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Howard Van Auken

Iowa State University, vanauken@iastate.edu

Shawn Carraher

University of Texas at Dallas

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Abstract

This paper examines factors that impact the frequency of financial statement preparation among a sample of 312 SMEs. Specifically, the study examines the relationship between how often financial statements are prepared and (1) whether the financial statements are used to make decisions and (2) owners' confidence in the reliability of their financial statements. Financial statements provide important information that should be used to help guide decisions. The findings showed that the frequency of financial statement preparation was directly associated with whether the financial statements were used to make decisions and inversely associated with owners' confidence in the reliability of their financial statements. Additionally, the results showed that the frequency of financial statement preparation was directly associated with gender and size of community in which the firm was located. The results should be useful for owners of SMEs and providers of services to SMEs to better understand which factors affect how often financial statements are prepared and to provide business development assistance.

Keywords

financing, financial statements, decision-making

Disciplines

Business Administration, Management, and Operations | Finance and Financial Management

Comments

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Influences on frequency of preparation of financial statements among SMEs

Howard Van Auken¹, Shawn Carraher²

¹ Iowa State University, Iowa, USA
vanauken@iastate.edu

² University of Texas, Dallas, USA
shawncarraher@yahoo.com

Abstract. This paper examines factors that impact the frequency of financial statement preparation among a sample of 312 SMEs. Specifically, the study examines the relationship between how often financial statements are prepared and (1) whether the financial statements are used to make decisions and (2) owners' confidence in the reliability of their financial statements. Financial statements provide important information that should be used to help guide decisions. The findings showed that the frequency of financial statement preparation was directly associated with whether the financial statements were used to make decisions and inversely associated with owners' confidence in the reliability of their financial statements. Additionally, the results showed that the frequency of financial statement preparation was directly associated with gender and size of community in which the firm was located. The results should be useful for owners of SMEs and providers of services to SMEs to better understand which factors affect how often financial statements are prepared and to provide business development assistance.

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1 Introduction

Financial statements allow stakeholders to use available financial information to gain a better understanding of and manage their firm. Although the use of financial statements can help stakeholders and owners make better decisions, owners of small firms often are poorly equipped to use financial statements effectively. In this case, even reliable and timely financial statements are insufficient, if owners do not know how to interpret and use them. More current and accurate information should enable owners to make better informed decisions. Owners using their financial decision must have confidence in their reliability (Van Auken, 2005).

The use of financial statements is closely linked to and supportive of the firm's strategic goals, because decisions made without regard to their financial impact can lead to a confused company focus and financial distress (Horngren et al., 2009). The importance of poor decisions, many of which are directly associated with financial management, is evident from the high discontinuance/failure rate among small firms (van Praag, 2003). Owners of small firms often lack strong finance skills and may not fully understand the impact of their decisions. Bad decisions often create extensive

operational problems and threaten their firm's viability (Timmons and Spinelli, 2004). Instead, firms should use financial statement information to evaluate the impact of their decisions (Breen et al., 2004) and manage their business operations efficiently and effectively (Shields, 2010). Effective use of current financial statements is especially important considering that poor financial management is a leading cause of financial stress and business failure (Carter and Van Auken, 2005; Coleman, 2002; Headd, 2003; Wiklund and Shepherd, 2005).

Interpretations of financial statement information can be influenced by owners' perceptions of their firms' potential. Accurate and timely information is required, but effective usage also requires valid assessment of the financial statements. Entrepreneurs generally are optimistic about their firm's financial potential, which can lead to inaccurate analysis, interpretations, and assessments of their firm's potential and impact of decisions in a way that can increase the financial distress and the probability of failure (Landier and Thesmar, 2009; Smith, 2011). While external assistance with interpreting financial statements might help owners make better and more informed decisions (Breen et al., 2004), Gooderham et al. (2004) reported that owners of small firms tend not to seek external financial advice.

This paper investigates the factors that are associated with the frequency of financial statement preparation by owners of SMEs. Specifically, the paper examines the association between the frequency of financial statement preparation and whether the financial statements are used to make decisions as well as the extent that owners believe their financial statements are reliable. Both issues are critical, especially considering that financial statements affect all stakeholders, yet most research on financial statements and their use has focused on large firms, with few examples of studies of how SMEs use financial statements in making decisions (Shields, 2010). The important information in financial statements must be incorporated into any firm's operational and strategic decision-making processes though, because ignoring or misusing that information can harm all areas of the firm: unreliable operations, ineffective marketing, and an inability to hire qualified personnel (McMahon, 2001; Timmons and Spinelli, 2004). More frequent preparation provides the opportunity for owners to have access to more current information from which to base their decisions.

