INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI

films the text directly from the original or copy submitted. Thus, some

thesis and dissertation copies are in typewriter face, while others may be

from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the

copy submitted. Broken or indistinct print, colored or poor quality

illustrations and photographs, print bleedthrough, substandard margins,

and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete

manuscript and there are missing pages, these will be noted. Also, if

unauthorized copyright material had to be removed, a note will indicate

the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by

sectioning the original, beginning at the upper left-hand corner and

continuing from left to right in equal sections with small overlaps. Each

original is also photographed in one exposure and is included in reduced

form at the back of the book.

Photographs included in the original manuscript have been reproduced

xerographically in this copy. Higher quality 6" x 9" black and white

photographic prints are available for any photographs or illustrations

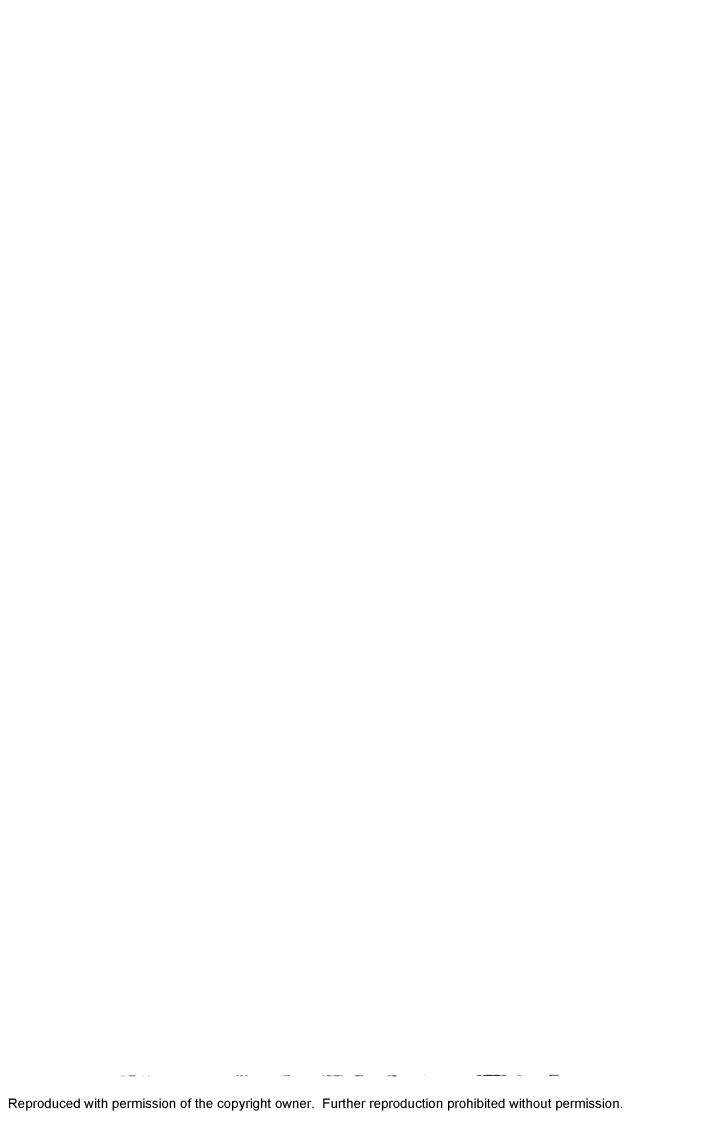
appearing in this copy for an additional charge. Contact UMI directly to

order.

UMI

A Bell & Howell Information Company 300 North Zeeb Road, Ann Arbor MI 48106-1346 USA

313/761-4700 800/521-0600



A Locational Perspective on the Competitiveness of Small- and Medium-sized Accounting Firms: An Empirical View from New York State

> by Jayanti Sarkar Sen April 1997

Advisor Dr. Alan D. MacPherson

A dissertation submitted to the Faculty of the Graduate School of State University of New York at Buffalo in partial fulfillment of the requirements for the Degree of Doctor of Philosophy UMI Number: 9801344

Copyright 1998 by Sen, Jayanti Sarkar

All rights reserved.

UMI Microform 9801344 Copyright 1997, by UMI Company. All rights reserved.

This microform edition is protected against unauthorized copying under Title 17, United States Code.

300 North Zeeb Road Ann Arbor, MI 48103 **DISSERTATION ABSTRACT**

Title: A Locational Perspective on the Competitiveness of Small- and Medium-

sized Accounting Firms: An Empirical View from New York State

Author: Jayanti Sarkar Sen

Advisor: Dr. Alan D. MacPherson

This dissertation explores the main opportunities and obstacles that small- and medium-

sized accounting firms (SMFs) face in a changing and competitive environment.

Specifically, the main objective is to assess the role of location, regional demand structure,

and market diversification in the commercial performance of accounting SMFs. Inter-firm

networking and promotional strategies are also investigated.

The dissertation begins with an overview of academic literature that emphasizes

the contribution of producer services to regional development, as well as the unique

characteristic of this sector in reinforcing the central place hierarchy of most urban

systems. The advent of information technology is also claimed to increase the accessibility

of non-local or foreign markets to producer service firms of all sizes. A description of the

background of the public accounting industry is also provided.

A sampling procedure for analyzing the organizational and performance

characteristics of New York State's public accounting SMFs is described. Questionnaire

responses from a postal survey of 180 accounting firms across New York State are then

analyzed. Contrary to popular opinion, evidence from the survey indicates that locational

factors play an almost negligible role in the strategic behavior of these firms. Moreover,

the data suggest that most of these SMFs have only recently been exploring international

markets. The results of the survey also show that accounting SMFs have not been

i

following the leaders of the industry (the 'Big Six' conglomerates) in diversifying their output into non-accounting services such as management consulting. It is argued that non-local markets, especially foreign ones, are not easily tapped by these small firms. Further, it is argued that the recent literature on producer service export activity must be tempered by a more detailed consideration of the types of firms that operate within this service sector.

The dissertation concludes with a discussion of possible barriers affecting the SMF component of the public accounting industry in entering into new functional and geographic markets. Finally, a temporal perspective is suggested for future research on this sector, if only because SMFs with very little or no international involvement today may become specialized players in the global markets in the next century.

ACKNOWLEDGMENTS

This dissertation could not have been completed without the assistance of numerous firms, advisors, friends, and family members. Within the Department of Geography at the State University of New York at Buffalo, I owe a special debt of gratitude to Professor Alan MacPherson for his infinite encouragement and guidance. I am also immensely grateful to Professors Sharmistha Bagchi-Sen and James McConnell for their continuous support and direction. Moreover, helpful comments and advice from Dr. James W. Harrington, Jr. of George Mason University must be acknowledged.

I owe special thanks to the professionals from the one hundred and eighty public accounting firms who participated in the project. Without their willingness to respond to the survey, this dissertation would never have been possible. Particular thanks are due to Mr. Peter Bellanti of Fiddler and Company for endorsing my survey and to Mr. Stanley Kicinski of Kicinski and Stolzenburg and Mr. Gary Kanaley of Magavern, Kanaley, Rich, and Bencini for taking the time to review my questionnaire amidst their demanding schedule.

Special thanks are also due to my colleague and friend, Professor Linda Hall of D'Youville College, for her emotional support throughout the PhD program. I must acknowledge the encouragement I received from my parents and friends, especially Dr. Jharna Basak. I could not have accomplished this immense task without the unlimited cooperation and encouragement I received from my son Atanu and my brother Ranajit. Last but most important, I cannot find the appropriate words of gratitude and emotion I feel for my husband Arup for always being there and having faith in my abilities.

iii

Table of Contents

<u>.</u>	rage
Chapter 1: INTRODUCTION	1
Scope and organization of chapters	2
Research context	3
Background of the professional accounting sector	13
Summary	18
Chapter endnotes	19
Chapter 2: RESEARCH HYPOTHESES AND METHODOLOGY	20
Economic performance and functional diversification	20
Influence of location	24
Influence of firm size and promotional tools	25
Economic performance, geographic diversification and	
service delivery methods	27
International involvement	28
Location and international orientation	29
Networking and international involvement	31
THE SURVEY PROCESS	36
Structure of the questionnaire	36
The questionnaire survey	38
Summary	42
Chapter endnotes	44

Table of Contents (continued)

	<u>Page</u>
Chapter 3: FIRM PROFILE	. 46
General characteristics	. 46
Diversification	. 56
Delivery methods	. 59
Promotional tools	59
International activities	64
Barriers to internationalization	67
Collaboration	69
Other competitive information	70
Client types	72
Summary	75
Chapter 4: RESEARCH HYPOTHESES AND RESULTS	77
Economic performance and functional diversification	77
Location and functional diversification	83
Geographic diversification, economic performance,	
and location	87
Delivery methods	90
International activities	93
Summary	99

Table of Contents (continued)

	<u>Page</u>
Chapter 5: IMPLICATIONS OF THE EMPIRICAL RESULTS	100
Lack of functional diversification and	
internationalization	101
Economic performance	105
Location	106
LIMITATIONS OF THE STUDY	107
SUMMARY AND CONCLUSIONS	109
FUTURE RESEARCH IMPLICATIONS	113
Bibliography	115
Annendix 1: Mail-out questionnaire	124

List of Tables

Table No.	Table Title	<u>Page</u>
1	Response Rate Disaggregated by City	41
2	Firm Characteristics by Region	47
3	Employment Information	49
4	Summary Statistics for the Sample of	
	Firms by Region	50
5	Revenue Growth by Region	53
6	Income Growth by Region	53
7a	Firm Size by Region for 1990	55
7b	Firm size by Region for 1995	55
8	Share of Revenue (Mean % by Region)	57
9	Geographic Distribution of Revenue	58
10	Delivery Methods - Traditional Services	60
11	Delivery Methods - Non-traditional Services	60
12	Promotional Tools Used	61
13	Importance of Promotional Tools	63
14	International Activities	66
15	Barriers to Internationalization	68

List of Tables (continued)

<u>Table No.</u>	Table Title	<u>Page</u>
16	Competitors - Client Gains and Losses	71
17	Most Frequent Reason for Client Losses	73
18	Forward Linkages for Non-Traditional Services	74
19	Age of Firm by Revenue Growth	78
20	Age of Firm by Firm Size (1990)	79
21	Age of Firm by Firm Size (1995)	80
22	Revenue Growth by Degree of Functional	
	Diversification	81
23	Degree of Functional Diversification by Region	84
24	Firm Size by Degree of Functional Diversification for 1995	84
25	Perceived Importance of Promotional Tools by	
	Degree of Functional Diversification	86
26	Degree of Geographic Diversification by Region	88
27	Change in the Degree of Geographic Diversification	
	by Region 1990-1995	88

List of Tables (continued)

Table No.	Table Title	<u>Page</u>
28	Revenue Growth by Degree of Geographic	
	Diversification	89
29	Significance Tests on Delivery Methods	
	Traditional Services	91
30	Significance Tests on Delivery Methods	
	Non-traditional Services	92
31	Degree of International Involvement by Firm Size (1995):	
	Serving Foreign Clients	95
32	Degree of International Involvement by Region:	
	Serving Foreign Clients	95
33	Perceived Importance of Promotional Tools by	
	Degree of International involvement:	
	Serving Foreign Clients	96
34	Summary of Results	98
35	Percent of Firms Offering Non-traditional Services	102

List of Figures

Figure No.	Figure Title	Page
1	Summary of Key Concerns for SMFs	
	in the Public Accounting Sector	12
2	Summary of Research Hypotheses	35
3	Summary of Questionnaire Structure	37
4	Office Networks of Firms in the Sample	48
5	Average Revenue and Average Net Income	52
6	Revenue Derived from Serving Foreign Clients	65
7	Perceived as Significant Barriers to Internationalization	67

Chapter 1

INTRODUCTION

The purpose of this dissertation is to assess the role of location, regional demand structure, and market diversification in the commercial performance of small- and medium-sized New York State (NYS) certified public accounting (CPA) firms. A central goal of the inquiry is to examine the extent to which these firms have internationalized their business operations in the 1990s. A further goal is to assess the role of inter-firm networking (collaboration) in company performance. Four main empirical questions are tackled in the chapters which follow. First, does the economic performance of accounting SMFs depend upon the degree of market diversification (functional and geographical)? Second, does market diversification and/or international business involvement depend upon a firm's location within the NYS urban system? Third, what other factors (obstacles and opportunities) influence SMF diversification? And, fourth, is strategic networking a significant feature of small- and medium-sized accounting firms (SMFs) in procuring international business? Data for the project come from a locationally structured postal survey of SMFs across the main urban centers of New York State, including Albany, Syracuse, Binghamton, Buffalo, Rochester, and New York City.

The inquiry was motivated by a number of broad empirical questions concerning the potential regional economic role of small- and medium-sized accounting firms. For instance, the public accounting industry is widely recognized as an important part of the producer services sector (Beyers and Lindahl, 1994; Daniels et al., 1992; Harrington et

ı

al., 1991). This rapidly growing sector consists of service establishments that primarily deliver intermediate inputs to other business organizations (Greenfield, 1966). Significantly, these inputs are typically information or knowledge-based in nature, and are thus highly transportable (Coffey and Drolet, 1996). Across most of the industrialized nations, moreover, this sector is increasingly viewed as an essential component of almost any region's economic base (Coffey, 1995; Daniels, 1995; Harrington, 1995a).

A second motivating factor for the inquiry is that SMFs have become important generators of new jobs across all sectors of economic activity (Birch, 1987; Lyons, 1995), including services (Beyers, 1991). To date, however, the economic role of public accounting firms in regional economic development has not been rigorously examined in the academic literature on producer services. With the notable exception of Kuechler (1996), there is a marked paucity of detailed empirical work on the employment, market, and organizational characteristics of SMFs in the public accounting sector. At the same time, virtually no empirical research has been conducted on possible regional variations in the attributes of such firms. This dissertation seeks to redress these research omissions by exploring the spatial and structural features of New York State SMFs outside the corporate size class.

SCOPE AND ORGANIZATION OF CHAPTERS

This dissertation is organized as follows. Chapter 1 provides a general context for the inquiry, as well as a series of key research issues. Chapter 2 presents a set of hypotheses,

along with a discussion of the research methodology. Chapter 3 gives an overview of the main empirical findings, notably with regard to regional and structural patterns. The research hypotheses are discussed and tested in Chapter 4, while Chapter 5 discusses the implications and significance of the empirical findings. Chapter 5 also presents a set of general conclusions, as well as a brief description of the main strengths and weaknesses of the dissertation. This final chapter also suggests new directions for future research on this sector.

RESEARCH CONTEXT

In the past decade, the role of producer services in accelerating regional economic growth in developed economies has captured the attention of numerous economists and geographers (Beyers and Lindahl, 1994; Coffey and Bailly, 1993; MacPherson, 1991; Coffey and Polèse, 1987; Illeris, 1989; Daniels, 1982; Marshall et al., 1987; Noyelle and Stanback, 1984). Producer services are intermediate-demand functions that serve as inputs into the production of other goods or services (see Greenfield, 1966). Several authors have suggested that advanced producer services can strengthen the efficiency of operation and the value of output at various stages of the production process (Coffey and Drolet, 1996; Harrington, 1995b; Dicken, 1992). From a modeling perspective, for example, Lentnek et al. (1992) have shown that rational firms will search for external input provision whenever the relative costs of in-house supply are higher. From an empirical standpoint, moreover, numerous researchers have demonstrated how producer service firms may help other firms in improving cost efficiency and revenue performance

by introducing better marketing tools (Sinkula, 1990), enhanced business software (Phillips, 1995), better ways of doing business (i.e., management consulting) (Berman, 1995; O'Farrell et al., 1995), new or better products through innovative research and development (O'Conner, 1994), new target markets through niche advertising (Beyers and Lindahl, 1994), or new export markets through export counseling (Kleinschmidt and Cooper, 1990).

Currently, researchers are also investigating the contribution of producer services in shaping territorial disparities and affecting the ranking of cities within the hierarchical sub-systems to which they belong (Senn, 1993). Advances in telecommunications and information technology have improved the tradeability of these services across regions and national borders (Goe, 1990). In addition, the globalization of developed economies has instigated expanded interest in the internationalization of producer services (O'Farrell et al., 1995; Daniels, 1993; Erramilli and Rao, 1993; Harrington, 1992; O'Farrell and Hitchens, 1990; Dunning, 1979). In accounting services, one of the main subsectors of producer services, most studies have focused upon large multinational firms (Beaverstock, 1991; Noyelle, 1990; Daniels et al., 1989). However, there is a shortage of academic research on the geography of small- and medium-sized accounting firms.

The broader literature on producer services suggests a number of common themes that may be relevant to the topic at hand. It is now well accepted in the academic literature that the purpose of producer service activity is to support the operational needs of business and/or institutional clients across all sectors of the economy. Their contribution in accelerating the process of regional growth depends upon the degree of

this functional interdependence with other parts of the economy (Senn and Gorla, 1993). Certain types of producer services such as banking, legal, accounting, or computer and management consulting depend on proximity to their customers because of the thorough knowledge base required of their customers' needs (O'hUallachain, 1991).

In addition to contributing to regional economic development, however, producer service activity has tended to reinforce the central place hierarchies that characterize most urban systems (Esparza and Krmenec, 1993; Pred, 1977). Higher order producer services such as management consulting require access to a substantial client-base in order to survive. Therefore, they typically locate in larger cities to reduce uncertainty and contribute to the attraction of new demand. In turn, they give rise to agglomeration economies among services. Where services are utilized by other services, a development of 'tertiary activities for tertiary activities' occurs (Momigliano and Siniscalco, 1980). For example, the volume and quality of consulting services depends upon the existence of telecommunication networks; professional and training services are linked to research services; and informational networks are associated with marketing services. Thus, each city, in relation to its position on the urban hierarchy, attracts and/or generates a volume and quality-mix of services that reflects its market size, agglomeration economies, and the supply of skilled labor (Illeris, 1994).

These factors contribute to a stronger element of attraction for intermediate services to locate in higher ranking cities, resulting in a cumulative causation process: fast-growing and/or first-tier cities attract higher order services, and those services often reinforce the growth of the primate cities (Daniels et al., 1992; Sheets et al., 1987; Burns

and Healy, 1978). Close contact with clients, repeat business, and word-of-mouth referrals become crucial elements for survival and growth of advanced producer service firms, especially those in the SMF class. Such elements "are particularly fostered in regions where large organisations tend to concentrate high-level functions" (Wood et. al, p. 680, 1993) and in turn, may give rise to marked regional diversity in the demand, supply, and operational characteristics of this sector.

Recent evidence from the United Kingdom confirm the existence of such territorial disparities within the SMF sector of advanced producer services, notably among business service firms (O'Farrell et al., 1996; Wood et al., 1993; O'Farrell et al., 1992). These authors find that business service SMFs located in peripheral regions such as Scotland face less discriminating and sophisticated demand for services than their counterparts in the South East of England that enjoy the benefits of a primate city like London. Moreover, "the South East offers the major national concentration of highly educated and experienced individuals, forming the basis for a wide variety of business service expertise" (O'Farrell et al., p.5, 1996). In an earlier survey, O'Farrell et al. (1993) found that the depth of professionalism among the staff of business service firms (for example, staff with graduate level degrees) varied more across regions than by industry. On this note, the combined effect of such demand and supply conditions could enhance opportunities for firms in first-tier cities to offer more high value added activities such as management consulting at home and abroad than firms located in lower tier cities.

Another factor that may contribute to regional differences in the characteristics of producer service SMFs is the spinning off effect from large established service

conglomerates located in primate cities (Wood et al. 1991). In the public accounting industry, the 'Big Six' firms have established expertise and reputation in providing non-accounting services to clients domestically and abroad (Bagchi-Sen and Sen, 1997). Professionals employed by these large firms with headquarters located in primate cities such as New York City (Willis et al., 1997) have more opportunities to gain expertise in non-accounting services (for example, management consulting, market feasibility studies, or business valuation) than employees in the branches of these firms or smaller firms located in second-tier cities. With such developed expertise and established clientele, professionals may leave these firms to create their own businesses in close proximity to their previous employers. Bryson et al. (1993) found greater evidence of such spinning off activities in inner London and the Southeast of England than in the more peripheral areas of northern Britain.

For SMFs in the public accounting sector, then, it can be expected that the opportunities for diversification of output into non-traditional accounting services such as management consulting or business planning might be influenced by a firm's location. For example, the owners of SMFs in a primate city such as New York may exhibit broader expertise for the creation of economies of scope than their counterparts in smaller cities such as Buffalo, Albany, or Binghamton. Empirical examples of this type of locational variability can be found in the U.K. (O'Farrell et al., 1996).

In terms of the geographic spread of demand, however, the increased tradeability of services has been claimed to increase the accessibility of non-local or foreign markets to producer service firms of all sizes (Beyers and Lindahl, 1994; Goe, 1990; Stabler and

Howe, 1988). Others have referred to these firms as delivering intermediate inputs that can help their clients locate, penetrate, or develop non-local markets (Chandra, 1992; Daniels, 1983). Significantly, seminal studies by Polèse (1982) and Beyers et al. (1985) suggest that small service firms can compete effectively for sales in national and/or international markets.

Having said this, it should be mentioned that not all firms in the producer services sector have the ability (or desire) to serve non-local or foreign markets. Regulatory obstacles to long-distance trade can be discerned for several producer service industries (for example, accounting, legal, and engineering services), whereas logistical barriers can be discerned for many others (for example, machinery repair, janitorial, and catering services). On balance, however, the available evidence suggests that knowledge-intensity is a fairly good predictor of the extent to which producer services of particular types can be traded over geographically extensive areas (Bagchi-Sen and Sen, 1997). The logic here is that knowledge-intensive services can often be geographically distributed via electronic means, or by moving talented people to potential clients via more traditional means (trains, planes, and automobiles).

On this note, another goal of this dissertation is to assess the extent to which non-local and/or foreign markets have become accessible to small- and medium-sized firms in the public accounting sector. This is an important and well-recognized segment of the producer services which is commercially dominated by a nucleus of only six firms (the 'Big Six' - see Endnote 1). Surrounding this nucleus are myriads of specialized SMFs that have recently been repositioning their marketing efforts toward non-local and/or

international clients (Kuechler and Bagchi-Sen, 1996). It should be kept in mind that both direct exports and the value added generated directly or indirectly in satisfying export demand must be considered to grasp the full extent of the role of producer services in regional growth (Stabler and Howe, 1988). For example, revenue generated from helping clients export and servicing foreign-owned businesses should be combined with revenue from servicing clients in another country from the home base in order to realize the true extent of the international activities handled by SMFs.

