

THE ACCOUNTING PROFESSION IN ALBERTA

AN ECONOMIC ANALYSIS
OF LICENSURE AND
SELF-REGULATORY REFORMS,
AND A COUNTER-PROPOSAL

ALEXANDER W. JENKINS



THE ACCOUNTING PROFESSION IN ALBERTA

THE ACCOUNTING PROFESSION IN ALBERTA

**AN ECONOMIC ANALYSIS
OF LICENSURE AND
SELF-REGULATORY REFORMS,
AND A COUNTER-PROPOSAL**

ALEXANDER W. JENKINS

Canadian Cataloguing in Publication Data

Jenkins, Alexander William, 1946-
The accounting profession in Alberta

Bibliography: p.
ISBN 0-88975-090-4

1. Accounting - Alberta. 2. Accountants - Licenses - Alberta.
3. Accountants - Legal status, laws, etc. - Alberta. I. Fraser
Institute (Vancouver, B.C.). II. Title.

HF5616.C22A45 1986

657'.023'7123

C86-091562-X

COPYRIGHT © 1986 by The Fraser Institute. All rights reserved.
No part of this book may be reproduced in any manner whatsoever
without written permission except in the case of brief quotations
embodied in critical articles and reviews.

Printed in Canada.

CONTENTS

Preface	/ ix
Acknowledgements	/ xi
Executive Summary	/ xii
About the Author	/ xiv

Chapter 1	
Introduction	/ 1

Chapter 2	
The Accounting Profession in Alberta	/ 5

I. THE NATURE OF ACCOUNTING	/ 5
II. THE NATURE OF PUBLIC ACCOUNTING	/ 7
III. THE NATURE OF A PROFESSION	/ 10
IV. PROFESSIONALISM AND THE SELF-REGULATORY STATUS OF ALBERTA ACCOUNTING GROUPS	/ 12
Chartered Accountants	/ 12
Certified General Accountants	/ 14
Certified Management Accountants	/ 17
Other accountants	/ 18

Chapter 3

The Need and Scope for Reform / 21

I. AN EVALUATION OF INDUSTRY PERFORMANCE / 22

The quality of accounting services / 22

The price/output of accounting services / 26

Technological innovation / 28

II. THE SCOPE FOR LEGISLATIVE REFORM / 29

Professional-governmental relations / 30

Professional-membership relations / 32

Professional-client relations / 34

Chapter 4

The Exclusive Practice/Licensure Issue / 37

I. POTENTIAL SOCIAL BENEFITS OF AUDIT LICENSURE / 38

Higher average quality / 39

Reduced quality variability/uncertainty / 40

Output/static efficiency / 42

Technological innovation / 43

Standardization / 44

Manpower planning / 44

II. POTENTIAL SOCIAL COSTS OF AUDIT LICENSURE / 45

Socially sub-optimal quality / 45

Output/static inefficiency / 47

Reduced practice innovation / 49

Equity / 50

III. COMPARING THE SOCIAL BENEFITS AND COSTS OF AUDIT LICENSURE / 51

Chapter 5

Policy Recommendations and Conclusions / 55

I. SELF-REGULATORY PROFESSIONAL REFORMS / 57

Education, training, examination and specialization / 57

Discipline / 58

Practice review / 58

Professional development / 59

Liability insurance / 59

Advertising / 60

Fee schedules / 60

Lay representation / 60

Annual reporting / 61

II. EXCLUSIVE PRACTICE REFORMS / 61

Designated exclusive practice areas / 62

Designated practitioners / 63

Special safeguards relating to exclusive practice / 65

III. CONCLUSIONS / 65

Notes / 67

References / 73

PREFACE

This book is one in a series produced by the Fraser Institute which scrutinizes the activities of professions in Canada. The purpose of the studies is to subject these occupational monopolies to the same searching analysis which the Institute applies to the activities of trade unions which are the other major group in society to whom legislation gives powers to restrict entry. This book studies a particular instance where a government is under pressure to tighten the cartelizing powers given to the accounting profession in the Province of Alberta. The objective of Professor Alexander Jenkins is to assess the current conditions under which the services of accountants are provided in the Province of Alberta and to enquire whether the general public in that province will be well served by a tightening of professional control — in particular, enshrining in law that audits in the province may be conducted only by the members of the Institute of Chartered Accountants of Alberta.

The Fraser Institute asked Professor Jenkins to undertake this study because we felt that an examination of the issues by an impartial, uninvolved observer might provide legislators with an alternative perspective to that which is understandably presented by those who will directly gain or lose according to the legislative posture adopted by government. The Institute's study of other similar situations leads to the conclusion that frequently occupational licensure and other regulations do not have the desired effect of protecting the consumer interest. Rather, the suggestion emerges that occupational licensure is most often in the interest of those who are regulated. While Professor Jenkins has the particular concern of examining the situation in Alberta, his analysis admits of a broader application and those who are unfamiliar with the general effects of occupational licensure will find his a most interesting rendition of the basic analysis.

While this manuscript was in the final stage of press preparation, I had the great fortune to speak to the Annual Meeting of the Canadian Institute of Chartered Accountants — the association of C.A.'s in Canada and the

next day to speak to the Alberta meeting of the Certified General Accountants of Canada. To both groups I carried the message that whatever the particular details of the dispute in Alberta, neither the C.A.'s nor the CGA's were likely to benefit from a public policy which essentially encouraged groups individually to get ahead by limiting the supply of their services. This insight, due to the economist H.A. Simon, was applied by him to trade unions and led him to a pessimistic outlook for the future of the Western economies. They would, he thought, be strangled by the unions who were given this power by the state.

Simon's analysis applies equally well to the International Teamsters Union and to the International Brotherhood of Chartered Accountants. In a straw poll of the members at both gatherings of accountants, I found majority support for policy measures to limit the power of trade unions to control the supply of labour. I think it is fair to say that those present were somewhat chagrined when I drew the natural and obvious connection between the activities of unions and professions. It is to be hoped that members of the profession who read this study by Professor Jenkins will have the same open-minded attitude which I have encountered thus far.

Jenkins' conclusions are reported by him in a concise form in the Executive Summary on page xii so I will not attempt to repeat them here. It is, however, worthwhile to repeat his central inference which is that the public interest is unlikely to be served by a further extension of the monopoly power given to the accounting profession. While he does see merit in conformity in professional standards and similar training regimes, he also concludes, like many who have examined the issue of professional licensure, that the public interest is likely to be best served by the efforts of competing suppliers of accounting services and competing organizations providing certification of accounting professionals.

The Fraser Institute is pleased to welcome Professor Jenkins to the distinguished cadre of (unregulated) professionals who have written for the Fraser Institute. We offer his work as a public service in the hope that both those affected and those charged with the conduct of public policy with regard to the regulation of professions may find it useful. In view of the fact that Professor Jenkins worked independently and without the influence of the members or trustees of the Fraser Institute the views expressed by him should not be taken as representative of those of the members or trustees of the Fraser Institute.

Michael Walker
The Fraser Institute

ACKNOWLEDGEMENTS

This study would not have been possible without the assistance of a number of individuals and organizations. Mr. Bernie Doyle, Executive Director of the Professions and Occupations Bureau of the Alberta Department of the Solicitor General, permitted me access to his wisdom, his staff, and at least one key document, as well as provided his remarks on the preliminary draft. Mr. Steve Glover, Executive Director of the Institute of Chartered Accountants of Alberta (ICAA), provided me with a number of documents relating to his organization as well as a lengthy commentary on the preliminary draft, while Ms. Joanne Sokoloski, Communications Coordinator of the ICAA, provided me with numerous informational brochures, reports and newsletters. Dr. Carla Pasternak, Director of Public Affairs of the Certified General Accountants Association of Alberta (CGAAA), also commented on the preliminary draft, while Mr. Pierce Peters, Director of Student Services for the CGAAA, provided documents and numerous informal consultations. Mr. Keith Crowder, Executive Director of the Society of Management Accountants of Alberta (SMAA), provided both documents and commentary on the preliminary draft. Finally, Mr. David Stewart, President of the Registered Public Accountants Association of Alberta (RPAAA), made available data and documents relating to his organization.

Here at the University of Alberta, I was given assistance by a few key individuals. Professor Alan Richardson of the Department of Accounting shared with me important insights gained during his own studies of the accounting profession. Ms. Charlene Hill of the Department of Economics typed the various drafts of the study and Ms. Sharon Bright handled the correspondence relating to the study.

Dr. Michael Walker, Director of the Fraser Institute, was instrumental in recognizing the need for this study, in providing me with background documents, in commenting on the preliminary draft, and in arranging for the useful response from an anonymous referee and for publication of the study by the Fraser Institute. The Fraser Institute provided both administrative expenses and an honorarium, but neither it nor its Director are responsible for the opinions, errors or omissions contained in the study. These remain, as always, the responsibility of the author.

EXECUTIVE SUMMARY

This independent study of the Alberta accounting profession was commissioned by the Fraser Institute with the particular purpose of contributing to the recent debate on legislative reforms introduced during the last session of the Alberta Legislature. It finds little or no theoretical or empirical justification for these reforms.

The accounting profession in Alberta is characterized by multi-group certification, informal licensure of statutory and other audits to Chartered Accountants (CA's), and professional self-regulation. It appears to be providing socially optimal levels of quality, output and price, and product and process innovation in the market for public accounting services such as audits and reviews. It would seem to do so in response to the typical sophistication of clients, lenders and investors and to the professionalism and inter-group rivalry among the three existing major accounting groups.

Additional safeguards of the public interest are nonetheless defensible and reforms should pay heed to the following recommendations:

1. All three major accounting groups (the ICAA, CGAAA and SMAA) currently granted self-regulatory, exclusive title status should be uniformly *required* in group-specific amended (or new) Public Acts to create and implement an "Audit Specialist" designation; to make their discipline process more accessible to clients; to implement mandatory practice review, professional development and liability insurance programs; to minimize legally admissible advertising restrictions and to refrain from possible use of group-sponsored fee schedules; and to incorporate a higher degree of lay representation in their governance and greater detail in annual reporting to the Legislature;
2. If licensure of audits and reviews is at all incorporated in these Public Acts, it should be extended broadly to qualified "Audit Specialist" members of all three major accounting groups. Existing restrictions on

statutory audits should be appropriately liberalized to include performance by all “Audit Specialists” rather than CA’s alone; and

3. An interim “Public Audit Specialist Licensing Board” should be created and supervised by the Government of Alberta to designate other qualified public auditors. Licensed auditors should meet the on-going standards of one of the three major accounting groups.

ABOUT THE AUTHOR

Alexander Jenkins completed his undergraduate studies in economics and commerce at the Royal Military College of Canada in Kingston, Ontario, where he graduated with an Honours B.A. in 1968. After completing a statutory three-year period of service as an officer in the Canadian Forces, he resumed his studies in economics at the University of Western Ontario in London, Ontario, completing the M.A. degree in 1972 and the Ph.D. degree in 1977 with areas of specialization in industrial and labour economics.

After lecturing in economics during 1974-75 at Huron College in London, Ontario, Mr. Jenkins took a position as Assistant Professor in the Department of Economics at the University of Alberta. He was promoted to his current rank of Associate Professor of Economics in 1980.

Dr. Jenkins has since pursued a number of research endeavours including studies of the hospital, telecommunications and real estate brokerage industries and the process of wage formation in the construction sector, with papers appearing in *Applied Economics*, *Construction Management and Economics*, and the *Journal of Economics*. He has also acted as a consultant to the Department of Consumer and Corporate Affairs, Esso Resources, the Construction Labour Relations Association (Alberta), local legal practitioners and other agencies.

Currently Dr. Jenkins teaches courses in industrial and labour economics at the University of Alberta and is involved in consultancy with the Correctional Service of Canada. He is also examining the effects of Canadian competition policy on the service sector and is about to begin a study of the brokerage function in the Canadian economy.

Chapter 1

Introduction

As part of the on-going reform of legislation regulating both the professions in general and the accounting profession in particular, the Government of Alberta introduced three bills during the third session of the 20th Legislature in early 1985. Specifically, it introduced Bill 71, the *Chartered Accountants Act*; Bill 72, the *Management Accountants Act*; and Bill 76, the *Certified General Accountants Amendment Act*. In doing so, it seems to have appeased one group (the Institute of Chartered Accountants of Alberta, or ICAA), seriously offended another group (the Certified General Accountants Association of Alberta, or CGAAA) and left a third group with mixed feelings (the Society of Management Accountants of Alberta, or SMAA).

The Government of Alberta is to be commended for its efforts to promote a higher degree of self-regulatory uniformity, professionalism and public accountability among the three accounting groups. It has acted in a manner more or less consistent with the earlier recommendations of its 1973 *Report on Professions and Occupations* (otherwise known as the *Chichak Report*) and its 1978 *Policy Governing Future Legislation for the Professions and Occupations* (henceforth referred to as the *Policy*). However, in introducing reforms in a second area, particularly in initiating exclusive practice provisions for audits, it has provoked considerable professional and some public debate. Much of the debate is concerned with the merits of extending “narrow” licensure of the highly critical accounting function of auditing to ICAA members alone (even though it has softened the blow to auditors from other groups by granting the usual transitional provisions for “grandfathering” existing CGAAA and SMAA auditors into the ICAA).

These policy reforms are clearly contemporaneous with, and hence cannot fail to become part of, the recent controversy concerning the demise

of the previously audited Canadian Commercial Bank (CCB) and Northland Bank. Indeed two other undertakings are obvious responses to the same financial disasters: the "Estey Commission," sponsored by the Federal Government, seeks to examine "the state of affairs surrounding the cessation of operation" of the two banks; and the "Macdonald Commission," sponsored by the Canadian Institute of Chartered Accountants (CICA), questions the extent to which the public has tended to construe, rightly or wrongly, the prior audits of these banks (and other entities) as indicating continuing liquidity and viability. Possible findings of these commissions might assign some degree of responsibility to the negligence of the auditors (who are part of nationally based CA firms and members of the ICAA) or to the undue narrowness of audit definition and content. If such is the case, there is reason to suspect that there are defects in the current self-regulatory regime of informal licensure of statutory audits to CA's in Alberta, and hence a need for reforms of some sort. However, due to the preliminary status of the commissions' investigations, it would be premature to place great evidential emphasis on these bank failures in this analysis.

The major purpose of this study will be to provide further insights into the need for reforms of both the self-regulatory and exclusive practice varieties. It will be seen that the current regime of multi-group certification in Alberta accountancy is characterized by only a limited degree of competition due to a number of phenomena. These include the "informal" licensure of statutory and other audits to CA's; market segmentation; and industry concentration. The current regime also suffers from numerous imperfections in the self-regulatory professional legislative environment. It is ultimately concluded that there is little or no evidence of current deficiencies in the performance of the Alberta accountancy profession. However, there is nonetheless a need to further safeguard the public interest against potential performance deficiencies in the areas of quality and static and dynamic efficiency. These deficiencies might arise under both the existing regime and the proposed one of formal audit/review licensure.

In particular, there is a need for a more uniform, comprehensive and strengthened self-regulatory professional legislative package than currently exists or is proposed in Bills 71, 72 and 76. It is argued that proposed reforms of this first type fail to go far enough in protecting the public interest. For example, reforms lack uniformity in that they allow formal specialization by ICAA members only and require explicit enunciation of advertising policy by the SMAA alone. They lack comprehensiveness in that they are mute on the issue of suggested fee schedules. Finally, they too often merely *empower*, but do not *require*, the three groups to implement programs for practice review and compulsory liability insurance.

Reforms of the second type go too far in that they restrict audit licensure to ICAA members alone. They do so without adequate explicit *prior* provisions for the specialized training of licensees, and without sufficient other, more general, safeguards of the self-regulatory variety. Such narrow audit licensure would also necessarily erode *posterior* provisions for the continuing escalation of quality, supply flexibility and technological progress in *all* areas of public accounting. It would especially pre-empt the significant inter-group rivalry that has characterized professional accounting over the past several decades. If formal audit and review licensure is at all included in this legislative package, it should be *broadened* so that the exclusive practice of both audits and reviews is extended to those appropriately qualified and designated "Audit Specialist" members of all three major accounting groups. Moreover, Government of Alberta policies which currently limit the performance of statutory audits to CA's alone, such as is the case with the Alberta Securities Commission, should be liberalized so as to admit audits performed by *any* designated "Audit Specialist." Such broad licensure would facilitate *greater* competition and inter-group rivalry than currently exists. This, in turn, might well accelerate the introduction of an audit product which would routinely include socially beneficial *explicit* information on the liquidity and health of the firm and serve to close any public-profession expectations gap concerning the meaning of audits.

The approach taken in this analysis is necessarily eclectic. It draws upon an ample body of literature prepared as background material for the regulatory reform of professional legislation both in Alberta (as mentioned above) and in Ontario (where the Professional Organizations Committee of the Ontario Ministry of the Attorney General undertook a massive study of public accountancy, as well as the architecture, engineering and legal professions, in the late 1970s). It also draws upon a large and growing body of theoretical and empirical literature relating to professional and occupational self-regulation and licensure. This literature is found in various economic and accounting journals and books. Finally, it makes use of the background materials provided by the three major provincial accounting groups.

The outline of the analysis is as follows. Chapter 2 provides definitional and background material on the nature of accounting; public accounting (including audits and reviews); professions and self-regulating professions; and the accounting groups currently active in the province of Alberta. Chapter 3 provides a brief discussion of the areas of industry performance — quality, price/output, and innovation — in which deficiencies might be currently or potentially evident, and for which regulatory reform might be needed. This discussion draws heavily upon the observations, analysis, and

recommendations of the study of public accounting undertaken by the Government of Ontario in the late 1970s; the 1973 *Chichak Report* and the 1978 *Policy* of the Alberta Government; and the information provided by the ICAA, CGAAA and SMAA. It ultimately seeks to identify the specific areas in which the proposed legislative reforms, particularly in the area of professional self-regulation, do meet these needs for reform, and those areas in which they are in need of “upgrading.”

Chapter 4 more specifically addresses the issue of whether the (narrow) licensure of the audit function and, to a lesser extent, the review function, represents a necessary, or even beneficial, policy for the Alberta Government. It demonstrates especial concern with the market power and supply restrictions which might arise from narrow licensure. It goes on to examine the social benefits and costs of licensure in relation to those of one possible scenario of little or no regulation; another, actually (more or less) existent, scenario of multiple certification and inter-group rivalry; and a third scenario of broadened audit/review licensure of audits and reviews to “Audit Specialist” members of each of the three major accounting groups. It also makes additional comment on the (transitional) practice of allowing all existing auditors, even those failing to meet new standards, to continue practicing nonetheless (i.e. “grandfathering”).