2 Research issues

The background of the entrepreneur and firm characteristics are key determinants of decision making tactics (Avery et al., 1998; Chaganti et al., 1996; Watson 2002). For example, business owners who don't have good financial information about the likely impact of their decisions on their firms may make choices that create risk and reduce potential returns (Van Auken, 2001). Romano and Rataunga (1994) and Romano, Tanwowski and Smyrniotis (2001) recognized that decision making in small firms is complex and involves many factors, whereas Busenitz and Barney (1997) noted that limited experience and overconfidence often leads to inappropriate decisions, in which case small firms are particularly vulnerable to the impact of poor financial decisions because of their limited resources. The informational value of financial statements provides the basis for many of the firm's decisions. Sian and Roberts

(2009) reported that owners' understanding of financial statements varies widely, such that many owners are confused by the information. The complexity of the statements makes them less useful to SME owners, who instead rely on their accountants to explain the information to them.

2.1 Owner's use of financial statements to make decisions

Several papers report that owners want better information and the quality of information they obtain determines the effectiveness of their decisions (Berger and Udell, 1998; Bruns and McKinnon, 1993). Traditional finance theory assumes rational decision making, but behavioral finance also acknowledges the potential influence of overconfidence and optimism on decisions (Barberis and Thaler, 2002; Ritter, 2003). A lack of financial skills can signal a need for owner training on how to use financial statements (Berger and Udell, 1998; Cassar and Ittner, 2008). However, owners with a stronger finance and accounting background are more likely to use external accounts for advice because they understand the importance of accurate statements (Cassar, 2009; Sian and Roberts, 2009).

Holmes and Nichols (1988) also note that the use of annual financial statements is associated with firm characteristics and demographics. For example, the frequency of financial statement preparation varies with the use of outside funding and venture size (Cassar, 2009). Small firms may also tend to be less financially sophisticated (McMahon, 2001; McMahon and Stanger, 1995). They rarely use financial statements when making decisions (Halabi et al., 2010).

Sales, often used as a proxy for firm size (Carter and Van Auken, 2005), may help determine the complexity of a firm's operations and financial reporting needs. Berger and Udell (1998) suggest that smaller firms are more financially opaque, but become more financially transparent as they grow. Therefore, owner use of financial statements should vary with sales. Higher sales imply higher resource needs, greater financial exposure, and the need for more financial information. Lower sales may motivate owners to devote more attention to the associated financial impact on their firm.

This reasoning leads us to predict:

H1: The frequency of financial statement preparation is directly associated with whether financial statements are used to make decisions.

2.2 Owners' confidence in their financial statements

The frequency of preparation may be an indicator of an owner's confidence in the reliability of their financial statements. Firms that have financial statements prepared more often likely are more sophisticated and have a greater understanding of their importance for decision making (Cassar, 2008, 2009). The reduction of uncertainty, especially in competitive environments, is directly associated with the frequency of financial statement preparations. Small firms that have their financial statements prepared less frequently may not perceive a benefit from the reports. These firms likely fail to recognize the benefits of more timely financial information, are not willing to incur higher costs, and feel less comfortable in using the information they

would obtain. Owners may believe that unreliable financial statements are not a good use of the firm's time or resources.

Confidence in the reliability of financial statements may be affected by various factors. For example, whether firms have employees who are sufficiently knowledgeable about financial statements may impact the nature of interaction and explanations between the owner and the hired expert (Smallbone et al., 1993), which in turn may make owners more comfortable with the use of financial statements. Level of revenue, which can serve as a proxy for firm size and, perhaps, sophistication can be associated with use of financial statements. Changing levels of revenue also alter the firm's perspective on its resource constraints and needs (Byers et al., 1997). Neeley and Van Auken (2010) confirm that the level of revenue affects small firms' decisions, and Busenitz and Barney (1997) suggest that organizational size affects decisions, in that larger firms have more resources and information on which to base their decisions. In turn, accurate and current financial statements are critical to understanding how revenue levels affect small firms, because they must plan for associated resource demands. These effects, in combination, lead to the following hypotheses:

H2: The frequency of financial statement preparation is inversely associated with the owner's belief in the reliability of the financial statement.

