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SERVICE INDUSTRIES STUDIES PROGRAM

SYNOPSIS OF RESEARCH

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SERVICE INDUSTRIES STUDIES PROGRAM

SYNOPSIS OF RESEARCH

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## THE SERVICE INDUSTRIES STUDIES PROGRAM

### SYNOPSIS OF RESEARCH

The purpose of this document is to provide synopses of the individual studies prepared under the auspices of the Service Industries Studies Program (SISP). The synopses are an attempt to provide a general description of the studies. They are not intended to represent the views and conclusions of the authors. Synopses are arranged alphabetically by author according to the organization that sponsored the research. The bulk of the research was completed by March 31, 1988.

This document is available in both official languages. Please note, however, that the vast majority of the individual research studies commissioned by the Institutes are available only in English.

The Service Industries Studies Program was supported by a contribution from Industry, Science and Technology Canada. The views expressed in the studies, however, are those of the authors alone and are not necessarily those of the research organizations or the federal government. The sale and distribution of the studies are the sole responsibility of the individual research organizations that commissioned the studies.

### INTRODUCTION

In May 1986, Industry, Science and Technology Canada (formerly the Department of Regional Industrial Expansion) launched the Service Industries Studies Program (SISP), a major \$2.4 million research program into the structure and dynamics of the service sector and its component industries. The purpose of the SISP was to promote research, discussion and a greater understanding of the issues facing this sector. The SISP was created in recognition of the increasingly vital role that service industries are playing in the Canadian and world economies. Even so, there is a general lack of data and analysis on service industries: the factors influencing the sector's growth; the implications for employment; the role of trade in services, etc. Three organizations - The Fraser Institute, The Institute for Research on Public Policy (IRPP) and Statistics Canada - undertook separate aspects of the service sector research by commissioning over 80 studies on specific service industries, trade in services, horizontal issues, and statistical development, as follows:

The Fraser Institute: The Fraser Institute undertook a comprehensive examination of the growth of the service sector in the Canadian economy and the structure and performance of individual Canadian service industries.

Institute for Research on Public Policy:

The IRPP studied international trade in services and the Canadian experience. It divided the research program into four main lines of enquiry: theory, empirical analyses, institutional negotiating issues and services in regional development.

Statistics Canada: Statistics Canada undertook to examine and analyze the existing body of services statistics and to determine the need and potential for producing better data and information on the service sector.

SISP OVERVIEW PAPERS

The individual studies which make up the SISP contain a wealth of new information, ideas and policy relevant research analyses and conclusions. A key element of the program was to integrate the research findings, and identify the major substantive issues and conclusions and their public policy implications. To meet this objective, the Institutes have prepared a series of overview reports, scheduled for release in 1989:

The Fraser Institute:

Service Industry Growth: Causes and Effects

Herbert G. Grubel & Michael A. Walker.

This overview of Canada's service sector includes a thorough review of definitions of services, the history and reasons for growth of Canada's service sector, linkages between goods and service industries, service sector productivity, employment and growth, plus some insights from reviews of individual service industries.

Institute for Research on Public Policy:

Canada's Trade in Services: An Overview

A.R. Dobell & H.E. English

This paper examines the role of service industries in Canada's international trade: the historical trends, an analytical framework, implications for negotiations on trade in services and related domestic policy issues.

Statistics Canada:

Overview of Statistics on Service Industries

Statistics Canada has prepared a summary of the issues involved in bringing about a significant improvement in the statistical data base for services.

In addition to its major overview, the IRPP has prepared a series of summary reports, one for each main area of its research program. These reports, which are listed below, are in turn synthesized in Canada's Trade in Services: An Overview.

Trade in Services: A Theoretical Analysis, James R. Melvin

The various theoretical issues associated with trade in services are set into a framework that will hopefully assist the structuring of further research.

Trade in Services: Case Studies and Empirical Issues, D. Conklin et al. March 1988.

An examination of Canada's services trade in six industries (banking, transportation, real estate, engineering, computers and telecommunications), this overview identifies and explores issues such as measurement of services trade, determinants of comparative advantage and human capital requirements.

Trade in Services: Legal, Institutional and Negotiating Issues,

Murray G. Smith and Dan Roseman.

The paper looks at issues in the international relations of industrial countries stemming from the emergence of trade in services.

Service Industries in Regional Development, James J. McRae,

William Coffey and Martine Desbois.

The role of service industries in regional development in Canada is explored using available data. The policy implications are identified and discussed.

FOR MORE INFORMATION

The Service and Construction Industries Branch of ISTC has been responsible for overseeing the direction of the research program. For more information about the SISP, please contact -

Director General  
Service and Construction Industries Branch  
Industry, Science & Technology Canada  
235 Queen Street, 10th Floor East  
Ottawa, Ontario  
K1A 0H5  
Telephone: (613) 954-2994

Copies of individual studies and overview reports may be purchased directly from the sponsoring organization, at the following addresses:

**The Fraser Institute**  
626 Bute Street  
Vancouver, B.C.  
V6E 3M1  
Telephone: (604) 688-0221

**The Institute for Research on Public Policy**  
3771 Haro Road  
Victoria, B.C.  
V8P 5C3  
Telephone: (604) 721-1441

Director, Services Division  
Resources, Technology & Services Statistics Branch  
**Statistics Canada**  
Jean Talon Building  
Ottawa, Ontario  
K1A 0T6  
Telephone: (613) 951-2198



I. THE FRASER INSTITUTE

Service Sector Growth in the Canadian Economy

A. HORIZONTAL STUDIES

Harris, Richard G. (Queen's University) and Cox, David (University of Toronto). **The Service Sector and Trade in the Canadian Economy: An Input-Output Analysis.** Draft, September, 1988. Publication forthcoming.

This study, based on input-output data for the year 1981, evaluates the interaction between trade and the service sectors for the Canadian economy. Some of the findings are extremely significant for the analysis of the deep linkages between the services and the goods sectors, for example: "...in each dollar of total exports there is approximately 39 cents worth of service sector output". "...the service sector is sensitive to changes in the export sector and...the service sector is more sensitive to changes in exports than the economy as a whole." "...an increase in exports worth one dollar will result in an increase in the demand for business services of 26 cents." In addition, the study presents some extremely interesting data on the service content of exports from over 60 industries in Canada and on the export elasticity of several key service industries. The results of this research convey the clear message that "...For Canada, service sector income and employment is closely related to the performance of the export sectors, and vice-versa".

\*\*\*\*\*

MacCharles, Donald C. (University of New Brunswick). **Knowledge Production in Manufacturing: Its Impact on Business Services.** Draft, February, 1988. Publication forthcoming.

This study investigates the major factors affecting growth in the demand for business services, with particular emphasis on contracting out. The author concludes that the continuing relative shift of jobs from the goods producing to the business services sector "is not part of a deindustrialization process but of a much healthier one related to improving the competitiveness of the goods producing sector." He also warns that the evidence in support of the contracting out hypothesis is ambivalent and needs careful interpretation. Further research is needed on the general issue of the make-or-buy decision within firms and how it relates to the contracting out of business services with more emphasis on the role of the non-goods producing sectors as a source of demand for business services.

\*\*\*\*\*



Markusen, James R. (University of Western Ontario). *Service Trade by the Multinational Enterprise*. Draft, August, 1987. Publication forthcoming.

The objective of the paper is to demonstrate the significance of services trade between foreign parents and branch plants which is centred around proprietary knowledge or firm specific assets (FSAs), the transfer of which may be a net benefit to the branch plant economy. The author develops a simple theoretical model of the multinational enterprise (MNE) to illustrate this point and reviews the relevant empirical and theoretical literature. He notes that the balance of payments accounts underestimate the importance of trade in services because "much of the returns to knowledge-based assets are simply classified as returns to FDI (foreign direct investment) and thus classified separately from trade in producer services". One interesting conclusion is that "...if one objective is to encourage the development of human-capital intensive industries, then the producer service and FDI sectors should not be overlooked. A movement of our thinking away from the manufacturing sector is long overdue."

\*\*\*\*\*

Mathewson, Frank (University of Toronto). *The Role of Franchising in the Development of the Service Economy*. Draft, June, 1988. Publication forthcoming.

This study analyzes "the economics and evolution of franchising in the economy" and hypothesizes that the growth in franchising operations "can be traced to an increasing efficiency in the creation of national brand name capital where the realization of the quasi rents from this investment requires local production of goods and services". Professor Mathewson also reviews the available literature on the issue of the economics of franchise contracts, and explores the nature of the franchise contract itself and its ability to deliver efficiently the quasi rents referred to above. The author notes that "some argue that as franchise systems mature...franchisers will find company-operated outlets relatively more efficient". The tendency for franchisers to own and operate outlets themselves will be reinforced if anti-trust authorities challenge the restrictions placed in franchise contracts.

\*\*\*\*\*

McFetridge, Donald G. and Smith, Douglas A. (Carleton University). *The Economics of Vertical Disintegration*. 1988.

Is the much-publicized growth of the service sector a statistical mirage? The fundamental question addressed by this study is the extent to which service functions formerly performed within industrial firms have been contracted out. This study breaks new ground in developing a series of statistical approaches to the measurement of contracting out. Based on a solid theoretical framework, three new empirical measures of contracting out are presented. The results vary somewhat by method but the overall conclusion is that contracting out is an important phenomenon. As much as a third of the

employment growth of some service sector occupations appears attributable to contracting out. The study concludes with a series of perspectives on how estimates of contracting out can be refined in future research.

\*\*\*\*\*

Weiermair, Klaus (York University). *The Labour Market and the Service Sector*. 1988.