Chapter 5 provides the policy recommendations and conclusions for this analysis. It emphasizes the need for self-regulatory legislative reforms which are more uniform, comprehensive and compelling than the proposals of Bills 71, 72 and 76. It argues that the case for audit/review licensure is not overly persuasive, since quality may not be improved and competition/inter-group rivalry will be impaired. To the extent that licensure of audits and reviews is at all justified, exclusive practice rights should be extended (broadly) to all three accounting groups, but to only those members assigned “Audit Specialist” status. Broad licensure should be combined with a liberalization of current regulatory disposition of many statutory and other audits to CA’s alone. It should also be accompanied by appropriate self-regulatory professional safeguards (including provisions for specialization) which would provide stronger *prior* guarantees of performance in the public interest, as well as preserve or enhance existing *posterior* guarantees (especially inter-group rivalry). This package of reforms would maintain or upgrade accounting quality, static efficiency and technological progress.

Chapter 2

The Accounting Profession in Alberta

In order to be able ultimately to evaluate the need for the regulatory reform of Alberta's accounting profession, it is important first to be clear on a number of matters. Specifically, what is "accounting"? What is "public accounting," including "audits" and "reviews"? Who practises accounting, and to what extent do practitioners constitute a "profession"? To what extent are the professional accounting groups in Alberta already subject to state regulation, and to what extent does each conform to the norms of a "self-regulating profession"? These and other questions are examined in this chapter.

I. THE NATURE OF ACCOUNTING

Although a degree of presumption arises whenever a scholar in one field (economics) dares to attempt to provide broad descriptions (let alone analysis) of another (accounting), even if that scholar has survived a few undergraduate courses in that other discipline, the effort must nonetheless be made for the benefit of the lay reader. Fortunately, well-tested standard textbooks come to the rescue.

According to one source,¹ "Accounting is the process of identifying, measuring, recording, communicating and interpreting financial activity." If this definition is construed as encompassing much more than the mechanical and repetitive aspects of "bookkeeping," for example, as involving the design and analysis of financial records and the important activity of "verifying or adding credibility to financial reports," it should meet little resistance (other than for the invariable reason of its being overly simplistic!). Another source² describes accounting even more succinctly as "the language with which we describe the financial aspects of the opera-

tion and status of all public and private organizations in our society.” A third source³ describes it as “an information system for measuring, processing, and communicating information that is useful in making economic decisions.” Needless to say, this author personally prefers the third definition, but will admit that all three seem mutually compatible and consistent with the more formal definitions of accounting adopted by organizations of professional accountants.⁴

Accounting has been subject to a further distinction through its subdivision into the areas of “management accounting” and “financial accounting.” The former is concerned with “the accounting information used only by those within the business organization,”⁵ while the latter “refers to accounting information reported to and used by those outside the business organization.”⁶ Of course the two are by no means without inter-relation and inter-action, especially in that managers can and do make use of financial accounting information.⁷ Management accounting has been described in a second source as “Determining the types of information most relevant to specific managerial decisions, and interpreting that information”; and financial accounting as “Developing accounting information in conformity with ... accounting concepts, measurement techniques and standards of presentation used in the preparation of financial statements [generally accepted accounting principles].”⁸ Again, the definitions which constitute this dichotomy seem to be subject to reasonable consensus, with the emphasis being on the directly intended user of the results (management versus outsiders).

An alternative division of accounting places emphasis on the organizational context within which accountants apply their skills. It identifies the areas of public, private and governmental accounting.⁹

Public accounting (which will receive more extensive discussion below) is practised by “independent professional persons ... who offer accounting services to clients for a fee.”¹⁰ It includes the provision of three primary types of services: audits and reviews; management advisory services, and income tax planning,¹¹ with the first service being very much “financial accounting,” the second being primarily “management accounting,” and the third involving elements of both types of accounting.

Private accounting is undertaken by an accountant who is employed by a single enterprise. It entails the accountant’s involvement in the design of accounting systems, cost accounting, financial forecasting, tax accounting, internal auditing, and internal reporting within the accounting system.¹² Again, it encompasses both financial and management accounting as potential areas of activity, but it places primary emphasis on management accounting.

Government accounting, along with accounting for non-profit organizations, is seen as a third area of accounting.¹³ It, for example, includes the design and auditing of tax returns, the preparation of budgets, and the audit of government departments and business contractors. It involves a mix of both financial and management accounting functions.

Much of the focus of this analysis is directed toward the regulation of public accounting, particularly the audit/review function. Such narrowness is justified by the belief that, while there are grounds for the self-regulation of the entire accounting profession within an appropriate regulatory framework of "reserved title practice," primarily due to informational imperfections and asymmetries regarding individual practitioner competence and service quality, there may be additional grounds for the possible "exclusive practice" or "licensure" of certain areas of public accounting. In particular, licensure may be necessary as a remedy for the potentially harmful third party/lender/investor consequences arising from the informational imperfections and asymmetries often associated with the audit/review functions of public accounting. Hence the next section examines public accounting in greater detail.

II. THE NATURE OF PUBLIC ACCOUNTING

As previously indicated, public accountants provide audit and review, management advisory, and income tax services to business, household and government clients in return for a fee. They often do so within the context of a short-term relationship characterized by considerable imperfections in the client's knowledge of the accountant's competence. Many of those public accountants who are legally permitted to perform audits and reviews, spend a significant amount (15-40 percent) of their time performing audits and reviews.

Audits and reviews are specific functions of financial accounting performed by a public accountant. They are often a response to statutory requirements (of, say, securities exchanges) or the stipulations of lenders/investors. They involve the public accountant's gathering evidence from both within the company and outside sources so as to provide an opinion on the completeness, fairness, and reliability of the information disclosed and measured in the company's/client's financial statements. Audits are typically more complex, comprehensive and formalized than reviews. In Bill 71, an audit is defined (or described) as

an examination and evaluation of relevant financial systems, financial data and other corroborative evidence relating to an entity, for the purpose of expressing an independent opinion to provide reasonable assurance, based on professional judgement, that the financial statements or assertions, whether explicit or implicit, that are the subject of examination and evaluation

- a. are fairly stated in accordance with criteria that are appropriate in the circumstances and have been consistently applied, and
- b. taken as a whole, are not materially misstated.

Also in Bill 71, a review is

...an independent review of financial statements provided on a fee for service basis, primarily by means of inquiry, comparison and discussion of information supplied by an entity, with the objective of determining whether the financial statements

- a. appear to be plausible in the circumstances, and
- b. appear to be in accordance with an appropriate and disclosed basis of accounting consistently applied.

The complexity and sophistication of both the general body of accounting knowledge and its application are increasingly evident. It is, therefore, frequently argued that the client is only imperfectly able to assess the quality of the services he has purchased, whether they be audit/review, management advisory, or income tax services. This is especially so when the relationship between the accountant and client is a relatively new one, or there is little or no knowledge of the accountant or accounting firm's reputation. It contrasts with the situation in private or government accounting, where the accountant is (usually) an employee of sufficient tenure to eliminate much of information or quality uncertainty.

In public accounting, the accountant is reasonably knowledgeable of his own particular competence. However, the (new) client is not, so an informational asymmetry can arise. These informational imperfections and asymmetries in turn may lead to "adverse selection," a process which can ultimately lead to a deterioration of service quality.¹⁴

The process of adverse selection supposes that individual practitioners have a (reasonably) precise knowledge of their competence and related service quality. By way of contrast, clients know (at best) only *average* competence/quality. Since service price reflects *average* competence/quality, current (or potential) practitioners of above-average capabilities and ser-

vice quality will view themselves as under-compensated. Hence they will exit (or never enter) the market for that service. Accordingly *average* competence and service quality will fall to socially suboptimal levels. Moreover, below-average competence and service quality relating to specific practitioners, if undetected, can additionally injure clients/third parties and lead to further reduced levels of social well-being.

One social policy remedy for adverse selection is the introduction of “reserved title practice” or “certification” (as is currently the case for Alberta accountants). Either coalitions of practitioners (seeking to protect their economic interests as well as service quality) or government will establish minimum standards for initial qualification (and continued practice) which must be met by any practitioner legitimately using the specific title allocated to that “professional” group. The client in turn can then distinguish between those practitioners who meet or exceed the minimum standards and have acquired the title, and those who do not; hence the process of “adverse selection” and quality deterioration is mitigated. However, this remedy is limited by the extent to which the title is indicative of general competence (in public accountancy) but not of specific competence (in, say, auditing). It is also less effective if the client is ignorant of any, or the precise, relationship between the title and even general competence, an ignorance which may be compounded by confusion arising from the proliferation of titles associated with professional groups. This is not to argue, however, that *fewer* groups are better than more, since *more* groups can lead to enhanced inter-group rivalry or intraprofessional competition, which in turn can provide further assurances of high and escalating quality.

The area of public accountancy which has attracted much attention, and substantial public policy discussion and action, is that involving audits and reviews. This is because any informational imperfection or asymmetry is potentially more severe and widespread in terms of adverse effects. As always, the client (the company subject to audit or review) may suffer from acting on the basis of any erroneous credibility/interpretation assigned to the company’s financial records by the auditor/reviewer. However, the failure of a poor quality audit or review to uncover disclosure/measurement anomalies is often of little consequence to the client. This is because the client is in a better position to know the “real” financial picture, and is therefore little harmed by any ignorance of the auditor’s competence and audit quality. In contrast, the third-party user, such as an investor or lending institution, is particularly susceptible to being misled by financial statements which have been poorly audited or reviewed. The third-party user may make a “bad” investment or loan on the basis of audited/reviewed financial reports which are, in reality, highly misleading or incomplete.

Some authors argue that the general efficiency of the capital markets in assigning realistic share prices (to public companies) acts as an “informal auditor” in providing a substitute/complement to the more formal process of audit/review.¹⁵ However, many authors question whether there is enough empirical support to justify this belief.¹⁶ There is, in fact, validity to both positions. There appear to be some reasons to believe that market efficiency, together with audited/reviewed financial statements, are adequate indicators of economic reality in some situations. For example, this may be the case where a large investor/lender (with its extensive past experience and staff of financial experts) is assessing the financial performance/credit worthiness of a large company (of long-standing reputation) through an examination of that company’s financial statements as audited/reviewed by a large public accounting firm (also of long-standing reputation). There is, however, less reason to believe that there is enough market efficiency to supplement audited/reviewed financial statements as validators of economic reality in situations where investors/lenders, clients (companies), and public accounting firms are small (or relatively new).¹⁷

Exclusive practice or licensure has been advocated by its many supporters as being necessary for the adequate protection of some, especially small, clients and third party investor/lender interests from the consequences of undetected poor audit quality. Licensure would permit only designated accountants to perform audits and reviews. If well-managed by the state or responsible self-regulatory profession, it would establish even higher minimum standards for audit/review quality. However, as will be seen in a later chapter, licensure may not be the best arrangement for protecting audit/review quality. Even where it is, it may have sufficient adverse consequences (monopolization and supply restrictions) as to warrant great caution in its implementation.

III. THE NATURE OF A PROFESSION

One source describes a “profession” as “a branch or field of endeavour which, for ideal performance, requires an advanced degree of aptitude, specialized training, responsibility, conscientiousness, self-discipline and ethical maturity.”¹⁸ Another, while recognizing that professionalism “has come to connote devotion to the standards of competent craftsmanship and to the interests of the client above personal gain . . .,” places primary emphasis on the “agency relationship” arising from “the exercise of decision-making authority, based upon specialized knowledge, on behalf of a client.”¹⁹

Closely related to the problems associated with defining a profession are those of identifying which professions should be self-regulating. Self-regulation "implies an agency relationship between the professional group and the state. It is appropriate under conditions analogous to those which influence an individual consumer's decision to establish an agency relationship with an individual producer."²⁰ Another source places similar emphasis on the need for public protection, and sets out criteria which should be met before a group is granted self-regulating professional status, including the following: special knowledge requirements; the independent/private practice/self-employed status of practitioners; personal/trust/agency relationships between clients and practitioners; the gravity of consequences resulting from malpractice; and the confidentiality of information involved in practice.²¹ A related source espouses more measurable criteria for granting self-regulating professional status, including a high proportion of members in public practice; a clientele of mainly individuals; a relatively vast field of knowledge; a high rate of membership of practitioners in the professional organization; and substantial financial resources of the professional organization.²² In contrast to these "structural" criteria for designating self-regulating professional status, "conduct-related" criteria are considered by another source. However, they are found to be often absent in existing self-regulating professions, including "activities" such as discipline, continuing education, public information and standards of practice.²³

Perhaps the most comprehensive listing of criteria for identifying candidates for self-regulating professional status is provided by the *Chichak Report*.²⁴ It includes, in one form or another, all of the above, as well as additional "structural" and "conduct" criteria, and "performance" criteria (in a manner which is analogous to the manner in which the concept of "workable" competition is much broader than that of the more narrowly defined concept of "perfect" competition). These additional criteria include evidence that the type of service is "clearly identified"; there are enough "qualified" (potential) members of the organization (eg. institute, association or society) to make the service broadly available; the granting of the desired status will not result in a monopoly which unduly restricts the numbers licensed or establishes unreasonable fee schedules; and the organization has been operational for a certain minimum period of time. In addition to the obvious subjectivity of some of these criteria, the comprehensiveness creates some problems in that few groups will meet all criteria. A "trade-off" will have to be considered in deciding which groups have enough overall merit to qualify for the desired self-regulating professional status. However, to the extent that the granting of this status becomes conditional on the group's making up deficiencies (for example by

establishing previously lacking discipline procedures), these criteria can become quite useful guides to granting self-regulating professional status and to reforming existing professional legislation.

IV. PROFESSIONALISM AND THE SELF-REGULATORY STATUS OF ALBERTA ACCOUNTING GROUPS

There are noticeable differences among the three major organized groups of accountants, as well as smaller groups of designated and undesignated accountants in Alberta, for example in terms of their involvement in public practice and in their educational standards. Hence, each group — Chartered Accountants (CA's) as represented by the Institute of Chartered Accountants of Alberta (ICAA); Certified General Accountants (CGA's) as represented by the Certified General Accountants Association of Alberta (CGAAA); Certified Management Accountants (CMA's) as represented by the Society of Management Accountants of Alberta (SMAA); and "other" accountants — will be given separate treatment in terms of its history and current status. Some inter-group comparisons will be made at this time. However, the bulk of these comparisons, together with a more critical evaluation, will be made in the next chapter (which examines the broader question of the need for the legislative reform of the accounting profession in Alberta).

Chartered Accountants

Chartered Accountants (CA's) are involved in all types of accounting — public, private and government, with about half extensively involved in public accounting services. CA's in large public accounting firms are especially dominant in providing accounting services to the larger corporate clients. In this last capacity, they provide services related to financial reporting (including the preparation of audits and reviews) as well as other financial and managerial functions. They have been typically the first group of accountants to establish a professional organization in any given political jurisdiction, with those CA's in Alberta establishing the ICAA in 1910 through a special Act of the Legislature.²⁵

The ICAA is governed by a fifteen member elected Council. It has pursued four major objectives, including (1) the establishment and implementation of educational, experience and examination standards for students/trainees aspiring to become CA's; (2) the maintenance of professional competence of members through professional development, member

services and practice reviews; (3) the implementation of disciplinary proceedings and measures to ensure strict adherence to prescribed standards of conduct and competence; and (4) the provision of various public services, including the operation of a referral service for prospective clients. It boasts a current membership of roughly 5,000 CA's which has grown at an annual rate of roughly 10 percent over the past decade. It accords full reciprocity to CA students and members from other provinces.

The ICAA, in keeping with the policy of the national institute, currently requires CA candidates to successfully complete a university degree, a total of 17 specific university level courses (which would roughly involve 660 hours of class time), and 7 ICAA courses (roughly 200 hours of class time); to pass a Uniform Final Examination (UFE); and to acquire 2-3 years experience in "Auditing, Accounting and Taxation" in an approved CA firm. A small number of "mature" students (over age 25 and scoring 450 or more on GMAT tests) have, in recent years, been given special exemption from the university degree requirements. Most CA students complete the university courses as part of an undergraduate degree in business administration/commerce. Otherwise two years or more of academic study (typically full time in view of faculty quota restrictions and unavailability of part-time study programs) after completion of any other undergraduate degree would be needed. In addition, CA students must complete 2-3 years of "internship" in an approved CA public accounting firm. Most CA students (85 percent) have passed the UFE on their first attempt in recent years (given the benefit of an optional preparatory course in "Integration and Analysis"). CA students today need far more academic training than their predecessors (before 1970 a university degree was not required, while before 1935 classes/correspondence courses were optional). They generally spend 25-50 percent of their internship in the performance of audits and reviews.

The ICAA has introduced a number of other provisions which meet the previously discussed "activities" criteria which ought to be met by ideal self-regulating professional bodies. It formalized disciplinary measures in the 1930s; established a Code of Ethics in the 1960s; began the approval and inspection of training sites/offices also in the 1960s; began formal professional development sessions in the early 1970s; and implemented a four-year cycle of mandatory practice reviews beginning in the 1980s.

However, in some key respects the ICAA fails to meet all the criteria for an ideal self-regulating professional group. Its clients are not mainly "persons," but are typically businesses; hence the need for protection of "naive" clients is less obvious. It does not embrace an overwhelmingly large majority of accounting practitioners (i.e. it excludes CGA's and CMA's), or alternatively, the type of service provided by its members is

not clearly distinguishable from that provided by non-members. It has only recently, and in token fashion, permitted lay representation in its governance and disciplinary processes. It may have unduly restricted labour supply by requiring its students to complete a university degree of *any* sort. It might do more prospectively (before the client complains) to inform the public/clientele of their rights to redress and related access to complaint/disciplinary committees. Finally, it did not (somewhat) relax its long-standing restrictions on advertising by individual CA's until 1980.²⁶ In fact, the last may have a role, along with market segmentation and the maintenance of possibly excessive educational requirements, in sustaining possible (although not yet demonstrated) "unreasonable" or monopolistic levels of fees and earnings.

The impetus for further professional reform within the ICAA in the above areas of deficiency would seem to come from external as well as internal sources. Threatened legislative reforms (eg. mandatory practice review provisions) would conceivably act as a spur to speed up its voluntary adoption of professional programs (eg. practice reviews). Perhaps more important, inter-group rivalry would also serve to accelerate the escalation of educational, training, examination, continuing competence and other professional standards and programs. One study places great importance on such rivalry in the development to date of professional excellence in the Canadian accounting scene:²⁷

Competition among associations, therefore, had two effects. First, associations continually escalated their commitments to professional standards and symbolism. ... Second, the competition for professional status resulted in the definition of professionalism in this particular sphere of activity.