However, the question of the influence of the urban hierarchy remains somewhat equivocal in several instances. To what extent does location have a bearing upon a firm's propensity to seek non-local sources of income? The role of international trade is unquestionably significant to regional competitiveness in a globalizing economy. In the United Kingdom, O'Farrell et al. (1996) found that the training and international work experience of key personnel in business service firms in London has created a richer atmosphere for international activities and competition than in smaller cities in Scotland. Employees of producer service firms in primate cities may have developed a network of personal contacts while working in other countries and are, therefore, able to facilitate the internationalization process more efficiently than their counterparts who have always been confined to smaller cities. In the same survey, the authors (O'Farrell et al., 1996) also found that firms in Scotland were more risk averse than firms located in the South East of England regarding internationalization.

In terms of opportunities available to small- and medium-sized producer service firms for internationalization, the role of inter-firm collaborative efforts or strategic networking becomes a valid point of inquiry. Scholars in the fields of industrial marketing, regional studies, and small business development have shown a keen interest in the network perspective (Johannisson, 1995). In Sweden, in industries that are dominated by a few large firms, "small firms have been forced to collaborate horizontally by building strategic alliances or joint ventures in order to mobilize the resources needed to penetrate international markets" (Johannisson, p. 189, 1995). Networks have been shown to enhance qualitative and quantitative growth, and scholars in general agree that networks are a critical factor in small business development. Based on Danish evidence, Blenker and Christensen (1995) point out that the potential of using collaborative efforts may be quite high, especially if parties with related skill requirements from different lines of industry are selected. "Networks", therefore, could compensate for locational problems—for example, small firms in small towns might be able to internationalize if they were to "network" appropriately.

Some of the main conditions that favor network development would appear to be in place as far as the U.S. public accounting sector is concerned. For instance, the industry is dominated by a powerful oligopoly, and the domestic market for traditional accounting services has been shrinking for many years. Under these conditions, collaborative networks of complementary SMFs might afford the small business sector an opportunity to broaden its client-base. Possible networking options might include subcontracting, teamwork, joint-ventures, and/or participation in the activities of international accounting associations. A public accounting SMF located in a smaller town may be able to overcome certain locational disadvantages by joining these accounting

associations to pursue international activities (Bryson et al., 1993). Moreover, such networking may also enhance opportunities for reaching clients located in distant countries.

Set against this backdrop, the empirical chapters address the following questions in order to shed light upon the competitiveness of SMFs in the public accounting sector (see Figure 1). First, to what extent have these SMFs been diversifying their output to offer non-traditional services? Second, to what extent have they moved away from local and/or domestic markets? Third, does a firm's locational or regional context have a bearing upon its propensity to enjoy economies of scope (i.e., diversification of output) and to seek non-local sources of income? And, fourth, what are the main barriers and opportunities that face SMFs that wish to internationalize their business opportunities? But first, it is necessary to present a brief history of the industry in order to understand the current role of SMFs within the accounting sector as a whole.

Figure 1

Summary of Key Concerns for SMFs in the Public Accounting Sector

m ·	7
<u>Topic</u>	<u>Literature Base</u>
The extent of diversification of output-advanced producer services contributing to regional development	Berman, 1995; Harrington, 1995; O'Farrell et al., 1995; Phillips, 1995; Beyers and Lindahl, 1994; O'Connor, 1994; Coffey and Bailly, 1993; Dicken, 1992; Lentnek et al., 1992; MacPherson, 1991; O'hUallachain, 1991; Sinkula, 1990; Illeris, 1989; Coffey and Polise, 1987; Kleinschmidt and Cooper, 1990; Marshall et al., 1987; Noyelle and
	Stanback, 1984, Greenfield, 1966
The extent of geographic spread into non-	Bagchi-Sen and Sen, 1997; Kuechler and
local markets, especially foreign ones increased tradeability	Bagchi-Sen, 1996; Beyers and Lindahl, 1994; Daniels, 1993; Erramilli and Rao,
	1993; Chandra, 1992; Harrington et al.,
	1991; Beaverstock, 1991; Goe, 1990;
	O'Farrell and Hitchens, 1990; Noyelle,
	1990; Daniels et al., 1989; Stabler and
	Howe, 1988; Dunning, 1979
The role of location upon economies of	
scope and geographic diversification	Daniels et al., 1992; Sheet, et al., 1987;
	Momigliano and Siniscalco, 1980; Burns
	and Healy, 1978; Pred, 1977; Britton, 1974
The role of inter-firm collaborative efforts in	Blenker and Christensen, 1995;
enhancing intermediate activities and	Johannisson, 1995; Bryson et al., 1993
compensating for locational disadvantages	

BACKGROUND OF THE PROFESSIONAL ACCOUNTING SECTOR

In the United States, and in many other nations, government regulatory practices have played a pivotal role in the growth, development, and structure of the professional accounting industry. The licensed Certified Public Accountant (CPA) profession, established a century ago, gained public exposure in the US in 1933 when the Securities and Exchange Commission (SEC) was established. At this time, independent audits were required for all publicly held companies in the US. After World War II, the US manufacturing sector enjoyed a dramatic expansion which created unprecedented demand for audits and CPAs. From the 1950s to the mid 1970s, pure accounting and auditing services constituted almost all of the revenues of US accounting firms. In addition, the growth of small- and medium-sized businesses created an increased demand for accurate recordkeeping and preparation of financial statements for obtaining credit. These factors helped CPAs enjoy a period of prosperity.

Over the past two decades, however, rapid advancements in computer technology, new market demands, and growing competition has forced accounting firms to offer more specialized services, including tax planning, management consulting, and information technology services (Noyelle, 1990). This change has been invigorated by the elimination of many large accounts, notably through mergers and acquisitions. Accounting firms have also lost audit revenues because many publicly held corporations have become privately owned to avoid numerous SEC regulations such as the independent audit requirement by a CPA firm.

13

Beginning in the mid-1970s, moreover, many of the CPAs from the baby-boom generation recognized opportunities for tax preparation and accounting or bookkeeping services in the small business market and began exiting the larger firms and creating their own firms (Beauchemin, 1991). Growing competition has continued to exert downward pressure on audit fees, prompting many accounting firms to search for new markets both domestically and internationally (Noyelle, 1990). Significantly, easy access to microcomputer technology and sophisticated software for recordkeeping and preparation of financial statements has reduced the demand for traditional accounting services. In addition, tax law changes in 1986 have made tax return preparation simpler such that many customers are able to file their own tax returns without the help of a CPA (Beauchemin, 1991). Responding to these changes, accounting firms began generating revenues from management consulting and information technology services in the 1980s. Evidence of developing in-house expertise in non-accounting services was indicated by a recent national survey that found CPA firms hiring 24 percent of non-accounting graduates in 1993 (AICPA, 1994a). The same survey also noted that "the proportion of new graduates employed who were assigned to management consulting services increased from 15 percent in 1992 to 19 percent in 1993" (p.33). The AICPA has now approved the admission of non-CPA equity partners to accounting firms, although a super majority (662/3 percent) of firm ownership must be retained by CPAs (Bagchi-Sen and Sen, 1997). In some cases, new consulting firms have been spun-off from their auditing parents, as in the case of Arthur Andersen and Deloitte & Touche (Public Accounting Report, 1995).

Another 1990 survey performed by the Texas Society of CPAs showed that the accountant's role has expanded far beyond auditing, recordkeeping, or tax preparation. Today, many firms now offer services such as personal financial planning, litigation support, advice on mergers and acquisitions, market and feasibility studies, and management consulting. Interestingly, this trend was verified for firms of all sizes (Stolle, 1991), suggesting a consistent shift in focus across the entire population of firms (*large and small*). In the public accounting sector, it is widely acknowledged that accounting firms fall into one of the following four categories: *local*, *regional*, *national*, *and international*. This typology is based upon the extent of the geographic spread of office locations of the firm. For example, the local firms are usually small accounting practices with intrametropolitan locations, while regional firms are considered medium-sized that have branch or office networks established at the state or regional level. The top-tier firms are characterized by a national network of offices, with a handful of firms extending beyond the national level.

Recent evidence suggests that the leading firms (the 'Big Six'-see Endnote 1) in accounting services have internationalized their business operations in response to domestic competitive pressures, as well as to the globalization of their clients. The toptier firms have set up extensive international networks by locating offices in foreign countries through greenfield investments and acquisitions or mergers, and/or through nonequity arrangements such as joint ventures and management contracts. These conglomerates now generate up to 49 percent of their revenue from foreign sources (Bowman's Accounting Report, 1994). Using Dunning's (1979) terminology, the

ownership, location, and internalization advantages stemming from their size, economies of scope in service offerings, established reputation, brand image, the necessity for face-to-face contact with clients, and other factors have provided these large firms with a competitive edge over indigenous firms in the host countries and small- and medium-sized firms in the investors' countries. Even so, recent reports from various trade journals (Royce, 1996; Dennis, 1995; Public Accounting Report, 1995 and 1994; DePree and Jude, 1993; Durbin, 1993; Israeloff, 1993; Stolle, 1991) indicate that involvement in global business is not necessarily a top-tier exclusive. Indeed, it would appear that smaller firms are overcoming their size barriers and becoming involved in international business.

Having said this, one other aspect of the public accounting industry is noteworthy here. Accounting firms are generally organized as individual practice businesses or partnerships facing unlimited liability exposure to the owner's personal assets. Until the mid-1990s, accounting firms were not legally allowed to operate as limited liability partnerships (LLPs) or limited liability corporations (LLCs) that offer some protection of owners' assets from their partners' or employees' negligent actions (Cecil et al., 1995). Over the past decade, legislation at the federal and state levels has exposed these professional business services to numerous negligence lawsuits and caused many to file for bankruptcy (Aharoni, 1993; Cecil et al, 1995; Berton, 1995). Events such as those mentioned above may have an impact on the profession's willingness to offer new and expanded services to its clients. However, at the same time, the shrinking domestic market for traditional auditing and bookkeeping services has necessitated public accounting firms of all sizes to explore non-traditional markets as mentioned before.

The dominance of a handful of multinational public accounting firms has prompted several authors to investigate the external and internal networking strategies of the large players (Aharoni, 1993; Radebaugh and Gray, 1993; Beaverstock, 1991; Noyelle, 1990; Porter, 1990; Daniels et al., 1989; Enderwick, 1989; Dunning, 1988; Rossi, 1986). However, the survival and growth strategies of small- and medium-sized accounting firms have not been adequately explored. A review of the aforementioned trade journals in accounting indicates that these firms follow very different internal and external networking strategies in comparison to their larger counterparts, creating distinct subsectoral characteristics within the accounting services industry. Clearly, new empirical research on the competitiveness of small- and medium-sized firms and their spatial impacts is justified, not least because of the changing environment in the accounting services industry as described above.

On this note, a postal survey of SMFs in the accounting sector was conducted because the topic at hand required access to proprietary information. On the basis of the review presented above, a set of exploratory hypotheses were developed. These hypotheses, along with their theoretical and/or empirical origins, are presented in Chapter 2.

CHAPTER SUMMARY

This dissertation addresses several issues relevant to our understanding of a major subsector of the producer services. The competitive environment faced by SMFs in the accounting industry has not been investigated on a systematic basis in previous research, even though the multinational accounting conglomerates (the 'Big Six' - see Endnote 1) have been the targets for many studies. The dissertation introduces a number of new dimensions to the analysis of SMFs in the producer services sector in general. First, the influence of the location of a firm is examined with respect to economic performance through diversification of output into non-traditional services and expansion into non-local markets, especially foreign ones. Second, the utilization of innovative promotional tools and collaborative links with other firms in the producer services sector is explored to understand the strategic behavior of the smaller accounting firms as they face the challenges of shrinking traditional markets (i.e., recordkeeping, accounting, and auditing) on the domestic front. Overall, then, the goal of the dissertation is to assess the interplay between a firm's geographical location and its competitive characteristics. Does location really matter?

ENDNOTE

1. The 'Big Six' multinational accountancy conglomerates are: Arthur Andersen, Price Waterhouse, KPMG Peat Marwick, Ernst & Young, Coopers & Lybrand, and Deloitte & Touche. As of 1993, 30 to 49 percent of their revenue was derived from foreign offices and as much as 47 percent of revenue was from management consulting (Bowman's Accounting Report, 1994). The extent of internationalization of these conglomerates is also evident in examples such as KPMG Peat Marwick, which now has 837 offices worldwide housed in 131 countries (Bagchi-Sen and Sen, 1997).

Chapter 2

RESEARCH HYPOTHESES AND METHODOLOGY

Keeping the objectives listed in Chapter 1 in mind, this chapter introduces a set of research hypotheses which form the basis for the remainder of the dissertation. The influence of location within the urban hierarchy upon a firm's economic performance is the key theme. My introductory hypothesis explores the relationship between the degree of functional diversification into non-traditional services and economic performance. Building upon this perspective, Hypothesis 2 looks at the influence of location upon SMF revenues. Here, attention is also given to the role of specific types of promotional tools in the degree of functional diversification. Hypotheses 3 and 4 address the influence of geographical diversification of markets upon economic performance. Finally, hypotheses 5, 6, and 7 explore the extent of international business involvement by accounting SMFs, as well as the influence of location and strategic networking as factors that might influence the international activities of such SMFs. The research context for each hypothesis is discussed in more detail below.

Economic Performance and Functional Diversification:

Firms obtain competitive advantage through the creation of a value chain that their buyers recognize as superior to competitors (Porter, 1990). Firms also perceive opportunities for innovation via differentiation. Porter (1990) argues for the vital importance of innovating in the face of new technologies, new or shifting buyer needs, emerging new industry

segments, shifting input costs or availability, and changes in government regulations. These factors help producer service firms recognize new business opportunities either by specializing in certain niches, or by broadening their scope of offerings within individual establishments. Daniels et al. (1992) have found that consultancy services in Western Europe responded to changing demand by "diversification of output rather than changes of direction or attempts to identify niches." Wood (1991, p. 168) reports that "the range of specialist market niches for business service firms, stimulated by business, consumer, and public sector change, has multiplied in recent years." In Beyers and Lindahl's (1994) research, management consulting firms have emphasized their range of services as a competitive advantage.

A review of the accounting industry literature indicates that potential revenue source, let alone growth, in traditional accounting and auditing services is currently very limited because of price competition from the larger firms and replacement of certain recordkeeping services by computer technology. A national survey of local and regional (small- and medium-sized) firms conducted by the Texas Society of CPAs in 1991 (Stolle, 1993) found that revenue growth between 1982 and 1991 did not keep pace with the rate during that period. Industry literature, however, points to the fact that accounting firms of all sizes around the country have been increasingly offering other services, such as tax planning, management consulting, and litigation support in order to stay competitive. A recent survey of the top 100 CPA firms finds that the top performing firms for both 1994 and 1995 attributed significantly higher percentages of revenue from management advisory services than from traditional services such as taxes (Jerris and Pearson, 1996). On the

demand side, according to a 1994 Small Business survey conducted by the American Institute of CPAs, small business owners ranked CPAs as a primary source of business counsel that may include a wide variety of services ranging from management consulting to tax planning to financial planning to software recommendation (AICPA, 1994a).

For this study, then, it was expected that diversification into activities other than accounting and auditing services would have a positive impact upon the competitiveness of the firm (measured by revenue growth over the past five years). Other measures of competitiveness such as growth in net income before owners' compensation or the proportion of net income over revenue (profit margin) were also considered. However, it was anticipated that the firms would be reluctant to divulge such proprietary information. Therefore, revenue growth was used to formulate the hypotheses in this study, while questions regarding net income were included in the questionnaires.

In operational terms, the functional diversification scheme employed in this study includes twelve categories: (1) accounting and auditing, (2) management consulting, (3) tax preparation and planning, (4) personal financial planning, (5) business valuation, (6) litigation support, (7) bankruptcy or insolvency services, (8) mergers and acquisitions, (9) market and economic feasibility research, (10) computer systems consultation, (11) executive search, and (12) "other" (specified by the firm). Using a postal survey, the firms were asked to provide a percentage breakdown of these revenue categories for 1990 and 1995. Based on the responses, a diversification index was anticipated as being appropriate, using absolute and relative entropy measures (Shannon and Weaver, 1949;

Bagchi-Sen and Pigozzi, 1993). First, an absolute entropy measure of diversification was computed as follows:

$$A = -\sum (\ln p_i * p_i)$$
, where,

 p_i is the proportion of the particular revenue category to total revenue expressed in decimals and k is the number of revenue categories.

The entropy measure was then normalized to compute a relative diversification index, R:

$$R = (A/\ln k) * 100$$

The diversification index was expected to range from 0.0 indicating complete concentration and 100.0 for cases with maximum diversification.

Another important factor in the success of business service firms is their established reputation as indicated by client referrals, repeat businesses, and client stability (Bryson et al., 1993). Client referral can be a method utilized by firms to obtain new clients or to offer new services to existing clients. If a client is satisfied with a CPA firm, it is likely that the same firm will be consulted for non-accounting services when the need arises. Therefore, it may be reasonable to expect that a mature and established accounting firm would have a greater probability of success in functional diversification than younger firms, which in turn, could help enhance revenue growth. Based upon this logic, it was anticipated that the firms' revenue growth over the 1990-1995 period could be analyzed to test for possible relationships with company age and the diversification indices.

More formally, the first hypothesis is structured as follows:

Hypothesis 1:

The competitiveness of a firm (measured by its revenue growth over the past five years) is positively correlated with:

H1a) age (number of years in business) and

H1b) the degree of functional diversification into new services (other than accounting and auditing services).

Influence of Location:

According to Pred (1977), cities are spatially organized and distributed in many hierarchical systems and sub-systems as a result of the distribution and stratification of population and economic activities over time. The higher ranking cities compared to the region, nation, and the world attract and/or retain larger manufacturing and service firms that tend to centralize their decision-making and strategic functions in those locations. These tendencies toward concentration are reinforced by the presence of management consulting, marketing, advertising, information, and legal services (Illeris and Philippe, 1993). Therefore, it is logical to expect that larger and more dynamic cities contain a rich array of high-order producer services (such as management consulting), in line with central place theory (Esparza and Krmenec, 1993). Thus, a high level of spatial centralization of producer service activities occurs in the largest urban centers, reflecting the importance of urbanization and localization economies (Coffey, 1989; Illeris and Philippe, 1993). The expectation in this study is that New York City (NYC) firms will tend to exhibit a higher degree of diversification into management consulting, computer information services, and other higher-order activities in comparison to the firms located

in the other cities because of NYC's ranking as a first-tier metropolitan center within the urban hierarchy (Mitchelson and Wheeler, 1994). As mentioned earlier (Chapter 1), firms located in primate cities are able to enjoy the advantages of combined demand and supply conditions and the existence of supporting or related industries more readily than firms located in peripheral locations (O'Farrell et al., 1996; Porter, 1990). For example, the existence of corporate headquarters in large cities implies greater opportunities for the outsourcing of advanced producer services. In addition, the skill level necessary for offering such services is arguably better in large cities than in smaller ones (O'Farrell et al., 1990). Moreover, the positive effect of the spinning-off of skilled personnel from larger producer service firms (e.g., the 'Big Six') into smaller firms or even sole practitioners could play a role in the regional differences regarding functional diversification (Wood et al., 1993). It is noteworthy here that the headquarters of the industry's main professional organization (the American Institute of CPAs) and the New York State Society of CPAs are located in New York City. These organizations offer continuing education courses for CPAs to learn new skills on a continuing basis. Therefore, the likelihood of course offerings in new areas such as business valuation or computer consulting may be greater in New York City (based upon demand) than in other cities in the State.

Influence of Firm Size and Promotional Tools:

The size of a firm (measured by its revenue) is expected to play an important role in the level of diversification because of the need for additional capital in hiring skilled specialists and in building a more advanced telecommunications and information technology

infrastructure. The larger accounting firms within the SMF sector may have better accessibility, in terms of capital resources and skilled personnel, to offer non-routine services such as computer consulting.

The presence of an effective promotional tool represents another factor that may play a role in the success of an SMF's diversification efforts. Although word-of-mouth advertising or client referral has been known to play a key role in management consulting services (Bryson et al., 1993), in the public accounting industry, distributing newsletters to existing clients about new service offerings, media advertising, or "cold calls," could also have a significant influence upon the degree of functional diversification. To accounting firms, media advertising, 'cold calls', and other promotional strategies are new concepts because aggressive client recruitment was considered unethical by the public accounting profession until the late 1980s.

Based upon the above discussion, it was postulated that a firm's degree of functional diversification could be analyzed to test for possible relationships with the firm's location on the urban hierarchy, its revenue class, and its promotional tools.

Specifically, the second hypothesis is structured as follows:

Hypothesis 2:

The degree of functional diversification is positively related to:

H2a) the location of the firm within the urban system,

H2b) the size of the firm (based on revenue)

H2c) the firm's promotional tools.

Economic Performance, Geographic Diversification and Service Delivery Methods:

One of the main factors contributing to the rapid growth in producer services has been the increased tradeability of services (Daniels, 1993). Very rapid advances in information technology, combined with improvements in international transportation, have acted as catalysts for the growing tradeability of producer services at a variety of spatial scales. Thus, "producer service industries are evolving into basic industries as the development of their markets is extending beyond the urban regions in which they are located" (Goe, 1990, p. 331). Evidence from developed countries reveals that business services can strengthen the export base of peripheral regions by tapping extra-regional markets (Michalak and Fairbairn, 1993; O'Farrell et al., 1992 and 1993; Stabler and Howe, 1988; Beyers and Alvine, 1985). In accounting services, while face-to-face contact with clients is still essential for certain aspects of service delivery, advances in computer technology have made some of the routine recordkeeping services transferable through electronic means. It is also reasonable to anticipate that offering services through various electronic means may allow SMFs to exploit non-local markets, even international ones. Therefore, utilization of an appropriate distribution method for different kinds of services and for clients located in different proximity bands must be considered in conjunction with the marketing of a product of service (Kotler, 1983). This is the logic behind the two hypotheses summarized below.

Hypothesis 3: Revenue growth over the past five years is positively correlated with the spread of the geographic market served.

Hypothesis 4: Significant variations exist among the delivery methods of traditional and non-traditional services. In addition, variations in delivery methods are expected in serving clients in intra- versus inter-metropolitan areas.

