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Rural
Restructuring
Group

RESTRUCTURING INDUSTRIAL PRODUCTION AND TRADEABLE SERVICES IN RURAL CANADA IN THE 1990'S

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Brandon, Manitoba

2-5 July, 1992

Richard C. Rounds, Editor
Director, The Rural Development Institute
Brandon University

The Canadian Agriculture and Rural Restructuring Group
1993

"A Program of Research, Dialogue and Dissemination On the Future of Rural Societies in Western Industrial Nations"

ABOUT ARRG

The Brandon Rural Policy Seminar was held under the auspices of the Agriculture and Rural Restructuring Group of Canada (ARRG). ARRG was founded informally in Regina in 1987. It is a not-for-profit group of rural social scientists and policy analysts with particular commitment to improvements in the economic and social condition of rural people. This commitment is expressed in research, program design and conferences. The focus is on households, businesses, industries, communities and governments to develop economic opportunities and to create policy awareness.

ARRG conducted its first four years of seminars and conferences with ad hoc support from Agricultural Canada, Employment and Immigration Canada, the Canadian Federation of Agriculture and the Universities of Quebec, Alberta and Guelph plus support from rural communities and other private and public organizations. ARRG is grateful that the Donner Foundation of Canada provided major funding during the formative years of the group. Commencing in 1993, the Social Science and Humanities Research Council of Canada is supporting ARRG through a Strategic Grant.

The ARRG Seminar (Workshop) and Conference Schedule 1989-1993

1989 February, Ottawa, ON. National Seminar; Sustaining rural development.
October, Saskatoon, SK. National Conference; Sustainable rural communities in Canada.

1990 March, Ottawa, ON. National Seminar; Globalization and agricultural restructuring.
October, Ottawa, ON. National Conference; The data base for monitoring and researching rural restructuring.

1991 April, Coaticook, PQ. National Seminar; Development in resource dependent and single industry rural places.
October, Camrose, AB. National Conference; Stimulating rural economies for the 2000's.

1992 June, Brandon, MB. National Seminar; The potential for manufacturing and tradeable services in rural economic diversification.
October, Huron County, ON. National Conference; Manufacturing and the service sectors in rural development strategy.

1993 May, Merrickville, ON. National Seminar; Building Partnerships for Rural Development, Lessons from Past and Present Experiences, Future Trajectories.
October, Wolfville, NS. National Conference; Development Strategies for Rural Canada; Evaluating Partnerships, Jobs and Community.

ABOUT RDI

The Rural Development Institute of Brandon University commenced activities in 1989, with a mandate to coordinate and conduct research related to rural Canada. The Director was to work in a cooperative manner with all levels of government, rural groups and citizens, and the university community. RDI responds to information requests from five sectors of rural society: 1) an External Advisory Committee (EAC) comprised of representatives of rural organizations, 2) the Manitoba Department of Rural Development, 3) the University community, 4) other federal and provincial Departments dealing with rural issues, and 5) rural towns and villages. Once the research agenda is set, RDI develops proposals to address issues, recruits qualified researchers, acquires funding, assists the research process, and publishes and disseminates results. In 1991, RDI assumed the responsibility of evaluating, editing and publishing proceedings or individual papers for ARRG. A list of recent publications appears on the back cover of this paper.

ACKNOWLEDGEMENTS FOR THE BRANDON SEMINAR

The Agricultural and Rural Restructuring Group deeply appreciates the effort of many institutions and individuals who helped make the Brandon Seminar successful. The Rural Development Institute and Brandon University were pleased to host ARRG. Special thanks are extended to the Manitoba Department of Rural Development not only for continuing support of RDI but also for special support for the ARRG Seminar. Special credit for organizational efforts go to Joan Rollheiser, Maxine Wenger, Diane Ripley and Kevin Hutchings of Brandon University.

The Seminar could not have been held without the financial support of its patrons. The response by our patrons endorses the seriousness of economic restructuring for the well-being of rural people. The patrons are Western Economic Diversification, Forestry Canada, Employment and Immigration Canada, and the Social Sciences and Humanities Research Council of Canada through an Aid to Small Universities Grant to Brandon University.