This inter-group rivalry would seem to be, for that reason, a more welcome past and on-going development than the long-standing lobbying of the ICAA. That lobbying has often sought to secure exclusive practice rights, and in other cases the merger of its rival into a management accounting professional body. It would have reduced, if successful, inter-group rivalry and attendant social benefits.²⁸

Certified General Accountants

This group is currently represented by the Certified General Accountants Association of Alberta or CGAAA (incorporated under the *Societies Act* in 1961), but has been organized for most of this century by the national CGAA (which was federally incorporated in 1913). It too is active in all

areas and types of accounting, but only about one-quarter of its approximate 1,000 members are in public practice as principals, partners or employees in CGA public accounting firms. However, it has experienced annual growth rates in its membership of about 20 percent over the past decade (and slightly less if the assimilation of a number of Accredited Public Accountants in 1984 is ignored). Whenever its members do perform audits as part of their public practice, they deal primarily with smaller corporate clientele and individuals.²⁹ It is, not surprisingly, strongly opposed to the restriction of the audit function to CA's.

The CGAAA is also governed by an elected council and has discipline and other committees similar in design and purpose to those of the ICAA. However, because the CGAAA is only incorporated under the *Societies Act*, the powers of these committees are legally less compelling. It also appears to have the same sorts of professional goals in areas such as accreditation, competence, discipline and referrals, and in some cases pioneered various self-regulatory mechanisms. For example, it has a *mandatory* liability insurance and continuing education program (whereas other groups have only voluntary programs). It was also the first to appoint lay representatives to its governing body (in 1982).

The CGAAA appears to adhere closely to national association guidelines with respect to the education, training and examination of students, and hence also grants full reciprocity to students and CGA's of other provinces. It requires students to complete at least high school; some sixteen courses which can be completed by correspondence (with an average of 150-200 hours home study each) and subsequent in-person uniform examination, although courses typically each include about 20 hours of optional tutorial/lecture time (often through university extension facilities); and work experience in an accounting/business/government job during the 5-6 years of education/training/examination. Students can greatly shorten this period (to 2 or 3 years) if they gain exemptions on the basis of previously completed university and other course work (a maximum of 11 courses can be directly exempted, with a further 3 being challengeable). They must, however, complete and pass uniform examinations in the remaining courses.

It is difficult to determine whether the academic training of CGA's is as demanding/comprehensive as that of CA's, since, although total hours of (optional) class time are less, total hours spent in home study/correspondence may be more. Moreover, an approximate majority of CGA graduates in recent years already have a university degree or other relevant post-secondary qualification. Students with undergraduate degrees in commerce/business administration can readily obtain no more than the maximum 11 exemptions (even though they may have completed all 17 univer-

sity level courses required by CA students. This would suggest that one would not want to rule out the rough equivalence of CGA to CA academic training in *directly* relevant areas of accounting/business studies. This is so even though CGA's would tend to have less general education *in theory* (since they need only have completed high school, whereas CA's must have a university degree). It may also be the case that many students, especially previous university graduates, opt for CGA rather than CA education because they are unable to gain access to the university-level courses of the latter on the desired part-time and otherwise employed basis.

The one area in which it is apparent, from this and other studies,³⁰ that CGA training is *potentially* inferior to that of CA's is in the area of the specification and control over the specific content of practical experience requirements. CA students can only acquire their practical experience in an *approved CA public accounting* firm and that experience must involve at least 25 percent of total time being spent in audits and reviews. CGA's need only gain general accounting experience which is periodically attested to by qualified CGA's, who may or may not be employed in the same company (which may or may not be a *CGA or other public accounting* firm). It is, of course, reasonable to assume that *most* CGA students interested in pursuing a career in public accounting and the performance of audits and reviews will be careful to complete optional advanced courses in auditing and acquire their practical experience in a public accounting firm which is active in performing audits and reviews. However, there is no guarantee that they will do so. There are, of course, other safeguards which limit the *long-term* scope for the application of deficient accounting skills by those CGA's lacking sufficient relevant education and training. For example, the CGAAA reviews all public practices within six months of initial establishment and periodically thereafter. It also requires new entrants into public practice to participate in a practice advisory seminar during their first year. However, there is nonetheless cause for at least *short-term* concern. Hence it would be desirable that the CGAAA require proof of adequate general and specific preparation from any CGA before he establishes a public practice in which he would act as principal (or otherwise face expulsion from membership). In so doing, it would provide a better signal of the ability of its exclusive title practitioners to perform audits and reviews.

In most other respects, the CGAAA seems to have the same strengths and weaknesses as the CA's with respect to meeting the various criteria for self-regulating professional status. It even has made use of the CICA (Canadian Institute of Chartered Accountants) Handbook in establishing its own professional standards; has appointed CA's as CGA Examiners; and generally has pursued a broad-minded approach to maintaining the quality

of its professional services. In only one other area has the CGAAA been less than entirely successful — that of obtaining the legislative and political standing of the ICAA (as evident in the still unproclaimed status of the 1984 *Certified General Accountants Act*). Its failure in this respect seriously weakens its disciplinary and professional function and perhaps threatens its very continuance.

Certified Management Accountants

This group, known until 1985, as Registered Industrial Accountants (RIA's), were first formally organized in 1944 as The Society of Industrial Accountants of Alberta (SIAA) under terms of a private act.³¹ They are currently organized as the Society of Management Accountants of Alberta (SMAA) under the terms of the amended act. The SIAA/SMAA to some extent was/is supported by the ICAA on the understanding that its members were/are to be primarily involved in management accounting (and as such would be only minimally involved in the financial aspects of public accounting). In fact it was not until 1971 that it permitted its member RIA's to use their designation in public practice and amended its bylaws to include appropriate ethics. It has a current membership of about 2,500 CMA's (growing at 10 percent annually over the past decade), of which about 10 percent are engaged in public accounting (a third of these employed by a CA firm). Although it seems to be little opposed to its own members being excluded from the audit aspects of public practice, it seems to have mixed views on the issue of *exclusive* audit practice for CA's.

Once again, the SMAA, as the organizing body for CMA's, appears to meet most of the criteria for a self-regulating professional group. The SMAA exhibits most of the same strengths and weaknesses in meeting these criteria as is the case for the ICAA and CGAAA. For example, it has adopted a lengthy and demanding program for students of academic study, practical experience and examination similar to that of the CGA's. A majority of its students in recent years have had some other post-secondary qualification. However, the SMAA is even more open to criticism than the CGAAA in its failure to provide reasonable *posterior* as well as *prior* guarantees of competence in the public accounting practices of its members. This is readily seen. There are no courses in external auditing included in the CMA program. There are no guarantees that CMA's entering public practice have been exposed to public accounting as trainees in a CMA public accounting firm or other setting. There is no minimum specification for trainee involvement in audits and reviews or other specific public accounting areas. Finally, there are as yet no practice review programs established by the SMAA other

than those that would arise from disciplinary investigations, although this deficiency may be understandable in view of SMAA incorporation under the less than sufficient provisions of its private act. Hence in several respects the SMAA has failed to provide clear signals of the members' competence to perform audits and reviews.

This criticism is blunted by a number of factors. The SMAA appears to be somewhat willing to withdraw from the audit function. It also seems prepared to accept proposed legislative reforms which include provisions for practice review (which should be mandatory for public practitioners), as well as disciplinary and other professional powers. However, the SMAA should consider requiring its members about to begin a certain type of public service (eg. audits) to provide evidence of adequate academic and practical preparation, or otherwise face expulsion.

Other accountants

A number of previously undesignated accountants have recently formed reserved title professional accounting groups. For example, beginning in 1980, some 250 practitioners have become "Registered Public Accountants." However, because they are both relatively new and small and lack the standing that only a public act can bring, such groups would tend to be even less congruent with the "ideal" self-regulatory professional accounting group portrayed in section III.

Of those practitioners who do not generally have a designation, only those who are in public practice are readily identifiable. Even then, only yellow page listings are a reasonable means of determining the numbers of undesignated public accounting *firms* (rather than *practitioners*). The City of Edmonton directory indicates over 100 such firms, suggesting that there may be several hundred in the province as a whole (with perhaps overrepresentation in rural and remote areas, and many providing only tax and/or bookkeeping services).

Since this group is largely unorganized, it fails to meet most of the criteria for professional status. Ironically it is probable that its clientele is largely made up of those individuals and small businesses which are more susceptible (than large business clientele) to the consequences of the lack of professional accountancy competence and trust.

The third-party effects of any deficiencies in (or the absence of) the professional self-regulatory mechanisms which provide assurances of high minimum audit/review quality are, of course, in theory mitigated by market efficiency. Moreover, these effects are further minimized by the aversion of lenders and other institutions to accept audits/reviews performed by either

non-CA designated or undesignated accountants. Nonetheless, there is some justification, as seen in Chapter 4, for legislatively restricting at least the audit and review functions of public accounting to accountants who are members of (or at least meet the relevant standards of) the existing major long-standing professional accounting groups (the ICAA, CGAAA or SMAA) or of any other group which (in the future) is able to gain maturity, size and professional standing of approximate equivalence.

Chapter 3

The Need and Scope for Reform

As the reader can gather from the dual nature of this chapter title, the discussion in this chapter will involve the examination of two interrelated issues. First, is there evidence, direct or indirect, that the performance of the accounting profession in Alberta is currently or potentially so deficient as to warrant legislative reform? Second, given any current or potential deficiencies, in what possible areas might reforms be made?

The answers to the first question are explored in the first part of this chapter. They look to such theoretical and empirical considerations which indicate that the practice of accounting in Alberta involves, or is likely to involve, quality of service which is socially sub-optimal; prices/output levels which are “statically inefficient” (i.e. prices too high, output too low for social optimality); and levels of technological/practice innovation which may be socially sub-optimal. They conclude that direct evidence of sub-standard performance is generally (and perhaps necessarily) lacking. However, indirect evidence (primarily in the form of weaknesses in the self-regulatory legislative framework discussed below) does indicate potential deficiencies in one or more areas of performance. This would, in turn, provide some justification for reform of the self-regulatory professional legislative framework of the current regime of multiple certification in Alberta accountancy.

The answers to the second question concern the scope for legislative reform. They follow logically from the evaluation of current industry performance. Areas for potential reform discussed in this chapter in many respects go beyond the measures incorporated in the current Bills 71, 72 and 76. They are threefold. First, there is a need for a general “tightening up” of the self-regulatory framework so as to provide further guarantees of the accountability of professional accounting groups to the public in general and the Legislature in particular. Second, legislative provisions

should more strongly empower and/or *require* each professional group to impose upon its members legislatively approved standards (i.e. Regulations) for education, training, specialization, professional development, practice review and other matters. Third, legislation should endeavour to improve the quality of relations between the professional group and its members' clients by requiring its publication and more widespread dissemination to clients of information concerning complaint and disciplinary options and its more expeditious provision to the courts of relevant information in civil liability actions. A fourth area for potential reform, the extension of exclusive practice privileges to one or more groups of accountants (such as in the provision of audits or reviews), is more contentious and is discussed in the next chapter.

I. AN EVALUATION OF INDUSTRY PERFORMANCE

As quality of service seems to be most often discussed as the area of performance which is of greatest concern to public policy-makers for the accounting (and other) professions, it will be the first dimension of performance examined. Other aspects of performance, however, are in many ways just as important, including price/output/static efficiency and innovative/dynamic efficiency. For of what consolation would it be to policy-makers that the accounting profession provided a (near-)perfect delivery of services, under a worse case scenario, of outdated accounting techniques, technology and organizational arrangements, and prices which few clients could afford? Hence, although quality is discussed first, that discussion should not be viewed as more important than or divorced from the subsequent discussion of static and dynamic efficiency.

The quality of accounting services

The concept of product quality is at best a difficult one. In view of the multiplicity and heterogeneity of accounting services, it becomes perhaps more than unusually complex and abstract. Nonetheless, quality is an important dimension of performance which needs to be examined both theoretically and empirically.

Since accounting services have much to do with information, notably financial information, it is surely the accuracy, completeness and usefulness of that information which constitute much of what would be deemed service "quality." For example, tax services should involve adherence to tax regulations in the preparation of tax returns, and as such be "accurate,"

and also provide comprehensive advice, if so contracted, on how the client can (legally) minimize tax payments. Audits should lend credibility to financial statements and reveal any discrepancies between the reported and actual "financial picture."

Two dimensions of quality are relevant to the performance of the accounting profession. The first is the *mean* or *average* quality of service, which, in a market situation which is on average "efficient," will be approximated by market price. The second is the *variation* of the service quality provided by individual practitioners about (and especially below) the mean or average quality.

Mean or average quality tends to be reduced whenever information on service quality is imperfect and the process of adverse selection arises. It can be defended (or even increased), however, at (or beyond) socially optimal levels through the development of a number of *prior* mechanisms. These include the voluntary escalation of credentials (especially education) by high quality practitioners¹ and certification/exclusive title practice,² often in tandem (as a result of inter-group rivalry among professional accountants). Quality is also maintained and even augmented by *posterior* measures such as the disciplinary and continuing education programs of professional accounting groups.

Since both prior and posterior mechanisms for thwarting the process of adverse selection are reasonably well developed in the Alberta accounting profession, there is little reason to anticipate socially sub-optimal service quality. Educational standards have escalated both formally and informally; the vast majority of practitioners do belong to one of the three major reserved title professional accounting groups and are subject to the general educational, training, disciplinary and other standards of those groups; and inter-group rivalry has accelerated the upgrading of professional standards.

Nor is there any empirical evidence to suggest that accounting services in Alberta are of lower quality compared to other jurisdictions. This lack of evidence, however, comes as no surprise, not only in view of the effects of national uniformity in the standards of the three groups, "credentialism," and certification, but also because statutory and most other audits tend to be performed in most cases using the same restrictive standards as Ontario (i.e. by a Chartered Accountant only).³ Moreover, large lenders and clients especially are sufficiently sophisticated as to deal only with large accounting firms whose reputations for quality are well established.⁴

The variation in quality is also a matter for possible concern, particularly when the quality of accounting service provided by a particular practitioner falls below the average or anticipated level of quality. Low quality, particularly if undetected, can lead to income transfers (eg. the client pays

a fee exceeding the value of the services or he pays higher taxes than legally necessary due to poor tax advice). It can also lead to resource misallocation. For example, lenders/investors might be misled by a low quality audit into making privately and socially unprofitable loans/investments, which can lead to an inefficient allocation of capital inputs and even to default and bankruptcy.

Since again it is informational imperfections which are the source of much of the below-average service quality, measures which provide added "signals" of service quality are called for. These include educational credentials, certification, and the accountant's reputation. In addition, measures which deter substandard application of the skills of an otherwise well-qualified accountant also do much to minimize below average service quality. These include civil liability,⁵ discipline, practice review⁶ and the market (defection of unsatisfied clients). However, many of these mechanisms are not currently designed to have their optimal impact on service quality. For example, current educational and training requirements may not be sufficiently specific to certain critical areas of public practice such as audits and reviews. These practice areas ideally might be formally designated as specialties. Nor are current provisions for civil liability and discipline always strong enough or workable enough to guarantee effort and service quality consistent with credentials.

Among accredited accountants there seems to be little evidence of malpractice/substandard service quality for individual practitioners. Nor has service quality been generally so much below the average as to have warranted widespread notice or inter-group accusation. Moreover, evidence in the form of unduly frequent disciplinary and civil litigative proceedings is also minimal, either because substandard quality is rare *or* professional groups/courts are, due to weaknesses in existing legislation, only minimally involved in disciplinary/litigative areas.

The several areas in which legislative reform is currently contemplated might also be seen as indicative of a public concern with substandard quality. However, these proposals merely formalize the various disciplinary, practice review, and other measures already voluntarily pursued by the three accounting groups. This would suggest that the motivation for the reforms has more to do with the extension of exclusive practice provisions alone (at the behest of one or more accounting groups) rather than a general concern with substandard quality.

In only one other area is there reason for obvious concern with substandard quality. The existence of a small but significant number of unaccredited accountants, who deal primarily with a "naive" clientele of small businesses and persons, provides considerable scope for substandard service quality.

However, although these unaccredited practitioners are exempt from external control by the three accounting groups, they are nonetheless subject to the ultimate discipline of the market as well as civil litigation. Moreover, in the critical area of audits and reviews, where the third party consequences of malpractice would be especially severe, it is anticipated that unaccredited accountants are rarely, if ever, engaged/authorized by lenders/securities exchanges.

Closely related to the concern with the average or below-average variation of quality is the issue of the price of and access to accounting services. The consequences of quality that is "too high" also can be of considerable social concern. High quality is accompanied by high prices, which in turn limit the access of some clients to accounting services, and so potentially reduces the general "quality" of financial life. In an important study of the effects of occupational licensing,⁷ it is pointed out that, various remedies, including licensing, have been pursued to deal with the problem of low quality due to adverse selection. However, they may cause service quality to fall if they lead to reduced competition among suppliers (accountants); to professionals' (accountants') devoting too much of their time to tasks for which they are over-qualified and too little to more demanding tasks; and to higher prices which cause clients to do without the service or adopt inferior "do-it-yourself" alternatives. The authors of that study find empirical support for this last contention, with disturbing findings that, for example, electrocution rates (for do-it-yourselfers?) are higher in those regions where licensing has been adopted to protect the public from low-quality practitioners! They find similar results for other services (dental, plumbing, optometric, sanitary, real estate brokerage and veterinary); for example, longer "time on the market" for houses in states where real estate brokerage is licensed.

Needless to say, such *broadly defined* quality could suffer in much the same way should the price of accounting services, along with *narrowly defined* quality, be "too high." This could, for example, happen in a context of *informal* exclusive practice/licensure within a reserved title regime as, to some extent, exists in Alberta, where, partly due to statutory and other institutional rigidities, about 95 percent of audits are performed by CA's. The high prices associated with high quality would induce lenders to exempt many of their smaller loan applicants from expensive audits or reviews (which, to be consistent with institutional policy, must be performed by a high-priced accredited accountant), and in the process admit higher overall rates of loan default and bankruptcy.

Other authors have pointed to the possibility that the quality of accounting services may be unduly escalated by the "credentialism" response to

adverse selection. For example, one discussion examines recent proposals in some regions of the United States to increase the educational requirements of Certified Public Accountants (CPA's) from four to five post-secondary years. It argues that this will increase prices and possibly quality to levels which some clients, and even many accountants, feel are unjustified.⁸

There seems to be no systematic evidence of a deterioration of broadly defined quality of accounting services in Alberta or Canada as a whole although the recent, widely unanticipated, failure of the CCB and the Northland Bank might be construed by some as casual evidence of such. Given the high degree of inter-group rivalry, this general observation should come as no surprise. Obvious difficulties with measuring broadly defined quality (eg. what portion of loan defaults/bankruptcies are due to reduced access/resort to audits/reviews rather than recession?) would, in any event, confound such an empirical investigation.