International Involvement

As noted earlier, the largest multinational accounting firms have internationalized by physically locating in foreign countries through acquisitions and mergers, or by forming non-equity ventures with indigenous firms. The ownership, location, and internalization advantages possessed by these firms has helped them gain a competitive edge compared to the smaller firms. However, smaller firms are reported to be increasingly involved in obtaining international business. These SMFs may be lacking the resources and brand image advantages of their larger counterparts; however, certain factors may enhance their opportunities to search for international markets. First, many of the SMFs may have been formed by CPAs who left the larger firms in search of independence. These professionals may have developed personal contacts with clients from other countries, special skills to help clients export, or expertise in the taxation laws of foreign nations. Second, if the SMF is located in a trade-oriented region, clients of the same size class from other countries that have a presence in the region may require expertise in US accounting or taxation laws, thus, creating a special niche for internationally-oriented business. Third, when existing clients begin establishing offices abroad, the public accounting SMFs may join other accounting or non-accounting firms in order to meet their clients' new demands and share one another's expertise. Set against this backdrop, this study examines two additional metrics of international orientation aside from direct export activity and/or

foreign direct investment (FDI) (Kuechler, 1996):

- 1) providing management consulting services that will help a domestic client internationalize operations either by exporting or by locating in foreign countries; or
- 2) providing tax, auditing, accounting, or other services to foreign companies that have located in the United States.

Location and International Orientation

Firms located in NYC might be expected to have a higher degree of international business involvement because of this city's ranking as a first-tier center at the global level. Evidence from the United Kingdom (O'Farrell et al., 1996) suggests that internationalization levels among SMFs in the producer services sector vary directly with city size. These authors argue that the internationalization tendencies of British SMFs in the business services sector vary according to location within the national urban hierarchy. Exposure and accessibility to international business and the necessary skilled labor is arguably higher in first-tier cities such as London or NYC than in other cities. Moreover, firms located in Buffalo and Rochester (two export-oriented cities) might also be expected to have a higher propensity for international involvement (Illeris and Philippe, 1993; MacPherson and McConnell, 1992). Therefore, the combined demand and supply effects from a locational point of view are expected to have a significant impact upon international involvement.

In the sections which follow, the firms have been divided into the following categories based on location: NYC firms, Western New York (WNY) firms located in Buffalo and Rochester, and Upstate Central (UC) firms located in Syracuse, Albany, and

Binghamton. It was anticipated that a firm's location in terms of these regions, its size measured in terms of its 1995 revenue, and several dimensions of its promotional strategy would turn out to be significant predictors of international business orientation (as defined earlier). In other words, firms located in NYC or Western New York were expected to demonstrate a higher percentage of international business revenue than those located in the Upstate Central region.

The influence of the firm size and promotional tools upon international orientation is expected for the same reasons described for **Hypothesis 2.** Within a region, one might expect that a larger firm, aggressively pursuing a promotional strategy targeted at a foreign country, would be more inclined to obtain international business than a smaller one not so bold in employing newer promotional methods such as media advertising or 'cold calls'. Set against this background, hypothesis five is structured as follows.

Hypothesis 5:

The propensity to obtain internationally-oriented business is positively related to:

- 5a) the firm's location within the urban system,
- 5b) the size of the firm
- 5c) the firm's promotional tools.

The propensity to obtain internationally-oriented business is measured by the proportion of revenue earned from offering services that: 1) help clients export and 2) assist foreign clients housed in the region, and 3) supply earnings via direct exports to a foreign country.

Networking and International Involvement:

Researchers generally agree that networks define a specific set of relations among various groups and/or actors. Multiple interconnections and chain reactions are two fundamental properties of networks (Barnes, 1972). Recent studies on small businesses have attempted to identify the size, type, density, frequency of inter-firm links, and boundaries of networks. Birley (1985) categorizes networks into formal and informal ones. Formal networks consist of connections with banks, accountants, lawyers, and others, while informal networks include families and friends. Curran et al. (1993) identify compulsory and voluntary networks. Compulsory networks, such as with banks or accountants, are vital for survival and success, while participation in the local chamber of commerce or golf club would qualify as examples of voluntary networks.

The model formulated by Butler and Hansen (1991) is more comprehensive because it suggests three stages of network development for small- and medium-sized firms: social network, business-focused network, and strategic network. Social networks provide new ideas to the entrepreneur; business-focused networks develop gradually and are influenced by the nature of the social network; and strategic networks in the final stage establish mutual dependence among actors that not only reduce the firm's risk of failure but also provide new advantages. Snodgrass (1993) confirms this concept by stating that firms use strategic networks to increase their efficiency and effectiveness through minimizing transaction costs and gaining technological know-how. These goals may be achieved by entering into a strategic alliance with a larger and wealthier firm. In addition, Curran and Blackburn (1994) have shown that newer and/or rapidly expanding small

businesses tend to form strategic networks that are both local and non-local. Researchers in the United Kingdom (O'Farrell et al., 1996; Bryson et al., 1993) indicate that small business service firms are forming networks with other small firms or sole practitioners to serve clients with a broader range of services or to reach foreign clients.

In sum, the existing literature on SMFs has identified a key role for flexible networking in the success and survival of small- and medium-sized firms, notably in sectors that are dominated by large companies. Networking is a response to the need for firms to be innovative and stay ahead of competition. Extensive knowledge about regional demand and highly specialized activities is necessary for gaining this competitive edge (Beyers and Lindahl, 1994; Porter, 1990). One way to acquire this knowledge is by forming collaborative and strategic ventures (i.e., formal and informal) with other firms. In other words, SMFs not only need to recognize the potential advantages of connecting (e.g., through subcontracting) with larger firms, but also be cognizant of the benefits of building social and strategic relationships with firms of similar sizes, local community associations, and non-local groups that may help them stay innovative and competitive (fizcan, 1995). Considering this theoretical framework, it was expected that firms that have formed networks with other accounting and non-accounting firms with international expertise would be more successful in obtaining international business.

Kuechler (1996) tested several hypotheses regarding collaborative efforts in Western New York. Two of these are retested in this study for the State as a whole. Kuechler's (1996) findings show differences in the types of collaborators used by firms that internationalized versus those that did not. In the present study, one additional aspect

will be analyzed. Specifically, it is expected that different degrees and types of internationally-oriented collaborative efforts would be utilized by firms located at various levels of the urban hierarchy. O'Farrell et al. (1996) found variations in the internationalization strategies among SMFs in Scotland and the South East of England. In relative terms, Scottish companies chose the safer exporting strategies such as via an agent, through joint ventures, or via 'piggyback' arrangements with other firms. London companies, on the other hand, were more likely to take proactive steps in selecting a foreign country for direct exports.

Therefore, it can be anticipated that strategic networks would play a positive role in the internationalization tendencies of SMFs in the study sector. It was also anticipated that variations among the types of networks might exist, depending upon the location of the firm within the urban system. For example, one might expect NYC firms to demonstrate more proactive international activities such as exporting directly or helping clients export without 'piggybacking' with larger firms as prior personal contacts may already exist from the owners' or partners' previous employment with larger multinational firms. As a further example, one might expect firms in WNY to take advantage of existing international networks in a cross-border region and concentrate in serving foreign clients more than firms in the Upstate Central region. Firms in the latter region may be inclined to use established international accounting associations more frequently, as part of a "safer" strategy (dealing with known clients and reducing uncertainty in terms of

collectibility of fees). Many small- and medium-sized firms obtain international business through referrals received from International Accounting Associations (Public Accounting Report, 1994). Non-member firms are less likely to obtain international referrals than member firms. Moreover, as data from O'Farrell et al. (1996) imply, firms located in centers other than primate cities such as New York, or cross-border cities such as Buffalo, might be expected to use these associations more aggressively than their counterparts elsewhere in New York State to reach foreign clients. On this basis, then, it was hypothesized that:

Hypothesis 6:

Firms that have formed strategic networks with other firms (including other accounting firms and firms in complementary industries) are more successful in obtaining international-oriented business than their counterparts that operate without such networks. Variations in the degree and types of networks exist depending upon a firm's location.

Hypothesis 7:

Firms that are members of international associations tend to have a higher degree of involvement in international business.

A summary of the research hypotheses, along with selective examples of recent literature support, is presented in Figure 2.

Figure 2
Summary of Research Hypotheses

<u>Hypothesis</u>	<u>Topic</u>	Literature Support
1	Functional diversification and revenue growth	AICPA (1994), Beyers and Lindahl (1994), Daniels et al. (1992), Fisher (1994), Noyelle (1990), Porter (1990), Stolle (1991), Wood (1991)
	Entropy measures	Bagchi-Sen and Pigozzi (1993)
2	Functional diversification influenced by location, size, and promotional tools	Coffey (1989), Coffey and Polise (1987), Illeris and Philippe (1993), Kotler (1983), Pred (1977), Senn (1993)
		Dennis (1990), DePree and Jude(1993), Nassutti (1994), Stolle (1991)
3 & 4	Geographical diversification and revenue growth	Daniels (1993), Dennis (1995), Goe (1990)
5	International involvement influenced by location, size, and promotional tools	Bari and Soy (1993), Dunning (1988), Illeris and Philippe (1993), MacPherson and McConnell (1992), Senn (1993) Keefe (1989), Durbin, (1993); Israeloff,
		(1993); Public Accounting Report (September, 1994)
6 & 7	Influence of strategic networks upon international involvement	Barnes (1972), Beyers and Lindahl (1994), Birley (1985), Butler and Hansen (1991), Curran and Blackburn (1994), Curran et al. (1993), İzcan (1995), Porter (1990), Public Accounting Report (September, 1994)

Note: This table is simply an illustration of various inquiries that have been conducted; it does not represent a comprehensive list of scholarly and empirical work in this field.

THE SURVEY PROCESS

Structure Of The Questionnaire

Keeping these hypotheses in mind, a survey instrument was designed and pre-tested with a view toward answering a range of locationally structured questions. Figure 3 summarizes the structure of the survey instrument. The final questionnaire included sections on demographic characteristics, service diversification, economic performance, service delivery methods, marketing strategies, personnel and clientele information, and internationalization activities (see Appendix 1).

In view of the fact that rapid advancements in computer technology have made certain tax and bookkeeping services exportable via electronic means, specific questions were asked to test the hypothesis that delivering services beyond the metropolitan area would help firms to achieve revenue growth. Questions were also asked to test whether delivery methods vary between offering: 1) traditional accounting and auditing services and non-traditional services, and 2) services for local (intrametropolitan) versus non-local (intermetropolitan) customers.

The underlying assumption throughout this study is that location plays a significant role in diversification of output and of geographic markets. Within New York State, New York City firms were expected to offer a broader range of services because of their proximity to clients demanding higher order producer services than those in Syracuse, Albany, Binghamton, Rochester, or Buffalo. Furthermore, New York City firms and those located in Buffalo and Rochester (export-oriented cities), were expected to be

Figure 3 Summary of Questionnaire Structure

- Demographic characteristics:
- ownership structure
- firm classification by geographic spread
- firm hierarchical classification (a branch, a headquarter, or an autonomous location)
- age of firm
- size of firm (by revenue and # of employees)
- personnel information (full-time, part-time, accounting and non-accounting professionals)
- 2. Economic performance and service offerings:
- share of revenue dollars by various service categories for 1990-1995
- geographic spread of revenue dollars
- five-year revenue growth
- five-year growth in net income before owner's compensation
- Delivery methods:
- means of delivery for traditional and non-traditional services (face-to-face or other)
- means of delivery to clients within and out of the metropolitan area
- 4. <u>Promotional tools</u> (which of the following and the degree of importance for each):
- distributing newsletters
- media advertising
- sponsoring seminars
- designated marketing director
- making 'cold calls'
- share of marketing dollars spent to gross revenue
- 5. Client information:
- client gains and losses identify types of competitive firms
- · reasons for client losses
- identify industry type demanding non-accounting type services
- 6. <u>International activities</u> 1)help export, 2)serve foreign-owned clients, and 3)export services directly. For each international activity (if any):
- percent of gross revenue
- the types of services offered
- identify barriers to internationalization
- 7. <u>Collaborative networks</u> for firms engaged in international activities:
- identify collaborative networking strategies
- identify industry types demanding international activities
- *See endnotes 1-8 for a description of these components. The survey instrument that addressed these components is presented in Appendix 1.

engaged in international activities at a higher degree than those in the other cities. Specific questions were developed and pretested to probe for these relationships (see Endnotes 1 to 8 for a brief description of the components summarized in Figure 3).

The Questionnaire Survey

During the months of June and July of 1996, questionnaire surveys were sent out by mail to accounting firms located in Syracuse, Albany, Binghamton, Rochester, Buffalo, and New York City. In order to test for the significance of a firm's location in the urban hierarchy, the questionnaires were color coded to identify each firm's location by city. The months of June and July were selected because better response rates were expected over this period than during the tax season (which spans January to May). The following 'Big Six' firms were excluded from the sample: Arthur Andersen, Price Waterhouse, KPMG Peat Marwick, Ernst & Young, Coopers & Lybrand, and Deloitte & Touche. Firm names and addresses were obtained from the Yellow Pages of the NYNEX telephone directory because it provides the most comprehensive listing of all practitioners (professional accountants) with CPA licenses. The membership directory of the New York State Society of CPAs is not as comprehensive because not all practicing CPAs are members of the Society. In the NYNEX listing, a CPA may list his/her name separately from the associated firm's name. To eliminate these duplications in the listing, the addresses and phone numbers of the firms were compared with individual name listings and any matched items were eliminated. This process also helped identify owner/partner

names of firms such that the cover letters could be personalized. Table 1 presents the total population by city after all duplications were eliminated.

A pretest was conducted in May of 1996 to probe for any flaws in the design of the questionnaire, as well as to estimate the final sample size that would be required to meet a 95% confidence level for two key variables: 1) gross revenue, and 2) net income before owner's compensation in 1995. Seventeen firms were randomly selected from each city, such that firms of all sizes in all cities were adequately represented. Prior to sending the pretest questionnaires, several practicing CPAs in the Buffalo metropolitan area were asked to review the questionnaire and give comments. Based on their review, only minor changes had to be made on the questionnaire. A cover letter from the past President of the Buffalo chapter of the New York State Society of CPAs (NYSSCPA) endorsing the survey was sent along with the questionnaire. A cover letter guaranteed confidentiality for any proprietary information provided. From the pretest, thirty-one responses (completed questionnaires) were received. The pretest did not detect any significant flaws in the design of the questionnaire. Therefore, the surveys returned during the pretest were included with those from the main test.

A review of the distribution of revenue and net income reported by the responding firms from the pretest indicated that the required sample size would have to be approximately 240 firms in order to achieve a 95% confidence level. This was determined

by using the following formula:

$$n = (zs/d)^2$$

where n is the required sample size, s is the standard deviation from the first sample, d is the tolerable margin of error at a specified level of confidence, and z is taken from the z-table.

Based upon the 30.4% response rate of the pretest (31 returned/102 sent), 688 additional firms were randomly selected (see Table 1 for a breakdown by city) with the expectation that 210 additional responses would be obtained to achieve the desired sample size of 240 respondents (31 from the pretest + 210 from the main survey). endorsement by the past President of NYSSCPA and a cover letter with a guarantee of confidentiality by the researcher was mailed with the questionnaire along with a preaddressed stamped envelope (see Appendix 1 for a copy of the cover letters and the questionnaire). The first mailing produced 142 valid responses. Follow-up phone calls requesting more responses produced only seven additional returned surveys, indicating that additional follow-up efforts would not improve the response rate any further. Thus, the final response rate achieved from the total population was 24.2% (180 valid responses) after deducting for discontinued businesses or undeliverable surveys returned by the post office. Response rates, disaggregated by city, are presented in Table 1. Because the n sizes by city turned out to be somewhat lower than was anticipated, the results were "regionalized" for analytic purposes. On this note, Syracuse, Albany, and Binghamton were grouped into one region (Upstate Central), Buffalo and Rochester were merged to form a second group (Western New York), while New York City was left as a distinct group in its own right.

40

Table 1
Response Rate Disaggregated by City

Region	Popu	ation # of Surveys Mailed *		<u>Discontinued/</u> <u>Undeliverable</u>	Sample Base	<u>Desired</u> <u>Responses *</u>	Actual Responses *	Response Rate
	#	<u>%</u>						
Syracuse	99	5.25%	97	6	91	29	30	33%
Albany	135	7.15%	132	6	126	41	27	21%
Binghamton	32	1.70%	30	2	28	9	8	29%
Rochester	167	8.90%	162	5	157	51	41	26%
Buffalo	194	10,30	165	-	165	53	40	24%
NYC	1257	66.70	204	27	177	57	34	19%
Total	1884	100%	790	46	744	240	180	24%

^{*} Includes surveys returned during the pretest and main test periods.

Although the final response level (180 surveys) is sufficient for an exploratory analysis, the problem of non-response bias cannot be ignored. Some of the late respondents indicated that lack of time and interest and a high regard for keeping individual firm level information confidential were the main reasons for not responding promptly. A review of the characteristics of early versus late respondents revealed that the two groups were quite similar in nature in terms of revenue/net income, size, diversification of service offerings, geographic spread, and international activities. Therefore, the sample does not appear to exhibit serious non-response bias. At the same time, one has to recognize that the empirical results presented in Chapters 3 and 4 can only be claimed as suggestive rather than conclusive for the total population.

CHAPTER SUMMARY

Following up with the main themes of this dissertation as described in Chapter 1, seven hypotheses were developed. Locational variation was the key point of discussion. Hypotheses 1 and 2 were structured to examine possible relationships between economic performance and location within the urban system, functional diversification, age and size of the firm, and the utilization of different types of promotional tools. Hypothesis 3 was developed to study the influence of geographic diversification upon economic performance or competitiveness (measured by revenue growth). Hypothesis 4 was designed to test for variations in delivery methods between traditional and non-traditional services, as well as

between intra versus intermetropolitan marketing preferences. The main purpose of this hypothesis was to inquire about the tradeability of these services via electronic means.

International activity was identified as a second major area of concern. As one of the main subsectors of producer services, not only direct exports were considered as international activities, but indirect exports such as assisting other businesses in exporting and servicing foreign-owned enterprises from the home base were also included. The remaining three hypotheses were structured to examine factors that might influence a firm's internationalization propensity. Location in the urban system, size of the firm, promotional tools used, collaborative efforts (including subcontracting, joint ventures, or team projects) were also postulated to have significant influences upon the extent and nature of a firm's involvement in international activities.

Firms across NYS (Albany, Binghamton, Buffalo, New York City, Rochester, and Syracuse) were surveyed (via mail), for which a twenty-four percent response level (a total of 180 completed questionnaires) was achieved. The preliminary results of the survey are discussed in the following chapter.

ENDNOTES

- 1. <u>Demographic characteristics</u> (questions 1 through 4 and question 11): The ownership structure (i.e., a sole proprietorship, a partnership, or a corporation), age, size (measured by gross revenue and/or number of employees), the status of the firm in its organizational hierarchy (a branch, a headquarter, or an autonomous office), and the firm's classification as a local, regional, national, or international entity (based upon the extent of physical branch/office locations) represent demographic characteristics of a firm that may influence its economic performance and competitiveness. For example, a young firm may be more likely to be engaged in innovative marketing strategies than a well-established firm. An older or a larger firm (a partnership or a corporation) may be better equipped to offer higher-order management consulting services than a sole proprietorship with only one accounting professional. Demographic characteristics represent fundamental elements of variation among firms.
- 2. Economic performance (questions 3, 6, and 16): Partial measures of the economic performance of a firm may be constructed by obtaining data on its size in terms of gross revenue, revenue growth over five years, its net income. All three questions were asked because private enterprises are not always willing to release proprietary information such as net income or gross revenue, but may be less hesitant to report five-year revenue growth rates. Economic performance measures such as market share percentages were not considered relevant because of the oligopolistic characteristics of the industry as indicated by the dominance of the 'Big Six' accounting conglomerates.
- 3. <u>Service offerings</u> (questions 5 and 7): These questions inquired about types of service offerings and the geographic spread of revenue sources. First, firms were asked to reveal the share of each type of service offering (twelve categories in total) to gross revenue to measure the degree of diversification of output. Second, the degree of geographic diversification was measured by a firm's share of gross revenue from within the metro area (i.e., the city where the firm is located), out of the metro area but within the state, out-of-state but within the US, and out of the US. Both diversification of output (i.e., offering non-traditional services instead of just accounting and auditing services) and geographic spread were considered to be important indicators of economic performance.
- 4. <u>Delivery methods</u> (questions 8 and 9): Delivery methods were grouped into two major categories: 1) face-to-face conversations and 2) other means, such as mail, fax, or electronic means. This dichotomy allowed delivery methods for traditional accounting and auditing services to be compared with non-traditional services such as management consulting or tax planning. Second, delivery methods for serving clients within and out of the metro areas could also to be compared.
- 5. <u>Promotional tools</u> (questions 10A, 10B, and 10C): In the accounting industry, service promotion via channels that are considered common in other industries (such as through media advertising or making cold calls) had been thought of as unethical until the late 1980s. Therefore, firms were asked about their involvement in various marketing

activities using a Likert scale. In addition, firms were asked about their perception of the importance of each type of marketing strategy in promoting their services. Finally, firms were asked to report the share of marketing dollars spent to gross revenue.

- 6. <u>Client information</u> (questions 12 through 15): In order to gain a better understanding of the competitive environment facing the accounting firms, these questions asked about which types of firms were their main competitors in terms of gaining and losing clients, the reasons for losing clients, and the industries that needed non-traditional services such as management consulting.
- 7. <u>International activities</u> (questions 17 through 20): International activities included 1) helping clients export, 2) serving clients that are foreign-owned, and 3) exporting services directly to clients located in a foreign country. For each type of activity, its share of total revenue provided a measure of internationalization for these firms. In addition, firms were asked to identify and rank the barriers perceived or faced in the internationalization process.
- 8. <u>Collaborative networks</u> (questions 21 through 25): These questions inquired about the existence of strategic networks (contractual relationships) with other firms, the frequency of the usage of these networks, and the types of industries that the networks were formed with. The importance of international accounting associations in obtaining international work was also investigated. In addition, data were sought regarding the types of industries demanding international work. This section was designed to test the significance of collaborative networks in obtaining international work.

Chapter 3

FIRM PROFILE

General Characteristics

Across all three regions (six cities), most firms consider themselves to be local entities (approximately 97% - see Table 2), conducting business mainly within each metropolitan area. From the outset, then, it should be emphasized that this sample contains only a tiny fraction of international accounting firms (i.e., with branches or affiliated offices in other countries). Only one firm in the Buffalo/Rochester region considers itself as international. This is not surprising, if only because the 'Big Six' international firms were excluded from the sample. The regional firms constitute 1.2 percent, 3.1 percent, and 2.9 percent of the sample in the Western New York (Buffalo and Rochester) region, Upstate Central (Syracuse, Albany, and Binghamton) region, and New York City (NYC) area, respectively (see Figure 4).