3 Methodology

3.1 Sample and questionnaire

The questionnaire was developed during the fall of 2010. In addition to findings from focus group discussions, questionnaire development was based on prior research into small firm financing decisions, including Van Auken (2005), Carter and Van Auken (2005), Busenitz et al. (2003), Kuratko, Hornsby, and Naffziger (1997), McMahon and Stanger (1995), Petty and Bygrave (1993), and Ang (1992). After pretests and further revisions, the final questionnaire comprised two sections: (1) demographic information and (2) information associated with the use and understanding of financial statements. The first section asked respondents about the characteristics of their firms, including its age, organizational structure, type, total assets, and revenue and the gender of the owner. The second section focused on their use of financial statements, including the frequency of financial statement preparation, confidence in the accuracy of the financial statements, confidence in ability to interpret their financial statements, and whether the financial statements were used when making decisions.

The sample consisted of small firms located in a southwestern US state and was designed to represent the structure of the region, following stratified sampling principles in finite populations. The southern tier of the state was initially segmented into districts. The population of firms included all SMEs located in these districts, and then the owners of ten small firms within each district were contacted to ask for their participation in the study. If the business owner declined, another business from the district was contacted. Nonresponse bias thus should not be an issue, because

non-responding organizations were replaced by similar organizations. The sizes and ages of the final sample did not differ from the original sample at the .01 level.

Owners served as the respondents for this study because of their importance as decision makers, and because their perceptions shape strategic behavior (O'Regan and Sims, 2008; Van Gils, 2005). A total of 312 useable questionnaires were obtained. Geographic specificity offered several advantages. First, it facilitated our data collection—a benefit that is especially relevant in the context of the regional differences that might exist among owners of small firms. Second, using data from a single state minimizes the number of extraneous variables. For example, various states have different educational programs, different levels of support for small firms, and variations in banking practices associated with financial statement requirements (Carter and Van Auken, 2005).

3.2 Variables

Dependent variable. The dependent variable measured owners' frequency of financial statement preparation. Respondents indicated how often their income statement, balance sheet, and cash budget were prepared (1 = never, 2 = monthly, 3 = quarterly, 4 = annually). These responses were gathered into a new variable, "frequency," that included the very highly correlated frequencies of preparation of the four financial statements..

Independent variables. The first independent variable in the regression analysis pertained to whether the owner used financial statements when making decisions. The variable took a value of 1 if financial statements were used in decision making and 0 if not.

The second independent variable, called "reliability" was constructed from two questions that had highly correlated responses. Owners were asked about their comfort in their ability to use financial statements to make decisions. The variable was calculated at the (arithmetic) mean value of owners' ranking (1–7 scale, 1 = not comfortable, 7 = very comfortable) of their ability to interpret an income statement, balance sheet, cash budget, expense forecast, and sales forecast. These five variables were combined into a single variable, because respondents' rankings were highly correlated. The second variable used to construct the "reliability" variable was owners' confidence in the accuracy of their financial statements (1-7 Likert Scales, 1=confident and 7=not confident).

Control variables. The two control variables used in the study were gender and size of community in which the firm operated. Both control variables were found to be associated with financial management issues in previous studies.

Gender. A number of studies (Carter et al., 2003; Chaganti, et al 1995; Coleman and Robb 2009; Neeley and Van Auken, 2010; Van Auken, 2005) indicated gender differences relative to a variety of small firm financial issues. Women are more risk averse than men (Borghans et al, 2009). Other studies found that women approach entrepreneurship differently than males, including risk tolerance and management of risk, and demonstrate less confidence in entrepreneurship than males (Kirkwood, 2009; Langowitz and Minniti, 2007). These issues may lead to gender differences in issues associated with financial management.

Community size. Van Auken (2005) found that firms located in smaller sized communities may be less sophisticated and informed than firms in larger communities. Glaeser (2007) reported that location impact entrepreneurship in several ways. Several authors (Figueredo et al., 2002; Henderson, 2002) emphasized the role of entrepreneurship relative to location, but also emphasized the disadvantages of small many firms that are located in remote locations.