This paper is an analytical overview of the labour market underlying the Canadian service economy. Among aspects reviewed are "the evolution of employment in Canadian service industries, ...the changing nature of service sector jobs in terms of changing technologies .... (and) the structure, function and performance of labor markets serving the Canadian service economy". The author observes that "data on wages or annual pay, productivity, the introduction of technical change and changes in the skill composition of the labor force seem to indicate large inter and intra-industry variation". One observation is that "Canada's education and training system in general (is) wanting in terms of producing the quality and mix of skills commensurate with the growth and transformation of the services sector". Furthermore, Professor Weiermair feels that "international competition in human capital-intensive products will essentially mean competition between nations' varying systems of schooling, training and learning".

#### B. INDUSTRY STUDIES

Acheson, Keith and Ferris, Stephen (Carleton University). *Retail and Wholesale Trade Services in Canada*. 1988.

This survey profiles the wholesale and retail trade sectors through a description of the industries' inputs and outputs, productivity and labour market characteristics. Organizational developments such as cross merchandising, cross ownership, franchising and shopping malls are reviewed. The authors suggest that these "organizational developments have been important in developing better retailing and wholesaling".

\*\*\*\*\*

Adie, Douglas K. (Ohio University). **The Post Office**. Publication forthcoming.

This study "inspect(s) and analyze(s) various aspects of Canada Post and its operations". Aspects such as Canada Post's labour force and its productivity, mail service, demand and supply for first-class mail, financing and major issues facing Canada Post are reviewed.

\*\*\*\*\*

Auld, Douglas (Sir Sanford Fleming School of Natural Resources) and Kitchen, Harry (Trent University). **The Supply of Government Services**. 1988.

This study takes the position that the bulk of non-transfer expenditures by governments can be classified as services even though the characteristics of public services are not exactly the same as those assigned to private sector services. The changing delivery modes of public sector services, for example "contracting out" and franchising, are examined with respect to their advantages and disadvantages and their effect on government accountability. The critical role of public services as an intermediate good and an initial factor of production in private sector output and what this means for economic growth and productivity are reviewed. "An overview of public expenditures over the 1951-86 period" is provided along with a discussion of "theories that have been used to explain public expenditure growth". Additional aspects of public sector services, such as output, compensation and productivity are reviewed. In the concluding chapter on delivery mechanisms, the authors state that "improvements in efficiency, expansion in consumer choice and mechanisms for monitoring the activities of the producing and delivering agents is more effectively achieved through the introduction of competitive elements".

\*\*\*\*\*

Bernstein, Jeffrey I. and Geehan, Randall R. (Carleton University). **The Insurance Industry in Canada**. 1988.

This study presents a comprehensive overview of Canada's insurance industry. Income, price and cross-elasticities for insurance services are developed. The authors provide an analysis of measurement issues relating to inputs, outputs and productivity, as well as estimates of economies of scale, economies of scope (diversification) and growth in productivity. It is noted that international competition improves the efficiency of domestic suppliers. "Canadian life insurance firms have not only increased their domestic market share, they have been highly successful in their foreign operations. In 1985, over 40 percent of Canadian federally registered companies' global business is outside Canada." The study finds that economies of scale and scope do not seem to be significant in this industry and that "... there is evidence that any scale economies in life and property casualty insurance appear for only very small levels of output." In addition, the evidence shows that "the sources of productivity growth (about one percent per year) in the Canadian life insurance industry are dominated by technological change... over the

period 1962 to 1977 technological change accounted for around 65 percent of productivity growth".

\*\*\*\*\*

Brown, Malcolm C. (University of Calgary). **Caring For Profit: Economic Dimensions of Canada's Health Industry.** 1987.

"The basic objective of this study (is) to identify probable future developments in Canada's health care sector, and their ramifications for the economy." Professor Brown discusses the nature, evolution, demand, supply, utilization and productivity of Canada's health sector, and concludes with remarks on the prospects, problems and public policies for this sector. He concludes that "within the health care sector, far too many services are provided which cannot be justified in terms of improving either quantity or quality of life, and on far too many occasions the services are provided using more highly trained labour and more expensive capital than is technically necessary".

\*\*\*\*\*

Chant, John F. (Simon Fraser University). **The Market for Financial Services.** 1988.

The study examines the importance of the deposit-taking financial institutions (i.e., chartered banks, trust companies, mortgage loan companies and credit unions) in Canada in terms of their organizational structure, representation across Canada, employment patterns, income levels, occupational skills and their general contribution to the economy as represented by their share of the Gross Domestic Product. The author notes the methodological problems in measuring some of the traditional income and productivity measures for these institutions and suggests some modifications and identifies areas where caution should be used in comparing deposit-taking financial institutions with other service companies and non-service industries, in general. Three common themes emerge in the study. Firstly, "the shape and structure of the industry are the creation of regulation to a greater degree than almost any other industry". Secondly, "changing communication and computer technology .... has shaped the product, changed the employment conditions, and altered the organization of the industry and the firms within it. Finally, the deposit-taking sector does not appear to fit many of the stereotypes of a service industry .... (having) undergone extensive innovation and technical change. In addition, while it has grown in importance in the economy as an employer, this growth has been accompanied by a raising of the skills and incomes of its employees relative to other workers".

\*\*\*\*\*

Easton, Stephen T. (Simon Fraser University). **Education in Canada.** 1988.

This report examines the value of elementary and secondary school expenditure as measured by its contribution to the growth of national income,

its rate of return, etc. It also studies the costs and productivity in the education sector during the past few decades. Professor Easton follows this by looking at "some alternative ways in which the current structure might be made more cost effective through various proposed mixes of private schooling with the public system, and offers a few remarks about the difficulty in evaluating the structure of vocational programmes as they are currently identified". Relying heavily on existing studies and literature, the author notes that "over the past several decades the real (inflation adjusted) costs per student ... have risen by almost any measure we care to use.... Unfortunately, there is little evidence to suggest that there is or has been a simple correspondence between higher costs and more or better education." One recommendation is that "until a clear link is established between the pupil teacher ratio and the quality or quantity of education, it would seem foolish to pursue the apparent goal of an ever-decreasing student teacher ratio".

\*\*\*\*\*

Gill, David C. (The Fraser Institute). *The Market for Legal Services*. 1988.

This survey provides a statistical and economic profile of the legal services sector in Canada. The author reviews industry output, employment, productivity and industry demand, and concludes by examining several policy issues such as restrictions on the supply of lawyers and the recent trend in various provinces to allow law firms to use incorporation as a form of business ownership. Information and statistical data were gathered from surveys conducted by provincial law societies, the Canadian Bar Association, Gallup polls, Census surveys and taxation statistics published by Revenue Canada. The author notes the tremendous percentage increase in the number of lawyers in various categories: "the number of in-house lawyers grew by 103 percent between 1971 and 1981, ...the number of private practitioners ...grew by 107 percent (to approximately 28,290), the number of government lawyers grew from 1,425 to 3,480 during the same period - an increase of 144 percent."

\*\*\*\*\*

Globerman, Steven (Simon Fraser University) with Carter, Deborah (Vancouver Community College). *Telecommunications in Canada: An Analysis of Outlook and Trends*. 1988.

"This study provides an overview of the telecommunications sector with respect to its primary economic characteristics and evaluates a number of hypotheses bearing upon public policy considerations". The author generally argues for the introduction of free markets in this sector and concludes that "the Canadian telecommunications industry is facing increasing competitive pressures as a result of technological changes and deregulation in the United States. The increasingly competitive environment is rendering the historical practice of value of service pricing untenable. Under value of service pricing, long distance services subsidize local services and urban subscribers subsidize rural subscribers. Over time, the structure of cross-subsidies will encourage uneconomic bypass and cross-border reselling. The latter will become an increasing reality as competition in the long-distance sector of the

U.S. industry expands. An increase in the value of the Canadian dollar will hasten the process."

\*\*\*\*\*

Hammes, David L. (The Fraser Institute). **Shaping Our Nation: An Economic Analysis of Canada's Consulting Engineers.** 1988.

"The export success of Canadian consulting engineers has highlighted engineering as one of the few Canadian service industries... that is competing successfully with producers in the rest of the world." After profiling the Canadian consulting engineering industry, the author examines the supply and demand for engineering services and innovation, industry organization and growth, characteristics of the engineering labour force, costs and productivity and Canadian engineers in the world market. He concludes with a chapter on government and the industry. One interesting observation is that three particular clauses in the free trade agreement with the U.S. promise benefits for the Canadian engineering industry. "Opening the borders to the export of Canadian energy products will build on the skills and technical know-how already present in the country. Allowing U.S. investors to seek opportunities in Canada will encourage growth and construction. Making access to the U.S. market more open for trade in services and access to federal government procurement contracts also encourages the employment of the current stock of engineers."

\*\*\*\*\*

Jenkins, Alexander W. (University of Alberta). **Home Sweet Home: The 7% Solution (Real Estate Brokerage in Canada).** 1989.

"In general, it appears that real estate brokerage has grown more rapidly, in terms of both output and employment, than other services and the economy as a whole, during the 1970s and 1980s, mostly because Canadians are moving more often." The author presents an overview of the real estate brokerage industry in Canada, and discusses industry output, demand, employment and productivity. He also reviews government policy and several of the major issues facing the industry. Professor Jenkins notes that the industry "has enjoyed a much higher productivity growth rate than the rest of the economy ... probably due to the on-going computerization of the MLS (Multiple Listing Service)". He anticipates that "a combination of technological innovation (computerization), increased competition for salespersons from 'full commission' brokers like Re/Max, and appropriate governmental policies (especially the promotion of an 'open' MLS) would do much to evolve a real estate brokerage industry, and resale housing market in general, that will better serve the homeowner".

\*\*\*\*\*

Maki, Dennis R. (Simon Fraser University). *The Market for Employment, Personnel, and Security*. 1988.