Most of the firms are autonomous offices (92.8 percent of the sample), with only 2.8 percent and 3.3 percent in the branch and headquarter categories, respectively. In the context of ownership structure, a majority of the firms are individual practitioners (52.7 percent), a fact that is supported by Table 3. The average number of full-time accounting professionals employed by the firms is 1.59, 1.56. and 1.65 for Western New York, Upstate Central, and NYC, respectively. On average, these SMFs employ less than two full-time accounting personnel.

46

Table 2
Firm Characteristics by Region

<u>Profile</u>	Total (% of sample)	Upstate Central (% of region)	Western New York (% of region)	New York City (% of region)
Local	97.2	96.9	97.5	97.1
Regional	2.2	3.1	1.2	2.9
International	.6	0	1.2	0
Autonomous office	92.8	89.2	97.5	88.2
A branch	2.8	3.1	1.2	5.9
A headquarter	3.3	4.6	1.2	5.9
Individual practitioner	52.7	55,4	54.3	44.1
Partnership	17.8	16.9	13.6	29.4
Limited liability partnership	2.8	3.1	2.5	2.9
Professional corporation	23.9	23.1	25.9	20.6
Limited liability company	2.2	1.5	2.5	2.9

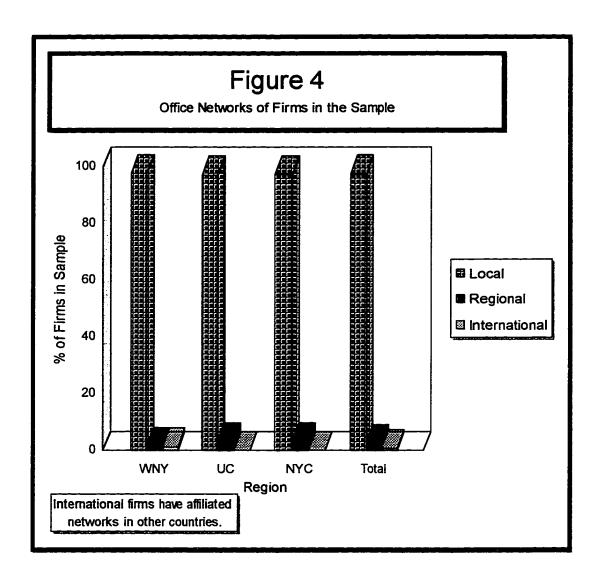


Table 3
Employment Information

<u>Region</u>	Number of responding firms	Average total employment	Average # of FT accounting personnel	Average # of PT accounting personnel	Average # of FT non- accounting personnel	Average # of PT non- accounting personnel	Average # of office administrative staff
Upstate Central	65	3.57	1,59	.53	.34	.27	.84
Western New York	81	3.79	1.56	.73	.44	.26	.80
NYC	34	3.68	1.65	.59	.44	.18	.82

49

The next largest group is represented by professional corporations, followed by partnerships (Table 2). New York City is an exception, in that partnerships constitute 29.4 percent of the sample population. Only 20.6 percent of the latter can be attributed to professional corporations. Interestingly, an insignificant number of firms in the sample is organized as limited liability partnerships and limited liability companies, despite the fact that accounting firms are faced by liability lawsuit threats due to negligence. It should be noted that the limited liability organization concept is relatively new in the industry (Cecil et al., 1995). At first glance, the average revenue appeared to be \$384,309 and \$387,284 for 1990 and 1995 respectively, indicating a lack of revenue growth. However, further analysis revealed that the 1995 revenue estimate listed above included several firms that did not exist in 1990. After excluding those firms, the 1995 revenue estimate was calculated to be \$450,036 - a 17.1 percent increase of average revenue over five years (see Table 4).

Table 4
Summary Statistics for the Sample of Firms by Region

Region	Average age (years)	Average gross revenue (1990)	*Average gross revenue (1995)	Average net income (1990)	*Average net income (1995)	Net income/ Average Gross Revenue (1990)	Net income/ Average Gross Revenue (1995)
Upstate Central	14.66	\$419625	\$470800	\$127739	\$156674	30.4%	33.3%
Western New York	16.71	\$356784	\$406040	\$137585	\$156351	38.6%	38.5%
NYC	18.68	\$378535	\$501198	\$163696	\$236737	43.2%	47.2%
All regions	16.35	\$384308	\$450036	\$139541	\$173391	36.3%	38.5%

^{*} Includes firms that existed both in 1990 and 1995.

At first glance, NYC firms appear to have experienced faster revenue growth (32.4%) than firms in the other regions. However, a closer examination of the data detected one NYC firm experiencing 650% revenue growth and just a handful of firms with a greater than or equal to 250% revenue growth in the other two regions. When these outliers were excluded from the total sample (i.e., those with greater than 250% revenue growth), spatial variation in revenue growth did not appear to be significant (Figure 5). As Table 5 shows, of the 49 WNY firms (excluding the outliers), 20 (40.8%) experienced high revenue growth, while 23 (54.8%) of the 42 Upstate Central firms and 13 (52%) of the 25 NYC firms belonged to the same category. Thus, no significant spatial variation was noted across the State among low growth and high growth firms (Table 5). The median of revenue growth of 20% was utilized to create the low versus high growth categories: Low (<=20%) and High (>20%).

For the sample as a whole, the **average** net income before owner's compensation grew at 24.2 percent over five years. The average net income was \$139,541 and \$173,391 from 1990 and 1995, respectively (Table 4). Reviewing the average net income by region, NYC appeared to have experienced a larger than average net income growth of 44.6%. However, similar to revenue growth, when income growth was calculated for each firm (excluding those with greater than 250% income growth) on an individual basis and tested for regional variations among low and high growth firms, location was again not a significant factor (see Table 6). The median of income growth of 20% was utilized to create the low versus high growth categories: Low (<=20%) and High (>20%).

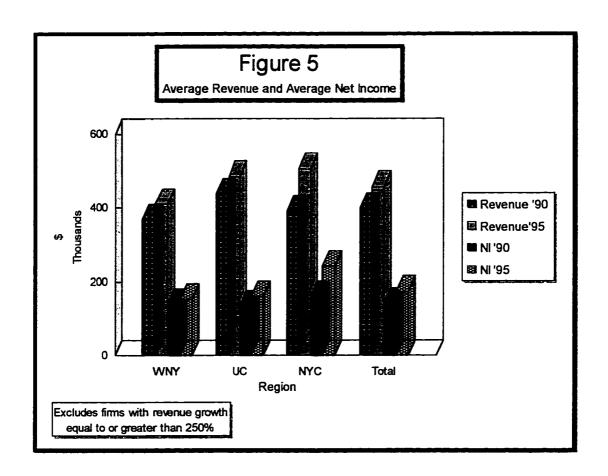


Table 5
Revenue Growth by Region

Region	Low Gro	Low Growth Firms		wth Firms	Total Number of			
	#	%	#	%	<u>Firms</u>			
Upstate Central	19	45.2%	23	54.8%	42			
Western NY	29	59.2%	20	40.8%	49			
New York City	13	52.0%	12	48.0%	25			
Total	61	52.6%	55	47.4%	116			
Chi-square = 1.77 p = .41								

Notes:

Table 6
Income Growth by Region

Region	Low Gro	wth Firms	High Gro	wth Firms	Total Number of			
	#	%	#	%	<u>Firms</u>			
Upstate Central	17	43.6%	22	56.4%	39			
Western NY	27	56.3%	21	43.8%	48			
New York City	12	52.2%	11	47.8%	23			
Total	56	50.9%	54	49.1%	110			
Chi-square = 1.40 p = .49								

Notes:

- 1) Firms with <= 20% growth and > 20% growth are categorized as low and high growth firms, respectively, based upon a median of 20% income growth.
- 2) Excludes firms with an income growth of greater than 250%.

¹⁾ Firms with <= 20% growth and > 20% growth are categorized as low and high growth firms, respectively, based upon a median of 20% revenue growth.

²⁾ Excludes firms with a revenue growth of greater than 250%.

At this point, it seemed appropriate to examine whether the owners were taking larger slices from firm revenue over the five years being tested. The average profit margins (Net income as a percentage of Revenue) changed little over the period 1990-1995, starting from 36.3% to 38.5%. The National Survey (Stolle, 1993) also reported a profit margin of 39.5% in 1991 and 38.5% for 1982. The public accounting SMFs, therefore, appeared to stay very stable over the past decade. As far as regional differences, from the outset, NYC firms demonstrated higher than average profit margins, their WNY counterparts faired just around the average, while the UC firms showed below average profit margin (Table 4). However, similar to revenue and net income growth, when profit margin was calculated for each firm on an individual basis and tested for regional variations among low and high profit performance, location was again not a significant factor for both 1990 and 1995. The median of profit margin of 40% for 1990 and 45% for 1995 were utilized to create the low versus high profit performance categories.

As for revenue and net income size, very little spatial variation was detected (see Figure 5 showing average revenue and net income for 1990 and 1995 for each region). When revenue size (1990 and 1995) and location were tested (Tables 7a and 7b), no significant variations were noted among the regions. For example, 20 (58.8%) of the 34 NYC firms, 41 (63.1%) of the Upstate Central firms, and 54 (66.7%) of the WNY firms had higher than the median revenue of \$225,000 in 1990 (Table 7a). Similarly, no significant spatial variability could be demonstrated for 1995 (Table 7b). Based on this review, then, it is fair to summarize that these firms are very small in size and experienced

similar revenue and net income growth over the 1990-1995 period across all regions, including the New York City metropolitan area.

Table 7a
Firm Size by Region
for 1990

Small Firms		Larg		Total Number of Firms	
#	%	#	%		
24	36.9%	41	63.1%	65	
27	33.3%	54	66.7%	81	
14	41.2%	20	58.8%	34	
65	36.1%	115	63.9%	180	
l S	hi-aquare = .67	P			
	# 24 27 14 65	# % 24 36.9% 27 33.3% 14 41.2% 65 36.1%	# % # 24 36.9% 41 27 33.3% 54 14 41.2% 20 65 36.1% 115	# % # % 24 36.9% 41 63.1% 27 33.3% 54 66.7% 14 41.2% 20 58.8%	

Note:

Table 7b Firm Size by Region for 1995

Region	Smal	Small Firms		e Firms	Total Number of Firms	
	#	%	#	%		
Upstate Central	39	60.0%	26	40.0%	65	
Western NY	49	60.5%	32	39.5%	81	
New York City	16	47.1%	18	52.9%	34	
Total	104	57.8%	76	42.9%	180	
		ni-square = 1,9	8 . p			
	等是一个的。					

Note:

1) Firms with <= \$225,000 revenue and > \$225,000 revenue are categorized as small and large firms, respectively, based upon a median of \$225,000 revenue.

¹⁾ Firms with <= \$225,000 revenue and > \$225,000 revenue are categorized as small and large firms, respectively, based upon a median of \$225,000 revenue.

Diversification

As explained earlier, the firms were asked about the extent of their diversification of revenue source from areas other than the traditional areas of accounting and auditing. The results are presented in Table 8. The main revenue sources were accounting/auditing and tax preparation and planning, regardless of a firm's location on the urban hierarchy. Management consulting only constituted approximately 5% of gross revenue on average. Interestingly, the responses do not point to any significant spatial or temporal variation in service diversification. For NYC firms, financial planning also represented approximately 5% of revenue with little variation between 1990 and 1995. In contrast, the firms in the Western New York region showed a growth pattern in financial planning, from 1.9% in 1990 to 4.1% in 1995. Computer consulting, although not a significant portion of revenue, demonstrated an increasing share of total revenue over the five-year period in all of the three regions. The remaining categories constituted less than one percent of revenue on an individual basis, again with little spatial variation of any significance.

The limited diversification of revenue categories demonstrated by the firms, combined with the 17.1 percent revenue increase over five years (a 3.4 percent per year growth) and a net income growth of 24.2 percent over five years (4.85 percent growth per year), may indicate that the small- and medium-sized accounting firms chose to survive by cutting costs instead of attempting to search for new niches in service offerings. Industry literature and the Texas Society National Survey (Stolle, 1991) indicated a higher functional diversification of revenue than is the case here. However, those studies inquired whether firms were simply engaged in the various service categories, and did not

Table 8
Share of Revenue
(Mean % by Region)

		<u>1990</u>		<u>1995</u>				
Service:	Upstate Central	Western New York	NYC	Upstate Central	Western New York	NYC		
Acctg/Aud.	38.9%	36.9%	32.0%	35.2%	33.6%	33.3%		
Mgt. Consul.	4.9%	5.0%	3.9%	4.9%	6.3%	5,4%		
Tax & Plng.	51.4%	50.5%	52.7%	49.5%	49.4%	50.1%		
Fin'l Plng.	1.7%	1.9%	5.1%	2.6%	4.1%	4.8%		
Comp.Consul.	1.3%	1.2%	1.1%	1.8%	1.6%	2.6%		
Other*	2.0%	3.6%	4.5%	5.9%	4.4%	3.2%		

^{*} The following revenue categories have been grouped in this classification because each type demonstrated insignificant (1 percent or less) share of gross revenue: business valuation, litigation support, bankruptcy services, mergers and acquisitions, market and economic feasibility analysis, and executive search.

ask for the revenue share of each category. The results from this survey of NYS firms convey more precise information about service diversification, and thus might be demonstrating inconsistencies with the national survey. A more detailed analysis of the share of revenue from each category is presented in Chapter 4.

With regard to the geographic distribution of revenue, firms from the Upstate Central region appeared to be more diversified than their counterparts from the other two regions (Table 9). This may be explained by the ability of larger metropolitan areas such as NYC to offer sufficient local revenues than the smaller ones such as Syracuse, Albany, or Binghamton. This finding is reminiscent of export base theory, in that the proportion of non-local income earned by a business establishment tends to decrease with city size (I shall return to this point in Chapter 4). However, out-of-state revenues (within the US) constituted approximately 12% of total revenue for the NYC firms compared to 4.8% in the Upstate Central region and 3.3% in the Western New York region. International sources of revenue represented an insignificant portion of revenue in all cases.

Table 9
Geographic Distribution of Revenue

	1990				<u>1995</u>		
Average share of revenue:	<u>Upstate</u> <u>Central</u>	Wester n New York	NYC	Upstate Central	Wester n New York	NYC	
Within metro area	61.5%	81.5%	79.5%	59.8%	81.2%	77.9%	
Out of metro but within NYS	33.6%	14.9%	7.9%	35.2%	14.4%	8.4%	
Out of NYS but within the US	4.8%	3.3%	12.1%	4.7%	3.5%	12.3%	
Out of the US	0	1.7%	.7%	.3%	.9%	1.2%	

Delivery Methods

Firms from each city were asked to identify the most frequently used method for delivering traditional and non-traditional services within and beyond each metropolitan area. Tables 10 and 11 summarize the responses regarding delivery methods. Within each region (and each metropolitan area), face-to-face conversations were found to be the most important method of delivering services, regardless of the type of services offered (traditional or non-traditional). In short, personal interactions of a face-to-face nature between sellers and buyers are still important — despite the advent of electronic options for certain types of service delivery. However, sufficient variability emerged between delivery methods (intrametropolitan versus intermetropolitan) among the regions to warrant further examination (see Chapter 4).

Promotional Tools

The practice of distributing a newsletter to clients was the most popular promotional tool used by the accounting firms (36.7% of the firms - see Table 12). The sponsoring of educational seminars/workshops for clients and media advertising received the next highest scores (17.2% and 18.9%, respectively). Regarding locational disparities, firms in the Western New York region consistently showed a higher than average score in all types of promotional tools, except for having a designated marketing director on their staff. The average marketing dollars spent to total revenue was reported as approximately 2% (consistent among all regions).

Delivery Methods Table 10 Traditional Services # of Firms

		Within	<u>metro</u>		Out of metro area				
	Face-1	to-face	<u>Ot</u>	<u>her</u>	Face-	to-face	<u>Other</u>		
Region	<u>Seldom</u>	<u>Always</u>	<u>Seldom</u>	Always	<u>Seldom</u>	Always	<u>Seldom</u>	Always	
Upstate Central	11 (18.6%)	48 (81.4%)	37 (66.1%)	19 (33.9%)	34 (66.7%)	17 (33.3%)	21 (40.4%)	31 (59.6%)	
Western New York	14 (17.9%)	64 (82.1%)	58 (80.6%)	14 (19.4%)	43 (63.2%)	25 (36.8%)	35 (55.6%)	28 (44.4%)	
NYC	14 (46.7%)	16 (53.3%)	20 (71.4%)	8 (28.6%)	15 (57.7%)	11 (42.3%)	14 (60.9%)	9 (39.1%)	

Table 11
Non-traditional Services
of Firms

		Within	Metro		Out of metro area					
	<u>Face-to-face</u>		Ot	<u>Other</u>		<u>Face-to-face</u>		her		
Region	Seldom	Always	Seldom	Always	Seldom	<u>Always</u>	Seldom	Always		
Upstate Central	13 (22.0%)	46 (78.0%)	42 (75.0%)	14 (25.0%)	36 (72.0%)	14 (28.0%)	26 (50.0%)	26 (50.0%)		
Western New York	18 (23.4%)	59 (76.6%)	57 (79.2%)	15 (20.8%)	42 (60.0%)	28 (40.0%)	38 (58.5%)	27 (41.5%)		
NYC	18 (58.1%)	13 (41.9%)	19 (65.5%)	10 (34.5%)	18 (64.3%)	10 (35.7%)	14 (53.8%)	12 (46.2%)		

Table 12 Promotional Tools Used

		Region		NY State	National
Promotional Tool	<u>Upstate</u> <u>Central</u>	Western New York	NYC	<u>Total</u>	<u>1990</u> Survey*
Distributes a newsletter to clients	41.5%	38.3%	23.5%	36.7%	65.8%
Engages in media advertising	20.0%	17.3%	20.6%	18.9%	29.7%
Sponsors educational seminars/workshops	12.3%	22.2%	14.7%	17.2%	24.7%
Has a designated marketing director	6.2%	4.9%	14.7%	7.2%	17.0%
Makes 'cold calls' to prospective clients	6.2%	11.1%	5.9%	8.3%	10.0%
Share of marketing dollars spent to revenue	Mean 2.2% Mode 0% Median 1.0%	Mean 1.6% Mode 1.0% Median 1.0%	Mean 1.9% Mode 0% Median 0.5%	Mean 1.9% Mode 0% Median 1.0%	not available

^{*} Stolle (1991), Practicing CPA, November, p.7, representing a weighted average of small to large sized firms at a national level.

When applied to the average 1995 revenue dollars of \$450,036 (Table 3, p. 49), the average marketing dollars spent of \$9,000 cannot be construed as negligible for such small-sized firms. However, a closer review of the central tendency statistics of marketing dollars spent revealed that the mode was 0% with a median of 1%. Fifty-five firms allocated nothing to promoting, while 48 firms only spent 1% of their revenue toward marketing. The mean was affected by six firms reporting more than 10% of revenue spent for marketing.

The respondents were also asked to rate the perceived importance of each type of promotional tool. The results (Table 13) supported the above statistics on central tendency. In the context of perceived level of importance, distributing newsletters received the highest score in all cities and regions. However, in total, only 45 firms allocated a high score to this activity (3, 4, and/or 5 on a Likert scale), while 122 firms did not perceive newsletters as important at all. All of the other categories received substantially lower scores, rendering a tabulation unnecessary.

Interestingly, the national survey conducted by the Texas Society of CPAs in 1990 (Stolle, 1991) reported a higher percentage of firms using each type of promotional tool. However, similar to the current NYS survey, the national survey also found the use of a newsletter to be the most popular strategy with media advertising in second place. From these observations, it appears that aggressive promotional tools such as making cold calls to generate new revenue are still considered to be too proactive for a sector with such a seemingly "conservative" orientation.

Table 13
Importance of Promotional Tools

Region			Perceive	d level of imp	ortance of pro	omotional too	l in promoting	services		
	(Number of responding firms)									
	Distribute	newsletter	Mędia advertising		Seminars/workshops		Marketing Director		'Cold calls'	
	Important	Not Imp.	Important	Not Imp.	Important	Not Imp.	Important	Not Imp.	Important	Not Imp.
Upstate Central	17	45	5	56	10	52	4	57	6	55
Western New York	22	51	2	70	12	60	4	68	6	67
NYC	6	26	2	29	4	27	3	29	ı	30
Total	45	122	9	155	26	139	11	154	13	152

Notes:

- 1) For each category of promotional tool, thirteen to sixteen firms chose not to respond to the questions.
- 2) Regrouped from actual responses: the 'Important' category=3+4+5 levels on a Likert scale. The 'Not Imp.' category=1+2 levels on a Likert scale.

International Activities

As mentioned before, this sample contains only a small fraction of international companies as reflected by the response to question 1 (see Table 1, p. 41). However, when asked about involvement in international activities disaggregated by three areas (i.e., help clients export, serve foreign-owned clients, and export services directly), a higher degree of orientation toward international activities can be discerned. Table 14 summarizes the results of international involvement in these three categories. Forty-five firms (25% of the sample) served foreign-owned clients, deriving average revenues of 3.6% of total sales in 1990 and 5.4% in 1995 (Figure 6). More significantly, there was a definite influence of location in terms of international involvement in all categories. As postulated in Chapter 2, firms in WNY and New York City not only showed more involvement in all three categories, but also reported consistently higher revenue percentages than firms in the other cities.

Interestingly, among both WNY and NYC firms, an approximately equal proportion of firms serving foreign clients were from the sole proprietor, partnership, and professional corporation category. However, only 6 percent of the firms in the sample responded affirmatively regarding having any plans to internationalize, which may indicate the passive and conservative attitude of the public accounting SMF sector. A more detailed discussion of this dimension of the survey is presented in chapter 4.