4 Analysis

The results were initially summarized using univariate statistics to identify respondent characteristics. Percentages for categories were calculated for the educational level of the owner, gender, type of business, total assets, and revenue.

The Spearman correlations (Table 2) between the independent variables assessed the significance of the relationships between the control and independent variables. The Spearman correlations coefficient estimation is a non-parametric technique based on ranks rather than the value of responses. We used this non-parametric technique because of our uncertainty about the population distribution. Because no significant correlations appeared among the independent variables, multicollinearity was not a problem.

Table 1. Spearman correlations between variables (n = 312)

Variables	Gender	Community Size	Used to Make Decisions	Reliability
Gender	1.0			
Community size	0.107	1.0		
Used to make decisions	-0.020	-0.083	1.0	
Reliability	-0.093	-0.0210	-0.277	1.0

Regression analysis is commonly used in entrepreneurship research, because it appears to be the most suitable method for understanding the relationship between dependent and independent variables. It is especially relevant for analyzing how the dependent variable changes as the independent variable shifts. We thus used two regression models: a generalized least squares model when owners' comfort in using financial statements was the dependent variable and a logit regression model when the owner's actual use of financial statements was the dependent variable.

Generalized least squares analysis examined the relationship between the frequency of financial statement preparation (dependent variable; never, monthly, quarterly, yearly) 1–7 Likert scale ranking) and gender, size of community (<5000, 5001 – 10,000, 10,001-25,000, 25,001 – 50000 and >50,000) , whether financial statements are used to make decisions (yes/no), and reliability of use (confidence in accuracy of financial statements (1-7 Likert Scale, 1= very confident and 7= not confident) + comfort in ability to interpret financial statements (1-7 Likert Scale, 1= very comfortable and 7=not comfortable).

The regression model was follows:

$$FSP = a_0 + b_1\text{Gender} + b_2\text{CS} + b_3\text{Used} + b_4\text{Rel}$$

where:

FSP = frequency of financial statement preparations

Gender = gender of respondent

Used = whether financial statements were used to make decisions

Rel = owner comfort in using financial statements + owner comfort in interpreting financial statements

5 Results

5.1 Sample characteristics

Table 2 shows the percentage of respondents by category. Less than one-half of the respondents' highest educational level was high school. Just over half of the respondents had a bachelors or graduate degree. About two-thirds of the business owners were male. Almost one-half of the firms were organized as sole proprietorships, followed by corporations (17.1%) and partnerships (16.8%). About 37.9% of respondents were retail and about 42.1% were service firms. Approximately 33.6% of responding firms had total assets greater than \$100,000. The distribution of other firms among the various size categories was similar. The total revenue of about 39.1% was greater than \$100,000, and the distribution of firms among the various other categories was similar.

Table 2. Characteristics of responding firms (n = 312)

<i>Educational level</i>	Percent
High school	43.4
Bachelors degree	35.7
Graduate degree	16.1
Other	4.8
<i>Gender</i>	
Female	34.6
Male	65.4
<i>Legal structure</i>	
Sole proprietorship	49.3
Partnership	16.8
S-Corp	7.1
Corporation	17.1
LLC	9.6
<i>Type of business</i>	
Retail	37.9
Services	42.1

Agricultural	5.1
Manufacturing	6.8
Other	6.8
Total assets	
< \$10,001	17.7
\$10,001-\$25,000	10.5
25,001-50,000	11.2
50,001-75,000	14.8
75,001-100,000	11.2
\$100,000	33.6
Revenue	
< \$10,001	15.9
\$10,001-\$50,000	26.5
\$50,000-\$100,000	18.2
>\$100,000	39.1

5.2 Regression analysis

The regression results in Table 3 ($F = 10.65$, significant at 1%; $R^2 = 25.11$) show the association between frequency of financial statement preparation and (1) gender, (2) community size, (3) whether financial statements are used in decision-making and (4) respondent assessment of their financial statement reliability. The coefficient for whether financial statements are used to make decisions (coefficient=1.009, significant at 1%) is directly associated with the frequency of financial statement preparation. The more frequently financial statements are used to make decisions, the more frequently the financial statements are prepared. Conversely, the less frequently financial statements are used to make decisions, the less frequently the financial statements are prepared. This finding provides support for H1 – frequency of financial statement preparation is directly associated with whether financial statements are used to make decisions.