The price/output of accounting services

The price and output of accounting services has a direct relationship with the issue of static efficiency in resource allocation. A price which is higher and an output which is lower than "ideal" values, such as would prevail in a perfectly competitive market (which includes the perfect information/optimal quality characteristic), will lead to resource misallocation and "deadweight social loss."⁹ The associated reduction in client access could lead to dramatic and costly consequences for not only the client, but also third parties (lenders/investors), and even society as a whole. This would especially be the case where "bad" economic decisions resulted in/led to defaults, bankruptcies, *et cetera*.

Reductions in service accessibility and attendant static efficiency are matters for social concern whenever price is higher due to the escalation of quality above "ideal" levels. However, they are even more disturbing when higher prices are the result of the exercise of market power by suppliers (since higher prices will further reduce accessibility and *broadly defined* quality without any necessary increase in *narrowly defined* quality). Market power would seem an unlikely development in view of the literally thousands of accountants currently practising in Alberta, along with full inter-provincial reciprocity within each professional group. However, the number of accounting *firms* is necessarily less, albeit still a very large number.¹⁰ More important, the public accounting market tends to be dominated by ICAA members (who claim a 95 and 80 percent market share for audits and reviews respectively). ICAA public practitioners in turn are concentrated in the larger firms (notably "the Big Eight"). Almost one-half of Alberta CA's were

employed in 1985 by the biggest 18 offices. An earlier study in Ontario showed that over 50 percent of the total number of accountants engaged in public practice and performing audits were employed by the top 9 firms, while just 5 firms captured over 90 percent of the business of "large" clients.¹¹ Given the well-attested affinity between large clients/lenders/investors and "the Big 8" accounting firms, such high levels of concentration are supportive of higher prices through tacit collusion (or lesser degrees of oligopolistic interdependence) and the general exercise of market power in a context of market segmentation.

Market power is also potentially exercised by restrictions on supply, especially artificial constraints on the numbers of students who are able to find training sites or pass examinations. As discussed earlier, the ICAA does insist that students article in only *approved* CA firms and hence can potentially impose very demanding minimum standards for training sites and thereby create a restrictive upper bound on the number of such training sites.¹² In addition, at least one study shows that pass rates on professional examinations are inversely related to excess demand for (U.S.) accountants and other professional groups, a strong indication of potential supply restrictions.¹³

The certification, and especially the licensing, of (public) accountancy would tend to exacerbate the development of market power. However, the effects of both will be blunted by inter-group rivalry if more than one accounting group is certified/licensed.¹⁴ The statutory and informal precedence that is given to audit and review performance by CA's (as opposed to CGA's and CMA's) further develops market power for ICAA members. To the extent that the certified/licensed accounting groups restrict advertising (especially price advertising) and adopt mandatory/suggested fee schedules, market power would be more readily exercised and likely to result in higher prices/earnings.¹⁵

There seems to be no direct evidence of higher than competitive prices for accounting services in Alberta. This may be due to the somewhat competitive nature of the Alberta accounting industry. It may, as well, reflect the difficulties associated with coordinating the prices of an extremely heterogeneous product mix (each product, say audit as opposed to tax service, having a potentially different elasticity of demand, and also varying in intensity, such as the audit of a large as opposed to a small company). Even where a common hourly charge is adopted, price coordination for a particular service would be thwarted by a variation between *nominal* and *actual* hours involved in providing the service. Nonetheless, the continued survival of unaccredited accountants *may* indicate that prices tend sometimes to exceed average quality costs among accredited accountants. Hence higher

than competitive prices might result if certification/licensure were more restrictive.

Whether higher prices for accounting services lead to *serious* resource misallocations depends upon the price elasticity of demand for those services. One author contends that this elasticity is low,¹⁶ i.e. that higher prices result in little reduction in demand/output. He, therefore, asserts that any concern with higher prices for accounting services may prove to be secondary to the concern with quality (for which the same author asserts a high output elasticity). Much of the policy concern is directed toward the audit function, for which the client has limited discretionary demand (especially if it is statutory or dictated by the lender). Hence, he concludes that higher audit prices arising from market power may lead to little resource misallocation. However, as made clear in the next section, higher prices correlate with market power, and market power can lead to a lack of technological innovation/dynamic efficiency. In that respect, high prices may be an indirect symptom of unsatisfactory industry performance.

Technological innovation

A number of studies have stressed the importance of technological innovation as a key dimension of professional performance, especially in the area of the form and content of the firm.¹⁷ They have shown special concern with the possibility that professionals may, in the interest of generating/maintaining the demand for their services and enhancing their earnings, resist/limit the introduction of paraprofessionals and new practice organizational arrangements. These studies characterize such restrictions as resulting from the diminishment of competitive pressures to innovate in a regime of licensure;¹⁸ as taking the form of prohibitions on interdisciplinary practice and the legislation of rules and ratios for using paraprofessionals (as seems to pertain in American dentistry);¹⁹ and as being enhanced by restrictions on price and other advertising.²⁰

In accountancy, the scope for technological innovation is surprisingly large. In the area of process innovation, paraprofessionals, students and other non-professionals can be, and typically are, increasingly assigned numerous tasks which form part of, or are ancillary to, the major service provided (eg. inventory-taking as part of an audit). accounting practices range in size and organization all the way from single proprietorships to very large partnerships having a mix of partners and salaried employees. Computerization has greatly altered the role of the accountant to being more that of an analyst/decision-maker than that of a "number-cruncher," and thereby improved productivity/efficiency/effectiveness. Some scope for in-

terdisciplinary practice is evident (tax accountants and lawyers). Finally, in the areas of product innovation, much research is done, published and disseminated in the ongoing evolution of accounting standards and techniques.

Again, there seems to be little or no evidence of a deficiency in technological innovation in Alberta accountancy. All three groups, especially the CA's, show a diversity in firm type, size and organization²¹ (although there seem to have been some past restrictions on formal specialization and there seem to be current restrictions on inter-disciplinary practice/partnership with, say, lawyers or other professionals). They are continually upgrading educational standards for both students and practitioners. Finally, they are active in promoting a variety of professional publications and journals. That this is the case may be, in large part, due to the *loosely* regulated status of accountancy and to inter-group rivalry. Hence, care must be taken to ensure that professional legislative reforms add to, rather than subtract from, the high degree of technological innovation thus far experienced. In the area of product innovation, however, a potential deficiency is evident: there may be a possible and widening gap between what information the public expects an audit to convey, and the information the accounting profession routinely has provided in recent audits (such as those of the CCB and Northland Bank).

II. THE SCOPE FOR LEGISLATIVE REFORM

In the previous section, it is argued that there is little or no direct evidence of deficient performance on the part of any group of accredited Alberta accountants. This seems to be the case whether performance is evaluated in terms of the average or variation of quality, the levels of price and output, or the intensity of technological innovation. However, there is indirect evidence of potential deficiencies in the form of shortcomings in the regulatory environment. These shortcomings include the lack of uniformity in both existing and proposed regulatory frameworks for the three accounting groups; the total absence of some key safeguards in these frameworks; and the too often *empowering* rather than *compelling* nature of other key safeguards.

Identifying more specifically the possible areas in which existing and proposed regulatory provisions are deficient is vital to the ultimate provision of recommendations for "ideal" self-regulatory professional reforms. "Ideal" regulatory reforms are needed to provide further safeguards under the current regime of multiple certification. They are particularly vital to

safeguard the public interest under narrow licensure (eg. of audits). Areas for professional self-regulatory reform (other than licensure) are discussed in sections which outline the privileges and obligations which the three professional accounting groups ought to be subject to in dealing with government; in dealing with their memberships; and in dealing with their members' clients.

Professional-governmental relations

There are a number of areas in which reforms might do much to provide further assurances that professional accounting groups will be fully accountable to the government/legislature/public in their exercise of self-regulatory privileges and obligations. Each will be given brief treatment, although the interested reader may wish to examine identified sources for greater detail.

The general philosophy justifying the delegation of authority by government to a self-regulating professional group is amply discussed in one of the many background studies undertaken in Ontario in the late 1970s as part of a large-scale examination of four major professions. It is also more narrowly examined in other studies.²² Suffice it to say that accountancy is a reasonably good candidate for self-regulated professional status in view of the complexity of its body of knowledge and the trust/agency relations involved.

What is evident from these and other studies is that there is considerable room for reformation of this status. Reforms would transfer much of the benefits of this status from self-interested professionals to the public at large. Given that self-regulatory, often licensed, status has traditionally been granted at the request of the professionals, rather than society at large (as studies of medicine in the U.S. and Canada have revealed),²³ this assertion should come as no surprise. The on-going and sometimes costly endeavours of professionals to lobby for the defence/entrenchment of existing self-regulatory status and exclusive practice rights can also be viewed as typical examples of self-interested investments, rather than pure philanthropy, on the part of professional groups.

One proposal argues that professional legislation should be of the "sunset law" variety.²⁴ Professional legislation should expire at the end of a pre-specified period (7-9 years). It would only be reinstated in original or amended form after passage of a new act of the legislature (previously scrutinized, in light of past industry performance, by a standing, select, or *ad hoc* committee, or by an advisory body appointed by government). Although such a proceeding would probably "rubber stamp" existing professional legislation in most cases, it would provide an opportunity for public input

and periodic revision of legislation where there had been some public concern with deficient professional performance. It would, of course, create additional administrative costs and some uncertainty for professionals. However, it would certainly provide further checks upon any general abuse of professional status. Until such time, however, as the "sunset law" principle is more widely embraced by the Alberta government, it seems an unlikely area for reform.

Another proposal argues that the government should do more than enact legislation and subsequently exercise its veto power over a limited number of Regulations which the professional group is empowered, *but not required*, to make.²⁵ It argues that legislation should *require* the professional group to submit a larger number of key standards, rules, procedures, *et cetera* (some of which are described below, eg. advertising policy) for explicit approval by the Lieutenant-Governor in Council. These would be subsequently promulgated as "Regulations" in the *Gazette*. In this advocacy, this proposal would also increase the number of items for which the professional group is empowered or required to specify as "Regulations" (requiring state approval) rather than "Bylaws" (not generally requiring state approval). It would also make any exclusive practice or other privileges contingent upon *prior* approval of related "Regulations." In so doing, it envisages a higher probability of professional groups' adopting standards (eg. for education, training, specialization, advertising, *et cetera*) which would serve primarily the *public* interest. This proposal, if implemented in *practice* (as well as in theory), would do much to limit the potential and possibly monopolistic abuse of self-regulatory professional powers.

The requirement to submit an annual report to the government (a Minister or the Legislature) has also been espoused by a number of sources.²⁶ While this requirement is incorporated into Bills 71, 72 and 76, it is perhaps overly imprecise. In particular, legislation should specify *minimum content* for the report, rather than simply "a form satisfactory to the Minister." For example, the report should include information on changes in membership, numbers and types of disciplinary proceedings, changes in Regulations and Bylaws, and so on. Without such a detailed requirement, annual reports can become a rather uninformative and token exercise.

A final area for reform is the inclusion of lay persons on the governing body and disciplinary and possibly other committees of the professional group.²⁷ Again Bills 71, 72 and 76 include such provisions, but the numbers of lay persons should be larger (perhaps a quarter of council or conduct committee memberships). Moreover, lay persons would be nominated as well as appointed by the Lieutenant Governor in Council, rather than being nominated by the professional group. This last provision would ensure

that lay persons were not always pre-screened by the profession. Moreover, consideration should be given to *reasonable* reimbursement/compensation of lay persons (eg. at consultancy rates) so as to attract individuals (such as lawyers, business administrators or economists) who would otherwise eschew participation due to its opportunity costs. Again, proposed reforms need only modest up-grading to provide a more adequate and effective representation of the public interest in the self-regulatory process.

Professional-membership relations

It is in this area that a number of important reforms are needed, especially in terms of providing greater uniformity, comprehensiveness and compulsion among key provisions of current legislation, as well as the three bills. For example, only Bill 72 includes an explicit provision (in the Regulations) for professional control over members' advertising, while none of the bills *requires* the professional groups to implement practice reviews for its members who are in public practice.

Advertising is a key ingredient in effective price competition and the introduction of new practice and other innovations. Hence, it is important that the *Regulations* of all three accounting groups be amended so as to require explicitly each group to specify and present for approval any restrictions on advertising by its members (since the current practice of optionally incorporating such restrictions in "Codes of Ethics" does not invite the same degree of explicit state control). In addition, principles of equal treatment would dictate that the ICAA and the CGAAA, not just the SMAA (as currently proposed in Bill 72), would have to meet this requirement *explicitly*. Approved advertising policies should be only minimally restrictive (i.e. forbid only misleading or fraudulent advertising which would otherwise violate federal/provincial laws). In addition, they should not permit the professional group broad discretion to restrict advertising that infringes highly subjective standards of "professional dignity" or "substantiability."

The importance of adequate education and training is implicit in requirements that each accounting group establish,⁷ and present for approval, appropriate *general* as well as *specialist*, standards. None of the groups is as yet required or seems eager to establish the latter. Only recently has the ICAA permitted advertising of informal specialties. Only one of the proposals, Bill 71, gives the professional group the right to establish standards for formal specialization, including associated education, training, and designation, for its members, and then to promulgate these standards (as *Bylaws* rather than *Regulations*). Given the critical importance of maintaining quality in the provision of audit and review services in particular,

it is recommended that the existing *general* accounting designations be complemented with an appropriate indication of competence in the *specific* area of audits/reviews. This would improve the effectiveness of existing certification (especially for CGA's and CMA's). All three professional accounting groups should be *required* to establish an appropriate "Audit Specialist" or "Attest Specialist" (A.S.) specialization category, complete with educational and training standards, all to be presented for approval as Regulations by the Lieutenant-Governor in Council. Such standards would include completion of advanced audit courses, examinations and practical experience requirements (with an existing A.S. practitioner).²⁸

A *compulsory* liability insurance scheme is a desirable provision for improving the effectiveness of civil law proceedings, for promoting competence and for the direct protection of the public.²⁹ It is provided for in the Bylaws of Bills 71 and 72, but not Bill 76 (for the CGA's). Moreover, the proposals only *empower* but do not *require* the professional groups to introduce compulsory liability insurance. There are obvious advantages (eg. universality and its inclusion of small practitioners) to *requiring* all three accounting groups to introduce such a scheme (including specified minimum/maximum coverage and degree of co-insurance). Each group should also coordinate its disciplinary, practice review and continuing education programs with such a scheme (particularly in the experience-rating of premiums). These advantages are seen as offsetting any disadvantages such as the encouragement of frivolous claims/litigation.

All three bills *empower* the accounting group to operate practice review programs (primarily for those members in public practice).³⁰ However, consideration should be given to *requiring* the accounting groups to operate practice review programs on a cycle of maximum length. For example, existing public practice firms would be reviewed at least once every three or four years, while new practices must be reviewed within six months of establishment. This requirement is further justified if existing inter-group rivalry fails to provide adequate assurance of effective practice reviews under the current regime of multiple certification, and if licensure would further reduce inter-group rivalry and its safeguards. Moreover, the accounting group should be empowered not only to require correction of deficiencies in member practices, but also to present its findings to the liability insurance carrier for assessment of premiums.

In a similar vein, professional accounting groups should be *required* to design and implement continuing education or professional development programs. They, in turn, would require their members to participate in those programs. There may be some concern that *compulsory* continuing education may be of lower quality than *voluntary* programs.³¹ However, the much

higher rates of participation under the former, together with economies of scale in developing high quality, low cost (per participant) programs, would suggest the former's net advantage. Moreover, compulsory programs could admit proof of home study as an alternative to in-person attendances. Once again, the accounting group should be authorized to provide continuing education records to the insurance carrier, and even cooperate with it in developing "loss control" seminars.³²

There is also some possibility that the limitations on competition might arise from the use of any suggested fee schedules (mandatory fee schedules being potentially illegal under provisions of the *Competition Act*). It is of some concern that no restrictions on the use of such schedules are explicitly incorporated in existing or proposed legislation. Either the body of the legislation, or the provisions for Regulations, should forbid the accounting groups' preparing and distributing to their members (or quoting to potential clients using referral services) suggested fee schedules. This is true whether these schedules incorporate specific *point* or *average* values of hourly or service fees. To the extent that the accounting group is permitted at all to survey and publish member fees, it should be restricted to publishing (or quoting) information on the actual range (minimum and maximum values) of recent fees charged by members.

Finally, all three bills provide for disciplinary measures (as an aspect of professional-member relations). These measures are more effective than those currently available (especially to the CGAAA and SMAA which operate under the procedural and remedial limitations of the *Societies Act* and a private act respectively). However, as discussed above, the results of disciplinary proceedings should be made available to the government (as aggregates in the annual report). They should also be accessible to the insurance carrier (as specifics to be used in experience-rating premiums).³³ Moreover, as discussed below, all three professional groups should be required to periodically inform the public/clients (eg. in general informational pamphlets, telephone directories and referral processes) of their rights and appropriate procedures in the event of dissatisfaction with the services of members.

Professional-client relations

Many of the reforms outlined above have an impact on member-client relations; for example, any change (eg. liberalization) that might occur in the rights of members to advertise. Additional reforms that more directly affect the role of the professional group in conditioning member-client relations also merit some discussion.

In order to provide a more effective deterrent to low quality service, the professional group should publicize more widely the address and telephone number of the liaison officer for its discipline committee (as part of any information on the group contained in pamphlets). It should require members to provide this information or pamphlets to all (new) clients. It should be more specifically required to divulge relevant information, particularly in the areas of prior discipline, practice review and continuing education, in malpractice proceedings between a member and a client. It should also be required to provide the client, or the client's attorney, upon request, with a list of members who would be prepared to act as expert witnesses in such proceedings.

Many of the areas for potential reform identified in this section are relatively minor. However, it is argued that their combined effect would do much to further protect the public from the potential abuse of self-regulatory professional status for the Alberta accounting groups. Indeed, it is maintained that, should these criteria for an ideal self-regulatory environment be met (including provisions for audit and review specialty designations), the existing situation of multiple certification, together with inter-group rivalry, would forestall the need for the narrow licensure of audits to CA's alone. In fact, should these criteria, or equivalent measures aimed at protecting the public interest, *not* be met, the narrow licensure of audits to CA's alone would be especially inadvisable.