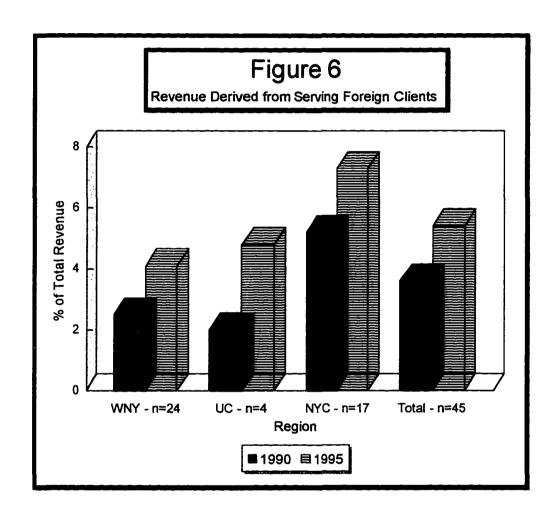


Table 14
International Activities

Region	Н	elp clients expo	ort	Serve	foreign-owned	clients	Export services directly		
	# of firms in	Average % of total revenue (1990)	Average % of total revenue (1995)	# of firms in	Average % of total revenue (1990)	Average % of total revenue (1995)	# of firms in	Average % of total revenue (1990)	Average % of total revenue (1995)
Upstate Central	3	.3%	2.3%	4	2.0%	4.8%	1	0%	1.0%
Western New York	6	3.3%	4.7%	24	2.5%	4.1%	6	2.0%	8.0%
NYC	4	11.3%	17.5%	17	5.2%	7.3%	3	4.0%	8.3%
Total	13	5.1%	8.1%	45	3.6%	5.4%	10	2.4%	7.4%

Barriers to Internationalization

All firms were asked to rate the severity of the following barriers to internationalization; (1) size of firm, (2) lack of expertise, (3) lack of demand, (4) risk willingness of owner(s), and (5) lack of skilled labor within the region. Across all cities, size of firm was the most significant barrier to internationalization (see Table 15). An average of 55% of the firms identified size as a significant barrier. On average, 43.4%, 28.9%, 11.1%, and only 5.5% of the firms reported lack of expertise, lack of demand, risk willingness, and lack of skilled labor within the region, respectively, to be significant barriers (Figure 7). A consistently higher percentage of Buffalo firms perceived all of the above reasons as significant barriers.

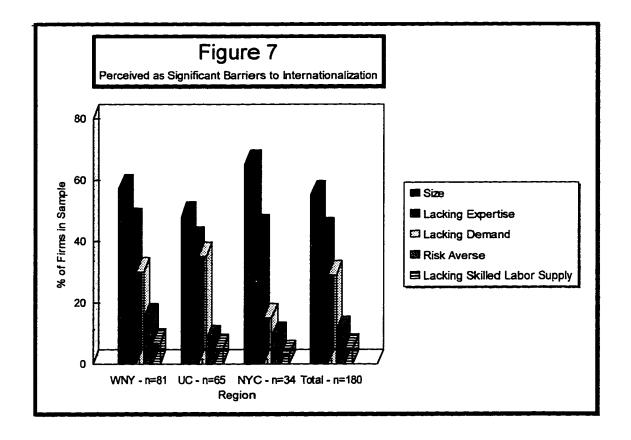


Table 15
Barriers to Internationalization
Perceived as a Significant Barrier*

	Size c	of Firm	Lack of	Expertise	Lack of	f Demand	Risk W	illingness	1	illed Labor Region
Region	<u>#</u>	% of each region	<u>#</u>	% of each region	<u>#</u>	% of each region	#	% of each region	<u>#</u>	% of each region
Upstate Central	31	47.7%	26	40.0%	23	35.3%	5	7.7%	3	4.6%
Western New York	46	56.7%	37	45.7%	24	29.6%	12	14.8%	6	7.4%
NYC	22	64.7%	15	44.1%	5	14.7%	3	8.8%	1	2.9%
Total	99	55.0%	78	43.4%	52	28.9%	20	11.1%	10	5.5%

^{*} Regrouped from actual responses: the 'Significant Barrier' category=1+2 levels on a Likert scale.

Collaboration

In terms of international business activities, the respondents were asked to comment on a variety of inter-firm collaborative strategies. Collaboration included contractual relationships such as subcontracting, joint ventures, or team projects. It was initially thought that collaborative networks of related firms would be found in this sector, if only because previous research has identified cooperative inter-firm linkages as being an important competitive feature of knowledge-based firms in the producer services sector (Bryson et al., 1993; Curran et al., 1993). Moreover, variations in the degree of usage of networks and the types of networks were expected to exist depending upon a firm's location in the urban hierarchy (see Chapter 2). Yet, from the survey results, there is little evidence of this type of business networking within this particular sample of firms. Of the 180 firms in the total sample, for instance, only fifty-five (30.56%) responded to this section of the questionnaire, while the remainder of the firms skipped this section because of lack of any international involvement. Of those fifty-five firms, a majority (forty-six) did not collaborate with other businesses at all. From the limited number of responses, it appears that, in regards to international business activities: 1) there is very limited interfirm collaboration; 2) collaboration, where it exists, mainly involves vendors of legal services; and 3) spatial variability is insignificant.

As indicated earlier, recent industry literature has suggested that many small- and medium-sized firms obtain international business through referrals from International Accounting Associations (Public Accounting Report, 1994). However, the survey results do not support this suggestion. Only two firms from the total sample were members of an

accounting association, and neither believed that this relationship was important in developing international business.

Other Competitive Information

A variety of survey questions pertaining to competitors were posed in an effort to identify the main sources of new client gains and losses, as well as the reasons for losing clients. Across all regions, the survey respondents identified other local firms as their main competitors (Table 16). On average, 53.9% and 67.8% of the firms identified 'other local firms' as the most important sources of client gains and losses, respectively. On a more interesting note, almost 20% of the firms stated that 'non-accounting firms' were the single most important sources of new clients, while 5% identified non-accounting firms to be their largest threat in terms of losing clients. This result is surprising in light of the fact that responses to earlier questions indicated a definite lack of diversification into non-accounting services (Table 8). The 'Big Six' firms were identified as the main competitors by 7.8% (for client gains) and 4.4% (for client losses) of the firms.

Reasons for client losses received the following rankings across all regions (in the order of most frequent to least frequent): 1) price competition, 2) client moved to another location, 3) acquisition/merger of client with a larger firm, and 4) lack of diversification of services (see Table 17). Lack of diversification of services was quoted as the most frequent reason for client losses by 27.3% of the firms.

70

Table 16
Competitors - Client Gains and Losses*

Region	Other Lo	ocal Firms	\	Regional rms		counting rms	The l	Big-Six		National rms
	Gains from	Losses to	<u>Gains</u> <u>from</u>	Losses to	Gains from	Losses to	Gains from	Losses to	<u>Gains</u> from	Losses to
Upstate Central	50.8%	66.2%	16.9%	20.0%	20.0%	6.2%	7.7%	3.1%	3.1%	None
Western New York	55.6%	70.4%	18.5%	14.8%	17.3%	3.7%	8.6%	6.2%	None	1
NYC	55.9%	64.7%	5.9%	17.6%	23.5%	5.9%	5.9%	2.9%	None	
Total	53.9%	67.8%	15.6%	17.2%	19.4%	5.0%	7.8%	4.4%	1.1%	V

^{*} Percent of firms reporting each category as the single most important source of client gains and losses.

Client Types

In order to gain a better understanding of the forward linkages of the accounting SMFs, Kuechler (1996) inquired about the industry characteristics of the main clients for SMF accounting firms in the Western New York area. She found that manufacturing, individual businesses, and retail firms were their main customers, while construction companies, government markets, insurance/banks/finance companies were the second most important customers.

In this survey, questions were asked about the industry type of clients needing non-accounting services such as management consulting. The Western New York region houses a cluster of medical equipment and supplies firms and health-related service firms (McConnell, 1994). With this locational characteristic in mind, the medical equipment and supplies sector and health-related services were disaggregated from other categories. Firms were requested to rank (first, second, and third ranks) the industry types demanding such services. Similar questions were also asked regarding the origins of internationally-oriented contracts (i.e., only from those firms that are involved in international activities).

In terms of non-accounting services, manufacturing/industrial firms, retail enterprises, and hospitals/health-related services received first ranking by 26.1%, 12.2%, and 12.2% of the firms, respectively. The second ranking was given mainly to retail, manufacturing, and hospitals/health related services by 18.3%, 16.1%, and 9.4% of the firms, respectively (see Table 18). The same three industries were identified for third ranking. Manufacturing/industrial firms appeared to be the main forward linkage for international business for the accounting firms, along with banks and financial services, health-related services, the medical equipment and supplies sector, and retail firms.

Table 17
Most Frequent Reason for Client Losses**

Region	Number and percent of firms of each region									
	Price competition	Client moved to another location	Acquisition/merger of client	<u>Lack of</u> diversification of services						
Upstate Central	28 (43.1%)	28 (43.8%)	25 (38.5%)	18 (27.6%)						
Western New York	48 (59.3%)	32 (39.5%)	36 (44.5%)	24 (29.6%)						
NYC	19 (55.9%)	15 (44.1%)	10 (29.4%)	7 (20.6%)						
Total	95 (52.8%)	75 (41.9%)	71 (39.5%)	49 (27.3%)						

^{**} Regrouped from actual responses: Most frequent=1+2 levels on a Likert scale.

Table 18
Forward Linkages for Non-Traditional Services

Region		Top Five	Industries Ide	ntified for Firs	t Ranking	
Upstate Central	Manufacturing (16.9%)	Retail (13.8%)	Health-Related Services (12.3%)	Construction (9.2%)	Government Services (7.7%)	NA/Don'tKnow 15.4%
Western New York	Manufacturing (38.3%)	Health-Related Services (13.6%)	Retail (12.3%)	Government Services (3.7%)	Individual Practices (2.5%)	18.5%
NYC	Manufacturing (14.7%)	Retail (8.8%) Health-Related (8.8%)	Financial Services (5.9%)	Non-Profit (2.9%) Medical Eq. (2.9%)	none	55,9%
Total	Manufacturing (26.1%)	Retail (12.2%) and Health- Related (12.2%)	Government (4.4%) and Construction (4.4%)	Fin'l Services (2.8%) & Medical Eq. (2.8%)	Non-Profit (2.2%)	24.4%
		Top Five I	ndustries Iden	tified for Seco	nd Ranking	
Upstate Central	Manufacturing (18.5%)	Retail (16.9%)& Health-Related (16.9%)	Colleges /Univ.(6.2%) & Construction (6.2%)	Government Services (4.6%)	Non-profit & Other (3.1%)	18.5%
Western New York	Retail (22.2%)	Manufacturing (17.3%)	Non-profit (6.2%)	Health-Related (4.9%) & Government (4.9%)	Med. Eq., Fin'l Services, Insurance, Medical Offices	22.2%
NYC	Retail (11.8%)	Manufacturing (8.8%)	Insurance & Health-Related (5.9%)	Fin'l Services & Utility Co. (2.9%)	none	61.8%
Total	Retail (18.3%)	Manufacturing (16.1%)	Health-Related (9.4%)	Government (3.9%)	Colleges & Univ. (3.3%)	28,3%

Manufacturing received first ranking across all regions. It should be noted here that a total of fifty-four firms responded to these questions regarding forward linkages for international business because the remainder of the firms did not appear to have any international involvement.

CHAPTER SUMMARY

Evidence from the sample of accounting SMFs across NYS demonstrates that these firms are very small in revenue and employment size; they derive most of their business from local sources; they offer mostly accounting, auditing, and tax preparation services; and a majority are rather "conservative" when it comes to "newer" types of promotional strategies. Based on a review of the general profiles of these firms, no major spatial variation among the three regions of New York State was uncovered.

Thirty percent of the survey firms were involved in some kind of international activities, mainly in serving foreign clients located in their home regions. Average revenues derived from international activities constituted less than six percent of gross revenue in 1995. The influence of a first-tier city such as New York and a cross-border region such as Western New York appeared to be important in procuring international business. Size of firm appeared to be the most significant barrier to internationalization. Networking with other firms did not emerge as an important factor in procuring international business.

On a more cautious note, the empirical findings derive from a small sample and the level of nonresponse bias remains unclear. Moreover, a simple review of descriptive statistics may not reveal certain underlying complexities in the relationship between economic performance and location, diversification, and/or networking and promotional tools. With these reservations in mind, a more detailed discussion of the survey data is presented in the following chapter.

Chapter 4

In the previous chapter, a review of the frequency distributions for key variables indicated that location may not play as strong a role in the geographic and functional diversification of the accounting SMFs as was initially envisaged. However, sufficient variations were noted among the key variables to warrant a more detailed statistical examination. In this chapter, therefore, each of the hypotheses described in Chapter 2 will be examined in more detail.

RESEARCH HYPOTHESES AND RESULTS

Diversification and Economic Performance

Economic Performance and Functional Diversification:

As explained previously, revenue growth was used in this study as a measure of economic performance. For reasons explained earlier (p. 22), net income growth or profit margin is likely to be a better measure of economic performance. However, it was initially anticipated that firms would not be willing to provide data on net income because of the proprietary nature of such information. Fortunately, sufficient data regarding net income was obtained from the survey. Therefore, in the following analysis, both revenue growth and net income growth over the period 1990-1995 are analyzed.

77

It was initially hypothesized that a firm's competitiveness might be reflective of the degree of service diversification. Specifically, it was expected that firms offering a broader mix of non-traditional services would exhibit above average performance. In the face of fierce price competition and a shrinking market for traditional services, the relationship between revenue growth and functional diversification was envisioned as positive (Hypothesis 1b). In this regard, it was also expected that older firms would be in a better position to offer a variety of services, if only because established SMFs have already acquired professional reputations. In turn, older firms were expected to be more functionally diversified, leading to higher revenue growth (Hypothesis 1a).

Firms were classified as young or old using the median of 13 years (Young <=13 and Old >13). The median for revenue growth over 1990-1995 was calculated as 20%, which was utilized to classify firms as high (>20%) and low growth (<=20%). Applying chi-square tests on this basis, age and revenue growth were found to be significantly related -- but in the opposite direction relative to my original hypothesis (see Table 19).

Table 19
Age of Firm by Revenue Growth

34.0%	# 35	66.0%	53
34.0%	35	66.0%	53
	F	- 31070	}
63.2%	25	36.8%	68
50.4%	60	49.6%	121
	50.4%	50.4% 60	

Notes:

¹⁾ Median age = 13 years.

²⁾ Firms with <= 20% growth and > 20% growth are categorized as low and high growth firms, respectively, based upon a median of 20% income growth.

Of the 53 younger firms in the sample, fully 66 percent experienced above average revenue growth over the study period, compared to only 34 percent (n=25) among older firms. An alternative way of picturing Table 19 is to consider the distribution of fast-growing firms by age-class. On this basis, 58 percent of the fast-growing SMFs are young, compared to 41 percent for the older firms. No matter how the data are sliced, in fact, it would seem that younger firms are more likely to exhibit relatively quick growth than their older counterparts. Since no significant relationship was uncovered between age of firm and revenue size for 1990 and 1995 (Tables 20 and 21), the results shown in Table 19 do not reflect scale distortions (e.g., tiny firms doubling in size, versus larger firms growing slowly). In 1990, for example, 65.5 percent (n=87) of the older firms and 59.4 percent (n=93) of the younger firms have higher than the median revenue size of \$225,000, depicting no significant variations among age-class and revenue-class (Table 20).

Table 20 Age of Firm by Firm Size (1990)

Age	Small	Firms	Large	e Firms	Total Number of Firms	
	#	%	#	%		
Young (<=13 years)	35	37.6%	58	62.4%	93	
Old (>13 years)	30	34.5%	57	65.5%	87	
Total	65	36.1%	115	63.9%	180	
	hi-square =	.19	p=.66			

Notes:

¹⁾ Median age = 13 years.

²⁾ Firms with <= \$225,000 revenue and > \$225,000 revenue are categorized as small and large firms, respectively, based upon a median of \$225,000 revenue.

Table 21 shows similar characteristics for 1995. In other words, the revenue size of the respondents was evenly distributed between young and old firms. For this analysis, a median of \$225,000 of revenue was used to categorize big (>\$225,000) and small (<=\$225,000) firms.

Table 21 Age of Firm by Firm Size (1995)

Age	Small	l Firms	Larg	e Firms	Total Number of Firms
	#	%	#	%	
Young (<=13 years)	60	64.5%	33	35.5%	93
Old (>13 years)	44	50.6%	43	49.4%	87
Total	104	57.8%	76	49.4%	180

Notes:

As a further step in the analysis, functional diversification and revenue growth were analyzed to probe for any possible relationships. First, a functional diversification index was developed for each firm by utilizing the entropy measure outlined in Chapter 2. All of the twelve categories of revenue, no matter how insignificant, were included in the formula on an individual basis. Some of the insignificant categories were grouped together as 'other' for tabulation purposes in Chapter 3 (Table 8, p. 57). Average scores on the functional diversification index were estimated as 35 for 1995 and 32 for 1990, indicating that most firms continued to be quite concentrated in terms of service offerings over the past five years. This is contrary to recent opinions expressed in the industry

¹⁾ Median age = 13 years.

²⁾ Firms with <= \$225,000 revenue and > \$225,000 revenue are categorized as small and large firms, respectively, based upon a median of \$225,000 revenue.

literature. An index of 35 was used to group the firms as service concentrated (<=35) and service diversified (>35) for both years. The second step was to run chi-square tests between these functional diversification categories and revenue growth. Functional diversification indices for 1990 and 1995 have been crosstabulated against revenue growth in Table 22. Of the 59 high growth firms in 1990, 45.8 percent (n=27) depict higher than average diversification versus 43.3 percent (n=26) of the 60 low growth firms (Table 22). Although more variation is noted among the high and low growth firms and their diversification characteristics in 1995, the results point to no statistically significant

Table 22
Revenue Growth by Degree of Functional Diversification

	_	990 =119)	<u>1995</u> (n=117)		
Revenue Growth	Concentrated Firms	Diversified Firms	Concentrated Firms	Diversified Firms	
Low (<=20%)	56.7%	43.3%	55.9%	44.1%	
High (>20%)	54.2%	45.8%	43.1%	56.9%	
Total	55.5%	44.5%	49.6%	50.4%	
At .05 level	Not Si	nificant	Not Si	gnificant	

Notes:

relationship between the two variables for both 1990 and 1995 (with chi-square values significant at .79 and .16 levels for 1990 and 1995, respectively). To test for possible connections between a firm's functional diversification index and how long it has been in business, age and functional diversification were also crosstabulated. Again, no significant associations were noted.

¹⁾ Median revenue growth = 20%.

²⁾ Firms with functional diversification indices less than or equal to 35 and greater than 35 are categorized as service concentrated and diversified firms, respectively, based upon a median functional diversification index of 35.

On this basis, then, it can be summarized that SMFs in this sample have not experienced particularly high revenue growth in general (at a median of 20% for five years or 4% per year before adjusting for inflation), nor have they aggressively searched for new services to offer other than those pertaining to accounting, auditing, and tax preparation. This appears to be true no matter how long they have been in business. Furthermore, younger firms have tended to experience higher revenue growth. Clearly, revenue growth cannot be attributed to the degree of functional diversification among the firms in this sample.

Interestingly, net income estimates (before owner's compensation) for both 1990 and 1995 were reported by 114 of the 180 firms surveyed. As mentioned in Chapter 3, no significant spatial variation was noted among the three regions for net income growth between 1990 and 1995. With the net income data available, chi-square tests were performed to explore any possible bivariate relationships between net income growth and the age of the firms and the degree of functional diversification. In both cases, no significant relationship could be found. Although younger firms show higher revenue growth, this does not necessarily mean that they were more profitable than older firms over the period in question. Income growth was also tested against revenue size, but no significant relationship was noted.

From this particular sample, then, it would seem that neither company size nor age has any discernible influence upon profitability. Functional diversification also does not appear to have an influence upon profitability. On a more cautious note, only 63% of the

sample population provided data on profitability. Consequently, generalizations based upon the survey results should be treated rather tentatively.

Location and Functional Diversification:

With regard to functional diversification, it was initially expected that firms located in NYC would tend to be more diversified and offer a wider mix of higher order services such as management consulting, computer consulting, and/or market feasibility search. This expectation was driven by the proposition that these firms are able to enjoy the agglomeration advantages offered by a global city. In addition, size of firm was expected to exert a positive influence upon functional diversification, if only because larger firms (in terms of revenue size) are more likely to have in-house expertise in the above mentioned non-traditional services. Finally, promotional tools, especially the newer ones such as media advertising or 'cold calls', were expected to improve functional diversification (Hypothesis 2).

As described in the previous section, the respondents from this survey appeared to be concentrated in service offerings with a median of functional diversification index in the lower thirties for both 1990 and 1995. To analyze any fluctuation in functional diversification among the three regions (Hypothesis 2a), a bivariate testing was performed for 1990 and 1995 (Table 23). Of the WNY firms, 41.4 percent (n=24) and 52.0 percent (n=39) show higher than average service diversification for 1990 and 1995, respectively. In the Upstate Central area, 48.9 percent (n=23) and 47.4 percent (n=27) of the firms (for 1990 and 1995, respectively) belong to the category of functionally diversified firms. NYC firms exhibit less functional diversification, as reflected by only 26.7 percent (n=8)

83

and 38.2 percent (n=13) of the firms falling in the above average category. However, chisquare testing revealed no statistically significant relationship between location and service diversification for both 1990 and 1995 (Table 23). The functional diversification indices were, on average, evenly distributed across NYS regardless of where a firm was located within the urban system.

Table 23
Degree of Functional Diversification by Region

Region	19 (n=1		1995 (n=166)		
	Concentrated Firms	<u>Diversified</u> Firms	Concentrated Firms	<u>Diversified</u> <u>Firms</u>	
Upstate Central	51.1%	48.9%	52.6%	47.4%	
Western NY	58.6%	41.4%	48.0%	52.0%	
New York City	73.3%	26.7%	61.8%	38.2%	
Total	59.3%	40.7%	52.4%	47.6%	
At 05 level	Not Sign	officant.	Not Sign	ificant	

Note: 1) Firms with functional diversification indices less than or equal to 35 and greater than 35 are categorized as service concentrated and diversified firms, respectively, based upon a median functional diversification index of 35.

Next, the revenue size and functional diversification scores were tested (Hypothesis 2b) and significant variations were detected. Of the 73 larger firms, for example, 60 percent exhibit above average service diversification scores, compared to only 40 percent (n=32) among smaller firms (Table 24). Therefore, it appears that larger firms are more diversified functionally than smaller firms -- as expected.

Table 24
Firm Size by Degree of Functional Diversification for 1995

Degree of Functional Diversification	Smal	l Firms	Larg	e Firms	Total Number of Firms	
	#	%	#	%	1	
Concentrated Firms	61	70.9%	25	29.1%	86	
Diversified Firms	32	40.0%	48	60.0%	80	
Total	93	56.0%	73	44.0%	166	
C C	hi-square=	16:09	p≕00	是影響的		

Notes: 1) Firms with functional diversification indices less than or equal to 35 and greater than 35 are categorized as service concentrated and diversified firms, respectively, based upon a median functional diversification index of 35. 2) Firms with <= \$225,000 revenue and > \$225,000 revenue are categorized as small and large firms, respectively, based upon a median of \$225,000 revenue.