Table 3. Least squares regression analysis with frequency of financial statement preparation as dependent variable ($n = 312$)

Variables	Coefficient
Intercept	6.543 ***
Gender	- 0.770 ***
Community size	0.476 ***
Used to make decisions	1.009 ***
Reliability	- 0.772 ***

Notes: $F = 10.65$ *** - *** Significant at 1%

Financial assessment of decisions is often a central issue, because of the potential

financial risk exposure. Firms that have their financial statements prepared more frequently may better understand the informational value of the financial statements than firms that have their financial statements prepared less often. Firms recognizing the informational value of financial statements probably use them when making decisions. This finding reflects recognition of the value and importance of the financial statements when making decisions.

The coefficient for reliability (coefficient = -0.772, significant at 1%) is indirectly associated with the frequency of financial statement preparation. The higher the reliability ranking indicates less frequent statement preparation. The lower the reliability ranking indicates more frequent preparation of statements. This finding provides support for H2 - the frequency of financial statement preparation is directly associated with whether financial statements are used to make decisions.

Owners who are more confident in the reliability of their financial statements may have the sophistication to understand the relevance of good financial statements. Financially sophisticated owners would be expected to demand financial statements that are reliable while less sophisticated owners may not understand the importance of reliable financial statements. Financially sophisticated owners would require that their financial statements be reliable so they could use the financial information to aid decision making.

The two control variables used in the regression were gender (coefficient = -0.770, significant at 1%) and community size (coefficient = 0.476, significant = 1%). These results indicate that firms owned by females have financial statements prepared more often than firms owned by males. The results also show that size of community in which the firm is located is directly associated with frequency of financial statement preparation. Firms in larger communities have financial statements prepared more often than firms in smaller communities.

6 Discussion

Financial statements provide some of the most basic and important information when making decisions. Good financial decisions are predicated on reliable financial information and an ability to understand financial statements. Ineffective decisions can lead to poor financial management and, ultimately, distress/failure (Headd, 2003). Effective use of financial statements when making decisions can lead to improved financial management and position the firm to remain viable. Even with reliable information, being able to understand and interpret financial statements is a prerequisite for effective decision making.

Understanding what factors affect the frequency of financial statement preparation is important because of the information value of financial statements. Firm decisions have the potential to improve success or lead to failure. Financial risk, especially important to evaluate, can be evaluated using financial statements. Better financial information is possible through more current and valid financial statements, and better financial information can lead to better quality decisions.

The findings of this study provide greater insight into what factors influence how often small firm prepare financial statements. The dependent variable used in the

study was the frequency of financial statement preparation. Financial statements were selected because of their important role in the financial management of small firms (Carraher and Van Auken, forthcoming; McMahon, 2001; Timmons and Spinelli, 2004).

Two of the most important consideration affecting the frequency of financial statement preparation is whether they are used to make decisions and owners' confidence in their reliability. The finding showed that both factors were associated with the frequency of preparation. The positive association between frequency of preparation and whether the financial statements were used to make decisions suggests that owners recognized the information value of the financial statements. More frequently prepared financial statements deliver more current information that can be used to better assess risk exposure and decision consequences. Owners who have financial statements prepared less frequently apparently do not recognize the informational value contained in the financial reports and associated potential value of the information when making decisions. Of course, the frequency of financial statement preparation does not guarantee good decisions by owners (Shields, 2010; Timmons and Spinelli, 2004). The quality of their analysis of the financial information and their effective implementation are pivotal issues affecting decision quality (Carraher and Van Auken, forthcoming).

The results also show that frequency of financial statement preparation was associated with owners' believe in financial statement reliability (comfort in using/confidence in accuracy). The relationship indicated that financial statements were prepared more frequently if owner had less confidence in their reliability. This finding is consistent with Carraher and Van Auken (forthcoming), Neeley and Van Auken (2010) and Busenitz and Barney (1997) who emphasize the importance of good financial information in a timely manner. Better and more reliable information can be obtained from more current financial statements.

Owners who have financial statements prepared more frequently may be more financially sophisticated and more fully understand the informational value of good/current financial information. On-the-other-hand, owners who are not confident in their statements may simply opt to not spend time and money on having their statements prepared. Alternatively, these owners may simply not be very sophisticated and not recognize the informational value of current financial statements.