Chapter 4

The Exclusive Practice/Licensure Issue

Of all the proposals incorporated in Bills 71, 72, and 76, the granting of the exclusive “audit” privilege to members of the ICAA alone appears to be the most significant as well as the most controversial. Such a *narrow* licensure of audits has been particularly opposed, not surprisingly, by the CGAAA as the group most likely to be disadvantaged. It is seen as having more serious long-term than short-term consequences. This is because the “grandfathering” of existing CGA/CMA auditors into the ICAA (by the Independent Accounting Review Board of section 94 of Bill 71) will reduce the immediate, but less-so the future, impact of this exclusivity. The *broad* licensure of the “review” function to all three groups has met with considerably less opposition. Although the concern of this analysis is with *both* cases of licensure, and related impact on social welfare, discussion will be focused upon audit licensure. This, in view of its greater restrictiveness, is more likely to be consequential.

The narrow licensure of audits has been especially defended as necessary for the protection of third-party (lender/investor) interests from the possibility of any low-quality, misleading or erroneous characteristics of the auditor’s verification or qualification of financial reports. This is of especial concern where these characteristics remain undetected in view of the informational complexity and imperfections associated with client and/or third-party knowledge of auditor competence. It has been attacked as creating a monopoly for ICAA members. Clearly it should be subject to a qualitative, if not quantitative, social benefit-cost analysis.

An evaluation of the social benefits and costs of audit licensure in the Alberta accounting profession is highly sensitive to the assumed nature of the broad, underlying, self-regulatory environment. In a context of little or no certification/exclusive title practice and/or limited state controls on the functioning of self-regulating professional accounting groups, such an

evaluation is quite likely to justify licensure. However, it is less likely to do so in a context (such as is currently evolving in Alberta) where the certification and legislated self-regulatory status of the three professional accounting groups are reasonably well developed. There are numerous advantages, and no inherent incompatibility with licensure, of the latter context. Hence, the social benefit-cost evaluation of licensure that follows will presume, unless otherwise specified, the more-or-less idealized certification and self-regulatory status of each of the three professional accounting groups.

It will be argued that *narrow* licensure is potentially inferior to both a policy of multiple certification (with inter-group rivalry) and *broad* (multi-group) licensure in a context of ideal professional self-regulation (including provisions for specialization). The bases for this argument are the lack of reasons for believing that narrow licensure would lead to quality (and social benefits) which would be greater, and the multiplicity of reasons for believing that competition (and related social benefits) would be less. Moreover, narrow licensure *without* an ideal self-regulatory legislative environment (including specialization and other compulsory safeguards), is even more inferior to multiple certification and broad licensure. This assertion is supported by a belief that any deficiencies in self-regulatory legislation would weaken licensure's guarantees of service quality, and strengthen its degree of exploitable market power. In contrast, similar deficiencies would detract little from the performance of a vigorously rivalrous context of multiple certification or broad licensure.

In the sections which follow, the theoretical and empirical considerations which either justify licensure as socially beneficial or condemn it as socially costly will be examined. Liberal reference to studies of other professions, as well as accountancy, will be made. A final section attempts to compare (qualitatively) these social benefits and costs of licensure, along with those of its frequent adjunct (grandfathering).

I. POTENTIAL SOCIAL BENEFITS OF AUDIT LICENSURE

A number of possible social benefits or advantages have been assigned to audit licensure by both the major direct beneficiary of licensure (the CA licensees) as well as outside analysts of both the professions in general and accountancy in particular. Greater guarantees of optimal quality and public protection are the advantages receiving the most emphasis, and subject to the broadest consensus whenever comparisons are made between licensed and *entirely unregulated* settings. These and other benefits, however, are less obvious when comparisons are made between licensed and *exclusive*

title, professionally self-regulatory, settings. Hence the social benefits of licensing should be examined within a well-defined specific context, preferably the latter, in order to obtain a clearer evaluation of the benefits which licensing *alone* can bring.

Higher average quality

Since audits “lend credibility to financial statements,” they are a somewhat subjective and complex exercise and, therefore, provide the potential for various informational deficiencies in the assessment of auditor competence and audit quality. As a result, the market for audit services is vulnerable to the process of “adverse selection” (and related third-party effects). This process can lead to lower than socially optimal quality (and a greater degree of uncertainty as to whether quality meets the minimum acceptable level as perceived by the client or third-party).¹ The consequences of lower (and more uncertain quality) for society are necessarily more widespread for audits. This is because both clients *and* third-party users (such as lenders and investors) might be led into making “bad” economic decisions on the basis of their inadvertently believing poorly audited financial statements to be accurate and complete.

Licensure has been recommended as one of the least cost measures for upgrading information on average service/audit quality. For example, one study sees licensure, along with certification, civil liability, seller branding/reputation, and purchase frequency as remedies for the deterioration of service quality due to the process of adverse selection.² Another study regards licensure as providing far greater guarantees of high average quality than those pertaining in an unregulated market.³ Another study sees licensure as especially justified in cases where consumption externalities/third-party effects are (potentially) present, as is the case for audit services.⁴

It seems highly plausible that formal audit licensure *in theory* produces higher average quality than would an unregulated market. However, it should also be recognized that alternative mechanisms also act as guarantors of quality. These include any *informal* audit licensure in the form of the requirements of most clients/lenders/securities exchanges that audits be performed only by designated accounting professionals such as a CA of a “Big Eight” firm of long-standing reputation; the sophisticated nature of many third-party users such as banks, institutional investors, stockbrokers and government; the certification of an optimally small number of accounting groups, especially where appropriately qualified audit specialists are clearly designated; and inter-group rivalry.

In addition, while licensure may provide some *prior* guarantees of high

average audit quality (in the form of high education and training standards), it provides fewer *posterior* guarantees of quality. For example, licensure may facilitate the introduction of overly high educational standards and other entry restrictions. These lead to chronic manpower shortages, which in turn pressure busy auditors to under-serve or take short-cuts and, in so doing, reduce audit quality. In addition, licensure eliminates competition from excluded groups and hence reduces market pressures to maintain audit quality. Certification, together with appropriate levels of inter-group rivalry, market efficiency, civil liability and ideal self-regulatory mechanisms (including required specialization), may do much more to provide *overall* guarantees of quality.

Finally, licensure may increase average audit quality, but only in proportion to the educational, training, and examination standards actually adopted (above and beyond those pertaining in an unregulated market). It *may* thereby increase average quality to whatever are construed to be socially optimal levels. However, it may lead to quality levels falling short of, or possibly exceeding, socially optimal levels. In the former case licensure *by itself* is not enough to optimize quality. In the latter case, it potentially reduces levels of social welfare.⁵ Ironically, in view of the lack of any evidence that the *current* quality of audit service is “deficient” in Alberta, licensure would, to the extent it raised audit quality, lead to the latter case of excessive, and social welfare reducing, levels of audit quality. To the extent that the licensed group (the ICAA) were successful in significantly escalating educational and training standards, reductions in social welfare arising from licensure could be substantial.

There does not appear to be any documented, systematic or even casual, evidence of higher average quality of audit or other accounting services in licensed regimes. This is not surprising, in view of the above discussion, and, yet surprising, given the self-interest of potential licensees in discovering and publishing such evidence as might exist. One study of American medicine⁶ found that mortality rates in those states licensing physicians were not significantly lower than in those states where physicians had not yet been licensed. Hence the lack of direct evidence on higher audit quality under licensure and such indirect evidence (for medicine) would cast doubt on the reality of higher audit quality under licensure.

Reduced quality variability/uncertainty

By instituting minimum education, training, and other standards, licensure is seen as putting a *prior* minimum bound on quality. In addition, when coupled with appropriate self-regulatory discipline, competence and other

mechanisms, it would provide an even higher minimum bound on quality. Moreover, it would reduce the variability and uncertainty of quality (through the standardization of education, training, discipline, continuing education, service definitions, and so on). It would especially reduce these as compared to their levels in an unregulated market. It would, to a lesser extent, reduce their levels below those prevailing under multi-group certification. The latter would occur in spite of the frequently argued, but never adequately documented tendency of the multiplicity of accounting designations under multi-group certification to create “confusion” in the minds of clients and third-parties.

One author alludes to the possibility of “Darby-Karni” behaviour in an unregulated market for audit services.⁷ Because of informational imperfections and resultant difficulties in assessing quality, he foresees cases where unregulated auditors will “over-service” during slack periods and “under-service” during busy periods (much as might happen in the case of automobile repairs). He sees licensure and related “professionalism” as a solution to the “Darby-Karni” outcome of overly variable audit quality. However, he fails to recognize that a regime of multi-group certification, inter-group rivalry, self-regulatory legislation, and the market is an equally or more effective offset to this “Darby-Karni” behaviour. Such a regime would beneficially combine professionalism with greater flexibility in matching competitive (non-monopolistic) supply/capacity with demand.

As discussed in previous chapters, there are, in practice, *prior* checks on the provision of low-quality audit service by unspecialized CGA’s, CMA’s and other accountants.⁸ These include the long-term interest of the auditor in repeat business, the escalation of educational and training standards by the profession, and informal licensure in the form of the prescription of auditor credentials by statute or by the parties requiring the audits. Even though these *prior* checks on audit quality are by no means perfect, *posterior* checks in the form of civil liability actions and the practice review and disciplinary programs of the professional groups undoubtedly do much to make up any deficiency. To the extent that the combined checks fail to assure adequate audit quality, licensure may be justified; but formal exclusive title specialization requirements for the existing three groups of accountants may be a far less drastic and perhaps more effective remedy. This would especially be the case if inter-group rivalry acted as a spur to upgrading and monitoring of both prior/specialization and posterior mechanisms.

The group most often the beneficiary of audit licensure, the CA’s, have typically defended licensure as reducing the “confusion” that arises in unregulated, and even rigidly certified, markets. In making this assertion,

they are in danger of exaggerating this “confusion.” This is because it would appear that most clients are businesses who are sufficiently sophisticated and long-standing as to have comprehended the distinctions between the three accounting designations. Moreover, CA’s under-value the possibility that, from the viewpoint of the client and perhaps society as a whole, such “variety” (as a more positive term than “confusion”) not only is the “spice of life,” but provides a wider and possibly more optimal mix of quality-price combinations.

Output/static efficiency

Low and uncertain quality, together with a significant output/demand elasticity with respect to quality, can lead to socially sub-optimal output of audit service. This, in turn, can lead to reduced credibility of financial statements and higher rates of default/bankruptcy and lower investment levels. This problem, it is contended, will be severe in an unregulated market. Licensure, by improving service quality through the mechanisms discussed in the previous section, is often seen as leading to a potential improvement in static/resource allocative efficiency. To the extent that any increase in the price of audit services has little negative impact on output, an unambiguous gain in static efficiency is apparent.

Again, however, it must be recognized that the impact of licensure in this area will depend upon the degree to which it escalates education, training, and practice standards without undue restriction in the supply of auditors. If licensure raises standards too much, or is otherwise overly-restrictive of the supply of auditors, much of the static efficiency gain will be lost. Certification of several groups having different educational/training routes (as is the current case in Alberta), together with appropriate self-regulatory mechanisms, may be just as, or more effective than, licensure in bringing about statically efficient output levels. This is for the reason that multi-group certification could escalate quality without producing supply restrictions (or monopoly). Alternatively, broad licensure of audits to specialist members of all three groups, together with an appropriate broadening of current statutory audit requirements from performance by a “CA” to performance by an “Audit Specialist,” would actually increase competition. In so doing, it would improve static efficiency beyond levels experienced under current informal licensure to CA’s.

Technological innovation

While one author⁹ points to superior technological innovation under a licensure regime, others¹⁰ see the opposite possibility. The former argues that clients are unable to distinguish between low cost-low price audits arising from technological innovation, and low cost-low price audits arising from low quality. Hence, clients will tend not to deal with low price practitioners. Such behaviour would thereby discourage innovation. The latter argue that the monopoly associated with *narrow* licensure will breed restrictions aimed at protecting the *status quo* interests of existing practitioners, including resistance to new practice techniques (especially those involving the use of paraprofessionals).

The argument that licensure reduces innovation will be treated in a later section. That licensure increases innovation beyond unregulated levels is discussed immediately.

It may be true that clients experience difficulties in distinguishing between low prices due to greater efficiency and those due to lower quality. However, it is not clear that they would be any less confused under licensure than in an unregulated context, since prices, efficiency and quality might vary even among licensed auditors. Moreover, it is not clear why an innovator would *have* to set a lower price. In a competitive market (and an unregulated market is a good candidate for that status), the profit-maximizing innovator, for all but the most major cost-saving innovations, would continue to charge (almost) the going market price.¹¹ It would thereby service as many, or more, clients while enjoying greater profits. The innovator would therefore not be discouraged.

Finally, it is again important to point out that while licensure might provide *higher* levels of technological innovation than an *unregulated* market, it might lead to levels of technological innovation exceeding socially optimal levels. This would especially be the case if it created a near-monopoly in which price competition were supplanted by significant non-price rivalry in the form of uneconomical technological innovation. In addition, it might perform no better than (or even worse than) a *regulated* regime involving multiple certification, inter-group rivalry, self-regulatory professional legislation, and market mechanisms. Indeed, the latter might generate higher rates of product innovation. For example, it might have more readily developed an audit product which routinely included statements about the liquidity or health of the firm in an inherently more competitive audit market. Such a product might have provided investors with an earlier warning of the impending failure of the CCB and Northland Bank.

Standardization

It is important that audit and general accounting standards evolve over time to meet the changing needs of the economy. It is also important that there be some consensus on the meaning of the various terms and the techniques used in performing audits. Government, securities exchanges, and large clients (especially financial institutions) play a desirable role in both the evolution and standardization of audit content. However, the accounting profession is clearly the major actor. Obviously, the fragmentation of the profession influences both processes, possibly accelerating the pace of the former (evolution), as will be seen in a later section, and possibly limiting the comprehensiveness of the latter (standardization).

It appears that currently each of the three major accounting groups is able to exercise considerable discretion in formulating "acceptable" standards for audit and general accounting practice. However, an examination of statutory requirements and organizational histories and brochures would suggest that all adhere closely to the audit standards that have been promulgated by the Canadian Institute of Chartered Accountants (CICA) Handbook. It would seem that there is no evidence to indicate that a serious or socially harmful diversity exists in the audit and other standards of Alberta accounting practitioners. Hence, it is not clear that licensure of the audit function to the ICAA would promote significant additional, or socially beneficial, standardization of audit content, terminology and techniques. Moreover, the establishment of a Canadian public equivalent to the U.S. "Federal Accountancy Standards Board" would more directly provide desired standardization without the need for licensure.

Manpower planning

Given a lag of at least two or three years in the response of the supply of trained auditors to any changes occurring in demand, a "cob-web" cycle is possible. The successive rounds of over- and under-supply of labour are especially likely in an unorganized, unplanned labour market. This cycle might be moderated by long-term demand forecasts and current adjustment of student enrollments so as to better balance labour supply and demand (and resource allocation). Such a moderating process might be better coordinated if a single professional group were granted exclusive practice rights.

However, the need for such balancing may be minimal, since many accountants can switch with little difficulty to one area of informal specialization (eg. audits) from another (eg. tax consultancy), or even from/to management. This reasonably presupposes that accounting skill is a relatively non-

perishable, storable commodity. Moreover, the ability of a professional group such as the ICAA to accurately forecast demand, and to rigidly control student enrollments, is limited, since even governments have had only partial success in that area. Finally, given the possibility of quasi-monopolistic behaviour of a single exclusively professional group, a chronic under-supply of labour (resulting from escalating educational standards, quotas, restriction of training sites or lower pass rates) might arise. Chronic under-supply might be more problematic than a “cob-web.” Hence manpower planning advantages would seem to provide little justification for licensure as preferable to an unregulated market or to multi-group certification.

II. POTENTIAL SOCIAL COSTS OF AUDIT LICENSURE

Again, as in the previous section, the effects (costs) of narrow licensure can be evaluated in relation to an unregulated context; a regime of multi-group certification (as currently exists in Alberta) or a hypothetical scenario of multi-group licensing. Many of the potential social costs of audit licensure are argued from the theoretical properties of markets amenable to entry restrictions and monopoly in general, and have been introduced as counter-arguments in the previous section. Other costs can be predicted on the basis of empirical evidence associated with licensure of accountancy in other jurisdictions as well as the licensure of other professions. The existence of this empirical evidence contrasts with the dearth of such evidence concerning the social benefits of licensure, and does much to justify caution in granting narrow/single group audit licensure.

Socially sub-optimal quality

Although it seems odd that the area of quality is mentioned here as involving a possible social cost for licensure, in view of its being discussed earlier as an area of possible social benefits, the seeming paradox is readily explained. Quality is enhanced by the *prior* guarantees provided by the (typically) high education, training, and examination standards associated with licensure. It is, however, reduced by potential labour shortages and time pressures, lack of competition (which can directly reduce care and effort), and general erosion of various *posterior* guarantees of quality. Such quality-reducing phenomena can occur when any monopolization due to licensure (and attendant diminution of inter-group rivalry) results in a deceleration of the growth in professional discipline, practice reviews, continuing education, and audit reform.¹² Moreover, even if quality is higher under licen-

sure, the corresponding combination of higher prices and higher quality may be (social) welfare reducing for the client. This is because client/third parties are forced to buy additional units of quality for which the shadow price (as reflected in overall audit price) is less than marginal cost. Finally, even if *narrowly* defined quality (in terms of the audits actually performed) is, on balance, optimal under licensure, *broadly* defined quality (in terms of the general credibility of all financial statements, audited or not), may be reduced. This occurs if higher prices lead to audits for some firms being waived in favour of a review or compilation. This leads to the possible result of higher incidence of bankruptcy, loan default, and economic losses for those using unaudited financial statements.

First, there is evidence from other professions that licensure can directly reduce service quality through limiting labour supply (thereby creating time pressures for individual practitioners) as well as (possibly) reducing care and effort. Ironically, this is precisely the sort of Darby-Karni behaviour that was predicted in the previous section as being the result of an *unregulated* audit market.¹³ In this case, licensure creates a possibly chronic short (restricted) supply of licensed auditors. For example, it can do so through the adoption of overly high educational and examination standards, and non-reciprocity, as well as through its inherent inflexibility in labour supply. In a study referenced earlier,¹⁴ it was found that in those jurisdictions where licensure of dentists was particularly restrictive (eg. no reciprocity with other jurisdictions), the density of dentists was lower and waiting periods were longer (and more detractive of quality, especially since dental disease is often progressive and painful). In addition, false teeth fitted by (too) busy dentists proved more often to be unsatisfactory. It was also found that there was a higher incidence of blindness in jurisdictions where optometrists were restrictively licensed, possibly because (too) busy optometrists rushed through the various checks/tests needed to detect and minimize the development of eye diseases. Hence, there is reason, and indirect evidence, to suspect that average audit quality might well fall (or at least not improve), and the (downward) variability of audit quality increase, under a regime of licensure. This would especially be the case if time pressures, lack of competition and the erosion of various other guarantees of quality (eg. geographic mobility) were to arise and generate the same results as seem to have occurred in other (restrictively) licensed professions.