The objective of this report is to examine the employment, personnel and security sectors, with particular emphasis on output, productivity and growth. However, because of the lack of available output data, the report concentrates on the issue of employment growth in these sectors. The author points out that "growth in employment agencies and personnel suppliers over the 1970s and early 1980s has averaged on the order of 10 percent per year" while employment in "security and investigation services grew 97 to 99 percent from 1971 to 1981, or a compound rate of about 7 percent per year". Although the report draws no firm conclusions with respect to explaining the growth, it cites the fact that both sectors seem to have been able to sufficiently diversify their client base to warrant rapid expansion.

\*\*\*\*\*

Palda, Kristian S. (Queen's University). *The Role of Advertising Agencies in Canada's Service Sector*. 1988.

This overview of the advertising sector concentrates primarily on the advertising agencies, largely because they dominate the sector, accounting for 70 percent of its output. All of the subject areas relevant to the advertising sector are touched on briefly. The author concludes with a short look at the welfare and employment effects of advertising services, and a brief discussion of major issues now facing the industry such as the shift away from media advertising, mergers, industry globalization and technological change. With regard to the Canada-U.S. Free Trade Agreement, Professor Palda concludes that "freer flow of goods and services across the Canadian-U.S. border presents equal challenge and opportunity to the members of this industry as to most of the other service sectors. It would not, however, affect the advertising scene drastically of itself." The principal challenge facing this industry is not freer trade but the global standardization (globalization) of advertising from the foreign headquarters of multinational enterprises.

\*\*\*\*\*

Palmer, John P. (University of Western Ontario). *An Economic Analysis of Canada's Ground Transportation Sector*. 1988.

This inquiry presents data and analyses on the industry structure, revenues, expenses and productivity of four of the industries which provide ground transportation in Canada: bus passenger service, rail service, trucking service and taxi service. "There is a steady theme which (emerges) ... in each of the industries examined, there is a tendency toward increased specialization by firms serving increasingly narrowly defined market segments" (for example, commuter passenger rail service, tour and charter bus service). Professor Palmer completes the study with a brief look at industry specialization, employment, productivity and issues relating to changing regulation. With respect to industry regulation, the author suspects that



"continued technological changes and continued intermodal competitive activity will increasingly tax the abilities of different agencies to regulate specific industries. But as the old regulations disappear through this process, it is also possible that superagencies will emerge to regulate intermodal competition."

\*\*\*\*\*

Scarfe, Brian L. and Krantz, Murray (University of Alberta). *The Market For Hospitality: An Economic Analysis of the Accommodation, Food and Beverage Industries.* 1988.

The purpose of this paper is to survey and describe the accommodation, food and beverage (AFB) industry in Canada. The food and beverage component consists of food and beverage establishments, i.e. restaurants, take-out, catering and tavern outlets. The paper analyzes data from Statistics Canada and notes the relatively rapid growth of the chains segment of the food and beverage sector. The author concludes that "the AFB industry will continue to be reliant on the rather large employment of part-time, low wage and limited skill labour inputs, with considerable labour turnover being the inevitable consequence".

\*\*\*\*\*

Watson, William G. (McGill University). *National Pastimes: The Economics of Canadian Leisure.* 1988.

Using available sources of data, this study "examines the economics of several service industries that are related to each other mainly by virtue of the fact that, by and large, Canadians consume their output during leisure time". Examples of the industries studied are broadcasting, motion pictures, commercial spectator sports and sports and recreation clubs and services. Dr. Watson measures the value and performance of these sectors and recommends a significant change from existing practices of government support for Canadian content in "cultural" industries. "If we are going to continue to support Canadian cultural activities, why not a policy that provides direct rewards for ... Canadians attending cultural events that concern Canada? Subsidies for inputs do not do this; subsidies for outputs for Canadians consuming Canadian culture do. In brief, we should subsidize the audience, not the artists."

\*\*\*\*\*

West, Edwin G. (Carleton University). *Higher Education in Canada.* 1988.

"Post-secondary education continues to expand, despite the fall in the population of individuals between 18 and 24 years." The author analyzes the major issues facing the post-secondary education sector in Canada. He presents a statistical review and outlines the productivity, social aspects, educational loan services, fiscal arrangements and institutional organization of this sector. The author suggests options for new data collection and

further research. One interesting conclusion is that, "when compared with other areas of the economy, including the service sector, Canadian universities have shown poor, if not negative, productivity growth achievements over the last decade". It is suggested that "a reduction in the time taken in degree courses ... remains a major avenue towards productivity gain, an avenue that U.S. private universities seem already to have taken".

II. INSTITUTE FOR RESEARCH ON PUBLIC POLICY (IRPP)

**Canada's International Trade in Services**

**A. TRADE IN SERVICES: A THEORETICAL PERSPECTIVE**

Amesse, Fernand (École des Hautes Études Commerciales). **Le commerce international des services industriels.** Août 1988. Final. (Available in French only)

For the purpose of this study the business services industry is divided into three categories: "services non liés centrés sur le faire ou l'action, services non liés centrés sur le conseil, et enfin, les services liés intrinsèquement associés aux biens à haute technicité". The potential for international trade is then examined. The first category are services which by their nature remain closely linked to local markets, although franchising may offer possibilities for expansion. A significant portion of consulting services will continue to be traded internally by multinational corporations or through affiliated firms. The third category, with its close ties to high technology goods, will tend to be traded through manufacturers. However, this sector has the greatest potential to stimulate additional services and increase international trade.

\*\*\*\*\*

Burgess, David F. (University of Western Ontario). **Some Implications of Trade Liberalization in Services When Services are Intermediate Inputs in Production.** August 1988. Final.

"The purpose of this paper is to examine some of the implications of trade liberalization in services when services perform the role of intermediate inputs in production." The author demonstrates "how international differences in the technology for the provision of services contributes to comparative advantage and the pattern of trade in goods, and how trade liberalization in services impacts on a country's industrial structure and the international competitiveness of its goods and services industries". The study confirms "that access to more efficient services on account of trade liberalization will improve the production process for final output and have beneficial effects throughout the country".

\*\*\*\*\*

Burgess, David F. (University of Western Ontario). **Trade in Services and the Foreign Direct Investment Process: Some Implications from the Specific Factors Model.** December, 1987. Final.

"The main purpose of this paper is to examine the welfare and distributive effects of trade liberalization in services in cases where it is not feasible to produce a service in one country and export it to another for consumption there." Using a specific factors model, the author demonstrates that, if barriers to international trade in goods exist, trade liberalization

of services might be harmful to the country "importing" the services. The author suggests that "...more liberalized trading arrangements for services can impact on a services-importing nation like Canada in a variety of ways depending upon whether the output of the service sector can be traded or the inputs that are crucial to services production in the services-exporting country are free to cooperate with other non-crucial inputs in the services-importing country to produce services." The study "serves to emphasize that there can be no guarantee of a welfare gain to service-importing countries from removing barriers to international trade in services if there are other trade distortions in place. If, for example, "...countries accede to the pressure to liberalize trade in services by permitting an influx of services-specific capital from abroad in the presence of tariffs on trade in goods they run the risk of being made worse off as a result". "It provides an additional rationale for the perceived reluctance on the part of many of these countries to support efforts to liberalize trade in services in the absence of further progress towards the achievement of freer trade in goods."

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Empey, William F. (Applied Economics Consulting). *Contracting Out of Services by Manufacturing Industries*. May, 1988. Final.

The objective of this review is to demonstrate whether there has been an increase in the use of services by manufacturers and to see if this was motivated by a desire to improve efficiency and products. Purchases of services are measured from the Canadian Input-Output tables and an estimate of in house services is taken from employment of salaried versus production workers. The author concludes that "while there is strong evidence of a general increase in service purchases, this process is not evenly distributed across all service sectors ... more research must be done to identify the motives in the service purchases".

\*\*\*\*\*

Jones, Ronald W. (University of Rochester) and Kierzkowski, Henryk (Graduate Institute of International Studies, Geneva). *The Role of Services in Production and International Trade: Theoretical Framework*. April, 1988. Final.

The authors of this study "concentrate on the manner in which developments in the service sector have encouraged and promoted the general level of international trade in goods.... The paper discusses how, with growth of a firm's output level, increasing returns and the advantages of specialization of factors within the firm encourage a switch to a production process with fragmented production blocks connected by service links. These links, consisting of bundles of activities requiring co-ordination, administration, transportation, and financial services, are increasingly demanded when the fragmentation of the production process allows joint use of production blocks located in different regions. Such fragmentation spills over to international markets. The greater disparity in productivities and factor prices found between countries (as compared to within a country) may

encourage, via the Ricardian doctrine of comparative advantage, the use of several international locations for production blocks comprising a given production process.... The fall in relative prices of many services ... further encourages the process of fragmentation.... Furthermore, it can be argued that technological advances in the provision of services lower especially the relative costs of international co-ordination and communication."

\*\*\*\*\*

Jones, Ronald W. (University of Rochester) and Ruane, Frances (Queen's University). Appraising the Options for International Trade in Services: A Specific Factors Framework. March, 1988. Final.

This analysis focuses "on one particular issue in service trade, namely, the choice of the appropriate level for trade". The levels are identified as "either trade in the service factor, where it combines with local factors to produce a non-traded service good, or as trade in the service good itself, involving no further production in the foreign country". The authors employ conventional economic theory of trade in goods to build their case by developing "a very simple model to focus clearly on the particular issue of the choice of level at which to facilitate service trade". One conclusion reached is that "when a country has a technological comparative advantage in services, labor will gain more if the country engages in free trade at both levels, and specializes in producing the service good, rather than simply trading at one level".

\*\*\*\*\*

Markusen, James R. (University of Western Ontario). Intra-Firm Service Trade by the Multinational Enterprise. December, 1986. Final.