Having confidence in the reliability of financial statements and high frequency of preparation suggests that owners understand the importance of financial information. Carraher and Van Auken (forthcoming) found that confidence of financial statements was directly associated with using them to make decision. Owners may still rely on advisors to draw conclusions about the information in the financial statements while using their own judgment and analysis. On the flip side, they may be not having confidence in the reliability of their financial statements apparently limits the frequency of preparation (e.g. why have them prepared if they are not reliable) This sequence matches behavioral finance theory, in which decision makers form beliefs that influence their practice (Barberis and Thaler, 2002; Ritter, 2003).

The results also found that frequency of financial statement preparation was negatively associated with gender in that frequency of financial statement preparation

was more common among male-owned firms than female-owned firms. Gender was previously associated with small firm financial decision in studies by Neeley and Van Auken (2010), Cassar (2009), Carter et al. (2003), and Coleman (2002).

The results also showed that frequency of financial statement preparation was positively associated with community size. Financial statements were prepared more frequently by small firms located in larger communities than in smaller communities. Van Auken (2000) reported that firms in smaller communities may be more isolated and have less access to resources, and that small firms in larger communities had a better understanding of financial management issues than firms in smaller communities. Lang, Calantone and Gudmundson (1997) believe that small firms must rely on external expertise, often not available in small communities, when developing business strategies. A better understanding of financial issues would likely lead to more frequent preparation and use of financial statements. Conversely, a weaker understanding of financial issues would likely lead to less frequent preparation and use of financial statements.

7 Conclusions

This analysis of the factors associated with how often financial statements are prepared is based on a sample of 312 SMEs located in a southwestern US state. Few studies previous have examined the financial statements and their use among owners of SMEs. This article therefore is important, considering the critical role of financial statements for stakeholders and the financial impact of owners' decisions on firm sustainability.

Owners who use financial statements to make decision also have their financial statements prepared more often but have less confidence in the reliability of their financial statements. The financial statements are also prepared more frequently by women owners and by firms in smaller communities. These findings may be due to owners needing more current financial statements when making decisions, but also because owners who are not confident in their financial statements would not want to waste time with unreliable information. Training to ensure that owners understand financial statements can affect how the financial information is used in decision making. A better understanding of the informational value of financial statements will likely lead to more frequent preparation. Financial statements more likely to be prepared more frequently if the owners better understand the information value and use the financial information for making decisions as well as having confidence in the reliability of their financial statements.

The results of the study should be useful for owners of SMEs and providers of services to SMEs. Financial statements provide important information that should be used, both by external evaluators and internally, to help guide decisions. Both owners and providers of services can use the information to understand which factors affect their use of financial statements. Such an understanding of what factors have this influence may improve the process by which financial statements get incorporated into decisions.

The limitations of this study provide avenues for further research. The study could be

expanded to other areas of the world to explore differences by region, ethnicity, type of business, etc. The issue of frequency of financial statement preparation, use of financial statements and firm performance could be both interesting and useful in practice. The data was collected at a single point in time. A longitudinal study could provide further evidence regarding what other factors influence how and how often financial statements are prepared, especially factors associated with a firm's maturity as well as over the business cycle.