In terms of promotional tools, the firms that were more diversified attributed significantly higher "importance rankings" to the following promotional tools than the ones that were relatively more concentrated: distributing newsletters to existing and prospective clients, providing seminars or workshops, and having a marketing director (see Table 25). Among those three categories, the distribution of newsletters resulted in the largest chi-square value. Of the 78 firms with above average diversification scores, 38.5 percent consider distributing newsletters as an important promotional tool, compared to only 17.1 percent (n=13) among firms with lower than average diversification scores. With regard to seminars or workshops, 23.4 percent (n=18) of the firms with high diversification scores perceive this promotional tool to be important, compared to only 8 percent of the 75 firms with low diversification scores. This pattern is true for having a separate marketing director, where only 2.7 percent of the 75 firms consider hiring a director to be an important marketing strategy versus 11.7 percent (n=9) of the firms that are functionally more diversified than an average firm in the sample. Interestingly, newer concepts such as media advertising and 'cold calls' are not related to functional diversification in any discernible way (Table 25). Ninety-two percent (n=69) and ninetysix percent (n=73) of the firms with low and high diversification indices, respectively, perceive media advertising as not important at all. Over 90 percent of the firms in both high and low diversification categories consider making 'cold calls' to be an ineffective promotional tool.

Table 25
Perceived Importance of Promotional Tools
by Degree of Functional Diversification

Degree of Functional Involvement	<u>Distribute</u> <u>Newsletters</u> (n=154)		Newsletters Workshops		<u>Marketing</u> <u>Director</u> (n=152)		Media Advertising (n=151)		'Cold Calls' (n=152)	
	Not Imp.	<u>Important</u>	Not Imp.	<u>Important</u>	Not Imp.	<u>Important</u>	Not Imp.	<u>Important</u>	Not Imp.	<u>Important</u>
Concentrated Firms	82.9%	17.1%	92.0%	8.0%	97.3%	2.7%	88.2%	11.8%	94.1%	5.9%
Diversified Firms	61.5%	38.5%	76.6%	23.4%	88.3%	11.7%	100%	23.1%	92.3%	7.7%
Total	72.1%	27.9%	84.2%	15.8%	92.8%	7.2%	95.3%	4.7%	93.0%	7.0%
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Chi-squa p=03	N . T. A. COLOR A. C.	Chi-squa p=.009	re=6.76	Chi∓squa p=.03	c=461	Notes		Nor Sig	ijific a nt

Note:

1) Firms with functional diversification indices less than or equal to 35 and greater than 35 are categorized as service concentrated and diversified firms, respectively, based upon a median functional diversification index of 35.

In sum, it appears that location did not play a powerful role in functional diversification during the 1990-1995 period. Nevertheless, larger firms were more inclined to offer services other than accounting, auditing, and tax preparation. The more functionally diversified a firm was, the higher was the perception of the importance of the utilization of promotional tools. Yet, media advertising and making 'cold calls' were not considered important -- perhaps reflecting the "conservative" or risk-minimizing posture of the industry.

Geographic Diversification, Economic Performance, Location:

As noted in the previous chapter, firms located in the Upstate Central region were more geographically diversified than their counterparts from the other two regions (Table 9, p. 58), at least when geographic spread within the State was considered. This finding reinforces export base theory, in that larger cities are more likely to be capable of offering sufficient local income to businesses for survival and staying competitive than smaller ones. However, the survey data also showed that, on average, NYC firms earned higher out-of-state revenues than firms from the other regions. Using absolute and relative entropy measures, geographic diversification indices (including all four categories - see Table 9, p. 58) were computed. The median index value was 20 for 1995, reflecting the relatively limited geographic diversification of the firms. Although a significant regional pattern in terms of low and high geographic diversification scores is not evident (Table 26), the data do suggest (albeit loosely) that location did affect geographic diversification,

placing NYC firms on top of the diversification ranking, with WNY firms and UC firms occupying the second and third ranks, respectively.

Table 26
Degree of Geographic Diversification by Region for 1995

Region	Concent:	Concentrated Firms # %		fied Firms	Total Number of Firms	
		Í	#	%		
Upstate Central	31	50.0%	31	50.0%	62	
Western NY	30	37.5%	50	62.5%	80	
New York City	9	26.5%	25	73.5%	34	
Total	70	39.8%	106	60.2%	176	
	5.4.2.4.C	hi-square=5.3	9 · · · · p	= .06		

Note:

When the growth in geographic spread over 1990-1995 was tested against location, however, location did not seem to matter (Table 27). Across the State, approximately half of the firms experienced more than average increases in geographic spread over the 1990-1995 period (median of 34 percent change). In other words, firms across NYS experienced similar patterns of geographic spread over five years.

Table 27
Change in the Degree of Geographic Diversification by Region 1990 - 1995

Region		vith Minor nange		with Major hange	Total Number of Firms	
	#	%	#	%	l	
Upstate Central	14	51.9%	13	48.1%	27	
Western NY	19	48.7%	20	51.3%	39	
New York City	10	50.0%	10	50.0%	20	
Total	43	50.0%	43	50.0%	86	
At .05 level	in which the	4.001.45.60.24.	Not S	gnificant		

Note: 1) Firms with a change in geographic diversification indices (1990-1995) of less than or equal to 34.9% and greater than 34.9% are categorized as firms with minor and major change, respectively, based upon a median of 34.9% change.

¹⁾ Firms with geographic diversification indices less than or equal to 20 and greater than 20 are categorized as geographically concentrated and diversified firms, respectively, based upon a median geographic diversification index of 20.

Regarding the influence of geographic diversification upon revenue growth (Hypothesis 3), no significant relationship was found (Table 28). For both 1990 and 1995, there is a 50-50 split among high and low growth firms in regard to geographic diversification. Similar results were encountered when income growth or profit margin and geographic diversification were tested. Based on the above analysis, therefore, diversification (both functional and geographic) does not seem to have significantly influenced revenue and/or income growth and profit margin for the survey firms. However, across all regions, the firms appear to have increased their geographic spread over the five years (1990-1995). For example, on average, 45.8% of the firms in 1990 were diversified, versus 63% in 1995. Moreover, NYC firms appear to have experienced above average profit margins (see Table 4, p. 50, Chapter 3) both in 1990 (43.2%) and 1995 (47.2%). Therefore, the survey data seem to indicate, albeit without statistical significance, that NYC firms may have performed better, in economic terms, by finding extra-regional markets rather than aggressively pursuing markets for new non-traditional services.

Table 28

Revenue Growth by Degree of Geographic Diversification

Revenue Growth	_	<u>90</u> 120)	1995 (n=119)		
	Concentrated Firms	<u>Diversified</u> <u>Firms</u>	Concentrated Firms	<u>Diversified</u> Firms	
Low (<=20%)	55.0% (33)	45.0% (27)	39.0% (23)	61.0% (36)	
High (>20%)	53.3% (32)	46.7% (28)	35.0% (21)	65.0% (39)	
Total	54.2% (65)	45.8% (55)	37.0% (44)	63.0% (75)	
At 05 level	NotSig	nificant	NotSig	nificant	

Notes: 1) Median revenue growth = 20%.

²⁾ Firms with geographic diversification indices less than or equal to 20 and greater than 20 are categorized as geographically concentrated and diversified firms, respectively, based upon a median functional diversification index of 20.

Delivery Methods

In Chapter 3, it was noted that personal interactions of a face-to-face nature were considered to be very important, regardless of the types of services offered (see Tables 10 and 11, p. 60). In an effort to explore the influence of location upon delivery methods, the responses for delivery methods were crosstabulated across the three regions, and two significant results were uncovered (see Tables 29 and 30). For both traditional and non-traditional services, NYC firms were less likely to utilize face-to-face conversations as the main means of service delivery within their "home area" than their counterparts in the other two regions. Therefore, it can reasonably be inferred that NYC firms were more accustomed to using electronic and/or other means of service delivery than firms in the other regions.

A further interpretation that can be derived from Tables 29 and 30 is that firms across all regions appear to use other means of service delivery more frequently to reach distant clients (non-local) than clients located within their respective metropolitan areas. However, the importance of face-to-face conversations was still weighed heavily in all cases.

90

Table 29
Significance Tests on Delivery Methods
Traditional Services
of Firms and % of Sample

		Within metro				Out of metro area				
	Face-t	o-face	Other		Face-	to-face	<u>Other</u>			
Region	<u>Seldom</u>	Always	<u>Seldom</u>	Always	<u>Seldom</u>	Always	Seldom	Always		
Upstate Central	11 (18.6%)	48 (81.4%)	37 (66.1%)	19 (33.9%)	34 (66.7%)	17 (33.3%)	21 (40.4%)	31 (59.6%)		
Western New York	14 (17.9%)	64 (82.1%)	58 (80.6%)	14 (19.4%)	43 (63.2%)	25 (36.8%)	35 (55.6%)	28 (44.4%)		
NYC	14 (46.7%)	16 (53.3%)	20 (71.4%)	8 (28.6%)	15 (57.7%)	11 (42.3%)	14 (60.9%)	9 (39.1%)		
At .05 level	Significant Chi-square = p= ,003	un.	Not Sig	nificant		nificant:	Not Sign	(ficant		

Note: The data in this table have been reproduced from Table 10 (p. 60), with additional information on the Chi-square results.

Table 30
Significance Tests on Delivery Methods
Non-traditional Services
of Firms and % of Sample

		<u>Within</u>	Metro		Out of metro area					
	Face-to-face		Other		Face-t	to-face	Other			
Region	Seldom	Always	<u>Seldom</u>	Always	Seldom	Always	Seldom	Always		
Upstate Central	13 (22.0%)	46 (78.0%)	42 (75.0%)	14 (25.0%)	36 (72.0%)	14 (28.0%)	26 (50.0%)	26 (50.0%)		
Western New York	18 (23.4%)	59 (76.6%)	57 (79.2%)	15 (20.8%)	42 (60.0%)	28 (40.0%)	38 (58.5%)	27 (41.5%)		
NYC	18 (58.1%)	13 (41.9%)	19 (65.5%)	10 (34.5%)	18 (64.3%)	10 (35.7%)	14 (53.8%)	12 (46.2%)		
At:.05 level	Significant Chi-square = 15:18 p= 000		Not Significant	Not Significant	Yot Significant	[Significants	Significant		

Note: The data in this table have been reproduced from Table 11 (p. 60), with additional information on the Chi-square results.

International Activities

In the context of international activities, it was hypothesized that the propensity to obtain international business would be positively related to location, revenue size, and marketing strategy. As stated in Chapter 3 (p. 46), only a tiny fraction (one firm) of the sample considered itself to be an international company (i.e., with offices or affiliates in foreign countries). The group of firms serving foreign clients (45 out of 180) was the only suitable group for any statistical testing. Only 13 and 10 firms of the 180 firms in the sample were involved in helping clients export and exporting directly to foreign clients, respectively (see table 14, p. 66, Chapter 3). Of the forty-five firms that served foreign clients, nine also helped clients export and exported services directly to clients. The firms were also asked to indicate the types of services they offered in the context of international activities. Most (over 90%) of the forty-five firms offered accounting and auditing and tax preparation and planning in the context of international activities. One firm in each category provided educational services. As explained in this section, promotional tools were not considered important by the firms that have internationalized (both in NYC and in WNY). However, the influence of a primate city and a cross-border region was clearly noted among the internationalized firms. These findings may point to several characteristics of the SMFs in this industry, such as: 1) these firms lack the expertise to offer anything other than traditional services, 2) they are not aware of the demand for non-traditional services in the international arena, 3) they are not aggressively

seeking these markets, and/or 4) the internationally-oriented business seemed to 'fall in their lap' accidentally because of their location.

Unfortunately, the n-sizes for the crosstabulations for helping clients export and direct exports are too low to permit reliable significance testing via either Chi-square and/or Fisher's tests (expected frequencies drop below 5 for more than 25% of the cells [rendering Chi-square tests inappropriate], while the distributions themselves fail Fisher's exact tests).

Interestingly, firm size and international revenue share from serving foreign clients (median 2%) were found to be negatively related with each other at the .08 level, implying that smaller firms may be somewhat more inclined to be involved in this type of international activity (Table 31). As mentioned in Chapter 3 (p. 64), the classification of sole proprietorships, partnerships, and corporations appeared to be somewhat evenly distributed among these forty-five firms. This phenomenon seems to indicate the locational influence of a primate city and/or a cross-border region may have helped overcome some of the size barriers in the internationalization process. In addition, based on categorical (yes/no) measures, the influence of an export-oriented region and a first-tier city upon international orientation is apparent -- forty-one of the forty-five firms that served foreign clients were located in either WNY or NYC. However, no significant relationship was noted between the degree of involvement (i.e., high or low, based on a median of 2%), in terms of revenue share and location (Table 32). Moreover, none of the promotional tools described earlier seemed to have a significant relationship with the degree of involvement in international activities (Table 33).

Table 31
Degree of International Involvement by Firm Size (1995)

Serving Foreign Clients

<u>Firm Size</u>	Low International Involvement			High International Involvement		
	#	%	#	%	<u>Firms</u>	
Small (Revenue<=\$225,000)	4	25.0%	12	75.0%	16	
Large (Revenue>\$225,000)	15	51.7%	14	48.3%	29	
Total	19	42.2%	26	57.8%	45	
1.20	hi-square	1 3.02	.p = .08			

Notes:

- 1) Median 1995 revenue = \$225,000.
- 2) Firms with less than or equal to 2% and greater than 2% of revenue from serving foreign clients are categorized as low and high international involvement, respectively (median = 2%).

Table 32
Degree of International Involvement by Region
Serving Foreign Clients

Region		Low International Involvement		ernational vement	Total Number of Firms
	#	%	#	%	<u> </u>
Upstate Central	2	50.0%	2	50.0%	4
Western NY	11	45.8%	13	54.2%	24
New York City	6	35.3%	11	64.7%	17
Total	19	42.2%	26	57.8%	45

Note:

1) Firms with less than or equal to 2% and greater than 2% of revenue from serving foreign clients are categorized as low and high international involvement, respectively (median = 2%).

Table 33
Perceived Importance of Promotional Tools
by Degree of International Involvement - Serving Foreign Clients

<u>Degree of</u> <u>International</u> <u>Involvement</u>	<u>Distribute</u> <u>Newsletters</u>			inars/ ishops	Marketing Director		Media Advertising		<u>'Cold</u>	Calls'
	Not Imp.	<u>Important</u>	Not Imp.	<u>Important</u>	Not Imp.	<u>Important</u>	Not Imp.	<u>Important</u>	Not Imp.	<u>Important</u>
Low International Involvement	61.1%	38.9%	64.7%	35.3%	94.4%	5.6%	88.2%	11.8%	94.1%	5.9%
High International Involvement	65.4%	34.6%	76.9%	23.1%	92.3%	7.7%	100%	23.1%	92.3%	7.7%
Total (n = 44)	63.6%	36.4%	72.1%	27.9%	93.2%	6.8%	95.3%	4.7%	93.0%	7.0%
At .05 level	Not Sig	· · · · · · · · · · · · · · · · · · ·	Not Sig	nificant	No Sie	nificant	NotSig	uficant:	No Si	nificant

Note:

1) Firms with less than or equal to 2% and greater than 2% of revenue from serving foreign clients are categorized as low and high international involvement, respectively (median = 2%).

Collaborative Efforts

While Hypotheses 6 and 7 were designed to test for possible relationships between collaborative efforts and international business involvement, only nine firms (5% of total) turned out to be active collaborators with other firms (mainly vendors of legal services). Unfortunately, then, Hypotheses 6 and 7 are untestable with the data on hand. Despite this setback from a statistical testing point of view, it is noteworthy that a higher proportion of firms from NYC (see Table 14 in Chapter 3) generated more revenue from all three categories of international activities than firms in the other two regions. Specifically, as postulated in Chapter 2 (p. 33), NYC firms demonstrated, in relative terms, more proactive forms of international activities, i.e., exporting directly or helping clients export, than firms in WNY or Upstate Central region. Moreover, as anticipated, WNY firms appeared to utilize existing international networks of a cross-border region and exhibited more activities in serving foreign clients (mainly providing routine accounting and tax preparation services) than the other two categories. Only a handful of firms in the Upstate Central region earned negligible (2% or less) or no revenues from helping clients export or direct exports. Therefore, some variability in the types of networks utilized were noted between firms located in NYC, WNY, and the Upstate Central region. However, contrary to Hypothesis 7, only two firms were members of international accounting associations, and neither considered such collaboration efforts to be important. In sum, the SMFs in this sample do not appear to utilize aggressive collaborative efforts to seek international business. Such passive attitudes may reflect the newness of the concept of internationalization for this size class of firms in the public accounting industry. Table 34 presents a summary of the results described in this chapter.

Table 34
Summary of Results

Hypothesis	<u>Topic</u>	Results	Hyp	otbesis
				est
			-	ptRejec
la	Revenue growth (1990-1995) and age-positive	Younger firms with higher		*
	relationship expected	revenue growth; no relationship		
		with age and income growth.		
	Revenue growth and functional diversification-			
• 1.	positive relationship expected	Very little diversification; no		
16		significant change in		
	Income growth and Profit margin	diversification between 1990		*
		and 1995; no relationship		
		between functional		
		diversification and revenue or		
		income growth or profit margin.	 _	
2	Functional diversification influenced by:			1
	a) location,	a) Influence of location		*
	h) size and	insignificant;		
	b) size, and	b) larger firms are more diversified functionally;	*	
	c) promotional tools	c) the more diversified firms	•	
	c) promotional tools	perceive promotional tools	Ì	
		as important except for media	*	
		advertising and 'cold calls'.		
		Insignificant relationship		
		between income growth and size		*
		or functional diversification.		
3 & 4	Geographical diversification and revenue growth -	Location does effect geographic	*	
	positive relationship expected	diversification placing NYC in		1
		first rank, WNY second, and		}
		Upstate Central third. No spatial		
		differentiation in the change in		
		geo. diversification during 1990-		
		1995.		*
		Insignificant relationship		
		between geo. diversification and		
		revenue or income growth.		
	Variations among delivery methods - face-to-face	NYC utilizes more other means		
	vs. other means	- variations in methods by	*	
	Dance of international involvement in figure and	location		
5	Degree of international involvement influenced by:	Very little int'l involvement; WNY and NYC firms have		*
i	a) location,	higher int'l activities than other		
	b) size, and	cities; marketing strategies have		
ļ	c) promotional tools	no influence; size apparently		
	c, F	does - perceived as one of the		
i		largest barriers to		
ļ		internationalization.		
6&7	Influence of strategic networks upon international	Too limited involvement in	n/a	n/a
· · ·	involvement	networks to perform statistical		
J		testing.		

CHAPTER SUMMARY

Based on the above analysis, the following conclusions may be drawn. First, the firms are close to being spatially homogenous. Specifically, it would appear that functional diversification and the development of new markets (especially foreign ones) are new concepts to these firms. Firm size appears to be the largest barrier for diversification in terms of limited in-house expertise and capital resources. Furthermore, the SMF component of the public accounting sector is not inclined to exploit aggressive promotional strategies such as media advertising or 'cold calls' to improve economic performance or to tap into new markets. The firms apparently do not perceive such promotional strategies to be important tools for achieving improved business performance.

Firms located in NYC appear to exploit a broader range of service delivery methods than their counterparts in the other cities. The NYC firms also appear to be more diversified geographically (at the interstate level). Among the firms that are involved in international activities, a majority is located in NYC and WNY, showing the possible influence of an international center and an export-oriented region. However, location was not found to be a significant factor for the degree (i.e., high or low) of international involvement.

In the next chapter, the implications of the study results for the SMF component of the public accounting sector are discussed. The following chapter also lays out an agenda for future research.

Chapter 5

IMPLICATIONS OF THE EMPIRICAL RESULTS

A number of general conclusions can be drawn from the survey results, some of which suggest important correctives to recent academic and policy perspectives on the internationalization of producer service activity. First, SMFs in the public accounting sector typically deliver relatively standardized services to local or regional clients. There is little evidence of ongoing and/or rapid internationalization among the survey firms, and there is only weak evidence of functional diversification. Second, the most widespread obstacle to the development of interregional or international markets is enterprise size. Simply stated, few SMFs in this sector contain sufficient internal resources to systematically explore and/or develop non-local markets. Although some of these SMFs deliver inputs that support the internationalization efforts of client firms (indirect export activity), it would appear that most SMFs in this sector may themselves need external producer service inputs in order to enter non-local markets. Third, there is scant regional variability in the demographic, organizational, and/or market characteristics of New York State SMFs in this sector. This suggests that most SMFs in the public accounting domain continue to provide relatively standardized or commodified services, rather than diversifying into strategic offerings in spheres such as management consulting or corporate planning. In short, there is little evidence of the knowledge-driven internationalization of SMF-based accounting activity that has recently been popularized in a variety of professional journals. Overall, then, it would appear that the era of internationalized (and

functionally diversified) public accounting services has arrived only for very large firms in the corporate sector.

On this note, the empirical results shown in Chapters 3 and 4 suggest a number of patterns that ought to be of interest to economic geographers that study the dynamics of producer service activity. For instance, surveys that report trends on the basis of categorical measures (yes/no) can project misleading pictures of the extent to which change has actually taken place within any given industry. Second, empirical research on producer service activity must pay greater attention to the role of company size in competitive behavior. And, third, the importance of geographical location in all of this may need to be re-examined in light of several of the findings noted earlier. The following section elaborates upon each of these points (among others), and offers a synthesis of the empirical findings with a view toward developing a new research agenda for future work.

Lack of Functional Diversification and Internationalization:

In contrast to the results from the National Survey by the Texas Society of CPAs (Stolle, 1991), this study indicates that small accounting firms in New York State continue to offer mainly traditional services. This apparent lack of functional diversification can be traced to a variety of factors, some of which are discussed below.

It is worth repeating that the National Survey dealt with the incidence of diversification (yes/no), while the survey conducted for this study asked for interval-level measures of the contribution of non-traditional services to total revenues. In Table 35, the percent of firms offering non-traditional services (at a yes/no response level) is presented.

Table 35

<u>Percent of Firms Offering Non-traditional Services</u>

Type of Service Offered	Curro	ent NYS Survey*	National 1990 Survey**
Tax Planning	1990	98.5%	99.4%
	1995	98.8%	Not available
Management Consulting	1990	42.6%	
	1995	47.3%	Not available
Financial Planning	1990	35.3%	63.2%
	1995	39.5%	Not available
Litigation Support	1990	7.35%	56.4%
	1995	11.9%	N/A
Bankruptcy Services	1990	9.6%	40.3%
	1995	11.9%	Not available
Mergers and Acquisitions	1990	12.5%	34.0%
	1995	14.4%	Not available
Market and Econ. Feasibility	1990	2.9%	13.9%
	1995	1.2%	Not available

^{*} Firms that reported as having revenues from these categories. Firms not responding to these questions were excluded from the percentage calculations.