"The purpose of this paper is to consider intra-firm service trade by the MNE." It focuses "on the ownership advantage possessed by a MNE", namely superior technology or management know-how, and analyzes "how this ownership advantage implicitly gives rise to the exports of services by the home firm to the foreign subsidiary or licensee". Thus foreign direct investment and "trade in producer services becomes conceptually very similar ... These notions are formalized in a simple model of the MNE, and the implications for the gains for foreign investment, the role of public policy, and (Canada's) balance of payments accounts are analyzed. One of the interesting conclusions is that two identical countries can gain bilaterally from MNE investment, since fixed costs of knowledge-based assets would be spread over many plants. The MNE can nevertheless exact from its market power "considerable monopoly rent as payment for the services of its assets", which the host government could capture back in taxes.

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Markusen, James R. (University of Western Ontario). Trade in Producer Services: Issues Involving Agglomeration Economies, Human Capital and Public Inputs. December, 1986. Final.

The author's analysis indicates that production characteristics common to certain producer services are: high intensity of human capital, large content of public inputs (i.e., regulation, legislation, policies) and heavy dependence on external economies of scale, notably, agglomeration economies. Agglomeration economies "are a type of external economy of scale that arises from close proximity among firms. Proximity involves the saving of transaction costs in time and money of shipping goods among firms, and more importantly for the purposes of this paper, the saving of time and money involved in the inter-firm contact of people". Based on production models, Professor Markusen concludes that, in an agglomeration economy, several equilibria may exist and that "a country can get 'stuck' at a low-level equilibrium in which welfare is significantly less than at alternative equilibria. Two considerations, which are particularly relevant to Canada in its trading relationship with the U.S., (are) shown to increase the probability of getting stuck at a low-level equilibrium. First, if the country is smaller than its trading partner and second, if the country is a late entrant in developing the technology or factors necessary to produce the skilled workers necessary to support the agglomeration economies sector." This points out a role for government in supporting human capital-intensive activities and not the production of human capital.

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Markusen, James R. (University of Western Ontario). Trade in Producer Services: Issues Involving Returns to Scale and the International Division of Labour. December, 1986. Final.

"Many producer services are knowledge intensive, requiring a high initial investment in learning, after which the knowledge can be provided to additional users at a very low marginal cost." Professor Markusen builds "a monopolistic-competition type model to analyze these producer services". Based on this model, he observes that "trade in producer services creates gains even for identical economies". A major conclusion for the Canada-U.S. bilateral trade initiative is that "when two economies differ only in absolute size, the smaller economy is the major gainer from trade in services".

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Melvin, James R. (University of Western Ontario). Services: Dimensionality and Intermediation in Economic Analysis. January, 1987. Final.

This paper examines, in a theoretical context, why services exist. The author suggests that commodities, usually called services, are produced in response to the desire of economic units to overcome the constraints of time and space. The paper describes three categories of services: contact services, substitution services and intermediation services (which intermediate commodities over space, risk over time or information over time

and space). A formal model of services is constructed to illustrate the various types of services, and this model proves useful in analyzing the question of productivity in the service sector.

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Melvin, James R. (University of Western Ontario). **Trade in Services: A Heckscher-Ohlin Approach.** December, 1986. Final.

Contrary to the views held by some economists, the formal incorporation of services in economic analysis and in the standard theory of international trade "does provide difficulties and does result in an analysis that differs substantially from the traditional model. It is also shown that in some circumstances, the law of comparative advantage, at least as usually defined, need not apply to service trade. It is found that commercial policy and domestic tax policy may have quite different effects in a world in which services are traded than they do in a standard Heckscher-Ohlin model." For example, "with trade in services, some domestic taxes have unexpected effects on the trade sector. It is shown that favourable income tax treatment of foreign-source service income is equivalent to an export subsidy. For countries importing services, a tariff is equivalent to a domestic tax on repatriated foreign-earned income."

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Rugman, Alan M. (Dalhousie University). **A Transaction Cost Approach to Trade in Services.** January, 1987. Final.

This paper proposes "a new methodology for the analysis of trade in services" which recognizes the role of multinationals in services trade. The author suggests that an analysis of trade in services must include an analysis of the multinational enterprise (MNE) since they account for most of this international activity in services. Professor Rugman expands the standard categories of internationally traded services (travel, business services) "to incorporate proxy measures for the activities of multinational enterprises", whose influence in world trade and investment cannot be ignored. The analysis shows the relevance of returns on foreign direct investment to a discussion of trade in services, since they are a proxy for the trading of "invisible" firm-specific knowledge of multinationals. The author concludes that "multinationals, as a conduit for trade in services", are critical factors in negotiations on and in adjustment to freer trade.

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Ryan, Cillian (University of Western Ontario). **Trade in the Presence of Endogenous Intermediation in an Asymmetric World.** June, 1988. Final.

"This paper endogenously derives intermediation services in a general equilibrium setting. It suggests that contrary to previous suggestions technical improvements in servicing can lead to a fall in domestic output, a rise in the size of the service sector and an increase in all agents' welfare.



It further suggests that if there are asymmetries in production or service technology that the trading pattern under autarky may be inefficient relative to free trade due to the presence of excess capacity and 'servicer self-trading'. Thus there are additional gains from free trade in addition to the conventional gains due to an 'as if' improvement in service technology."

#### B. THE SERVICE SECTOR AND REGIONAL BALANCE

Melvin, James R. (University of Western Ontario). *The Role of Services in a Small Regional Economy*. October, 1988. Final.

This analysis provides a "model of the role that services could play in a regional economy that trades extensively with the rest of the world". The author examines several different kinds of services, the potential for services to be an engine of economic growth and "the ways in which a comparative advantage could be established in a service industry". One observation made is that with the source of comparative advantage in many service sectors depending on human capital, "a region can lose a comparative advantage if it is unable to attract and retain the individuals with the requisite skills". He concludes that one feature that distinguishes services from goods is the existence of returns to scale associated with dispersion. Firms that are engaged in service activities will often find it advantageous to have branches located in different parts of the region or economy. Such dispersion activities would generally be expected to result in lower consumer prices, and thus should be facilitated by federal and provincial policy. In fact, government policy may encourage dispersion that is not locationally-efficient and that may not maximize scale economies. This provides another example of how interprovincial trade barriers can substantially reduce the welfare of Canadian citizens. Differing provincial regulations on trucking and transportation are examples of interregional restrictions on the flows of services, and such distortions can produce substantial welfare costs.

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Norrie, Kenneth H. and Percy, Michael B. (University of Alberta). *Services and Regional Economic Performance*. September, 1988. Final.

This study "concentrates on the relationship between service sector growth and the pattern of regional economic disparities". The authors observe that "the distribution of aggregate economic activity across regions changed very little over the four decades" during which the economy shifted to services. The authors attempt to find some means to identify the important differences in the service industries, to work through their potential effects on income disparities, and to test the resulting hypotheses empirically. A discussion of theoretical links between services and equilibrium regional disparities ensues, using a simple general equilibrium approach to a regional economy. The authors conclude that "there are a great number of ways in which the growth of service activities since WWII might have affected the pattern of regional economic growth and adjustment. The connections are numerous enough however, and sufficiently complex, that no partial equilibrium model can

adequately capture them. They must be investigated with the aid of explicit general equilibrium formulations." Furthermore, "until Statistics Canada is able to provide data on trade in services based on survey techniques then there can be no serious empirical work on service sector exports and regional economic performance".

### G. CASE STUDIES: STATISTICAL AND EMPIRICAL ISSUES

Conklin, David W. et al. Trade in Services: Case Studies and Empirical Issues. May, 1988. Final

As each chapter of this book is a research study into a specific aspect of Canada's trade in services, including six case studies, we have included short synopses of relevant chapters.

#### The Balance of Payments: Statistical Background, Martine Desbois and France St-Hilaire (IRPP) (Chapter II)

"The balance of payments (BOP) is a system of accounts designed to reflect the crossborder transactions between residents of one country and the rest of the world." An overview of Canada's international trade in services over the last twenty-five years is provided by analyzing "the main five subsectors that make up the service component of the balance of payments: travel, business services, freight and shipping, government transactions and other services". The authors' "overall observation is that services account for a relatively small and decreasing share of current account transactions. However, employment and production indicators show that services are accounting for a significant and rapidly growing share of economic activity."

#### Measuring Trade in Services: Conceptual and Statistical Issues, France St-Hilaire (IRPP) (Chapter III)

"In analyzing the issue of service trade, authors have found themselves severely constrained not only by the inadequacy of data, but even by the lack of an agreed definition as to what constitutes trade in services." This chapter reviews "the inappropriateness of existing definitions and concepts of service trade" and discusses trends and issues arising in the "new world economy" such as productivity, tradeability, transnationalization and the blurring of sectoral distinctions. The author notes that two related phenomena "go a long way in explaining the importance of service trade.... The first is the continuing rapid developments in information technology which are having fundamental implications for the service sector and the second is the predominance of multinationals in the process of economic internationalization currently underway".

**Trade in Banking Services, Thomas J. Courchene (University of Western Ontario) (Chapter IV)**

This chapter provides a summary of events that have been occurring in the international financial markets and relates these developments to the increasing pressures for deregulation in the various domestic financial systems.

International financial markets have reacted to the series of real and monetary shocks of the last decade (e.g. the oil crises, the inflation cycle, the exchange rate volatility, and the debt crises) with "...a virtual explosion of innovative instruments and structures that is serving to integrate national markets into a global financial marketplace". These instruments and structures include the bought deal, options and swaps, currency and interest rate swaps, and securitization. These global financial developments "have served to generate intense pressures on national regulatory authorities to bring their financial structures and regulations in line with what is permissible internationally". The author concludes that "for small, open economies like Canada, the message is ... catch the wave or the financial services revolution will simply pass us by". Failure to respond to these international pressures will lead to the inevitable result that "the bulk of our institutions would be relegated to being regional players in a regional, rather than a global market".