References

- Ang, J. S. (2007). On the Theory of Finance for Privately Held Firms, *Journal of Small Business Finance*, 1(3), 185-203.
- Avery, R. B., Bostic, R. W., & Samolyk, K. A. (1998). The Role of Personal Wealth in Small Business Finance, *Journal of Banking & Finance*, 22(6), 1019-1061.
- Barberis, N., & Thaler, R. (2002). A Survey of Behavioral Finance. Cambridge, MA: National Bureau of Economic Research, Working Paper #922.
- Berger, A. N., & Udell, G. F. (1998). The Economics of Small Business Finance: The roles of Private Equity and Debt Markets in the Financial Growth Cycle, *Journal of Banking & Finance*, 22(6), 613-673.
- Borghans, L., Golsteyn, B., Heckman, J. J. & Meijers, H. (2009). Gender Differences in Risk Aversion and Ambiguity Aversion, National Bureau of Economic Research, NBER Working Paper No. 14713.
- Breen, J., Sciulli, N., & Calvert, C. (2004). The Role of the External Accountant in Small Firms, *Small Enterprise Research*, 12(1), 5-14.
- Bruns Jr, W. J., & McKinnon, S. M. (1993). Information and Managers: A Field Study, *Journal of Management Accounting Research*, 5, 84-108.
- Busenitz, L. W., & Barney, J. B. (1997). Differences Between Entrepreneurs and Managers in Large Organizations: Biases and Heuristics in Strategic Decision-Making, *Journal of Business Venturing*, 12(1), 9-30.
- Busenitz, L. W., West, G. P., Shepherd, D., Nelson, T., Chandler, G. N. & Zacharakis, A. (2003). Entrepreneurship Research in Emergence: Past Trends and Future Directions, *Journal of Management*, 29(3), 285-308.
- Byers, S. S., Groth J. C., & Wiley, M. K. (1997). Managing Operating Assets to Create Value, *Management Decision*, 35(2), 133-142.
- Carraher, S., & Van Auken, H. (2013). The Use of Financial Statements for Decision Making by Small Firms. *Journal of Small Business & Entrepreneurship*, 26(3), 323-336.
- Carter, N., Brush C., Greene P., Gatewood, E., & Hart, M. (2003) Women Entrepreneurs Who Break Through to Equity Financing: the Influence of Human, Social and Financial Capital, *Venture Capital: an international journal of entrepreneurial finance*, 5(1), 1-28.
- Carter, R. B., & Van Auken, H. E. (2005) Bootstrap Financing and Owners' Perception of Their Business Constraints and Opportunities, *Entrepreneurship &*

- Regional Development*, 17(2), 129-144.
- Cassar, G. (2004). The Financing of Business Start-ups, *Journal of Business Venturing*, 19(2), 261-283.
- Cassar, G. (2008). Financial Statement and Projection Preparation in Start-Up Ventures, available at SSRN 1153673.
- Cassar, G. (2009). Financial Statement and Projection Preparation in Start-Up Ventures, *The Accounting Review*, 84(1), 27-51.
- Cassar, G., & Ittner, C. D. (2008). Initial Retention of External Accountants in Startup Ventures. Available at <http://ssrn.com/abstract=1320697>.
- Chaganti, R., DeCarolis, D. & Deeds, D. (1995). Predictors of Capital Structure in Small Ventures, *Entrepreneurship Theory and Practice*, 20, 7-18.
- Coleman, S. (2002). Characteristics and Borrowing Behavior of Small, Women-Owned Firms: Evidence from the 1998 Survey of Small Business Finances, *Journal of Small Business and Entrepreneurship*, 14(2), 151-166.
- Coleman, S. & Cohn, R. (2000). Small Firms' Use of Financial Leverage: Evidence from the 1993 National Survey of Small Business Finance, *Journal of Business Entrepreneurship*, 12(3), 81-98.
- Figueiredo, O., Guimarães P., & Woodward, D. (2002). Home-field advantage: location decisions of Portuguese entrepreneurs. *Journal of Urban Economics*, 52 (2), 341-361.
- Glaeser, E. L. (2007). Entrepreneurship and the City. Washington, D.C.: National Bureau of Economic Research, NBER Working Paper No. 13551.
- Glaeser, E. L., Rosenthal S. S. & Strange W. C. (2010). Urban Economics and Entrepreneurship, *Journal of Urban Economics*, 67(1), 1-14.
- Gooderham, P. N., Tobiassen, A., Døving E., & Nordhaug O. (2004). Accountants as Sources of Business Advice for Small Firms, *International Small Business Journal*, 22(1), 5-22.
- Halabi, A. K., Barrett R., & Dyt, R. (2010). Understanding Financial Information Used to Assess Small Firm Performance: An Australian Qualitative Study, *Qualitative Research in Accounting & Management*, 7(2), 163-179.
- Headd, B. (2003). Redefining Business Success: Distinguishing Between Closure and Failure, *Small Business Economics*, 21(1), 51-61.
- Henderson, J. (2002). Building the Rural Economy with High-Growth Entrepreneurs, *Economic Review-Federal Reserve Bank of Kansas City*, 87 (3), 45-75.
- Holmes, S., & Nicholls, D. (1988). An Analysis of the Use of Accounting Information by Australian Small Business, *Journal of Small Business Management*, 26(2), 57-68.
- Horngrén, C., Datar, S., Foster, G., Rajan, M., & Ittner, C. (2009). *Cost Accounting: A Managerial Emphasis* (13th ed), Upper Saddle River, NJ: Pearson Prentice Hall.
- Kirkwood, J. (2009). Is a Lack of Self-Confidence Hindering Women Entrepreneurs?, *International Journal of Gender and Entrepreneurship*, 1(2), 118-133.