^{**} Stolle (1991), *Practicing CPA*, November, p.7, representing a weighted average of small to large sized local and regional firms.

By comparing the estimates in this table with the data shown in Table 8 in Chapter 3 (p. 57), it becomes clear that a categorical approach can create the impression that the survey firms are more functionally diversified than they really are. The categorical data also point to increased diversification over the 1990-1995 period. For example, Table 35 shows that 42.6% (1990) and 47.3% (1995) of the firms in the sample offer management consulting. However, Table 8 (Chapter 3, p. 57) shows that average revenue shares from this category never exceeded 7% over the study period. In the case of financial planning, the categorical approach shows that almost 40% of the firms were engaged in this type of service. This being so, the highest revenue share from this activity was only about 5% for both 1990 and 1995, as reported by NYC firms. Table 35 also shows that the National Survey (Stolle, 1991) found a consistently higher percentage of firms offering non-traditional services than the NYS survey conducted by this author.

The small size of the survey firms, both in terms of revenues and the number of professional employees (see Table 3 in Chapter 3, p. 49), would appear to prohibit the development of economies of scope. These SMFs are not equipped to compete with the larger players (the 'Big Six'), most of whom have the capital and labor resources to diversify into management consulting or information technology related services. Among the SMFs in this sample, the top ten firms (those with 1995 gross revenues greater than \$1,000,000) exhibited a significantly higher functional diversification index (a mean of 50 and a median of 46) than the average index of 35 for the total sample as mentioned earlier in Chapters 3 and 4. Some of these mid-sized firms may have been created when

professionals left larger firms rather than grant their employers the benefits of their specialized expertise, such as in management consulting (Daniels, 1995).

To an extent, the risk aversion of these SMFs in offering new and expanded services to clients may be the result of threats from negligence lawsuits that have caused the extinction of many CPA firms. As Brachel (p.50, 1996) points out, "It is very difficult to be innovative if you are always concerned that every new service you offer could be subject to significant liability". The American Institute of CPAs has plans to actively influence state legislation for liability reform. In addition, the new Private Securities Litigation Reform Act of 1995 purports to alleviate this problem (Brachel, 1996). Larger firms have the alternative of organizing as limited liability partnerships (LLPs) or limited liability corporations (LLCs) in order to protect the individual assets of owners and partners from the exposure of vicarious liability arising from the professional acts of other owners, partners and their employees (The CPA Journal, 1994). However, small firms, mainly operating as individual practitioners (53% of the study sample), do not have these options available to them. As a result, these firms may be less inclined to offer new services that would increase their exposure to malpractice or negligence lawsuits.

The legal liability factor may also play a role in the low level of international involvement among the SMFs. A US-based accounting firm can be sued in the US courts for negligent audits in other nations (Berton, 1988). Although such exposure can be managed by insurance, the costs of such measures are most likely to be prohibitive for SMFs. While it is true that management consulting services may not fall in the category of services that face the risk of exposure, the perceived uncertainty in the degree of risk may

be sufficient to discourage small practitioners from becoming involved in international activities. The lack of expertise in foreign accounting and/or taxation rules, as well as minimal reciprocity in licensing regulations among different countries (Gupta, 1994; Radebaugh and Gray, 1993), could also provide possible explanations for the low level of internationalization among SMFs in this industry. Differences in national accounting systems, principles, reporting, and auditing standards have had a restraining effect on international trade in accounting services (Sen and Hall, 1994).

Economic Performance:

No significant relationship was found between economic performance in terms of revenue or net income (before owner's compensation) or profit margin and functional or geographic diversification. On an interesting note, however, NYC firms tended to exhibit higher than average profit margins, but relatively lower functional diversification and higher geographic diversification than firms located in the other cities. Although no definitive conclusions could be reached, this finding implies that pursuing extra-regional markets with traditional services may produce better economic results than attempting to offer newer services (the latter option almost always requires a greater investment in human capital). If higher levels of functional and geographical diversification had been evident among the survey firms, the validity of this conjecture could have been explored further. At this point, it is also noteworthy that 27.3% of the firms in the sample (see Table 17, Chapter 3, p.73) identified a lack of service diversification as being the most frequent reason for losing clients. In other words, although the accounting SMFs are

aware of existing opportunities for expanding their market base, their size has been a limiting factor in taking advantage of new sets of demands among their clients. There would appear to be a circular problem here, in that size limitations prohibit diversification at a time when diversification is required to prevent clients from seeking alternative suppliers.

Location:

Geographic location did not appear to have a major bearing upon the demographic, functional diversification, or international characteristics of the firms in the sample. However, geographic diversification in terms of intermetropolitan markets appeared to be influenced, albeit weakly, by a firm's location within the urban system. NYC firms exhibited the highest geographic spread at the interstate level. At the same time, NYC firms appear to utilize mail and other electronic means of delivering services to a greater extent than firms located in the other cities, reinforcing the idea that firms in primate cities adopt new technologies earlier than their counterparts in smaller centers. Although not statistically significant, some influence of a first-tier city and a cross-border region was noted by the fact that NYC and WNY firms demonstrated stronger international involvement than the other firms in the sample. In addition, revenue generated from international activities seemed to increase (rather modestly) over the 1990-1995 period. Direct export activities and revenue from helping clients export were noted in a higher proportion among NYC firms than in the other two regions. WNY firms appeared to benefit from the locational advantages of an export-oriented region in light of the fact that

aggressive promotional efforts were not considered important at all in relation to international activities.

A link with regional demand structure was noted by the fact that 38.3% of the WNY firms (see Table 18 in Chapter 3, p.74) identified manufacturing as the top sector in terms of non-traditional service demand. Only 16.9% and 14.7% of the UC and NYC firms, respectively, pulled non-accounting work from the same sector. However, even with these differences in demand characteristics across the regions, SMF performance was not found to vary significantly by any metric of client focus.

LIMITATIONS OF THE STUDY

At this stage, it is appropriate to say something about the limitations of the study. First, the lack of variability in the data restricted the range of analytic possibilities from the very start, and major reliance had to be placed upon chi-square tests. More indepth firm-level discussions prior to the development of the questionnaire could have provided other relevant information on competitiveness and economic performance. The original research proposal that served as the template for this study included a variety of multivariate options, all of which were designed to provide starting points for the development of explanatory models for the topic at hand. Unfortunately, the data turned

out to be unsuitably distributed for this to be achieved. Yet, the data would appear to reflect the types of condition that are actually present.

Second, some of the hypotheses were framed on the basis of a national survey that proceeded on a categorical basis. Consequently, published information regarding existing economies of scope within the SMF component of the public accounting sector created a somewhat misleading picture. The interval data collected in this dissertation revealed the actual level of functional diversification, or the lack of, across all regions of New York State. Third, the difficulty in producing a systematic follow-up should be mentioned. The reader may recall that an endorsement from the past President of the Buffalo chapter of the New York State Society of CPAs was enclosed with the questionnaires. The endorser requested that confidentiality of the respondents be guaranteed unless the respondent voluntarily provided his/her name, phone number, and address for any follow-up questions. This limited the possibility of a systematic follow-up procedure, in that very few companies provided contact names or business addresses.

Finally, it would be inappropriate to conclude the study without acknowledging the weaknesses that often plague exploratory survey research. The study relied heavily upon a mail-out questionnaire. The sample was small, many of the responses may have been impressionistic, and data for some of the sections were inadequate for rigorous statistical analysis. At the beginning of the project, it was anticipated that the firms would exhibit considerable functional and geographic variability. On this basis, questions regarding traditional operations (forward linkages for example) were omitted. Questions regarding collaborative efforts in obtaining traditional services domestically were also left

out. With hindsight, it would appear that these types of considerations could have been investigated further.

SUMMARY AND CONCLUSIONS

This dissertation was designed to fill a gap in our understanding of the role of location, regional demand structure, and market diversification in the commercial performance of small- and medium-sized certified public accounting firms operating in an industry dominated by a handful of multinational conglomerates. The central objective of the project was to examine the employment, market, and organizational characteristics of these SMFs and possible regional variations in their attributes. Data for the project came from a regionally stratified postal survey of small- and medium-sized professional accounting firms across New York State.

An examination of recent literature on producer services and regional development revealed little systematic empirical work of direct relevance to the project's objectives. However, based upon several key studies (see Figure 1 in Chapter 1, p. 12) on the economic contribution of advanced producer services, their increased tradeability and the extent of geographic spread in non-local markets, and the role of location and collaborative inter-firm networks upon market diversification, a series of testable hypotheses were formed. At the broadest level, the dissertation was developed to assess the interplay between a firm's geographical location and its competitive characteristics.

A review of industry literature indicated that the public accounting industry is currently faced with a shrinking domestic market for traditional accounting and auditing services. As a result, there is a need for accounting firms to search for new markets, both geographically and functionally. According to a national survey conducted by the Texas Society of CPAs in 1990, small- and medium-sized CPA firms were offering many non-traditional services and utilizing innovative promotional tools such as media advertising and 'cold calls' even five years ago. Against this backdrop, it was anticipated that firms that successfully diversified output into non-traditional services such as management consulting and expanded into non-local markets would be better performers in terms of revenue and/or income growth. A firm's location in the urban hierarchy, its size in terms of revenue, the degree of utilization of innovative promotional tools, and collaborative links with other firms in the producer services sector were hypothesized to influence its degree of functional and geographical diversification and the extent of internationally-oriented activities. Direct and indirect exports such as helping clients export and serving foreign-owned clients at home were included in the definition of international activities.

Chapter 2 introduced a set of detailed hypotheses based upon the above expectations. A sampling procedure for analyzing the organizational and performance characteristics was then described. The sample was randomly selected from the Yellow pages of the NYNEX telephone directory that provides the most comprehensive listing of CPA firms. The 'Big Six' firms were excluded from the sample. Detailed self-administered questionnaires were distributed to a sample of accounting SMFs located in Syracuse, Albany, Binghamton, Rochester, Buffalo, and New York City. A cover letter

from the past President of the Buffalo chapter of the New York State Society of CPAs endorsing the survey was sent along with the questionnaire. One hundred and eighty valid responses were received from a total of 790 mailed questionnaires, giving a final response rate of 24%. Because the n-sizes by city turned out to be lower than was anticipated, the results were "regionalized" for analytic purposes. Syracuse, Albany, and Binghamton were grouped into the Upstate Central region, Buffalo and Rochester were merged to form the Western New York region, while New York City (NYC) was classified as a distinct group on its own.

Chapters 3 and 4 described the results of the survey. A broad review of the data indicated that the CPA firms in the SMF sector are very small in revenue and employment size; they derive most of their business from local sources; they offer mostly accounting, auditing, and tax preparation services; and a majority are rather "conservative" when it comes to "newer" types of promotional strategies. In addition, no major spatial variations among the aforementioned three regions were noted.

In Chapter 4, more detailed statistical analyses were performed to test the hypotheses. Entropy measures were utilized to test the degree of functional and geographical diversification. Chi-square testing found no significant relationship between revenue or income growth (1990-1995) and the degree of functional or geographic diversification. Contrary to my initial expectations, location did not appear to influence economic performance or functional diversification. Size was found to be a significant barrier in the realization of economies of scope -- the larger firms offered a wider variety of services as they had access to more capital and in-house expertise in non-traditional

services. On average, these SMFs hired less than two professional employees across all regions. The more diversified firms perceived promotional strategies as important tools for improving performance. However, aggressive strategies such as media advertising and 'cold calls' were not considered important, implying a somewhat "conservative" attitude within the SMF segment of this industry.

In terms of geographic diversification, chi-square testing tentatively revealed that NYC firms obtain relatively more revenue from out-of-state sources than firms in the other regions. In addition, NYC firms appear to deliver both traditional and non-traditional services through means other than face-to-face conversations than Upstate Central and Western New York firms, possibly implying locational advantages for firms in the NYC metropolitan area.

The group serving foreign-owned clients (25% of the sample) was the only suitable group for any statistical testing among the three types of international activities described earlier. Among these firms, the majority were located in Western New York and NYC, reinforcing the influence of an export-oriented region and an international center. However, location was not found to be a significant factor in determining the degree of international involvement (i.e., a high or low proportion of revenue from this category). On average, only 5.4% of revenue was derived from serving foreign-owned clients in 1995. In addition, the respondents indicated that mainly accounting and auditing services were being offered to foreign-owned clients.

Overall, it would appear that SMFs in the public accounting sector continue to deliver relatively standardized services to local and regional clients. Little evidence of

functional diversification and internationalization was found, contrary to the belief popularized by industry literature. Categorical measures, as used by the National Survey conducted by the Texas Society of CPAs, created a misleading perception that non-traditional services were common among accounting SMFs. The survey conducted for this dissertation obtained interval data which portrayed a more realistic picture of the industry. It appears that most SMFs in this sector may themselves require external producer service inputs in order to enter non-local markets. Size of the firms and the fear of negligence lawsuits could be playing major roles in the risk-averse attitude of these firms. Furthermore, this study makes it clear that the role of geographic location upon a firm's competitiveness may not always be as strong as previous studies have implied.

FUTURE RESEARCH IMPLICATIONS

At the beginning of this dissertation, it was noted that much of the recent research on the accounting industry has focused upon multinational firms within the 'Big Six'. A paucity of research on the SMF component of the industry was also noted. In retrospect, an empirical focus upon the 'Big Six' may be justified, in that SMFs do not appear to be "innovating" their way into offering new services or international markets. Even so, this does not necessarily mean that small firms will continue to operate on the margins of nonaccounting services or international activity. Fully 25% of the firms in the NYS sample exhibit at least some degree of international involvement. The task remains to monitor their progress over time. One possible direction for future research would be

to compare the service diversification trends of large versus small firms as the next century approaches. A temporal perspective is necessary in this regard, if only because SMFs with no international involvement today may become specialized players in the global markets of tomorrow. Future researchers, however, should be fully aware of inter and especially intrasectoral differences (based upon the size of the firm) among advanced producer service industries. In other words, the research focus utilized in this study might uncover stronger regional differences if applied to another producer service industry.

The findings of this dissertation have demonstrated a need for informing public accounting SMFs regarding existing and potential opportunities for functional and geographical diversification. Although participation in internationally-oriented business was very limited among the firms in this study, the types of firms that were successful in such efforts were somewhat evenly distributed among sole proprietorships, partnerships, and professional corporations. This appears to indicate that opportunities for new markets do currently exist for all size classes. To an extent, then, the perception that international markets and economies of scope are not accessible to these SMFs may need to be modified. The State CPA societies and the American Institute of CPAs have the capability to improve the accessibility of educational courses regarding these opportunities and the ways to obtain them. Finally, the academic accounting departments of local universities must face the responsibility of internationalizing their accounting and management curricula in anticipation of improving the supply of skilled expertise necessary to meet the demands of tomorrow.

BIBLIOGRAPHY

- Aharoni Y. (1993) Ownerships, networks and coalitions, *Coalitions and Competition*, In Y. Aharoni (ed), 121-142. London: Routledge.
- AICPA (1994a) The Supply of Accounting Graduates and the Demand for Public Accounting Recruits-1994, American Institute of Certified Public Accountants, Inc.: New York.
- AICPA (1994b) 1994 Small Business Survey; Fifth Annual Report, American Institute of Certified Public Accountants, Inc.: Private Companies Practice Section; New York.
- Bagchi-Sen S. and Pigozzi B. (1993) Occupational and industrial diversification in the United States: implications of the new spatial division of labor, *Professional Geographer*, Vol 45(1), 44-54.
- Bagchi-Sen S. and Sen J. (1997) The current state of knowledge in international investments in producer services, *Environment and Planning A*, forthcoming in May.
- Barnes J.A. (1972) Social networks, pamphlet, Reading, Mass: Addison-Wesley.
- Bari E. and Soy A. (1993) Business service location strategies in the Barcelona metropolitan region, *The Geography of Services*, In P.W. Daniels, S. Illeris, J. Bonamy, and J. Philippe (eds), 23-35, London: Frank Cass & Co. Ltd.
- Beaverstock J.V. (1991) Skilled international migration: an analysis of the Geography of international secondments within large accountancy firms, *Environment and Planning A*, Vol 23, 1133-1146.
- Beauchemin T.J. (1991) Facing new challenges, *The Practicing CPA*, September, 1,7-8.
- Berman D.H. (1995) Export-information/knowledge acquisition and export planning: an empirical study of small-firm behavior, Ph.D. Dissertation, Department of Geography, State University of New York at Buffalo, Buffalo, NY 14261.
- Berton L. (1995) Squeeze Play Midsize accountants lose clients to firms both large and small, *The Wall Street Journal*, November 14: 1-A4.
- Berton, L. (1988) Accounting firm scan be sued in US over audits done abroad, judge says, *The Wall Street Journal*, March 10: 10.
- Beyers W.B. (1991) Service industries, service occupations, and the division of labor, a paper presented at the North American Regional Science meetings, New Orleans.

- Beyers W.B. and Alvine M.J. (1985) Export services in post-industrial society, *Papers of the Regional Association*, Vol 57, 33-45.
- Beyers W.B. and Lindahl D.P. (1994) Competitive advantage and information technologies in the producer services, a paper presented at the annual meetings of the American Association American Geographers, San Francisco, April, 1-46.
- Beyers W.B., Alvine W.B., and Johnson E.G. (1985) The service sector: a growing force in the regional export base, *Economic Development Commentary*, Vol 9, 3-7.
- Blenker P. and Christensen P.R. (1995) Interactive strategies in supply chains a double-edged portfolio approach to small- and medium-sized subcontractors' position analyses, *Entrepreneurship & Regional Development*, Vol 7, 249-264.
- Birch D. (1987) Job Creation in America: How Our Smallest Companies Put the Most People to Work, New York: Free Press.
- Birley B. (1985) The role of networks in entrepreneurial process, *Journal of Business Venturing*, Vol 1, 107-117.
- Bowman's Accounting Report (1994) April, 950 East Paces Ferry Road, Suite 2425, Atlanta, GA 30326-1144.
- Brachel J.V. (1996) Reinventing the CPA, Journal of Accountancy, Vol 182(5), 49-51.
- Burns L.S. and Healy R.G. (1978) The metropolitan hierarchy of occupations: an economic interpretation of central place theory, *Regional Science and Urban Economics*, Vol. 8(4), 381-393.
- Butler J.E. and Hansen G.S. (1991) Network evolution, entrepreneurial success, and regional development, *Entrpreneurship and Regional Development*, Vol 3, 1-16.
- Cecil H.W., Ciccotello C.S., and Grant C.T. (1995) The choice of organizational form, Journal of Accountancy, Vol 180(6), 45-52.
- Chandra B. (1992) An empirical analysis of the impact of technological innovation on the corporate performance of high-technology manufacturing establishments, Ph.D. Dissertation, Department of Geography, State University of New York at Buffalo, Buffalo, NY 14261.
- Coffey W.J. (1995) Producer services research in Canada, *Professional Geographer*, Vol 47(1), 74-81.
- Coffey W.J. (1989) Service Industries in Regional Development, Halifax, Canada: The Institute of Public Policy.

- Coffey W.J. and Bailly A. (1992) Producer services and systems of flexible production, *Urban Studies*, Vol 29(6), 857-868.
- Coffey W.J. and Drolet R. (1996) Make or buy: internalization and externalization of producer service inputs in the Montreal metropolitan area, *Canadian Journal regional Science*, Vol XIX:1, 25-48.
- Coffey W.J. and Polèse M. (1987) Trade and location of producer services: a Canadian perspective, *Environment and Planning A*, Vol 19, 597-611.
- Curran J. and Blackburn R. (1994) Small Firms and Local Economic Networks, London: Paul Chapman.
- Curran J., Jarvis R., Blackburn R., and Black S. (1993) Networks and small firms: constructs, methodological strategies and some findings, *Small Business Journal*, Vol 11(2), 13-25.
- Daniels P.W. (1995) Producer services research in the United Kingdom, *Professional Geographer*, Vol 47(1), 82-87.
- Daniels P.W. (1993) Service Industries in the World Economy, Oxford: Blackwell Publishers.
- Daniels P.W. (1983) Supporting Role or Centre Stage? Annual Meeting of the Institute of British Geographers, Edinburgh.
- Daniels P.W. (1982) Service Industries: Growth and Location, Cambridge: Cambridge University Press.
- Daniels P.W., Hutton T.A., and O'Connor K. (1992) The planning response to urban service sector growth, *Growth and Change*, Vol 22, 3-26.
- Daniels P.W., Van Dinteren J.H.J., and Monnoyer M.C. (1992) Consultancy services and the urban hierarchy in Western Europe, *Environment and Planning A*, Vol 24, 1731-1748.
- Daniels P.W., Thrift N.J., and Leyshon A. (1989) Internationalization of professional producer services: accountancy conglomerates, *Multinational Service Firms*, In P. Enderwick (ed), 79-106, London: Routledge.
- Dennis A. (1995) A firm without walls, Journal of Accountancy, Vol 180(6), 62-63.
- Dennis A. (1990) Management advisory services: a new practice niche, *Journal of Accountancy*, Vol 169(3), 83-86.

- DePree C.M. Jr. and Jude R.K. (1993) Constitutionality of in-person solicitation, *Journal of Accountancy*, Vol 176(3), 81-82.
- Dicken P. (1992) Global Shift: The Internationalization of Economic Activity, New York: The Guilford Press.
- Dunning J.H. (1988) Trade and foreign-owned production in services: some conceptual and theoretical issues, *Services in World Economic Growth*, In H. Giersch (ed), 108-50, Boulder, CO: Westview Press.
- Dunning J.H. (1979) Explaining changing pattern of international production: in defence of the eclectic theory, Oxford Bulletin of Economic Statistics, Vol 41, 269-95.
- Durbin E.Z. (1993) The wave of the future, CA Magazine, January, 25-28.
- Enderwick P. (1989) Multinational Service Firms, London: Routledge.
- Erramilli M.K. and Rao C.P. (1990) Choice of foreign market entry modes by service firms: role of market knowledge, *Management International Review*, Vol 30, 135-150.
- Esparza A. and Krmenec A.J. (1993) The regional geography of U.S. business services growth, 1977-1987: evidence and policy implications, *Review of Urban and Regional Development Studies*, Vol 5, 174-193.
- Fisher J.S. (1994) The new finance, Journal of Accountancy, Vol 178(2), 73-76.
- Goe W.R. (1990) Producer services, trade and the social division of labor, *Regional Studies*, Vol 24, 327-42.
- Greenfield H. (1966) Manpower and the Growth of Producer Services, New York: Columbia University Press.
- Gupta P.P. (1992) International reciprocity in accounting, *Journal of Accountancy*, Vol 173(1), 46-54.
- Harrington J.W. Jr. (1995a) Producer services research in U.S. regional studies, *Professional Geographer*, Vol 47(1), 87-96.
- Harrington J.W. Jr. (1995b) Empirical research on producer service growth and regional development: international comparisons, *Professional Geographer*, Vol 47(1), 66-69.
- Harrington J.W. Jr., MacPherson A.D., and Lombard J.R. (1991) Interregional trade in producer services: review and synthesis, *Growth and Change*, Vol 22(4), 75-94.