**Estimates of Trade Flows in Banking Services, France St-Hilaire and John Whalley (IRPP) (Chapter V)**

This chapter "presents some estimates of international trade in one key service category, banking services, obtained using an alternative method... (to those) estimates of service trade derived from Balance of Payments (BOP) data". The authors find that "international flows in banking services may be relatively small... Service trade, as it relates to banking, may be an important investment issue (ie. establishment rights and discriminatory regulations), but does not appear to be that important a trade issue".

**Canada-U.S. Trade in Transportation Services, James J. McRae (University of Victoria) (Chapter VI)**

"This chapter has three major goals. First to discuss the structure and dynamics of the three most important transportation modes - highway, marine and railway - used in the transborder transportation markets between Canada and the U.S. Second, to identify the most important U.S. NTBs (non-tariff barriers) for these three modes, and finally to adjudicate on the economic importance of the identified NTBs." The author notes that, for the most part, transportation services "are directly complementary to trade in goods so that the volume and commodity structure of merchandise trade to a large extent determines the volume and structure of our balance of trade in transportation services. However, because the transportation industries in both Canada and the United States have been heavily regulated with respect to entry, rates and operating standards, regulatory differences play an important role in

determining market access, operating practices and transportation trade balances in the two countries".

This chapter is an abstract of a full SISP study. (See separate entry below.)

**Evolution de la structure de l'industrie canadienne du génie-conseil,**  
Roger Verreault (Urbanisation Institut national de la recherche scientifique). (Chapter VII) (Available in French only)

In this review of Canadian engineering consulting services, Verreault notes that Quebec-based firms are mostly responsible for Canadian exports in this sector. "...ces succes sur le marché international sont en grande partie attribuable aux entreprises québécoises." One reason for this is that "la diversification plus grande des firmes québécoises exportatrices au niveau des types de services offerts. Elles offrent en moyenne plus des services différents que leurs rivales canadiennes sur le marché canadien et étranger." The author concludes that, with respect to trade liberalization, "une libéralisation tous azimuts profiteraient plus en moyenne aux firmes de l'Atlantique, des Prairies et de la Colombie Britannique qu'à celles du Québec et de l'Ontario".

This chapter is an abstract of a full SISP study. (See separate entry below.)

**Les exportations de services de gestion et promotion immobilières,**  
Mario Polèse (Urbanisation Institut national de la recherche scientifique) (Chapter VIII) (Available in French only)

In this chapter, Polèse provides an overview of the international real estate management and development (REMD) sector. Large firms dominate this sector because of the huge capital investments that are required. Financial strength is a key determinant of international competitiveness. "Brèf, les banques canadiennes, par leur taille, leur mobilité géographique et les instruments financiers qu'elles ont développées, sont des partenaires tout designés pour des grandes sociétés de GPI avec des ambitions continentales." In addition, REMD requires the ability to co-ordinate information and skills with this capital. This integration of investment with services means that it is difficult to separate payments for services from returns to capital. For this sector, taxation of foreign income is extremely important, and it influences the reporting and the repatriation of income. Intra-firm transactions also complicate the measurement of services trade.

This chapter is an abstract of a full SISP study. (See separate entry below.)

Trade in Computer Services, David W. Conklin (University of Western Ontario) (Chapter IX)

"For certain purposes, the traditional data classifications (for computer services) are no longer appropriate. A new classification, information technology, should be developed to include computers, telecommunications equipment, certain robotics, and various services such as equipment leasing and repairs, software, and business consulting. In many cases, the division between goods and services is artificial because of corporate pricing based upon individually negotiated contracts and solution selling. From the policy perspective, a barrier to one element of the sales package can impede the entire sale. The right of establishment is important because the relationship between the computer firm and its customer is a relationship over time, requiring frequent and immediate service. International procurement agreements may be more difficult to enforce with information technologies than with other activities. Public assistance to education and skills training will be a key factor in Canada's international competitiveness. As with other activities, intra-firm transactions form a substantial component of services trade, and these present severe measurement difficulties."

Trade in Telecommunications Services, David W. Conklin (University of Western Ontario) (Chapter X)

"Prior to the 1960s, the definition of telecommunications services was relatively straightforward, the collection and interpretation was relatively simple, and the analysis of trade policy issues was relatively clear-cut. Since the 1960s however, a lengthy series of important changes in technology and market structure have added a new complexity to this subject. At this point in time many conceptual and methodological problems remain unresolved. Most of these problems - concerning definition, data classification, and public policies - relate to the new and rapidly growing international trade in "enhanced" telecommunications services. While the traditional basic services, provided by a physical communication network, remain by far the largest component of domestic services, it is the wide range of new enhanced services that forms the major component of today's international trade in telecommunications services. A new Statistics Canada catalogue to present more detailed data would be helpful."

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Courchene, Thomas J. (University of Western Ontario). Some Perspectives on the Future of Banking. June, 1986. Final.

Professor Courchene discusses "the likely future developments in the banking sector and, more generally, the role of banking in the evolution of the overall financial services sector." He reviews the developments taking place in the international financial markets which will influence domestic financial service operations, including the banks, and touches on regulatory issues. One of the conclusions arrived at is that, even with the granting of greater investment banking powers within Canada, the Canadian chartered banks

will face increased competition in the domestic financial markets, especially retail financial services. The banks' competitive position will continue to erode unless they "alter their underlying philosophy to recognize... that while Canadians need banking services, they do not necessarily need the services of a bank".

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Hamid, Aziz. **A Tale of Two Cities: A Comparison Between Vancouver and Seattle/Tacoma in the Transportation Sector.** October, 1987. Final.

The purpose of this paper is "to basically provide a comparison of the Vancouver region ... and the Seattle region ... note their Ports, Airports and other transportation networks and review deficiencies, if any, as far as Vancouver is concerned and the importance of the region as a whole in the development of Pacific Rim trade and commerce". The author concludes that Vancouver has inferior transport systems and facilities relative to Seattle/Tacoma and recommends, among other things, investigation into land development for a new container facility and an improved air cargo facility.

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Ludwick, Eugene M. and Associates (Winnipeg). **The Canadian Transportation Industry in a Deregulated and Free Trade Environment.** November, 1987. Final.

This study reviews the structure and dynamics of the transportation industry and its role in international trade. The relevance of the impact of domestic regulations and its relation to differential states of regulation among trading nations is discussed along with freer trade in transportation services in the context of an overall trade in services agreement. The authors complete the review with some suggested strategies for transportation firms in the free trade negotiation phase. One conclusion reached is that "efforts to improve Canada's trade in transportation services ... must revolve around arrangements with the United States in the context of the current free trade negotiations and primarily in the area of truck and rail transport". This is mainly because "there is little that can or perhaps should be done in the area of air transport bilaterals which already seek to assure mutually beneficial terms of trade". In addition, "from a marine transport point of view, with the exception of impediments related to Canada's and the United States' ability to haul each other's domestic traffic, Canada has little or nothing to trade in view of our continuing policy towards a deepsea fleet and our reliance on the vessels of other nations".

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McRae, James J. (University of Victoria) with Garland Chow (University of British Columbia). **Canada/United States Trade in Transportation Services.** January, 1989. Final.

This monograph describes the structure and dynamics of the three most important transportation modes - highway, marine and rail - used in the transborder transportation markets between Canada and the U.S. It identifies the most important American non-tariff barriers and concludes that the U.S. marine mode is extremely protectionist and has totally excluded Canadian domiciled ships from the domestic U.S. market in any fashion whatsoever. Immigration and equipment restrictions form a significant economic barrier to Canadian railroads which have been forced to acquire U.S. operating companies in order to compete in transborder business. Faced with similar restrictions, trucking companies have in most instances, opted for interline arrangements with U.S. carriers. The paper also contains a brief analysis of the availability and quality of data on trade in transportation services.

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Osberg, Lars (Dalhousie University), Edward N. Wolff (New York University), William J. Baumol (Princeton) **The Information Economy: The Implications of Unbalanced Growth.** 1989\*

The majority of Canadian workers today are information workers, concerned with the production, distribution and use of information, versus being directly engaged in the production of goods or "enjoyable" services. Information technology, moreover, is changing the workplace in significant ways, including the occupational structure and skill qualifications of the labour force. Yet these are issues about which we still know relatively little in terms of understanding the changes and their consequences.

The authors of this study attempt to partially remedy this deficiency in current knowledge by analyzing changes in the labour force according to an occupational classification rather than the usual industrial classification scheme. They then go on to examine the determination of individual earnings and the distribution of earnings, with particular reference to the impact of higher education on earnings of so-called knowledge workers and the distributional implications of a growth in low-pay, low-skill "data worker" employment versus a growth in high-pay, high-skill "knowledge worker" employment.

The study concludes with a discussion of three major policy issues arising out of the analysis: educational policy, research and development and international trade issues.

\*This recent IRPP study is not part of the Service Industries Studies Program but has been included in this synopsis of research because it was an important background piece to several SISP reports.

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Polèse, et al. **Les exportations de services de gestion et promotion immobilières: sur quoi repose l'avantage concurrentiel des firmes canadiennes.** Publication forthcoming. (Available in French only)

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Taylor, Douglas (Consultant, Toronto). **Trade in Financial Services.** April, 1988. Final.

"There is an ever-increasing concern that no international order or agreement exists ... to regulate the international economic and financial system." The author describes the changing nature of the international financial system, identifies the major issues that must be dealt with in negotiating a trade agreement and then reviews the advantages and disadvantages of using existing international agencies (GATT, OECD, and UNCTAD) as a framework to negotiate a possible agreement. Mr. Taylor concludes that "the application of broad trade in services principles to the specific requirements of a trade in financial services agreement is difficult. Indeed the development of a trade in financial services agreement will need to take into account and satisfy a plethora of different and competing concerns including: the problem that the conceptual understanding of many of the principles necessary to a trade agreement differs among nations; ...the regulatory powers governing domestic and international operations of financial institutions are shifting in scope and degree among nations; ...(and) the structure (and importance) of financial systems and institutions vary from country to country.... Therefore the agreement should deal with the international operating procedures of financial institutions on a functional basis."