- Kuratko, D. F., Hornsby J. S., & Naffziger D. W. (1997). An Examination of Owner's Goals in Sustaining Entrepreneurship, *Journal of Small Business Management*, 35(1), 24-33.
- Landier, A., & Thesmar, D. (2009). Financial Contracting with Optimistic Entrepreneurs, *Review of Financial Studies*, 22 (1), 117-150.
- Lang, J. R., Calantone, R. J., & Gudmundson, D. (1997). Small Firm Information Seeking as a Response to Environmental Threats and Opportunities, *Journal of Small Business Management*, 35, 11-23.
- McMahon, R. G. P. (2001). Business Growth and Performance and the Financial Reporting Practices of Australian Manufacturing SMEs, *Journal of Small Business Management*, 39(2), 152-164.
- McMahon, R. G. P., & Stanger, A. M. J. (1995). Understanding the Small Enterprise Financial Objective Function. *Entrepreneurship Theory and Practice*, 19(4), 21-40.
- Neeley, L., & Van Auken, H. (2010). Differences Between Female and Male Entrepreneurs' Use of Bootstrap Financing, *Journal of Developmental Entrepreneurship*, 15(1), 19-34.
- O'Regan, N., & Sims, M. A. (2008). Identifying High Technology Small Firms: a Sectoral Analysis, *Technovation*, 28(7), 408-423.
- Petty, J., & Bygrave, W. (1993). What Does Finance Have to Say to the Entrepreneur., *The Journal of Small Business Finance*, 2(2), 125-137.
- Ritter, J. R. (2003). Behavioral Finance, *Pacific-Basin Finance Journal*, 11(4), 429-437.
- Romano, C. A. & Ratnatunga, J. (1994). Growth Stages of Small Manufacturing Firms: The Relationship with Planning and Control. *The British Accounting Review*, 26(2), 173-195.
- Romano, C. A., Tanewski G. A. & Smyrnios, K. X. 2001. Capital Structure Decision Making: A Model for Family Business, *Journal of Business Venturing*, 16(3), 285-310.
- Shields, J. (2010). Small Business Use of Management Accounting Reports. *Paper presented at Small Business Institute Annual Conference*, at St Petersburg, Florida.
- Sian, S. & Roberts, S. (2009). UK Small Owner-Managed Businesses: Accounting and Financial Reporting Needs, *Journal of Small Business and Enterprise Development*, 16(2), 289-305.
- Smallbone, D., North, D., & Leigh, R. (1993). The Use of External Assistance by Mature SMEs in the UK: Some Policy Implications. *Entrepreneurship & Regional Development*, 5(3), 279-295.
- Smith, S. (2011). Beg, Borrow, and Deal? Entrepreneurs' Choice of Financing and New Firm Innovation. Available from: <http://ssrn.com/abstract=1573685>.
- Timmons, J. A., & Spinelli, Jr., S. (2004). *New Venture Creation Entrepreneurship for the 21st Century*. Vol. 6th. Chicago: Irwin.
- Van Auken, H. E. (2000). The Familiarity of Small Technology-Based Business

- Owners with Sources of Capital: Impact of Location and Capitalization. *Journal of Small Business Strategy*, 99 (Fall/Winter), 33-47.
- Van Auken, H. E. (2001). Financing Small Technology-Based Companies: The Relationship between Familiarity with Capital and Ability to Price and Negotiate Investment, *Journal of small business Management*, 39 (3), 240-258.
- Van Auken, H. E. (2005). A Model of Small Firm Capital Acquisition Decisions, *The International Entrepreneurship and Management Journal*, 1(3), 335-352.
- Van Gils, A. (2005). Management and Governance in Dutch SMEs, *European Management Journal*, 23(5), 583-589.
- Van Praag, C. M. (2003). Business Survival and Success of Young Small Business Owners, *Small Business Economics*, 21(1), 1-17.
- Watson, J. (2002). Comparing the Performance of Male-and Female-Controlled Businesses: Relating Outputs to Inputs, *Entrepreneurship Theory and Practice*, 26(3), 91-100.
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial Orientation and Small Business Performance: a Configurational Approach, *Journal of Business Venturing*, 20 (1), 71-91.