The following ARRG members assisted in organization of the Brandon Seminar program: Peter Apedaile (University of Alberta), Ray Bollman (Statistics Canada), Philip Ehrensaft (Universite du Quebec a Montreal), Dave Freshwater (University of Kentucky), Tony Fuller (University of Guelph), Andre Joyal (Universite du Quebec a Trois Rivieres), Richard Rounds (Brandon University), Jack Stabler (University of Saskatchewan), Fran Shaver (Concordia University), and Lynn Thurston (International Development Research Centre).

PREFACE

The Canadian Agriculture and Rural Restructuring Group (ARRG) hosts annual seminars (workshops) on specific issues in rural communities across Canada. In June of 1992, ARRG hosted a seminar in Brandon, Manitoba, on "The potential for manufacturing and tradeable services in rural economic diversification." Members of ARRG were joined by senior policy analysts, local government representatives, regional entrepreneurs and farmers. The meeting consisted of formal presentations followed by informal small groups and plenary discussions. The seminars are intended to bring together ideas that will be refined for the fall national public conferences sponsored by ARRG.

This publication includes six of the papers presented during the seminar, and is the third set of ARRG Working Papers to be published. The ideas presented are those of the various authors and questions or comments on any given issue should be directed to the authors. ARRG invites debate and welcomes all ideas, concepts and innovations. The Working Papers Series is meant not only to communicate what happened at Brandon, but also to carry forward the debate on how best to maintain and improve rural life in Canada. All working papers are reviewed by other ARRG members, with primary editorial responsibility falling to those named as editor(s). Joan Rollheiser, Administrative Assistant at the Rural Development Institute, prepared the manuscript for publication.

FORWARD

The members and associates of ARRG represent a wide range of backgrounds and interests in rural society. The subject to be addressed at each annual spring workshop/seminar and fall public conference determines which individuals will be asked to prepare and present position papers on issues. The only common threads among years are the rural emphasis of all materials, and the fact that theoretical considerations always are welcomed. The topic for 1992 was tradeable services and manufacturing in rural Canada.

The six papers selected for publication herein are divided into three groups, each of which contain two papers. The first two papers concern the theoretical and practical settings in which rural services and manufacturing must develop, and to which they must respond. The second set of papers trace the historical evolution of both the macro and micro-economic circumstances that have shaped rural enterprise during the last 50 years. Although based on experiences in the United States, many parallels exist in Canada. The final two papers provide case studies of rural enterprise in Quebec and Saskatchewan. In total, the group of papers reflects both the complexity of rural development, and the variety of viewpoints represented by ARRG members and associates.

In the first paper, William Coffey presents an interesting synopsis of "The Impact of the Growth of Tradeable Services Upon Non-metropolitan Areas." Growth in services during the last 50 years has resulted in between 60 and 75 percent of total employment being involved in the sector in developed countries. Continued rapid growth indicates long-term structural evolution that is dramatically changing production systems. The trend also has impacted present patterns of uneven spatial economic development, and raised hopes that "footloose" service industries may locate in non-metropolitan areas and assist rural development. Coffey identifies different classes of services, emphasizes the role of tradeable services in local economies, explains the relationship between producer services and primary manufacturing sectors, investigates locational dynamics of aggregated economic sectors, and explores topics in light of economic development of rural Canada.

Distributive services, producer services, consumer services, not-for-profit services and government services are discussed. This is followed by an expose on the interdependence of goods production and service production. What is produced and how it is produced are key elements within the emerging "self-service economy." The relationship between goods production and services is intimate and complicated. Locational trends help pin-point geographic distribution of service industries and allow definition of patterns of decentralization or deconcentration. Coffey views patterns in light of both population categories and relative location. Ten synthetic regional categories are compared. He concludes that many producer services currently are not locationally flexible, and are concentrated in metropolitan regions. The potential impact of telecommunications is reviewed. A variety of factors apparently mitigate against the role of telecommunications as a potential decentralizing force for services.

In the second paper, Apedaile, Freshwater and Ehrensaft present a discussion on government programs and rural restructuring and their impacts on rural areas and single industry towns. The purpose is to develop proactive rural development policy in Canada that recognizes the linked evolution of urban and rural economies. They argue that extra-market forces may adversely and disproportionately affect rural economies, resulting in non-optimal allocation of societal resources.