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Verreault, Roger et Polèse, Mario (Urbanisation Institut national de la recherche scientifique). **L'exportation de services par les firmes canadiennes de génie-conseil: évolution récente et avantages concurrentiels.** 1989 (Available in French only)

For several years now, the Canadian industry of consulting engineering has been attracting the attention of researchers and politicians. Their interest comes, for the most part, from the hope that the factors contributing to the success of this industry could be applied to enhance productivity in other spheres of activities.

The impression of a flourishing industry stems from the success of the firms in Canada as well as abroad since the end of the war. After experiencing an important period of growth between 1940 and 1960, Canadian firms took on foreign markets and have shown proof of a notable increase in their fees from foreign sources since the beginning of the '70s. Moreover, some of them are now considered to be among the leading consulting engineering firms in the world. Quebec firms make a good showing in this area and the Canadian success rate is largely owing to them. In spite of a decline in international engineering markets in recent years, Canadian firms have managed

to maintain their position and even improve it in some cases: Canadian firms have proven to be highly competitive. The objective of this study is, then, to offer an explanation for the success of Canadian consulting engineering firms on the international scene.

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D. LEGAL, INSTITUTIONAL AND NEGOTIATING ISSUES

Bernier, Ivan (Université Laval). *Trade in Services and the Experience of the European Economic Community*. January, 1987. Final.

The author examines "the European Economic Community approach to trade in services". The paper provides "a general view of how the EEC has incorporated services under the Treaty of Rome, how this approach has functioned, what problems have arisen, and what lessons can be drawn from the EEC experience". A major conclusion of the author is that the experience of the EEC should probably not be used as a model for international trade negotiations; however, there are useful ideas that can be adopted, e.g., an illustrative list of restrictions to free movement of services.

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Bernier, Ivan, Binette, André and Grenon, Jean-Yves (Université Laval). *Labour Mobility and Trade in Services*. February, 1988. Final.

"The objective of this study is to examine the approaches, rules, principles, and procedures that could be developed for the movement of persons under a trade agreement on services." The authors "develop a conceptual framework for looking at the subject of labour mobility and trade in services... examine how labour movement for the provision of services across borders has been dealt with in international trade agreements... discuss the kinds of impediments that affect labour movement in the transborder delivery of services" and then complete the paper by examining "how labour movement can be dealt with in a trade agreement". One interesting observation made is that when "approaching the task of implementing free movement of persons involved in trade in services... it appears essential to avoid fixing objectives that can simply not be met". An example of this possibility is cited. "In the recently signed Canada-U.S. Free Trade Agreement, for instance, some of the objectives proposed with regard to the movement of persons involved in trade in services appear more typical of a common market than of a free trade area, in particular those having to do with the development of mutually acceptable professional standards and criteria. If the attempt made to develop such standards and criteria in the field of architecture fails, chances are that the further sectoral negotiations envisaged under section 1405 will simply not take place."

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Card, Duncan Cornell (University of Toronto). **Canada-United States Free Trade and Canadian Cultural Sovereignty.** (Vols. I and II). December, 1987. Final.

The purpose of this review is to determine to what extent Canada's support measures to its cultural industries are acceptable in terms of international trade law principles established in the context of international and bilateral trade liberalization. The author contends "that general principles of international trade law and experience consistently provide for the protection of national cultures within the context of free-trade arrangements. However, such principles of application prohibit the application of indirect and inefficient trade protections that economically support cultural industries without resulting contributions to that nation's unique cultural identity. Rather, international trade precedent makes it clear that only the non-discriminatory application of direct and effective cultural policy implements will be tolerated within a free-trade arrangement". He concludes that international trade law dictates that "cultural protections must be non-discriminatory because the ability to create and distribute culturally relevant product with public financial support does not depend on the nationality of either the creator or distributor".

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Clark, Melvin G. (Ottawa). **GATT Uruguay Round Negotiations Relating to Services.** March, 1988. Final.

The purpose of this paper is to examine the GATT Uruguay Round negotiations on services. The study, inter alia, summarizes the programme for services adopted by participating countries in January 1987 for the initial phase of the negotiations, comments on the provisions of the agreements that might be negotiated, the types of such agreements and the services that might be included in them. The author notes that although GATT was primarily designed to apply to goods and not services, "GATT provisions apply to services that are physically linked to traded goods such as books, motion picture films and computer tapes... (and) also apply to certain services that are complementary to trade in goods but are not physically linked to the goods such as transportation, banking and insurance". Nevertheless, a substantial part of trade in services is not covered by GATT or any other similar agreement and is vulnerable to similar restrictions as trade in goods are before GATT. "Services trade that is vulnerable to restrictions consists largely of services that are traded without a relationship with goods (e.g., banking, other than that related to trade in goods; professional services such as accounting, architectural, engineering, legal and medical; real estate; telecommunications, data processing and information services; and travel) and services that substitute for trade in goods (e.g., franchising, chartering and leasing). Clark suggests that for these services not covered by GATT, "priority be given to negotiating a general agreement that would apply to virtually all trade in services and supplementary agreements that would apply to the trade of selected service industries (i.e., sector agreements)".

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Everard, James A. (IRPP). **The OECD Codes and Declarations and Trade in Services.** February, 1987. Final.

The Codes and Declarations that have been developed by the Organization for Economic Co-operation and Development during the past decades "to promote the liberalization of goods and service trade" are examined (e.g. Code of Liberalization of Current Invisible Operations, Code of Liberalization of Capital Movements) "to determine their relation to service transactions and trade", and to assess the suitability of their elements for a multilateral agreement on trade. The author provides an overview of the Codes' relevance to key concepts such as "Right of Establishment", "National Treatment" and "Transparency". The author concludes that despite their shortcomings, these codified agreements have made a significant contribution to the elaboration of a conceptual framework for trade in services. "This (GATT) framework is also being used in part as a basis of the service sector negotiation in the trade talks between Canada and the United States. Reliance on elements of the Codes and Declarations is further evidence of their importance in contributing to a multilateral agreement on trade in services."

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Everard, James A. (IRPP). **Trade and Investment in Services: OECD Agreements and the GATT.** February, 1988. Final.

"The central focus of this paper is the work of the Organization for Economic Cooperation and Development (OECD) on trade and investment in services as contained in the OECD Codes, Declarations and Decisions." The author examines "the relationship between trade in services and investment in services from the perspective of various governments, organizations and as contained in various free trade agreements", reviews "the OECD Elements of a Conceptual Framework on Trade in Services and identifies the relevance of the GATT Articles and Codes for services". One general conclusion is that the "Codes, Declarations and Decisions contain important concepts, principles and approaches to trade and investment in services which are relevant to the current GATT negotiations".

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Graham, W.C. (The Centre for International Studies). **A Review of Considerations Relating to Dispute Resolution Mechanisms and Trade in Services.** March, 1988. Final.

This study analyzes dispute resolution mechanisms (DRMs) in international law generally and the GATT and the FTA in particular. "A review of international practice in general, and U.S./Canada practice in particular, reveals then that the judicial resolution of disputes, by which I mean a binding decision made by an independent third party arbitrator or "court", is a technique which is seldom accepted by states.... In the end the most that most states will accept as a means of resolving their international conflicts is some form of the arbitration." The author concludes that "it is unlikely

that we will see the Uruguay Round produce significant move away from a fairly loose and diplomatic framework and in the direction of a judicial or court-like resolution of disputes".

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Grey, Rodney de C. **New Rules for International Services.** August, 1988.  
Draft. Publication forthcoming.

The intent of this study is "to make clear what are the emerging issues likely to arise in the Uruguay Round of multilateral trade negotiations and what are the issues for Canada" related to services issues. The author begins by introducing a formal proposal put forward by the U.S. in November, 1987 for consideration by its trading partners entitled "Concepts for a Framework Agreement in Services". After analyzing the proposal, Mr. Grey reviews trade policy aspects of the world economy and international regimes for services such as GATT, OECD Codes and existing bilateral and sectoral agreements. Various issues and proposals are discussed with emphasis on the information, air transport, shipping and financial services sectors. A conclusion reached by the author is that a "general services negotiation ... could create some real risks for Canada and for other small countries". One example he cites is that "it is entirely possible for governments ... to devise unworkable agreements about services". He suggests that "the reality of negotiation about services is at the sectoral level".

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Grey, Rodney de C. **Services and Intellectual Property Rights.** March, 1988.  
Final.

"The purpose of this paper is to enquire into the interest of the services sector, or the services industries collectively and individually, in the negotiations now beginning in Geneva under GATT auspices, to strengthen the international regime of intellectual property rights (patents, copyright, trade marks, trade secrets, etc.)." Many developing countries "believe that a less rigorous intellectual property rights system is necessary to insure that developing countries have adequate access to the technology developed in industrialized countries". The author concludes that "from the point of view of U.S. producers of intellectual property a great deal has already been achieved by the combination of bilateral pressure, in regard to export markets, and by more rigorous use of U.S. trade and intellectual property rights legislation, in regard to imports." These services industries clearly have a major interest in the effective working of the international property rights system, but it is not evident that they have any real interest in the pursuit of negotiations in Geneva, particularly if that turns into a debate about 'special and differential treatment', rather than into a discussion of how U.S. retaliatory authority should be integrated into the GATT framework.

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Kierzkowski, Henryk (Graduate Institute of International Studies, Geneva).  
**Trade in Services: The Negotiating Interests, Objectives and Concerns  
of the European Economic Community.** February, 1988. Final.

