*, *number of part-time employees*, location of the business (*large city versus small city or rural*), *years in public practice*, and *education*. For net profit dollars (a measure of managerial efficiency), significant coefficients are found for *number of dependent children*, *number of full-time employees*, a *desire to make more money*, and *location*. The sole practitioners who earn higher net profits (that is, are more managerially efficient) have more dependent children, employ more full-time employees, and were motivated to start their own practice to make more money compared to their less successful colleagues.

This brings us to the next question: If gender has no statistically significant direct impact on performance once we control for other variables, and we know that male and female practitioners appear to practice differently, is it possible that the effect of practice and personal characteristics on performance are different for men and women? The results of our tests of H4 show that gender moderates the effects of some practice and personal characteristics, although we continue to see no direct effect on performance. Hence, the situation is much more complex than simply considering the average revenue and profit differences.

If we look at the effect of employees on revenues and profits, we see that each employee generates more revenue and greater profits for female-owned practices. Why are these employees more productive for female owners? The answer may lie with the fact that these firms are very small. Over 60 percent of female sole proprietorships employed no full-time employees, compared to 48 percent of the male sole proprietorships. It is quite likely that the first employee contributes considerably more to revenue and profit than does each subsequent employee. Therefore, an "additional" employee for female proprietorships is more likely to be the first employee hired compared to a male-owned practice, and so we see full-time employees as more productive for females. If size of the practice (defined in terms of *number full-time employees*) is the explanation for the differences in employee productivity, and if women's practices are smaller than men's, we are left asking why women's practices are smaller. By including *age* and *years in public practice* in the regression, we control for the possibility that women's practices are smaller only because the women in the sample are significantly

younger and have been in practice a shorter time (Table 2).

When we consider *age* and *years in practice* explicitly, we find that age has a much more positive effect on performance for women, while years in public practice has a more positive effect for men. As we stated earlier, age represents life experience, and years in practice captures expertise. Our regressions control for years in public practice as well as *number of children* and *hours worked*, and we find that older women still have stronger financial performance than younger women. Possible explanations could include the expectation that older women would also have older children, which might reduce the demands of family, and/or they might have a different client mix due to their greater life experience and broader personal and business networks.

It is interesting as to why having greater years in public practice (again controlling for age) would have an overall negative effect on the performance of female sole practitioners and a strong positive effect on male sole practitioners. One possible explanation would consider how men's and women's client mix changes over time. For example, men's clients may become more profitable over time compared to women's clients. This could occur if women tend to have smaller clients, to take on less profitable activities, or to service clients in industries with less growth potential. We leave the analysis of the differences in clients and their activities for future research.

Perhaps the most interesting result relates to the *motivation to balance work and family*. This was the only significant difference in motivations for entering public practice between men and women with it being more important for women. Not surprisingly, our results show that it also had a greater impact for women than men on revenue and profits. But again, the story is more complex than we might expect. Women, who are motivated more strongly to start their own public practices in order to balance work and family, earn higher revenues and profits. Men, who are motivated more strongly by a need to achieve balance, earn lower profits. It appears that the men are trading off greater profits for more balance in their lives. For the women, it is quite the opposite. The greater flexibility of being a sole proprietor of an accounting practice allows women to earn more revenue than if they had to limit their income in a more restrictive context. For example, a woman with small children might work only part time or may take a less demanding position to obtain the flexibility to meet the needs of her family. As a sole proprietor, she can have the flexibility she needs and still can build a successful practice. For a woman, a sole proprietorship practice represents an opportunity to achieve a true balance between work and family, without having to make a trade-off of career for family (although they are likely trading off revenue for sleep and stress).

The other motivation variables, while not statistically significant in every case, also provide us with some interesting insights. The *desire to deal with a variety of issues* is related positively to earning gross revenue for men and is related negatively for women. This result may be related to the regions where the businesses are located. It may be easier for men in large cities to earn gross revenues while achieving their desire to have variety in their work than it is for women who are more likely to practice in smaller cities or rural areas.