Next, it was earlier suggested that, even if quality under a regime of licensure were higher than under one of certification, it is possible that any excess might be social welfare reducing.¹⁵ It is argued that the levels of education, training, practice standards, and so on, that optimize the profession's

goals (financial, psychic, *et cetera*) may generate quality (and price) which are in excess of those which would optimize the client's/third-parties' goals. This might, in turn, result in social sub-optimality. In the particular profession being examined (optometry), it was indicated that the shadow price of both examination length and complexity (numbers of incorporated procedures) were both lower than marginal cost in restrictively licensed jurisdictions. This was ascribed to the pursuit of professional goals and partly to non-price rivalry among optometrists. It was estimated that consumers paid 17 percent more for a (presbyopic) eye examination; that a deadweight social welfare cost (dswe) of roughly 1 percent of revenue (or \$8 million in 1976) resulted from too high a quality-price combination; and a further dswe of 1 percent arose from the high-price/low-output effects. However, given the approximate \$140 million of extra profits annually derived by U.S. optometrists from restrictive licensing, it would appear that any move toward de-regulation would be unpopular among optometrists.

No such evidence of higher audit quality in narrowly licensed regimes is yet available for the accounting profession. However, the scope for such an outcome is readily apparent. For example, receipts, financial records, inventories, *et cetera* might receive *very* close *personal* examination by the auditor. Hence, narrow licensure, for reasons of an undue escalation of quality (and price), could lead to a reduction in social welfare.

Last, licensure could lead to a reduction in *broadly defined* quality as mentioned in a previous section.¹⁶ By raising *narrowly defined* quality (which may or may not make continuing clients better off), licensure also raises price. This causes marginal clients more frequently to do without the service (a non-statutory audit) or "do it themselves" (by substituting an *internal* audit). In so doing, licensure would contribute to lower overall credibility of financial statements, which in turn would lead to a less efficient capital market, more loan defaults and bankruptcies, and poorer managerial performance.¹⁷ Given the evidence of such an outcome in numerous other cases of professional/occupational licensure,¹⁸ licensure of the audit function might well reduce broadly defined quality.

Output/static inefficiency

Licensure can increase quality and price, along with output (given low price elasticity and high quality elasticity), to socially optimal levels. However, licensing frequently facilitates various supply, advertising and other non-competitive restrictions. This leads to prices well above marginal cost (for an audit of whatever quality), which in turn leads to output/static inefficiency.

The potential for supply restrictions in the Alberta audit market is considerable. Although fewer than one-sixth of recent new entrants to the public accounting market have been non-university trained, non-CA graduates, this proportion is likely to grow in view of the relatively high growth rates of CGA membership. Narrow audit licensure to CA's would eliminate this source of auditors and would, therefore, significantly reduce the rate of growth of labour supply and thereby create an entry barrier for the audit market. In addition, one study shows that the pass rates on professional examinations is endogenous (negatively related to excess demand) for the accounting and other professions.¹⁹ This suggests that licensure of the accounting profession would act to restrict the growth of labour supply.

Other measures might also restrict the growth of labour supply. Pressure for higher educational standards for *new* practitioners is frequent in accounting and other professions and serves to further restrict labour supply.²⁰ Limitation (perhaps through very demanding desiderata) of training sites would have a similar effect.²¹ Non-reciprocity or refusal to readily qualify/license professionals trained in other jurisdictions would have a similar effect.²² Although each of the Alberta accounting groups is fully reciprocal with its equivalent designations in other provinces, it typically has no such arrangements with grandfathered members of other jurisdictions or with other designations. Moreover, it recognizes (often only partially) the qualifications of specific accounting designations from only a limited number of other countries. Finally, in any resistance to the use of paraprofessionals it does much to reduce *broadly defined* labour supply.²³

Restrictions on advertising (especially on price advertising) are also common in accountancy and other professions. They have been periodically debated but continue to survive, for example, in the ICAA, through selective restrictions on "undignified" and "unsubstantiated" advertising. They have been shown to have great importance to (continued) accreditation in some professions (such as optometry, where 70 percent of "points" for accreditation were related to advertising restrictions),²⁴ and to have substantially increased product/service price.²⁵ For example, a broad study of occupational licensing in Canada revealed that professions which were licensed and which restricted advertising had earnings (and arguably prices) which were about one-third higher than in other professions.²⁶ Even if the price elasticity of demand were small, such a large increment in incomes and prices, would signify serious static inefficiency, both in the market for audits and in the markets for other accounting services (which often are a spin-off from the initial audit engagement).²⁷

The adoption of mandatory or suggested fee schedules would also seem more likely and widespread under licensure. Prior to 1976 (when changes

occurred in the *Combines Investigation Act*), this practice was quite ubiquitous in the professions and seems to have raised earnings and prices for (licensed) professionals by about 10 percent.²⁸ Admittedly, such behaviour might arise under the existing regime of multi-group certification in Alberta's accounting profession, especially given the market segmentation advantage enjoyed by large CA firms in dealing with large clients. However, it is currently limited by inter-group rivalry.

Finally, narrow licensure would increase the market share of CA auditors from roughly 95 percent to 100 percent, and thereby eliminate competition from non-CA auditors. By way of contrast, broad licensure, together with the broadening of current statutory audit performance specifications from "CA" to "Audit Specialist" auditors, would actually *increase* competition. This would lead to lower prices and increased output and static efficiency.

Reduced practice innovation

There is very little consensus as to whether a narrowly licensed (monopoly) regime would provide higher or lower rates of all types of technological innovation than either an unregulated (competitive) regime or one of multi-group certification. However, there is more reason to believe that licensure provides few advantages and greater impediments to the low-cost, low-risk *practice* innovations which form a large part of all innovations for professional services (such as audits). One author strongly expresses his concerns with the licensure of public accounting/audits as an impediment to the introduction of paraprofessionals and multidisciplinary organization into widespread practice.²⁹ Another study shows that the legislated restrictions on dental practice (presumably sought by dentists), particularly those involving the numbers and duties of dental hygienists and chairside assistants, have resulted in under-utilization of these paraprofessionals, over-utilization of dentists' time in simple tasks, and generally costly and inefficient service production.³⁰ Normally considerable resistance/inertia characterizes such practice innovation, even where legally permitted (such as in the case of nurse practitioners in American medicine, the employment of whom would increase physician productivity by 30-70 percent),³¹ Hence, any additional impediments due to the sponsorship of restrictive legislation by licensed professionals are especially unwelcome.

By way of contrast, practice innovations (including those using lower-wage paraprofessionals) are especially likely within a context of multi-group certification such as exists in Alberta's accounting profession. They are likely to form part of the inter-group rivalry which aims at achieving a more at-

tractive, lower price, higher quality, service. They are quite feasible in the area of audits, where paraprofessionals can be used extensively in gathering data, checking records, taking inventories, designing and implementing computer programs for standard analysis, and so on. They would, therefore, provide the potential for significant reductions in costs and improvements in audit quality.

In addition, licensure does not provide the same pressures for audit redesign/redefinition/content changes as would the current context of multi-group certification in the Alberta accounting profession. An examination of the large and growing number of research publications and journals sponsored by each of the three groups amply verifies this contention. The volume and quality of this research is enhanced by both inter-group rivalry and the multiplicity of vantage points arising from the differing backgrounds and client contacts of the three accounting groups. Had non-CA's been able to play a greater role in the Alberta and national audit markets due to the relaxation of current informal licensure restrictions, perhaps the audit products undertaken for the CCB and Northland Bank would have provided more explicit warnings of impending failure.

Equity

Statements about equity which examine the social desirability of changes in income distribution resulting from the introduction of licensure invariably involve value judgements and subjectivity. However, equity is nonetheless a consideration which presents a cause for social concern wherever possibly undetected/uncompensated changes in income distribution are the result of licensure. Moreover, even where compensation is made (for example, under provisions of Bill 71, in the form of "grandfathering" non-CA auditors into the ICAA), compensation is at best short-term (available to current auditors only). In other cases, it is often only partial (grandfathered auditors may not be able to attract students in the future). Finally, attempts at compensation may offset many of the social benefits otherwise associated with licensure. For example, under Bill 71, the grandfathering of those non-CA auditors who have qualifications different from or inferior to those of CA's could do much to dilute prior guarantees of quality (education and training). It could also weaken posterior guarantees of quality (eg. the loyalty of grandfathered CA's to the ICAA and its standards is questionable³²).

The impact of licensure on CA incomes is arguably considerable, especially in the long run. A substantial increase in future audit prices and CA earnings would be associated with even a modest reduction in labour supply (say one-sixth, depending upon how many potential CGA and CMA public

practitioners were to opt for CA status). This is because audits are labour-intensive and thought to be inelastically demanded with respect to price (completely so when they are statutory).³³ The broader application of current restrictions on CA advertising would further increase audit prices and CA earnings if the pattern of other licensed professions emerges.³⁴

To the extent that some 2,500 CA's in public practice would benefit from audit licensure, up to 250 CGA's and 175 CMA's in public practice and performing audits would lose, were it not for grandfathering to CA status. Even then, they may suffer ultimate loss in being unable to attract (CA) students wishing to become auditors, or to offer clients the prospect of a long-term relation (going beyond that accountant's retirement). Both current (non-grandfathered) and new CGA's and CMA's would lose directly in being excluded from performing audits. They would also lose indirectly through the loss of the rapidly growing amount of non-audit engagements which often precede or follow the completion of the audit. Other individuals desiring to perform audits, except for a token number of "mature" students, would be virtually *forced* to pursue full-time university studies in order to attain their CA designation. Others, for example high school graduates, would be deterred altogether from any sort of professional accounting training (CA, CGA or CMA).

In addition, audit clients would lose to the extent that some would be forced to accept overly high and less variable quality-price combinations. Given a degree of monopoly and supply restriction resulting from licensure, they would also pay prices exceeding competitive/marginal cost levels. This would be especially true for clients in the smaller municipalities. For example, clients in 37 of the largest 68 municipalities in Alberta have access to only one local CA firm. Ironically, since the Alberta government is not extensively involved, relatively speaking, in purchasing audits from public accounting firms, it is less likely to lose from licensure and therefore more likely to grant it.³⁵

III. COMPARING THE SOCIAL BENEFITS AND COSTS OF AUDIT LICENSURE

It is difficult to quantify and compare the benefits and costs of audit licensure on an empirical, cross-sectional level in Canada because of spill-overs from one province to another. For example, audits are licensed in Ontario (primarily to CA's); unlicensed in Alberta; and broadly licensed to CA's and CGA's in British Columbia. Each provincial accounting group develops its educational, training, audit, and other practice standards to meet the broad

requirements of the national market and group. It also permits full inter-provincial mobility of its members. Hence, it is hazardous to draw conclusions on the effects of audit licensure by comparing (if possible) licensed with unlicensed provinces.

Nonetheless, it might be demonstrated that narrow audit licensure had a possible net advantage over a completely *unregulated* regime (given both theoretical considerations and empirical evidence from accounting and other professional studies). However, narrow audit licensure would seem to have fewer social benefits than would be forthcoming under the current Alberta regime of multi-group certification, inter-group rivalry, (imperfect) self-regulatory professional legislation (including current and suggested proposals for further reform, particularly specialization) and market forces. Moreover, it has considerable potential for many of the social costs discussed above, perhaps the most serious being in the areas of static and dynamic (innovative) inefficiencies. Hence, the balance of social benefits and costs is plausibly in favour of an upgraded package of self-regulatory and specialization reforms within the existing context of multi-group certification. Narrow licensure of audits (to CA's) would seem inadvisable, although *broad* licensure (to formally specialized CA's, CGA's and CMA's) would seem to have overall merit, especially if current widespread limitations of statutory audits to CA's are amended to include audit specialists of all three groups.

Should *narrow* audit licensure be introduced, careful consideration should be given to the process for the "grandfathering" of existing CGA and CMA auditors. Grandfathering may mitigate the short-term social costs (especially supply deficiencies) of audit licensure, and is certainly politically expeditious (in appeasing both opposition party members and non-CA auditors). However, it detracts from the "raison d'être" of licensing — the provision of *prior* guarantees of quality. Grandfathering should be complemented by a practice review for non-CA auditors which is as (but no more) demanding than that currently applied to CA auditors.

One compromise suggested in an earlier study of Ontario accountancy was the licensure of statutory audits alone.³⁶ Curiously, such a policy is somewhat counter to the philosophy of licensure. This is because the accountants, clients and third parties involved in statutory audits are typically the most sophisticated, and the least in need of regulation in the form of licensure. Hence, if licensure of non-statutory audits is viewed as unnecessary, so too is that of statutory audits.

Another compromise suggested by the dissenting author of a background study of Ontario accountancy would establish a government appointed/supervised *public* accounting/audit licensing board.³⁷ Although this arrangement

might *in theory* mitigate some of the social costs of licensure (eg. supply restrictions), in practice it would tend to be dominated by the majority audit/accounting professionals (i.e. the CA's). It would therefore provide little or no improvement over a policy of CA licensure alone. Moreover, it would undesirably divorce the licensure and professional self-regulatory functions (making discipline, for example, less effective).³⁸

As mentioned earlier, the proposed *broad* licensure of the "review" function to CA's, CGA's and CMA's is less restrictive and hence less likely to be socially costly. However, it too should be combined with the proposed self-regulatory professional and specialization reforms discussed in the previous chapter. It should also be similarly complemented with the revision of current statutory restrictions from performance by CA's to performance by designated specialists. In such a context it would more nearly optimize the net social benefits of review licensure. For the sake of simplicity (if for no other reason), the licensure of reviews *and* audits to designated specialists in each of three existing accounting groups should be combined (eg. only designated "Audit Specialists" would be permitted to perform/sign audits *and* reviews). More important, combination would be justified by the similarity on both the demand and supply side of (non-statutory) audits and reviews.³⁹

Chapter 5

Policy Recommendations and Conclusions

There seems to be little or no evidence of any deficiencies in the performance of the Alberta accounting profession, whether in the key areas of quality, price, output or technological innovation. However, there is nonetheless a need for self-regulatory legislative reforms which would provide more uniform, comprehensive, and compelling safeguards of the public interest. These reforms would maintain, strengthen or supplement the existing safeguards provided by legislative, legal, market and other mechanisms. These mechanisms include the various provisions incorporated in existing (and proposed) legislation for each of the three major exclusive title self-regulating accounting groups; the civil liability mechanism; continuing high levels of inter-group rivalry; the demonstration effects of accounting practice in other, more or less regulated, provinces; inter-provincial manpower mobility (reciprocity); and the reasonably sophisticated nature and experience of the dominantly business/corporate clientele in responding to market signals and evaluating service quality.

Although Bills 71, 72 and 76 (the Bills) do much to meet the needs for reformation of self-regulatory professional legislation, reforms need to be “upgraded” in two areas. Upgraded reforms would better meet the implicit demands of the analysis of the preceding two chapters, as well as the demands of the Government of Alberta’s own past policy statements (the 1973 *Chichak Report*¹ and the 1978 *Policy*²). First, they would provide a greater degree of uniformity, completeness, compulsion and public protection in the self-regulatory legislative provisions applying to the three accounting groups (the ICAA, CGAAA and SMAA). Second, to the extent that they justifiably include licensure, upgraded reforms would broaden legislative provisions to extend exclusive practice privileges for audits (and reviews) to “Audit Specialist” members of each of the three existing major accounting groups. In so doing, they would provide audit licensure which

would better balance concerns for quality with concerns for static and dynamic efficiency.

In the first area, upgraded reforms would standardize the privileges and obligations of each of the three groups with respect to setting the educational, training, examination, specialization, discipline, practice review, professional development, liability insurance, and other parameters of self-regulatory professional practice and government. They would also provide a more comprehensive legislative base by regulating areas such as the use of suggested fee schedules. Finally, they would assign self-regulatory powers which were more often obligations rather than empowering privileges and, as such, be more often explicitly subjected to governmental scrutiny and approval as "Regulations" contingent upon the corresponding "Acts." In the second area, upgraded reforms would grant exclusive practice privileges for audits only if licensure were, in the final analysis, viewed to be a superior policy to the existent multi-group certification regime. However, they would not extend these to one group alone (the CA's), but rather like reviews, extend them to "designated" members of the ICAA, CGAAA and SMAA. Moreover, they would permit "designation" of only those *specialized* members of each group who met their group's "Regulations" for "Audit Specialist," including explicit educational, training, examination and practice review standards. This would provide the justification for amending existing statutory and other government and regulatory policy to admit audits performed by any "Audit Specialist" rather than only those performed by CA's (as is, for example, the current policy of the Alberta Securities Commission).

Implementation of reforms in the self-regulatory area should, and for practical reasons must, *precede* implementation of reforms in the exclusive practice/specialization area. Since reforms are motivated by a concern with public protection, reforms of the self-regulatory mechanisms are needed as soon as possible. They would provide not only immediate benefits, but also safeguards against possible abuse of exclusive practice privileges. Self-regulatory reforms require primarily changes in bureaucratic mechanisms and could be implemented quite rapidly. In contrast, implementation of exclusive practice/specialization reforms involves a more lengthy process in which each professional group would evaluate the educational, training, examination and practice review records of all existing members performing audits/reviews as principals in a public practice (and wishing to do so in the future). Accountants failing to meet specialization requirements in one or more areas would need time to make up deficiencies (in say education or supervised public practice); and students would need time to make any adjustments in their educational/training programs. Hence, legislation

might specify that compliance with self-regulatory reforms would have to be achieved within six months after proclamation; whereas compliance with exclusive practice/specialization provisions for audit/reviews would have to be achieved within one year after proclamation.

Greater detail and further rationale for each of the two proposed areas for legislative reform are provided in the sections which follow. The reader is reminded that further detail for the justification of these reforms is to be found in Chapters 3 and 4 respectively, as well as the 1973 *Chichak Report*³ and 1978 *Policy*.⁴

I. SELF-REGULATORY PROFESSIONAL REFORMS

Most of these reforms are designed to provide further guarantees that the current performance of the Alberta accounting profession will continue to be more than minimally acceptable in the future. They also accord well with the principles of equity/equal treatment, and with the ever-desirable goal of public accountability for self-regulating professions.