This survey describes the current services export orientation of the European Economic Community (EEC) member states and summarizes the provisions of the Treaty of Rome with respect to services as well as their application to date. The paper also endeavours to speculate about what position the EEC will take in upcoming multilateral negotiations and what will motivate this position. The author suggests that "the process of negotiations on trade in services will be protracted and very painful" - one reason being that "the EEC is certain to insist on its unlimited power to regulate service industries for other purposes than protection and on the need for foreign countries to meet EEC standards".

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Krasnick, Mark and Chartrand, Mark (Swinton & Co., Vancouver). Canada's  
**Negotiations for International Agreements on Trade in Services:  
Federal-Provincial Jurisdictional Issues.** May, 1987. Final.

This review considers the legal alternatives the federal government has to proceed to negotiate, sign and implement an international trade agreement such as the Canada/U.S. Free Trade Agreement and multilateral trade agreements. Of the three legal choices for treaty implementation - a constitutional amendment, federal legislation to implement the treaty or reaching agreement with the provinces prior to treaty ratification - it is recommended that "the federal government should be bold and pass treaty implementing legislation. The other two options will be painstakingly slow...". The authors believe that if the agreement is broad and includes service sectors both within and outside provincial jurisdiction and the legislation mirrors the agreement, legal precedents exist that will reinforce the federal government authority in this matter.

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Mark, Janette (North-South Institute) and Helleiner, Gerald K. (University of Toronto). **Trade in Services: The Negotiating Concerns of The  
Developing Countries.** December, 1987. Final.

This study is largely a factual account of positions taken on services by certain developing countries and the UNCTAD Secretariat, who opposed the inclusion of services in the Uruguay Round discussions. An assessment of the rationale for this position follows. The second part of the paper looks at conceptual and coverage considerations which developing countries may be concerned about, and proposes negotiating options and strategies for the developing countries. An interesting point raised by the authors is that the draft of the U.S.-Canada Free Trade Agreement "recognizes the need for 'temporary entry of business persons and recognized professions and persons engaged in sales or after sales service functions'". This "limited liberalization of labour flows" was opposed by many U.S. labour interests

because of the "spectre of eased immigration flows of a more general character". This may prove to be "an important precedent of interest to developing countries" because "the remitted income of their nationals working abroad is a major source of foreign exchange (in the same way that earnings on foreign direct investment are for many developed countries). Moreover, since developing countries are currently more likely to export relatively unskilled and other labour-intensive services than other kinds, they may be interested in developing liberal trading rules for such service sectors as personal services, construction, engineering, data processing and various types of consultancy."

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Semkow, Brian W. (Consultant) A Study of Foreign Financial and Legal Services in Japan. November, 1987. Final.

This paper considers the approaches Japan may take in the negotiations under GATT on the 'right to establish' principle. It analyzes the evolving positions Japan has taken outside the GATT negotiations with respect to two of its own service industries, the financial and legal services industries. The author concludes that "Japan does not unequivocally follow any one approach to the right to establish.... If and when the Uruguay Round proceeds beyond the first step of the negotiation and implementation of a multilateral framework agreement on international services trade to the second one of elaborating specific sector agreements to which countries could subscribe individually, Japan will depart from the pure approaches of national treatment and reciprocity, striking a balance between the interests of reaching specific sector agreements and respecting current service industry practices and regulations."

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Siegel, Brenda (Consultant, Ottawa). The Internationalization of Service Transactions: The Role of Foreign Direct Investment in International Trade in Services. January, 1987. Final.

This paper undertakes "to generate a statistical basis from which to argue that it is investment, not trade issues, which are important in any further internationalization discussions or negotiations on services". It looks at factors to explain the increased international investment in services and some barriers. An interesting section of the paper is the discussion of the appropriateness of current international models, e.g., OECD, GATT, ICAO, the UN Commission and Centre on Transnational Corporations, as fora to handle the trade-foreign direct investment (FDI) linkage in the service sector, and progress to date. Important issues flagged for future research include: "how the growing role of trade in data services in its own right can enhance the international tradeability of other specific services... therefore diminishing the need for FDI"; "the particular relevance to the service trade in general of the protection of intellectual property and to the information service industry specifically of the inadequacy of copyright protection for software";



and, "how to incorporate the FDI aspect of service transactions into any multilateral discussion of international service trade".

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Sims, Margaret L. (Coalition of Service Industries) and Rivers, Richard R. (Akin, Gump, Stauss, Hauer and Feld, Washington, D.C.). **The International Trade in Services Agenda: Origins, Evolution and Agenda.** January, 1987. Final.

The United States has been the major proponent for the inclusion of services on the agenda of the current GATT negotiations. The authors "discuss the developing role of services in the world economy and the history of the movement that brought services to its place of significance in U.S. domestic and foreign policy". The review places "a particular emphasis on the role of the U.S. private sector, the Congress and the Administration" in the growing recognition of the importance of the services movement. Turning to the outlook for services trade, there are several substantive issues which must be addressed when considering an international agreement on trade in services. The authors suggest that "principles may be borrowed from the present GATT system.... currently the only multilateral trade organization capable of dealing with the issue of liberalizing international services trade.... to address these substantive trade in services issues in future negotiations" and identifies them as follows:

- non-discrimination and most-favoured-nation treatment;
- national treatment and the right to establish;
- transparency;
- dispute settlement process; and
- balance of concessions.

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Steger, Debra P. (Fraser and Beatty, Ottawa). **Constitutional Implications of the Implementation in Canada of a Trade-In-Services Agreement.** June, 1987. Final.

This investigation examines the constitutional implications for Canada of the negotiation and implementation of a bilateral/multilateral international agreement involving trade in services. Constitutionally, the Government of Canada has the power to negotiate, sign and ratify international agreements. However, "the question of who has the authority to implement the provisions of an international agreement requiring legislation is complex under Canadian constitutional law". After reviewing the issues and citing several precedents, the author concludes that "federal legislation implementing an international trade-in-services agreement, if drafted correctly, could be upheld as valid federal legislation under the federal trade and commerce power". However, the author notes that the federal power to legislate implementation is not assured or conclusive and a court decision granting that power would "require a bold, liberal interpretation of the federal trade and commerce power".

Steger, Debra P. (Fraser and Beatty, Ottawa). **National Treatment and Market Access: Issues in Trade in Services.** August, 1988. Final.

"The objective of this paper is to examine the implications of international legal obligations to apply the principle of national treatment to trade in services." The author reviews "the services provisions of the Canada-U.S. Free Trade Agreement and the experience in the European Economic Community with liberalization of services trade". The study concludes that "the application of the principle of national treatment is not in itself sufficient to achieve trade liberalization.... National treatment is nevertheless an important first principle since the most severe restrictions are often directed at foreign nationals in order to protect local service industries. The application of that principle is particularly important where only a partial liberalization of trade in services is envisaged, such as in the Canada-U.S. Free Trade Agreement."

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Taylor, Douglas (Consultant, Toronto). **UNCTAD and Trade in Services.** March, 1987. Final.

"UNCTAD has produced a number of reports studying services sector activity in developing economies, and has prepared a variety of multilateral agreements dealing with services and development." In this paper, Mr. Taylor reviews some of the most prominent of these agreements, including the U.N. conventions on:

- The Code of Conduct for Liner Conferences;
- The International Multimodal Transport of Goods; and
- Restrictive Business Practices Code.

The author concludes that "the multilateral agreements, with a couple of exceptions ... provide little to the trade in services debate" and do not provide "a basis for other trade in services agreements". Mr. Taylor bases this conclusion partially on his view that the agreements identify too closely "with the concerns of the developing countries" for general application in multilateral trade agreements on services.

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### III. STATISTICS CANADA

#### Service Sector Statistics

##### A. DOCUMENTATION OF SERVICES

Statistics Canada. Introduction to Statistics Canada Documentation of Services. January, 1988. Published.

This study consists of an overall introduction and five volumes containing information about the statistical programs covering services and the services-producing industries. Important objective information about the data is supplemented by subjective evaluations. These volumes provide additional information about concepts, sources, methodology, coverage, other classification dimensions and availability of data items. The introduction summarizes the contents of each volume and the uses to which each can be put.

##### Service Industries in the Business Sector - A Synoptic Profile. (Volume I)

This volume presents major data series for each service industry: GDP, implicit price deflators and employment. Statistical tables and graphs include information on the economy as a whole, total goods producing industries, total services producing industries and total non-business services industries. Business service industries are further disaggregated into 34 industries (SNA industry codes). A subjective assessment of the quality of the estimates is provided for monthly GDP at Factor Cost and for Input-Output tables - in both current and constant dollars.

##### Source and Methods for Service Industries in the Canadian Input-Output Tables. (Volume II)

"This report is concerned with sources of data and the methodology used for estimating outputs and inputs for service industries covered in the annual input-output tables of the Canadian economy. Only those service industries that are defined as business sector industries are covered". The publication provides estimates of current GDP for: Transportation, Storage and Communication; Wholesale and Retail Trade; Finance, Insurance and Real Estate; Community Services and Business and Personal Service. An evaluation of the 1983 estimates of output, inputs and GDP of these industries is given. The deflation methodology used to produce estimates in constant prices is also described.

##### Statistical Profile of the Service-Producing Industries. (Volume III)

"This study provides summary information of two broad kinds about the service-producing industries - information about the characteristics and coverage of existing statistical programs and information about the characteristics of the service-producing industries.... The characteristics of the service-producing industries are to some extent provided by the

information about the surveys: the number of units and revenues or production values also describe the size and importance of each industry. Two additional sets of data - the degree of foreign control and concentration - are also included." Ten classifications of service industries are identified in the tables presented: Transportation and Pipelines; Storage and Warehousing; Communication and Other Utilities; Trade; Finance, Insurance, and Real Estate Operators; Business Services; Education Health and Social Sciences; Accommodation and Food; Amusement and Recreation; and, Personal, Membership Organization and Other Services.