Canadian government views itself as a legitimate partner in distribution of wealth and opportunity, while the United States government is most concerned with maintaining equality of opportunity, regardless of competitive advantage among players. These two very different approaches to a "level playing field" often are not compatible. New trade pacts may adversely impact the subsidized rural industries of Canada owing to identification of subsidies as "unfair" by U.S. referees. Internally, Canadian interprovincial trade barriers are significant in the future of rural production. The authors argue that survival must be based on constant readjustment of institutions and enterprises to allow sustainable production.

Rural areas are vulnerable in the national economy. Resource dependency limits portability and flexibility, and both alternatives and information may be lacking. The increasing pace of change associated with globalization shortens response time. Also, resource dependent economies are based on "growth," and the new realities call for "development." This bridge is a major barrier that must be crossed to achieve stability and sustainability in rural regions.

Options for rural regions include either diversification or a new economic base. Both present problems and opportunities, and economies of scale mitigate against rural markets. As the authors state "... when [market] pressures are added to the bifurcation of the manufacturing and service sectors and to the dynamics of demand, the ability of rural communities to diversify is seriously constrained." The very forces that have contributed to rural economic problems must be used to revitalize rural areas: transportation systems, education and training, global trade and deregulation. Following a discussion of competitive pressures and rural bargaining power, Apedaile, Freshwater and Ehrensaft address market balance and government influence on rural economies. Sectoral, social and macroeconomic policy issues are addressed.

Buttel, McMichael and Christopherson discuss the need for and parameters affecting rural policy in the third paper. Particular attention is paid to indirect rural policy, or that which is not directed at rural areas but has major impact in rural regions. Focus is on the United States experience.

The changes in rural conditions and policies following World War II is addressed in a section entitled "The New Context of Rural Policy." Tracing the institutions and processes that evolved during the 1930's and 1940's, the authors trace shifts from competitive capitalism, to Fordism and organized capitalism. These led to the social and economic forces that affect rural policy today, and were embodied in an economic logic and a political logic. National regulation of economies and the rise of multinational firms were major influences.

Both agricultural and non-farm rural people were influenced by change. Agricultural commodity programs extended state intervention to the farm, and industrial influences began to restructure farming (technology, chemicals, mass production of undifferentiated commodities, etc.). Changes in rural labour changed the rural social and economic landscape and led to decoupling of agriculture and general rural economy. Rural policy became increasingly based on transfer policies, regional development, provision of infrastructure and service delivery.

The post-War order began to disintegrate during the 1970's. Slower growth in economies and declining working class political power have led to stable or declining incomes, with greatest impacts in the inner city and rural areas. National economies also have weakened as international financial exchanges now dominate trade in goods. World trade blocks have replaced national economies.

Agriculture, however, has not followed industrial changes and is mired in the pattern of mass production of undifferentiated products. This explains the persistent "farm crises" in OECD nations since the early 1980's. World trade patterns also have been altered by trade disagreements in the agricultural sector. The demise of national abilities to prop up marginalized rural non-farm economies was accompanied by disproportionate impact on low-technology rural-based mass production industries. Many rural industries have moved off-shore or to lower-wage regions. Rural areas lost both absolutely and relative to metropolitan areas during the 1980's.

The authors conclude the paper with a discussion of new trends affecting rural policy. Internationalization and the deregulation or re-regulation of markets are considered.

Lobao focuses on rural communities and the well-being of rural residents, and their relationships with industrial restructuring, in the fourth paper. Societal well-being is viewed through the concept of mass production and mass consumption, and the economic ramifications for rural households in the United States during the 1960's and 1970's. Various economic circumstances are assessed in terms of their effects on rural well-being. Farm policy inadequately served as rural development policy, and an urban-based economic development emphasis combined to marginalize rural areas.