- Illeris S. (1994) Proximity between service producers and service users, *Tijdschrift voor Economische en Sociale Geografie*, Vol 85(4), 185-196.
- Illeris S. (1989) Services and Regions in Europe, Avebury, Aldershot, Hants.
- Illeris S. and Philippe J. (1993) Introduction: the role of services in regional economic growth, *The Geography of Services*, In P.W. Daniels, S. Illeris, J. Bonamy, and J. Philippe (eds), 1-10, London: Frank Cass & Co. Ltd.
- Israeloff R.L. (1993) Positioning a firm for international opportunities, *Journal of Accountancy*, February, 46-50.
- Jerris S.I. and Pearson T.A. (1996) Benchmarking CPA firms for productivity and efficiency, *The CPA Journal*, Vol LXVII(7), 64-66.
- Johannisson B. (1995) Entrepreneurial networking in the Scandinavian context theoretical and empirical positioning, *Entrepreneurship and Regional Development*, Vol 7(3), 189-192.
- Keefe G.L. (1989) Helping clients prepare for global markets, *Journal of Accountancy*, Vol 168(1), 54-65.
- Kleinschmidt E.J. and Cooper R.G. (1990) The performance impact of an international orientation on product innovation, *European Journal of Marketing*, Vol 22(10), 56-71.
- Kotler P. (1983) Principles of Marketing, Prentice-Hall, Inc.: Englewood Cliffs, N.J.
- Kuechler L. (1996) Proactivity, economic performance, and internationalization of local and regional public accounting firms in Western New York, Ph.D. Dissertation, Department of Geography, State University of New York at Buffalo, Buffalo, NY 14261.
- Kuechler L. Bagchi-Sen S. (1996) Success determinants of small and medium public accounting firms: proactivity, the utilization of strategic networks, and international orientation, paper presented at the North American Regional Science meetings, Department of Geography, State University of New York at Buffalo, Buffalo, NY 14261.
- Lentnek B., MacPherson A., and Phillips D. (1992) Optimum producer service location, *Environment and Planning A*, Vol 24, 467-479.
- Lyons D. (1995) Changing business opportunities: the geography of rapidly growing small U.S. private firms, 1982-1992, *Professional Geographer*, Vol 47(4), 388-398.

- MacPherson A. D.(1991) Interfirm information linkages in an economically disadvantaged region; an empirical perspective from metropolitan Buffalo, *Environment and Planning A*, Vol 23, 591-606.
- MacPherson A. and McConnell J.E. (1992) Recent Canadian direct investment in the United States: an empirical perspective from Western New York, *Environment and Planning A*, Vol 24, 121-136.
- Marshall J.N., Damesick P., and Wood P. (1987) Understanding the location and role of producer services in the United Kingdom, *Environment and Planning A*, Vol 19, 575-595.
- McConnell J.E. (1994) On "Dreaming Big" about the Golden Horseshoe, *The Trade Center Review*, Canada-United States Trade Center, Department of Geography, State University of New York at Buffalo, Buffalo, NY 14261, Winter, 1-9.
- Michalak W.Z. and Fairbairn K. (1993) The producer service complex of Edmonton: the role and organization of producer service firms in a peripheral economy, *Environment and Planning A*, Vol 25, 761-78.
- Mitchelson R.J. and Wheeler J.O. (1994) The flow of information in a global economy: the role of the American urban system in 1990, Annals of the Association of American Geographers, Vol 84(1), 87-107.
- Momigliano F. and Siniscalco D. (1980) Terziario totale e terziario per il sistema produttivo, *Economia e politica industriale*, Vol 25.
- Nassutti C.P. (1994) Four case studies in marketing, *Journal of Accountancy*, Vol 178(2), 51-56.
- Noyelle T. J. (1990) Business services: accounting, management consulting, and computer software, *Skills, Wages, and Productivity in the Service Sector*, In T. Noyelle (ed) 122-159, Boulder: Westview Press.
- Noyelle T.J. and Stanback T.M. (1984) The Economic Transformation of American Cities. Totowa, NJ: Rowman and Allanheld.
- O'Conner K. (1994) Industrial design as a producer service: shifts in function and location, paper presented at the annual meetings of the Association of American Geographers, Charlotte, April.
- O'Farrell P.N. and Hitchens D.M. (1990) Producer services and regional development: a review of some major conceptual policy and research issues, *Environment and Planning A*, Vol 22(1), 141-54.

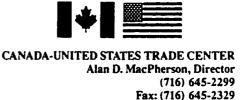
- O' Farrell P.N., Wood P.A., and Zheng J. (1996) Internationalization of business services: an interregional analysis, *Regional Studies*, Vol 30(2), 101-18.
- O'Farrell P.N., Hitchens D.M., and Moffat L.A.R. (1995) Business service firms in two peripheral economies: Scotland and Ireland, *Tijdschrift voor Economische en Sociale Geografie*, Vol 86(2), 115-128.
- O'Farrell P.N., Hitchens D.M., and Moffat L.A.R. (1993) The competitiveness of business services and regional development: evidence from Scotland and the South East of England, *Urban Studies*, Vol 30(1), 629-52.
- O'Farrell P.N., Hitchens D.M., and Moffat L.A.R. (1992) The competitiveness of business firms in Scotland and the South East of England: an analysis of matched pairs, *Regional Studies*, Vol 26, 519-33.
- O'hUallachain B. (1991) Industrial Geography, *Progress in Human Geography*, Vol 15(1), 73-80.
- Izcan G.B. (1995) Small Firms and Local Economic Development, Aldershot: Avebury.
- Phillips D. (1995) The outsourcing of computer services: toward an explanation of the externalization process, unpublished manuscript, Department of Geography, State University of New York at Buffalo, Buffalo, NY 14261.
- Polise, M. (1982) Regional demand for business services and interregional service flows in a small Canadian region, *Papers of the Regional Science Association*, Vol 50, 151-164.
- Porter M. (1990) The Competitive Advantage of Nations, New York: Free Press.
- Pred A. (1977) City Systems in Advanced Economies, London: Hutchinson.
- Public Accounting Report (1995) Yergen & Meyer targets Pacific Rim, Public Accounting Report, April 15, 3.
- Public Accounting Report (1994) Global business flows downstream -- International work no longer a Big Six exclusive, *Public Accounting Report*, September 30, 6.
- Radebaugh L.H. and Gray S.L. (1993) International Accounting and Multinational Enterprises, 3rd. ed., New York: John Wiley & Sons, Inc.
- Rossi F. (1986) Constraints on the operations of international accounting organizations, *The University of Chicago Legal Forum 1986*, In R. Posner (ed), 65-87. Cambridge, MA: Ballinger Publishing Company.

- Royce G.S. (1996) An American CPA in Tokyo, *Journal of Accountancy*, Vol 181(5), 65-70.
- Sen J. and Hall L. (1994) A progress report on the liberalization of trade in accounting services, *Journal of Global Competitiveness*, Vol 2, October, 247-252.
- Senn L. (1993) Service activities' urban hierarchy and cumulative growth, *The Geography of Services*, In P.W. Daniels, S. Illeris, J. Bonamy, and J. Philippe (eds), 11-22, London: Frank Cass & Co. Ltd.
- Senn L. and Gorla G. (1993) Networking strategies as a factor in urban decentralisation, in A. Summers, L. Senn, P. Cheshire (eds.), *Urban Change in the U.S. and Western Europe: Comparative Analysis and Policy*, Washington: The Urban Institute.
- Shannon C.E. and Weaver W. (1949) *The Mathematical Theory of Communication*, Urbana, II: The University of Illinois Press.
- Sheets R.G., Nord S., and Phelps J. (1987) The Impact of Service Industries on Underemployment in Metropolitan Economies, Lexington: D.C. Health and Company.
- Sinkula J.M. (1990) Perceived characteristics, organizational factors, and the utilization of external market research suppliers, *Journal of Business Research*, Vol 21, 1-17.
- Snodgrass C.R. (1993) The use of networks in cross border competition, *Long Range Planning*, Vol 26(2), 41-50.
- Stabler J.C. and Howe E.C. (1988) Service exports and regional growth in the postindustrial era, *Journal of regional Science*, Vol 28(3), 303-315.
- Stolle C.D. (1993) Individual Accounting practices: a ten-year review (Part 1), *Practicing CPA*, March, 5-8.
- Stolle C.D. (1991) A survey looks at policies and practices in public accounting firms, *Practicing CPA*, Vol 15(11), 5-8.
- The CPA Journal (1994) The editors look back at a busy and active year, *The CPA Journal*, Vol LXIV(12), 20-26.
- Willis E., Hoffman W.H., Maloney D.M., and Raabe W.A. (1997) West's Federal Taxation: 1997 Edition Comprehensive Volume, West Publishing Company: St. Paul, Minnesota.
- Wood P.A., Bryson J., and Keeble D. (1991) Regional patterns of small firm development in the business services: preliminary evidence from the UK, Small Business Research Centre, Cambridge University, Working Paper No. 14.

- Wood P.A., Bryson J., and Keeble D. (1993) Regional patterns of small firm development in the business service evidence from the United Kingdom, *Environment and Planning A*, Vol 25, 677-700.
- Wood P. (1991) Flexible accumulation and the rise of business services, *Transactions of the Institute of British Geographers*, N.S. 16, 160-172.

Appendix 1
Cover letters and mail-out questionnaire for small- and medium-sized accounting firms in New York State.
Note: The contribution of frameworks designed by Beyers and Lindahl (1994) and Stolle (1991) is acknowledged in the development of some portions of the questionnaire.
124





I am writing to you as a doctoral student of the International Trade area of the Department of Geography at the State University of New York at Buffalo. My doctoral dissertation is designed to explore and analyze the growth and competitive strategies of local and regional accounting firms facing a rapidly changing environment. This research project is being conducted with firms located in Buffalo, Rochester, Syracuse, Binghamton, Albany, and New York City in order to examine the effects of location and regional demand upon their performance. Data collected from this survey is of the utmost importance in completing my doctoral degree.

I am very much aware of the demands made upon your time by people in government, industry, and academia. The enclosed questionnaire has been prepared with those time constraints in mind. Enclosed you will also find an endorsement of my survey by Mr. Peter Bellanti, the past President of the Buffalo Chapter of the New York State Society of CPAs. Please be advised that specific company data reported by you will remain strictly confidential, and will only be seen by me and my supervisors. Any published results (for academic purposes only) will address only the entire population of replies, but not the replies of individual firms. For your information, as a SUNY student, I am required to follow the confidentiality rules set by the University's Ethics Committee on Human Subjects.

A paucity of research exists regarding the decision-making strategies of the small-and medium-sized accounting firms in an industry dominated by a handful of multinational firms. Your input will enhance the understanding of the behavior of the local and regional firms that contribute significantly to the national economy. I would appreciate you returning the survey by **June 15**, **1996.** For your cooperation, I will send you an Executive Summary of the study so that you can compare your firm's activities with the average profile of similar sized accounting firms. I hope that you will find the Executive Summary of value. Thank you for your time and valuable input.

Sincerely.

Jayanti Sen, PhD Student

Jayanti Sen



Fiddler and Company, LLP

Certified Public Accountants

One Towne Centre 501 John James Audubon Pkwy. Amherst, New York 14228 716-688-4343 Fax 716-688-4875

> Joseph A. Fiddler, CPA 1893 - 1976

RETIRED Joseph H. Mergler, CPA

Joseph DiMatteo, CPA John E. Peter, CPA Peter X. Bellanti, CPA John LaMonte, CPA

May 15, 1996

Dear Managing Partner:

I would like to request that you fill out the enclosed questionnaire sent by Jayanti Sen, CPA. Jayanti is currently in the process of completing her PhD. The information collected from this survey is critically important for the successful completion of her doctoral dissertation.

Jayanti has been a practitioner and an academician since 1977. Her main research interest involves examining and analyzing the role of local and regional public accounting firms in the changing environment faced by today's accounting profession.

Jayanti will be happy to share the summary of the results of her survey with you upon completion.

Your reply will be held in strictest confidence.

Thank you in advance for your cooperation.

Sincerely,

FIDDLER AND COMPANY, LLP

Peter X. Bellanti, CPA

PXB/tr

Survey: Profiles of Small- and medium-sized Accounting Firms in New York State

Please answer the questions below and return the survey in the stamped, addressed envelope. Most questions ask for rough estimates only, or yes/no answers. Please feel free to add written comments regarding any of the questions.

Sect	ion A: G	eneral Business	Characteris	tics				
Q1:		ıld you describe	•					
	☐ Local	□ Regional	□ Natio	nal 🗆	Inte	rnational		
	Is this of	fice:						
	□ Autor	omous (only on	e office)	🗆 A Bra	nch	🗆 A Headqu	ıarte	r
Q2:	Is this fir	m a(an):						
		-		-		Professional		
Pı	ractitione	r	Comp	any		Corporation		(Please Specify)
02.	33 /b = 4 =====		4-1	-:- 10050				
Ų3:	W nat wei	re your firm's to	tai revenue	8 ID 1995	•			
1	□ Equal t	o or Under \$150	,000					
ı	\$150,00	1 - \$500,000						
1	□ \$500,00	1 - \$1,000,000						
1	\$1,000, 6	001 - \$3,000,000						
l	Over \$3	,000,000						
Q4:	How man	y years has this	firm been	in existen	ce?	years.		

Section B:	Service Offerings	;		

Q5: Please indicate the percentage breakdown of your firm's total revenue in 1990 and 1995 in the following categories:

			1990	1999	5
	Category		<u>%</u>	_%	1
	Accounting & Auditing:				
	Management Consulting:				
	Tax Preparation and Planning:				
	Personal Financial Planning:				
	Business Valuation:				
	Litigation Support:				
	Bankruptcy or Insolvency services:				
	Mergers & Acquisitions:				
	Market and Economic Feasibility Resear	ch:			
	Computer Systems Consultation:				
	Executive Search:				
	Other (please specify):			<u> </u>	
	Total		100%	100%	6
~ ~			4000		
Q6:			<u>1990</u>	<u>199</u>	<u> 25</u>
	Gross Revenue in :	s		\$	
		_			
	Net Income of the firm before				
	owners' compensation:	\$		\$	
	•				
Q7:	Please indicate the geographic distribution	n of your	revenue sour	ce as specified	below:
				% of Reve	n III A
				1990	1995
				1770	1773

		% of Revenue		
		<u>1990</u>	<u>1995</u>	
From within the metropolitan area				
From outside of the metropolitan area but within N	ΓYS			
From out of NYS but within the US				
From outside the US	otal	100%	100%	

For questions 8 & 9, accounting and auditing services are referred to as traditional services and all other services as non-traditional.

Q8: For the categories listed below, please indicate how you provide these services to your clients located Within Your Metropolitan Area. Please circle one number for each statement ranging from 1 "never" to 5 "always".

Service Category: Traditional:	-				Never
Always					MEVEL
! 		_	•		_
Face-to-face conversations	l	2	3	4	5
Other (e.g., mail, fax, electronic means)	1	2	3	4	5
Non-traditional:					
Face-to-face conversations	1	2	3	4	5
Other (e.g., mail, fax, electronic means)	1	2	3	4	5

Q9: For the categories listed below, please indicate how you provide these services to your clients located **Outside Your Metropolitan Area**. Please circle one number for each statement ranging from 1 "never" to 5 "always".

Service Category: Traditional:					Never
Always					
Face-to-face conversations	1	2	3	4	5
Other (e.g., mail, fax, electronic means)	1	2	3	4	5
Non-traditional:					
Face-to-face conversations	1	2	3	4	5
Other (e.g., mail, fax, electronic means)	1	2	3	4	5

Section C: Marketing Strategies		
Q10A: For each of the following statements, please check either "Yes" or "No":		
	☐ Yes	□ No
Does your firm engage in media advertising?	☐ Yes	□No
Does your firm sponsor educational seminars/workshops for clients/public?	☐ Yes	□No
Does your firm have a designated marketing director?	□ Yes	□ No
Do staff members make "cold calls" to prospective clients?	☐ Yes	□No

Q10B: Please indicate the importance of the following marketing methods used in promoting your services to existing and prospective clients.

Not at all Very Important Important		Ran	k Impo	rtance	
Distribute a newsletter to existing or prospective clients	I	2	3	4	5
Engage in media advertising	1	2	3	4	5
Sponsor educational seminars/workshops for clients/public	1	2	3	4	5
Have a designated marketing director	1	2	3	4	5
Staff members make "cold calls" to prospective clients	1	2	3	4	5

Q10C: Please indicate the share of (in %) of marketing dollars spent to gross revenue: _____% Section D: General Information about Personnel and Clientele Q11: Please indicate the total number of personnel currently employed Total number of full-time accounting professionals: Total number of part-time accounting professionals: Total number of full-time non-accounting professionals: Total number of part-time non-accounting professionals: Total number of office administrative staff: Q12: Please identify the types of firms that you gained new clients from over the past five years. Check only the single most important source of new clients. The Big-Six: Other International Firms: Other National Firms: Other Regional Firms: Other Local Firms: Non-accounting Firms: Q13: Now, please identify the types of firms that you have lost clients to over the past five years. Check only the single most important source of recent losses. The Big-Six: Other International Firms: Other National Firms: Other Regional Firms: Other Local Firms: Non-accounting Firms:

Q14: Clients switch to other firms for several reasons. Please rank order the following reasons for losses of your firm's clients from 1 being the "most frequent" to 4 being the "least frequent":
Price Competition: Lack of diversification in services (e.g., consulting): Client moved to another location: Acquisition or merger of clients with larger firms:
Q15: Other than accounting, auditing, and tax preparation, which of the following industry type has the most need for non-accounting type services such as management consulting at your firm? (Please choose three industries among the following and rank from 1 being the "most" to 2 being the "second" and 3 being the "third":
 Manufacturing/industrial firms Medical equipment and supplies Retail Banks/financial services Insurance Hospitals/health related services Utility companies Government services Colleges and universities Other (please specify)
Q16: Please indicate your firm's gross revenue growth from 1990 to 1995 (in %) below:
☐ 0 - 9% ☐ 10 - 14% ☐ 15 - 19% ☐ 20 - 29% ☐ ≥ 30%

Section E: International Activities
Internationalization is defined as: 1) Firms assisting clients in exporting to foreign countries,
2) Firms offering foreign-owned firms locating in the US services in accounting and auditing, tax preparation and planning, financial planning, and other consulting, and
3) Firms offering (exporting) services directly to clients located in a foreign country.
Q17: Do you offer services to help domestic clients export? Yes □ No □
If "Yes", please indicate the share of this service to total revenue in %:
1990: <u>%</u> 1995: <u>%</u>
Please indicate the type(s) of services you offer to help clients export (check all that apply):
Accounting and Auditing Tax Preparation and Planning Financial Planning Management Consulting Other (please specify)
Q18: Do you serve clients that are foreign-owned? Yes \(\Bar\) No \(\Bar\)
If "Yes", please indicate % of total revenue from these clients:
1990:% 1995:%
Please indicate the type(s) of services offered to the foreign-owned firms (check all that apply):
Accounting and Auditing Tax Preparation and Planning Financial Planning Management Consulting Other (please specify)

Q19: Do you export services directly to clients located in a foreign country? Yes \(\pi\) No \(\pi\) If "Yes," please indicate % of total revenue from these exports:
1990: <u>%</u> 1995: <u>%</u>
Please indicate the type(s) of services you are exporting (check all that apply):
Accounting and Auditing Tax Preparation and Planning Financial Planning Management Consulting Other (please specify)
Q20: Please indicate the largest barrier faced or perceived by your firm in internationalizing (rank 1 being the largest and 5 being the smallest):
Size of firm:
Lack of demand:
Lack of expertise within the firm:
Lack of skilled labor supply in the region: Risk willingness of owner(s):
Q20A: If you answered "No" to Q17, Q18, and Q19, please respond to the following:
Do you have any plans to internationalize in the future?
☐ Yes ☐ No
IF YOU ANSWERED "NO" TO Q17, Q18, AND Q19, PLEASE STOP HERE. PLEASE PROVIDE THE INFORMATION ASKED ON THE LAST PAGE SO THAT I CAN SEND YOU AN EXECUTIVE SUMMARY OF THE RESULTS.
IF YOU ANSWERED "YES" TO ANY ONE OF Q17, Q18, OR Q19, PLEASE

subcontracting, joint ventures, or team projects. Yes □ No □ (If "No," skip to Q23). Q22: Please answer the following for each industry listed below that you currently collaborate with: <u>Rank</u> <u>Importance</u> (1 as not Contractual Regular important Interaction? Relationship? **Check** to 5 as very Industries Industry (Check if yes) (Check if yes) important) Legal Advertising & Marketing Other Accounting Clerical/Bookkeeping Insurance Financial Planners Banking Management Consulting Information Technology Other (Please specify) Q23: Do you belong to an international accounting association, such as PKF International? Yes □ No □ If "Yes", please rank the importance of this association regarding your degree of international involvement from 1 being "not important" to 5 being "critical". 3 5 1 Q24: If you have answered "Yes" to Q23, please check the appropriate box below to indicate whether you began internationalizing (as defined on page 6) before or after you became a member of an international accounting association. After □ Before □ 134

021: Does your firm collaborate with other firms to obtain international-oriented business as

defined on page 6? Collaboration includes contractual relationships, such as

Q25: Which of the following industry types has the most need for international-oriented services (as defined on page 6)? Please choose three industries among the following and rank from I being the "most needed," 2 being the "second," and 3 being the "third":
Manufacturing/industrial firms Medical equipment and supplies Retail Banks/financial services Insurance Hospitals/health related services Utility companies Government services Colleges and universities Other (please specify)
Mailing Information for Executive Summary
We would like to follow-up by phone with a few additional questions in the near future. If you do not want to participate in the follow-up inquiry, please check this box
I would like to receive a copy of the executive summary: \Box
NAME:
TITLE:
FIRM:
ADDRESS:
CITY:
ZIP CODE:
PHONE: ()