Education, training, examination and specialization

While both CA and CGA education include some audit courses, CMA education includes internal audit courses only. CA training does involve audit experience requirements, while CGA and CMA training *may* involve such training. CA and CGA auditors in public practice are currently subject to practice reviews, while CMA auditors are not. The potential third-party effects of poor quality audits *and* reviews on lenders/investors (due to lack of accountant education, training or effort) are well-recognized. Hence, it is desirable that accountants of *all three* designations, as a (pre-)requisite for their performance of audits *and* reviews as principals in a public accounting firm, be required, by their professional group, to meet specific "Regulations" (rather than optional "By-Laws" as proposed for CA's in Bill 71). Those public accountants meeting specified standards for education, training, examination and practice review would be designated as "Audit Specialists," "Attest Specialists" or "Licensed Attestors." Appropriate abbreviated titles for "Audit or Attest Specialists" in each of the three accounting designations would be C.A.(A.S.), C.G.A.(A.S.), and C.M.A.(A.S.). Those for the alternative designation of "Licensed Attestor" would be C.A.(L.A.), C.G.A.(L.A.) and C.M.A.(L.A.).

In the same vein, similar requirements might be specified for other specialties that the Government of Alberta might wish to see established.

For example, given the importance and increasing complexity of the taxation system, a specialty designation "Taxation Specialist," or "T.S.," might be required of all public accountants involved in taxation services. In order to avoid too much market segmentation and possible monopolization, however, the Government of Alberta should permit the creation of such specialties only through Regulations (not By-laws), hence requiring its approval. Having had prior experience of this sort of dealing with other professions (eg. medicine and dentistry), it would be able to optimize the degree and nature of admissible accounting specialization. It would hopefully find the three accounting groups ready to cooperate in designing these specialties, as one author feels that such specialization is already developing,⁵ while the ICAA has already discussed specialization and has recently sanctioned advertising of informal specialization by its members.⁶

Discipline

Existing legislation for the three accounting groups is not only obviously far from being uniform, but is also deficient in empowering the CGAAA and SMAAA to pursue a full exercise of the disciplinary process and remedies. The Bills would do much to redress these shortcomings. However, to be fully effective, legislation should include provisions which *require* each of the three accounting groups to produce informational brochures which include guidance on client access to the complaint/disciplinary process. These brochures would have to be supplied by members to all public accounting clients. Legislation should require adequate lay representation on professional conduct and hearing committees (say one-quarter of total committee membership), and lay representatives be nominated and appointed (and remunerated) by the Alberta Government. It should require publication of *at least* the aggregate numbers of the different types of complaints, disciplinary investigations, and responses in annual reports to the legislature. Finally, it should require the cooperation of discipline committees with, and the disclosure of investigation results to, the courts (in civil liability proceedings) and the compulsory liability insurance carrier (in the experience rating of premiums and the development of compulsory loss control seminars for disciplined and other members).

Practice review

Both CA's and CGA's in public practice are currently subject to periodic practice review by the ICAA and CGAAA respectively (as well as to practice reviews forthcoming from disciplinary actions). Moreover, the Bills

would more fully legitimize the practice review powers and procedures of the ICAA and CGAAA, and extend the practice review prerogatives of the SMAA. However, a further recommendation of this study is that legislation not only empower, but *require*, all three groups to undertake practice reviews of all members in public practice. New public practices would be reviewed within six months, while on-going practices would be reviewed at least once in each defined period (say 3 or 4 years). Legislation should also require practice reviews of all those members subject to disciplinary actions or a high incidence of liability insurance claims.

Professional development

All three accounting groups currently have professional development programs, with the Bills legitimizing the implementation of these programs. However, they are not obliged to develop such programs, nor is it clear that members of the ICAA (except perhaps disciplinary cases) are required to participate in those programs. It is desirable that each group be *required* to develop these programs and to enforce participation of members (especially those in public practice), as specified in Regulations (say an annual minimum of 20 hours seminar attendance or demonstrated home-study equivalent). It is also desirable that a coordination of these programs with the group's liability insurance programs be required in the development of loss-control seminars (especially for disciplined members or members subject to higher than average claims).

Liability insurance

As a means of providing further protection to the public (especially from the financial consequences of malpractice by small practitioners of limited financial resources), a compulsory liability insurance program should be required by law. Provision for it would not be merely incorporated in the Bills as "By-Laws," to be *optionally* pursued by the group, but rather be written in as "Regulations," which must be promulgated for that group. All members in public practice should be required to participate; premiums would be experience-rated; and the insurance program should be coordinated with the disciplinary and continuing education programs. The minimum amounts of coverage would be subject to periodic Government approval (as Regulations), along with other major parameters such as the degree of co-insurance. The program could be implemented entirely through an independent carrier or, if one of self-insurance for the professional group, administered by an independent carrier.

Advertising

Proposed legislation again lacks uniformity. Only Bill 72 explicitly *empowers* the group (SMAA) to present Regulations governing advertising by its members. It is desirable that all three groups be *compelled* to publish any restrictions on advertising by members in public practices as Regulations (subject to government approval). In view of the potential of such restrictions to greatly reduce competition and enhance prices and member incomes, the onus should be upon the profession to justify *any* (other than criminal, fraudulent or misleading) advertising restrictions.

Fee schedules

The proposed form of the Bills makes no explicit prohibition of the publication and circulation of mandatory or suggested fee schedules by the group or its members (although mandatory schedules could possibly violate the *Competition Act*). It is recommended that such a prohibition be included in the legislation, since there is evidence that fee schedules do enhance earnings (and prices) and provide no obvious offsetting public benefit. Moreover, it is recommended that any referral service operated by an accounting group be limited to informing clients of *the range* of current hourly/task fees based on a broad member survey (i.e. the minimum and maximum reported values, rather than the average or other specific value).

Lay representation

The legislative proposals of the Bills require (token) inclusion of lay members on the governing body and other designated committees of each of the three accounting groups. However, it is recommended that lay representation be at least one-quarter of the total membership of the governing body; the disciplinary or conduct committee; and any other committee dealing with matters of direct relevance to clients or the public such as the Communications or Government Relations Committees. In addition, lay representatives should be nominated by the Government/Minister, not the accounting group or its governing body. They should have no *prior* designation in the particular (or any) accounting group (nor should they be civil servants or MLA's). Finally, legislation should (continue to) require that lay representatives receive a consultant-level stipend (and expenses), from government or the accounting group, for participation in the governing body or committee.

Annual reporting

The Bills require that annual reports be made to the Legislature in a format specified by the Minister. They should, however, be more specific with respect to the content of reports, including mandatory reporting of the aggregate changes in membership; pass rates on uniform final examinations; numbers of students in training; number of graduates; number of extra-provincial transferees; numbers of, reasons for, and remedies arising from member discipline; numbers and total amounts of claims made and awarded under compulsory liability insurance schemes; and other key matters, such as any changes in Regulations (for example, any changes in minimum educational or training standards).

II. EXCLUSIVE PRACTICE REFORMS

Legislative reforms which would grant exclusive practice rights are to be examined with considerable circumspection. They may provide little advantage (over an environment of appropriately self-regulated professional certification), and considerable disadvantages, especially where they reduce competition/inter-group rivalry. They *may* be potentially justified for one particular area of public accounting — the audit/review function, since the third-party effects of the accountant's wrongly assigning credibility/interpreting financial statements may be severe for some (naive) lenders/investors. The case for such reforms is not strong even here, however, given the uncontradicted effectiveness in the past of the alternative of multi-group, certificated rivalry, albeit within a somewhat imperfect self-regulatory context. However, to the extent that the case is convincing, licensing should be granted broadly, i.e. to all three accounting groups, but only subject to the enactment of appropriate specialization and other self-regulatory safeguards ensuring competence, competition and public accountability. Given the similarity of audits and reviews, the same broad exclusive practice/licensure provisions should apply to both.

There are a number of precedents for this broad (multi-group) licensing. In British Columbia, both CA's and CGA's are licensed to perform audits, while other accountants may apply to the Audit Certification Board for such a license. In Quebec, CA's have full audit privileges, while CGA's can perform audits for certain entities. In Nova Scotia and Newfoundland, CA's also have full audit privileges, while CGA's (and other accountants) may apply to a licensing board. In all these cases (and for other, less regulated, provinces), no particular group of auditors seems to have been identified as less competent than others.

In Alberta, there are a number of seemingly convincing precedents for multi-group licensing in a number of cases involving the services provided by other professions.⁷ For example, ophthalmologists, optometrists and specially certified ophthalmic dispensers (opticians) are all licensed to fit contact lenses. Both ophthalmologists and optometrists are licensed to undertake eye examinations with a view to prescribing corrective lenses. Both dentists and denturists are licensed to fit, manufacture, and repair full dentures. Many different groups of medical practitioners are also jointly licensed for certain functions (e.g. physicians and chiropractors for the diagnosis of and some therapies for muscular/skeletal ailments). Engineers and architects provide a further example of jointly licensed occupations, since both can be licensed for certain construction functions (and in full recognition of the possible third-party effects of malpractice)!

Designated exclusive practice areas

Both government and business have sufficient sophistication and/or on-going relation to be able to reasonably assess and directly control the performance of *employed* professional accountants, as well as rely upon the basic protection provided by an appropriate self-regulatory professional legislative environment (including certification and disciplinary processes). Hence, it is only *public* accounting that is a strong candidate for licensure. Moreover, since it is third-party effects which form the greatest rationale for licensure, and it is only audits and reviews that have such effects (to any great degree), then it is the performance of audits and reviews which represent the most obvious candidate for licensure/exclusive practice legislation.

Since audits and reviews are similar in terms of the production process and are reasonable substitutes for many purposes (eg. loan qualification for smaller businesses), reviews should be subject to the same exclusive practice restrictions as audits. Moreover, non-statutory audits and reviews should be subject to at least the same exclusive practice restrictions as statutory audits and reviews. This is because clients purchasing and third parties using the former are conceivably less sophisticated and more in need of protection than those for the latter.

Whether other areas of public accounting, for example taxation services, should be subject to licensure, is even more controversial. The large numbers of non-designated accountants practising (with assumed success) would suggest generally acceptable performance. Interestingly enough, government might have an ambivalent position in such a licensure issue (favouring the *status quo*), since any undetected incompetence might, more often than not, involve over-payment of taxes by clients whose accountants were deficient in finding all available “loopholes.”

Designated practitioners

It was argued that currently there are no *prior* guarantees that CGA's and CMA's performing audits and reviews have adequate related education and training. Moreover, only the CGA's effectively in *full-time* public practice (and performing audits and reviews) are subject to periodic practice reviews (as a *posterior* guarantee of competence), while CMA's are currently not subjected to routine practice reviews.

It is desirable to optimize inter-group rivalry (and its benefits), and to be fair to existing and future CGA's and CMA's who do have adequate educational, training, and practice standards in the audit and review area. Hence, it is proposed that those members of all three major designated accounting groups, CA's, CGA's, and CMA's, who meet specialist standards, would be granted exclusive title and practice rights for audits and reviews. In order to formalize such an arrangement, each group would be required to develop minimum standards for education, training, examination, and practice review (subject to approval by government as "Regulations") to be met by designated member "Audit Specialists." Only these designated specialists would be permitted to perform audits and reviews. Moreover, existing limitations on the performance of statutory audits by CA's alone would be amended to encompass any "Audit Specialist," regardless of general CA, CGA or CMA designation.

Little change would be required in existing ICAA standards other than to formalize a minimum training component for "Audit Specialists." For example, 25 percent of all training time might be specified as the minimum to be spent in the performance of audits and reviews *as supervised by* a designated "Audit Specialist." More significant changes would be required in existing CGAAA standards, in that all candidates for the "Audit Specialist" designation would *have* to complete the advanced and possibly additional audit courses and would *have* to receive some minimum training component in audits and reviews under supervision of an existing (public practice) "Audit Specialist." Since self-interest typically leads existing CGA auditors to voluntarily adopt such a course, and since the CGAAA currently does have a practice review program, much of the change required will be purely formal. Finally, considerable changes will be required in existing SMAA standards. The SMAA will need to introduce and require successful completion of *external* audit courses for its candidates for the "Audit Specialist" designation; require appropriate training; and introduce a practice review program.

Existing designated and non-designated accountants who wish to continue performing audits and reviews, and yet are not members of any of the three

major accounting groups, should be required to complete or demonstrate completion of the specific audit and review educational, training, examination and on-going practice review standards equivalent to those of one of the three major groups. If they do so, they would be granted the "Audit Specialist" (or "Attest Specialist" or "Licensed Attestor") designation by an interim (temporary) "Public Audit Specialist Licensing Board" (or "Public Attest Specialist Licensing Board" or "Public Attestor Licensing Board" respectively), but only upon condition of meeting the ongoing standards of one of the three major accounting groups. This Board would be established with, say, one-quarter of its membership appointed by each of the ICAA, CGAAA, the SMAA and the Minister; would be responsible to the Minister; and would operate for a maximum of, say, three years, after which time it would be dissolved. In the future, only members of the three major accounting groups, or any other accounting group empowered by a Public Act, would be permitted to be qualified as "Audit Specialists."

This proposal undoubtedly will be met with some opposition (by excluded CGA's and CMA's particularly). However, this proposal is not without precedence from other professions and occupations. Only those ophthalmic dispensers (opticians) who have met certain additional training requirements are licensed to fit contact lenses in Alberta.⁸ Only those physicians having acquired certain additional training or having attained certain specialist designations are permitted by the Alberta College of Physicians and Surgeons (the ACPS is the governing body of the self-regulating medical profession) to perform certain, complex procedures (eg. brain surgery). In other cases, specialists who lack prior general practice experience can be limited by the ACPS to that specialty practice alone.⁹ In other jurisdictions, other professions are similarly specialized; for example, only those Registered Nurses with formal training as midwives are permitted to deliver babies in the United Kingdom.¹⁰ Moreover, many professions (eg. dentistry) have adopted *de jure* exclusive title provisions for specialties (eg. "Orthodontist" or "Oral Surgeon" designations) which are virtually *de facto* exclusive practice provisions" (for full-scale orthodontistry and complex oral surgery respectively).¹¹ Hence many other professions provide precedence for this "Audit Specialist" proposal for Alberta's accounting profession.

As an important complement to licensure, the rules of the Government of Alberta and its regulated entities should be amended so as to permit audits and reviews of firms to be performed by any "Audit Specialist," regardless of designation. In particular, these rules would no longer limit the performance of many statutory audits to CA's alone and would, therefore, represent a liberalization of the existing regime of effective informal narrow licensure of audits to CA's alone.

Special safeguards relating to exclusive practice

The proposed extension of exclusive practice rights to designated specialists in all three major accounting groups is intended to combine the advantages of licensure with those of multi-group certification (especially those of inter-group rivalry). It would as well provide further assurances of competence, equity and flexibility of labour supply (from university and non-university sources). This *broadened* licensure could, however, become purely nominal and hence less beneficial, if existing statutory audit restrictions to CA's were not broadened to all Audit Specialists; if mergers between the three groups were to occur; if agreements among the three groups were to limit competition for clients; or if the groups not requiring university degrees (the CGA's and CMA's) were to do so in the future. Hence, certain safeguards, in addition to the "upgraded" proposals for self-regulatory professional reform, ought to be built into the legislation.

Any merger among the three accounting groups would require approval of the Government of Alberta (as well as the Competitive Tribunal as overseer of the *Competition Act*). Accounting groups would have to justify to the Government of Alberta any limitations imposed on the number of students enrolled in (audit) specialty courses or taking specialty training; on the number of practitioners active in a specialty; or on the number of specialties any one accountant can pursue. Any restrictions on "ethical" or other competition for clients, either within the group or among groups, would also require Government approval as "Regulations." Finally, any changes in the educational and training standards of a group, both general and as pertinent to the "Audit Specialist" designation, would require Government approval as Regulations.

III. CONCLUSIONS

There are many theoretical and empirical considerations which pertain to self-regulatory and exclusive practice professional settings, both in general and with specific reference to the Alberta accounting profession. There also exist various policy desiderata as previously enunciated by the Government of Alberta. In light of these, there are two major areas in which current policy proposals for the Alberta accounting profession may be in need of further reform. First, greater uniformity and strengthening of self-regulatory professional mechanisms needs to be incorporated in the legislation. This would provide a higher standard of public protection and accountability under the existing regime of multi-group certification, and especially under

the proposed one of audit licensure. Second, audit licensure should be broadened. There is no compelling case theoretically or empirically for narrow licensure of audits to CA's alone (as compared to the existing regime of multi-group certification and informal audit licensure). However, if exclusive practice rights for audits and reviews are granted, they should be extended to designated "Audit Specialists" in *all three* major accounting groups (ICAA, CGAAA and SMAA). This would provide a better mix of *prior* (minimum qualifications) and *posterior* (inter-group rivalry) guarantees of optimal performance, whether in areas such as quality, price/output/static efficiency, innovation/dynamic efficiency or equity. This broad licensure is not without precedent from public accounting in other provinces and from other professional services in Alberta; nor are the attendant provisions for specialization. Broad licensure of these key public accounting functions should be accompanied by an appropriate liberalization of statutory audit specifications. Together with formal specialization requirements and more uniform and strengthened self-regulatory legislative provisions, it would constitute a legislative model for balancing public and practitioner interests in other professions and jurisdictions.

Notes

Chapter 2

1. Meigs, Meigs and Lam (1981), p. 1.
2. Guthrie, McDonald and Var (1980), p. 1.
3. Needles (1983), p. 1.
4. For example, Needles (1983), p. 4, reports the American Institute of Certified Public Accountants' definition of accounting as "the art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character, and interpreting the results thereof."
5. *Ibid.*, p. 7.
6. *Ibid.*, p. 7.
7. *Ibid.*, p. 7.
8. Meigs, Meigs and Lam (1981), p. 7.
9. *Ibid.*, p. 7-11.
10. *Ibid.*, p. 7-9.
11. *Ibid.*, p. 9-10.
12. *Ibid.*, p. 10-11.
13. *Ibid.*, p. 9-10.
14. Extensive discussions of adverse selection can be found in Lazar *et al.* (1978), Leland (1979) and Spence (1978).
15. For a partial listing, see Lazar *et al.* (1978), pp. 3-5.
16. *Ibid.*, p. 3-5.
17. Such a "market segmentation" hypothesis is advanced by Lazar *et al.* (1978), p. 9, especially with the "Big 8" accounting firms dominating the "large" market for audit services.