The *desire to make more money* was another variable that had the opposite effect on men and women. Surprisingly, men with a stronger motivation to enter their own practice to earn more actually generated lower revenues and profits than their counterparts who were less motivated by making more money. The

reverse was true for women (and the differences between the men and women are very large). Perhaps again the explanation lies with the alternatives to practice ownership available to men and women. A sole proprietorship practice offers a woman the ability to balance her work and family and to earn more income. For a man, the motivation to earn more money is related negatively to gross revenues ($p < 0.10$) when we control for other motivations such as the *desire for independence* and characteristics such as *age*, *years in practice*, and *firm size*. While the reason for this counterintuitive result awaits further research, we expect that this result is likely the source of dissatisfaction for men as it represents an unexpected trade-off between independence and income.[11]

For both men and women who placed greater importance on a need for more independence as a motivator, lower revenues and profits resulted. Here the trade-off is clear for both genders, whether it was recognized at the time they started their practice or not. Independence can include the ability to work fewer or more flexible hours (correlation between hours worked and independence motivation is negative and significant at $p < 0.10$), or it can mean making a conscious decision to take on less profitable but more interesting clients or activities.

Even in a professional sample such as this one, men tend to have higher levels of education than women. This education finding may be due either to the men having more education prior to certification or to them obtaining further education post certification. In addition, we find that *university education* compared to no *postsecondary education* makes a bigger difference on revenues and profits for women as compared to men. This effect is statistically significant for net profits, even after controlling for *age*. Our finding means that an education gap exists for women despite their ages. However, on the positive side, women may be able to increase their levels of education and thereby to address some of the performance gap.

Both sets of regressions in the present study (Tables 3 and 4) indicate that gender does not explain directly differences in the financial performance of small public accounting practices. We see that the relationship between financial performance and gender is more complex. For example, we have identified several interesting differences in practice and personal characteristics of male and female sole practitioners and how these characteristics influence performance differently for men and women. These differences may provide potential areas of future research. Also, more research using additional practice characteristics such as client composition may provide further insight into financial performance of male- and female-owned businesses. In addition, other samples in other industries are needed to explore the variables that significantly explain financial performance and how these variables differ between females and males.

## Limitations and Conclusion

While we have controlled for some factors (for example, geographic location) and included direct and moderating effects that have been ignored in previous research, there are some limitations in our study. One limitation inherent in all questionnaire-based research is that the sample may fail to reflect fully the underlying population. The response rates are virtually identical for both the

[11]Multicollinearity is not likely to be an explanation of this counterintuitive result as the tolerance value in the gender specific regressions was very good at 0.75.

male and female populations and are similar to other research involving accounting professionals. A second limitation is both a potential strength and a potential weakness. We examined sole proprietors of accounting practices in only one geographic location (one Canadian province). It may be that a sample of sole practitioners taken from a broader geographic area with different economic conditions or professional regulation might find different variables important in explaining financial performance. However, these limitations are beyond the scope of this study and are left for future researchers to explore.

The major conclusion of our study is that for this sample, gender directly fails to explain differences in financial performance for small public accounting practices after controlling for other practice and personal characteristics. This conclusion raises a question as to whether the gender–financial performance relationship should continue to be addressed in future research. We think this relationship should be an area of continued research for two reasons. First, as we noted earlier, the evidence on the gender–financial performance relationship has been mixed (see, for example, Fasci and Valdez 1998; Loscocco et al. 1991, compared to Watson 2002; Kalleberg and Leicht 1991). The current study represents a continuation of an exploration and provides one part of the evidence regarding this relationship. No one study provides definitive findings on its own. The second reason as to why research should continue in this area relates to the complexity of the gender–financial performance relationship discussed in the preceding section. We find that gender moderated the influence of other variables. Our results suggest that the effect of gender is not as obvious as some previous research had demonstrated. In addition, there are many more variables that may affect or moderate the gender–financial performance relationship than have been examined in this study. Until these other variables are identified and are explored, the existence of whether gender and financial performance are related remains an open and viable research question.

One other possible line of related research could explore an extended definition of business success beyond financial performance, a recent trend seen in the performance measurement literature (Hudson, Smart, and Bourne 2001). Exploration of extended success definitions might include facets particularly relevant to small business owners such as personal goals and satisfaction.

From one perspective our finding that gender fails to explain financial performance is positive because it signals that female-owned businesses are just as likely to prosper on average even though the effects of practice and personal characteristics differ. Our results also suggest that future researchers should continue to pursue how gender moderates the effect of other influences on performance.

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