**Statistical Data Collection and Publication Program for Service Industries. (Volume IV)**

This report presents a series of tables showing "current survey coverage of all service-producing industries displayed in 1980-SIC-E order." The information summarized in the tables for the thirty classifications of service industries include: SIC code and title; relevant survey title; questionnaire titles and numbers associated with each particular survey; references to Statistics Canada publications containing the data; and the periodicity of the data/publication.

**Canada's International Trade in Services: Overview of Statistical Developments. (Volume V)**

This overview "first describes the data which are currently available on Canada's international trade in services, and the various sources of information used in its compilation". It then describes the current and anticipated work programs "to further develop and improve available detail coverage and classification". A statistical appendix covers major aggregates for 1961-1986 and Business Services, Selected Years, 1969-1985.

**B. RESEARCH REPORTS**

Bernstein, Jeffrey I. (Carleton University). **Measuring the Real Output and Productivity of Chartered Banks and Trust Companies.** March, 1988. Published.

"The purpose of this study is to develop a methodology for calculating output at constant prices for chartered banks and trust companies." After establishing a definition of bank output at current prices, the problem of measuring output at constant prices is analyzed. Two methodologies are discussed, only one of which is supported by presently available data. Illustrative results for chartered banks ("Schedule A" banks) are included.

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Despatis, Jocelyne (Consultant). **Public Accounting and Management Consulting Industries: Report on Exploratory Research.** July, 1987. Published.

This exploratory research reviews "issues relevant to the development of a survey mechanism that will measure and track the economic impact of these two industries as part of the Canadian system of national accounts". The author describes the public accounting and management consulting industries and presents "information and recommendations for subsequent research, including a comprehensive taxonomy of services with graphic depiction of areas of activity where these two industries overlap with each other, and with specialists in other industry classifications". The report concludes that it is important to consider these industries as two separate entities and provides a means to overcome the problem of overlapping.

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Geehan, Randall R. and Bernstein, Jeffrey I. (Carleton University). **The Measurement of Output and Productivity in the Canadian Insurance Industry.** March, 1987. Published.

The main purpose of this study is "to construct output and productivity measures" for the insurance industry - specifically life insurance and property and casualty insurance. It "contains a review of related research, including reference to the practices of the statistical agencies in other countries plus an analysis of the particular problems of measuring output in the insurance industries". The authors note that "in the absence of imputations, GDP originating in banking and casualty insurance is anomalously low" and recommend a set of imputations similar to those for banking. While "the existing data from the Department of Insurance are considered to be adequate", it is recommended that a number of improvements in the data base for property-casualty insurance be made.

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Geehan, Randall R. (Carleton University). **Measuring the Real Output and Productivity of Investment Dealers and Brokers.** March, 1988. Published.

This paper estimates the real output of security brokers and dealers for the period 1971-86. Output is measured in terms of specific services performed. About fifty different activities are grouped into three categories: (1) stock exchange transactions; (2) underwriting activities; (3) miscellaneous activities. These services are valued at base year (1981) prices. Real output is then equal to industry revenue valued at 1981 prices. The resulting pattern of industry output fluctuates considerably over time, with stock market commissions the least stable component.

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Meguerditchian, A. (Statistics Canada) **International Trade in Services: Statistical Issues**. 1988. Published.

"This paper begins with considerations for the development of a statistical base, covering definitional issues, measurement problems as well as issues related to the organization of the statistical database. The paper then provides a review of the IMF framework and work undertaken at international levels by the U.N., Eurostat (EEC) and the OECD. It concludes by proposing a joint short-term and long-term approach.

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Statistics Canada. **Contracting Out: An Experimental Survey**. Publication forthcoming.

IV. OTHER BACKGROUND STUDIES

Dobell, Rodney (IRPP), McRae, James J. (University of Victoria) and Desbois, Martine (IRPP). **The Service Sector in the Canadian Economy: Government Policies for Future Development.** August, 1984. Final.

"The creation of income and wealth in the economy", this paper suggests, "is now more dependent on human capital than physical capital, or nature's endowment of resource capital. This transition in thought towards the fundamental importance of the skill, dexterity and knowledge base of the population has profound ramifications on many aspects of public policy, but especially the set of policies related to social and educational concerns." The paper recommends a fundamental re-examination of government domestic policy on services and for co-ordination between domestic policy and trade policy regarding services.

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Dobell, Rodney (IRPP), et al. **The Contribution of Service Attributes to Trade Performance.** March, 1985. Final.

"This exploratory study attempts to identify channels by which service activities and service attributes contribute to export performance and prospects, and to ascertain the significance of particular service attributes in contributing to that end." The authors address "three separate and distinct literatures (international trade theory and the modelling of export performance, international marketing and business strategy, and Lancasterian demand theory) for the purpose of drawing from them ideas that may be common to all three in order to shed new light on the issue of services and their role in export achievement". "The message of the report ... is that if Canada is to compete in the international marketplace, it must be on the basis of innovation, design, quality, timeliness, and a package of services which gives it products a unique appeal - not simply on the basis of appeal to a competitive position founded on relatively low wages and a finely-controlled cost structure." The authors also stress "the importance of a much extended effort in primary data capture and classification if the challenges facing Canada in achieving improved export performance are to be understood".

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Grubel, Herbert G. (Simon Fraser University), Hammes, David (The Fraser Institute) and Walker, Michael (The Fraser Institute). **The Evolution of the Service Sector: Major Conceptual Questions and Issues.** August, 1986. Published.

Institute for Research on Public Policy. **The Evolution of the Service Sector.** August, 1986. Final.

At the beginning of the Service Industries Studies Program (SISP), the Department of Regional Industrial Expansion posed a series of questions to be addressed by both The Fraser Institute and the Institute for Research on Public Policy. These papers are the Institutes' initial responses to these questions:

- 1) In the postwar period, which major service industries groups, during different relevant sub-periods, contributed most to service sector growth?
- 2) What are the major factors explaining the relative rapid growth and evolution of the service sector in the postwar period?
- 3) Have the service industries been engines of growth in the economy? In what sense do they create wealth?
- 4) What has been the contribution of service industries growth to regional development? Are service industries footloose?
- 5) What have been the effects on employment and occupational skills of the rapid growth of the service sector and what are the implications for the future?
- 6) How important a role do economies of scale and scope play in determining the performance of the service industries? What has been the role of human capital in the development of the service sector?
- 7) What is the impact of technological advance and the information revolution on job creation and growth in the service industries?
- 8) How would the adjustment process to Canada/U.S. free trade likely differ from that expected in the case of goods producing industries?
- 9) What are the linkages between productivity and growth in the service sector and that in the goods producing sector?
- 10) What are the prospects that the service industries will continue to grow relatively rapidly over the next 10 years as they have in the past? Which service industries have the greatest growth potential?



11) What are the implications of the growth in domestic service industries for international trade in services? Is there a need for free trade and a GATT in services?

12) What effects will tax reform have on the services industries?

The responses to these questions are, of necessity, brief and preliminary as the purpose of the SISP was to explore these issues in some detail. Many of the questions are addressed more fully in the studies commissioned by the Institutes.

The IRPP also introduces the reader to the service sector and its origins. It looks at trends in the development of the service sector, structural features underlying the post-war evolution and a number of public policy implications.

## V. WORKSHOPS

Since 1986, a number of workshops have been sponsored by the various organizations involved with the Service Industries Studies Program to present and discuss both preliminary research findings of studies in progress and proposals for further research. Many of the research papers presented at these workshops have now been completed and are summarized earlier in this synopsis. The proceedings of the workshops have been (or are being) published as follows:

WORKSHOP # 1 - Held in Vancouver, British Columbia. October 16-18, 1986.

Publication:

Grubel, Herbert G. (Simon Fraser University) Editor. **Conceptual Issues in Service Sector Research: A Symposium.** January, 1987. Published.

This Workshop, sponsored by the Fraser Institute, focused on a number of preliminary research papers that provided a broad overview of some of the conceptual and empirical issues which researchers hoped to develop during the course of the Studies Program. Approximately fourteen papers were presented and discussed at the Workshop and summarized in the Proceedings.

WORKSHOP # 2 - Held in Toronto, Ontario. June 2-4, 1987.

Publication:

McRae, James J. (University of Victoria) and Desbois, Martine (IRPP) Editors. **Traded and Non-Traded Services: Theory, Measurement and Policy.** January, 1988. Published.

This workshop provided an opportunity to present and summarize some of the SISP research in progress at that time and to assess some of the practical problems of data and analysis which confront the initial aspirations in the research plans. The proceedings of the workshop outline twenty-five papers and presentations and a summary of the discussions held on each topic.

In addition, the IRPP co-sponsored a workshop in February, 1986 on the topic of Trade in Services as part of an ongoing series of seminars on current issues in trade policy. Although this workshop was not a part of the SISP as it was held a number of months before the program began, the reader may be interested in the papers presented at the workshop. The proceedings, available from the IRPP, are entitled Symposium on "Conceptual and Data Issues in Trade in Services".

WORKSHOP # 3 - Held in Ottawa, Ontario. March 9-10, 1988.

Publication:

Industry, Science and Technology Canada. Service Industries Studies Program  
Workshop Proceedings. Publication forthcoming.

This workshop was organized by Industry, Science and Technology Canada to discuss the drafts of completed research studies and to assess the implications of the research for public policy. The notes from this workshop will be available at a later date.

Statistics Canada also held a one-day workshop on March 11 to review progress on their research. The Proceedings, entitled, DRIE/Statistics Canada Service Sector Symposium: Statistics Canada Workshop, are available from Statistics Canada.

SERVICE INDUSTRIES SECTOR STUDIES PROGRAM  
SYNOPSIS OF RESEARCH

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