18. See *Report II on Professions and Occupations*, December 1973 (the *Chichak Report*), p. 5.
19. See Tuohy and Wolfson (1978), pp. 112-13.
20. *Ibid.*, p. 115. See also Aucoin (1978), which points to an additional advantage of self-regulation *vis-a-vis* government regulation, the avoidance of undue political intervention.
21. Castonguay (1978), p. 65.
22. Dussault (1978), p. 107.
23. *Ibid.*, p. 104.
24. See note 18, pp. 5-6.
25. This and other information is extracted from the *ICAA Perspectives* (1985-86) and other ICAA pamphlets.
26. Existing ICAA policy is still somewhat restrictive in that it forbids advertising which is inconsistent with the "dignity" of the profession and which cannot be substantiated. The former criterion could be so strongly interpreted by the ICAA as to disqualify the vast majority of advertising, while the latter criterion could be construed so as to leave advertisers with little to say!
27. Richardson (1986), pp. 32-33.
28. Several examples of this lobbying are referenced in *ICAA Perspectives* (1985-86); ICAA lobbying would also seem to have had an obvious role in current proposals (Bills 71, 72 and 76) to assign exclusive practice rights for audits to ICAA members alone.
29. This and other information is extracted primarily from CGAAA pamphlets and publications.
30. See Kirsch (1979) for an examination of the highly similar standards for CGA training in Ontario.
31. This and other information is extracted from various SMAA pamphlets and documents.

Chapter 3

1. This point is made by Reeve (1983) in his discussion of the motivation behind the introduction of five-year accounting programs in the U.S.
2. See Leland (1979).
3. This restrictiveness is, in fact, a source of grievance with the CGAAA.
4. Shockley and Holt (1983).
5. Belobaba (1978) discusses the efficacy of the civil liability mechanism and needed reforms.

6. Reiter (1978) examines discipline as a means of ensuring continuing competence, as well as needed reforms, while Swan (1979) discusses practice review programs.
7. Carroll and Gaston (1981).
8. Reeve (1983).
9. The concept of "deadweight social loss" is discussed in Scherer (1980), pp. 17-18.
10. For example, there are currently about 600 CA firms operating in Alberta.
11. Lazar *et al.* (1978), pp. 106-107. A recent study of the U.S. audit market by Stevens (1985) suggests that the larger firms have been losing ground to medium-sized firms.
12. See Kirsch (1979) for discussion of the Ontario situation.
13. See Maurizi (1974). The Universities Co-ordinating Council in Alberta *might* limit the scope for such behaviour by the ICAA, but it is unclear that they would oppose the *escalation* of examination difficulty.
14. Both Reiter (1978) and Richardson (1986) emphasize the benefits of inter-group rivalry among accountants.
15. Broad consensus has been achieved for both cross-sectional and occupation-specific studies of the effects of both advertising restrictions and fee schedules on professional earnings/fees. See Muzondo and Pazderka (1980) and Benham and Benham (1975).
16. Reeve (1983).
17. Devany *et al.* (1982), Fottler *et al.* (1980) and Spence (1978).
18. Spence (1978) especially emphasizes this point.
19. Devany *et al.* (1982).
20. This may well be the case in the U.S. optometric industry. See Benham and Benham (1975).
21. This is evident from examining the annual reports of the three accounting groups.
22. Aucoin (1978); Dussault (1978); and Tuohy and Wolfson (1978).
23. Paul (1984) and Hamowy (1984).
24. Kahn (1979).
25. Aucoin (1978).
26. *Ibid.*
27. Many authors make this point, including Dussault (1978) and Spence (1978).
28. Trebilcock *et al.* (1979) feel that a strong case does not exist for specialization (in general). However, audits (with their third-party effects) may represent an exception. Dussault (1978) does support greater specialization.

29. Belobaba (1978) provides further discussion.
30. Swan (1979) emphasizes these programs as important contributions to continuing competence.
31. *Ibid.*
32. *Ibid.*
33. Reiter (1978).

Chapter 4

1. The process of adverse selection is discussed in previous chapters. See also Leffler (1978), Leland (1979), Spence (1978) and Lazar *et al.* (1978, esp. Ch. 5).
2. Leland (1979).
3. Lazar *et al.* (1978, Ch. 5), which presents D.B. Thornton's (dissenting) opinion in support of audit licensure *by a public board*.
4. Leffler (1978).
5. Paul (1984).
6. Feldman and Begun (1985) see the latter (overly high product quality) as arising in the case of the unduly restrictive licensure of the optometric profession in the U.S.
7. Lazar *et al.* (1978), notably the discussion of D.B. Thornton in Ch. 5.
8. Kirsch (1979) expresses some concern with the looseness of CGA and CMA training and the potential lack of specialized preparation for certain types of public accounting (eg. audits).
9. See the discussion by D.B. Thornton in Lazar *et al.* (1978), pp. 324-25.
10. Devany *et al.* (1982); Fottler *et al.* (1980); and Spence (1978).
11. See Arrow (1962).
12. Richardson (1986) sees inter-group rivalry as extremely important in pacing the rapid escalation of professional standards in Canadian accountancy.
13. See note 9.
14. Carroll and Gaston (1984).
15. Feldman and Begun (1985).
16. Carroll and Gaston (1984).
17. Gjesdal (1981) sees (audited) financial statements as being useful to the monitoring by investors of managerial performance (stewardship demand), as well as useful to potential investors in making the decision to purchase securities (decision-making demand).

18. Carroll and Gaston (1984) found such evidence not only for dentistry and optometry, but also for electricians, sanitarians, plumbers, real estate brokers and veterinarians.
19. Maurizi (1974).
20. Spiceland (1980) examines accountancy and Hamowy examines Canadian medicine.
21. Kirsch (1979) examines this possibility.
22. Pashigian (1979) sees licensure, non-reciprocity, localized business goodwill and location-specific knowledge as impediments to mobility for the professions. Shephard (1978) finds non-reciprocity in the dental profession reducing the dentist-population ratio by 24 percent and raising dentists' incomes and prices by 12-15 percent.
23. See Devany *et al.* (1982) for dentistry; Fottler *et al.* (1980) for medicine; and Shaked and Sutton (1981) for a theoretical discussion.
24. Benham and Benham (1975).
25. Feldman and Begun (1978) found that advertising restrictions increased the price of an eye examination by about 16 percent.
26. Muzondo and Pazderka (1980).
27. See Lazar *et al.* (1978), especially p. 37.
28. Muzondo and Pazderka (1980) provide an indication of this.
29. Spence (1978).
30. Devany *et al.* (1982).
31. Fottler, *et al.* (1980).
32. Aranya and Ferris (1984) p. 4, makes the point that commitment to the professional organization (which will be understandably less for grandfathered auditors) can *strengthen* commitment to organizational goals (including quality).
33. Reeve (1983).
34. Munzondo and Pazderka.
35. Faith and Tollison (1983).
36. This was the proposal of Trebilcock *et al.* (1979) for the Ontario audit market.
37. Lazar *et al.* (1978), Ch. 5, outlines the proposal of D.B. Thornton that a "public licensing board" would license qualified practitioners in audit as well as other public accountancy specialties.
38. Aucoin (1978) sees this as being the case in Ontario, where the Public Accountants Council is the licensing body but the ICAO is the self-regulatory professional body.
39. The discussion of Thornton supports this proposal (Lazar *et al.* [1978], Ch. 5).

Chapter 5

1. *Report II on Professions and Occupations* (December 1973).
2. *Policy Governing Future Legislation for the Professions and Occupations* (1978).
3. See Note 1.
4. See Note 2.
5. Richardson (1986), p. 34.
6. *ICAA Perspectives* (1986), No. 11, p. 3.
7. These examples were discussed with an official of the Alberta Professions and Occupations Bureau.
8. *Ibid.*
9. These examples were discussed with an assistant registrar at the Alberta College of Physicians and Surgeons.
10. *Ibid.*
11. This case was discussed with an official at the Alberta Dental Association.

References

- Antle, R., "The Auditor as an Economic Agent," *Journal of Accounting Research*, Vol. 20, Autumn 1982, pp. 503-27.
- Aranya, N. and Ferris, K.R., "A Reexamination of Accountants' Organizational-Professional Conflict," *Accounting Review*, Vol. 59, January 1984, pp. 1-15.
- Arnold, D.F. and Geiselhart, T.J., "Practitioners' Views on Five-Year Educational Requirements for CPAs," *Accounting Review*, Vol. 59, April 1984, pp. 314-24.
- Arrow, K., "Economic Welfare and the Allocation of Resources for Invention," in *The Rate and Direction of Inventive Activity*, Princeton, New Jersey: The National Bureau for Economic Research, 1962, pp. 609-25.
- Aucoin, P., *Public Accountability in the Governing of Professions: A Report on the Self-Governing Professions of Accounting, Architecture, Engineering and Law in Ontario*, Working Paper No. 4 prepared for The Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1978.
- Bellante, D. and Jackson, M., *Labor Economics: Choice in Labor Markets* (2nd Edn.), New York: McGraw-Hill, 1983, esp. pp. 278-79.
- Belobaba, E.P., *Civil Liability as a Professional Competence Incentive*, Working Paper No. 9 prepared for the Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1978.
- Benham, A. and Benham, L., "Regulating Through the Professions," *Journal of Law and Economics*, Vol. 18, October 1975, pp. 421-47.
- Bryant, M.J. and Mahaney, M.C., "The Politics of Standard Setting," *Management Accounting*, Vol. 62, March 1981, pp. 26-33.
- Carroll, S.L. and Gaston, R.J., "Occupational Restrictions and the Quality of Service Received: Some Evidence," *Southern Economic Journal*, Vol. 47, April 1981, pp. 959-76.

- Castonguay, C., "The Future of Self-Regulation: A View from Quebec," in P. Slayton and M.J. Trebilcock (eds.), *The Professions and Public Policy*, Toronto: University of Toronto Press, 1978, pp. 61-76.
- Chichak, C., *Report II on Professions and Occupations*, Edmonton: Chairman of the Select Committee of the Legislative Assembly of Alberta on Professions and Occupations, 1973.
- Chow, C.W., "The Impact of Accounting Regulation on Bondholder and Shareholder Wealth: The Case of the Securities Acts," *Accounting Review*, Vol. 58, July 1983, pp. 485-520.
- Darby, M.R. and Karni, E., "Free Competition and the Optimal Amount of Fraud," *Journal of Law and Economics*, Vol. 16, April 1973, pp. 67-88.
- Devaney, A.S., Gramm, W.L., Saving, T.R. and Smithson, C.W., "The Impact of Input Regulation: The Case of the U.S. Dental Industry," *Journal of Law and Economics*, Vol. 34, October 1982, pp. 367-81.
- Dorsey, S., "The Occupational Licensing Queue," *Journal of Human Resources*, Vol. 15, Summer 1980, pp. 424-34.
- Dunn, W.M. and Hall, T.W., "An Empirical Analysis of the Relationship between CPA Examination Candidate Attributes and Candidate Performance," *Accounting Review*, Vol. 59, October 1984, pp. 674-89.
- Dussault, R., "The Office des Professions du Quebec in the Context of the Development of Professionalism," in P. Slayton and M.J. Trebilcock (eds.), *The Professions and Public Policy*, Toronto: University of Toronto Press, 1978, pp. 101-110.
- Faith, R.L. and Tollison, R.D., "The Supply of Occupational Regulation," *Economic Inquiry*, Vol. 21, April 1983, pp. 232-40.
- Feldman, R. and Begun, J.W., "The Effects of Advertising: Lessons from Optometry," *Journal of Human Resources*, Vol. 13, Supplement, 1978, pp. 248-62.
- Feldman, R. and Begun, J.W., "The Welfare Cost of Quality Changes Due to Professional Regulation," *Journal of Industrial Economics*, Vol. 34, September 1985, pp. 17-32.
- Fleisher, B.M. and Kniesner, T.J., *Labor Economics: Theory, Evidence and Policy* (3rd Edition.), Englewood Cliffs, New Jersey: Prentice Hall, 1984, esp. pp. 240-42.
- Fogel, W., "Occupational Earnings: Market and Institutional Influences," *Industrial and Labor Relations Review*, Vol. 33, October 1979, pp. 24-35.
- Fottler, M.D., Gibson, G. and Pinchoff, D.M., "Physician Resistance to Manpower Innovation: The Case of the Nurse Practitioner," *Social Sciences Quarterly*, Vol. 61, June 1980, pp. 149-57.

- Gjesdal, F., "Accounting for Stewardship," *Journal of Accounting Research*, Vol. 19, Spring 1981, pp. 208-31.
- Gunderson, M., *Labour Market Economics: Theory, Evidence and Policy in Canada*, Toronto: McGraw-Hill Ryerson, 1980, esp. pp. 308-9.
- Guthrie, A., McDonald, D.L. and Var, T., *Accounting: The Canadian Scene*, Toronto: Kendall/Hunt Publishing Company, 1980.
- Hamowy, R., *Canadian Medicine: A Study in Restricted Entry*, Vancouver: The Fraser Institute, 1984.
- Jain, P.C., "The Impact of Accounting Regulation on the Stock Market: The Case of Oil and Gas Companies — Some Additional Results," *Accounting Research*, Vol. 58, July 1983, pp. 633-38.
- Kahn, L., *Mechanisms for the Governmental Review of Professional Legislation*, Internal Working Document prepared for the Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1978.
- Kirsch, E.B., *Training and Manpower in the Four Professions and Paraprofessions Under Study*, Internal Working Document prepared for the Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1979.
- Kleiner, M.M., Gay, R.S. and Greene, K., "Barriers to Labor Migration: The Case of Occupational Licensing," *Industrial Relations*, Vol. 21, Fall 1982, pp. 383-91.
- Lazar, F., Sievers, J.M. and Thornton, J.B., *An Analysis of the Practice of Public Accounting in Ontario*, Working Paper No. 8 prepared for the Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1978.
- Leffler, K., "Physician Licensure," *Journal of Law and Economics*, Vol. 21, April 1978, pp. 165-86.
- Leland, H.E., "Quacks, Lemons and Licensing: A Theory of Minimum Quality Standards," *Journal of Political Economy*, Vol. 87, December 1979, pp. 1328-46.
- Maurizi, A., "Occupational Licensing and the Public Interest," *Journal of Political Economy*, Vol. 82, March/April 1974, pp. 399-413.
- Meigs, W.B., Meigs, R.F. and Lam, W.P., *Accounting: The Basis for Business Decisions*, (3rd Canadian Edition), Toronto: McGraw-Hill Ryerson, 1981.
- Ministry of the Attorney General, *The Report of the Professional Organizations Committee*, Toronto: Ontario Ministry of the Attorney General, 1980.
- Murray, E.B., *Transfer of Professionals from Other Jurisdictions to Ontario*, Working Paper No. 12 prepared for the Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1978.

- Muzondo, T.R. and Pazderka, B., "Occupational Licensing and Professional Incomes in Canada," *Canadian Journal of Economics*, Vol. 13, November 1980, pp. 659-67.
- Needles, B.E. Jr., *Financial Accounting*, Boston: Houghton Mifflin, 1983.
- Olley, R.E., "The Future of Self-Regulation: A Consumer Economist's Point of View," in P. Slayton and M.J. Trebilcock (eds.), *The Professions and Public Policy*, Toronto: University of Toronto Press, 1978, pp. 77-88.
- Pashigian, B.P., "Occupational Licensing and the Interstate Mobility of Professionals," *Journal of Law and Economics*, Vol. 22, April 1979, pp. 1-26.
- Paul, C., "Physician Licensure, Legislation and the Quality of Medical Care," *Atlantic Economic Journal*, Vol. 12, March 1984, pp. 18-30.
- Puro, M., "Audit Firm Lobbying before the Financial Accounting Standards Board: An Empirical Study," *Journal of Accounting Research*, Vol. 22, Autumn 1984, pp. 624-46.
- Reeve, J.M., "The Five-Year Accounting Program as a Quality Signal," *Accounting Review*, Vol. 58, July 1983, pp. 639-46.
- Reiter, B.J., *Discipline as a Means of Assuring Continuing Competence in the Professions*, Working Paper No. 11 prepared for the Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1978.
- Richardson, A.J., "Professionalization and Intraprofessional Competition in the Canadian Accounting Profession," Research Report, Faculty of Business, University of Alberta, Edmonton, Canada, 1986.
- Scherer, F.M., *Industrial Market Structure and Economic Performance* (2nd Edition.), Chicago: Rand McNally, 1980.
- Schwartz, K.B. and Menon, K., "Auditor Switches by Failing Firms," *Accounting Review*, Vol. 60, April 1985, pp. 248-61.
- Shaked, A. and Sutton, J., "The Self-Regulating Profession," *Review of Economic Studies*, Vol. 48, April 1981, pp. 217-34.
- Shepard, L., "Licensing Restrictions and the Cost of Dental Care," *Journal of Law and Economics*, Vol. 21, April 1978, pp. 187-202.
- Shockley, R.A. and Holt, R.N., "A Behavioral Investigation of Supplier Differentiation in the Market for Audit Services," *Journal of Accounting Research*, Vol. 21, Autumn 1983, pp. 545-64.
- Select Committee of the Legislative Assembly of Alberta, *Report II on the Professions and Occupations*, Edmonton: Government of Alberta, 1973.
- Spence, M., *Entry, Conduct and Regulation in Professional Markets*, Working Paper No. 2 prepared for the Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1978.

- Spiceland, J.D., Brennan, V.C. and Hartman, B.P., "Standards for Programs and Schools of Professional Accounting: Accounting Group Perceptions," *Accounting Review*, Vol. 55, January 1980, pp. 134-43.
- Stevens, M., *The Accounting Wars*, New York: Macmillan, 1985.
- Swan, J., *Continuing Education and Continuing Competence*, Working Paper No. 15 prepared for the Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1979.
- Swinton, K., *The Employed Professional*, Working Paper No. 13 prepared for the Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1979.
- Thornton, R. and Weintraub, A.R., "Licensing in the Barbering Profession," *Industrial and Labor Relations Review*, Vol. 32, January 1979, pp. 242-49.
- Trebilcock, M.J., Tuohy, C.J. and Wolfson, A.D., *A Staff Study of Accounting, Architecture, Engineering and Law in Ontario*, prepared for the Professional Organizations Committee, Toronto: Ontario Ministry of the Attorney General, 1979.
- Tuohy, C.J. and Wolfson, A.D., "Self-Regulation: Who Qualifies?," in P. Slayton and M.J. Trebilcock (eds.) *The Professions and Public Policy*, Toronto: University of Toronto Press, 1978, pp. 111-22.
- White, W.D. and Marmour, T.R., "New Occupations, Old Demands: The Public Regulation of Paraprofessionals," *Journal of Policy Analysis and Management*, Vol. 1, Winter 1982, pp. 243-56.
- Ziderman, A., "Restrictive Practices, Training, and the Legal Profession in Scotland," *Scottish Journal of Political Economy*, Vol. 30, November 1983, pp. 295-303.