During the 1970's dramatic shifts occurred in movement of capital and spatial aspects of industrialization. Workers were less sheltered from market forces, and rural well-being suffered. Many patterns remained unchanged, but rural areas with "large business establishments lost ... opportunities because unionization, income transfers, and education had diminished capacity to shelter workers in the face of economic restructuring." In general, however, rural areas performed well during the 1970's owing to national economic growth.

Lobao looks at many other programs, ranging from tax incentives to business incubators and training programs. Various effects occur in rural areas, but in general, rural areas did not perform as well as urban areas during the 1980's. The progression of restructuring in productivity is traced to the present.

The fifth paper presents a case study of "The Impact of Free Trade on Small and Medium Enterprises in Three Quebec Regions." The products that likely would be influenced most by the FTA were identified and surveyed by Andre Joyal. Based on returns from 242 firms (144 in rural areas), the attitudes and actions of business owners/managers in rural areas are compared to their urban counterparts. Their was no significant rural-urban differences in attitudes toward the FTA, and only 29 percent of firms have taken action either to take advantage of, or protect themselves against the agreement. Strategies used include new products, product improvement and price reduction. More rural enterprises are involved in exporting than are urban firms.

The vulnerability of enterprises to the FTA was measured by both a sensitivity index and dynamism. Rural enterprises receive less benefit from government support programs, primarily owing to lack of information. No differences are evident in use of commercial or technological scans, investments, or strategic behaviours between rural and urban firms. Joyal concludes by stating that the smallest enterprises are not in jeopardy, but medium-sized firms are most affected by the FTA and may need some special support to survive.

In the final paper Stabler and Molder discuss the Manufacturing-Service Linkage in Saskatchewan. Data from 1971 to 1986 show growth in manufacturing and services as the Saskatchewan economy diversified away from primary production. The authors surveyed the emerging manufacturing sector in rural Saskatchewan to define linkages with the export service sector. They discovered that much business service activity is used locally, but that many Saskatchewan firms are export-oriented. The paper discusses the alliances of public, quasi-public and business interests that contribute to centres of intelligence and business services. Discussion centers on the roles of the Saskatchewan Research Council, public utilities, co-operatives and educational institutions.

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THE IMPACT OF THE GROWTH OF TRADEABLE SERVICES UPON NONMETROPOLITAN AREAS

Introduction

One of the major phenomena marking the economies of developed countries in the latter half of the twentieth century has been the growth of service industries. The provision of services has replaced the production of goods as the principal form of economic activity in these countries, where service industries currently account for between 60 and 75 percent of total employment and generally more than 50 percent of total economic production (gross national or domestic product). In addition, the growth of services, whether measured in employment or in output, has been very rapid over the last two decades, accounting for approximately three-quarters of all new jobs created. These trends are indicative of a long-term structural evolution that is fundamentally modifying the production systems of advanced economies.

Further, such trends may have considerable impact upon present patterns of uneven spatial economic development that characterize all developed nations. For example, a widely held view suggests that service industry growth will ultimately aid in the solution of the longstanding economic development problems of lagging (principally nonmetropolitan) regions. At the root of this optimism is the perception of services as relatively footloose; that is, as being free of the locational constraints that have made such regions relatively unattractive to investment in more traditional economic activities such as manufacturing.

This paper explores a number of issues related to the growth of service industries in the Canadian context, with particular emphasis upon the implications for nonmetropolitan areas. The following section makes the distinction between different classes of services, and emphasizes the role of tradeable services in the growth of a local economy. Next, the relation between producer services and the primary and manufacturing sectors is examined. Section 4 then summarizes the locational dynamics of a set of aggregated economic sectors in Canada for the period 1971-1981. Finally, the implications of the above topics for the economic development of nonmetropolitan areas is explored.

The Role of Tradeable Services in Economic Development

Perhaps the principal attribute of "the service sector" is its vast degree of heterogeneity. In fact, the very notion of "a" service sector represents a profound ecological fallacy. Different service activities are characterized by different rates of growth, by different levels of capital and human resource utilization, and by different growth stimuli and growth constraints. In addition, in "the" service sector one finds part-time, intellectually unrewarding and poorly paid positions juxtaposed with stimulating and highly remunerative employment; "the service sector" represents one of the most concrete examples of a dual labour market. The notion of the rise of the service sector as a monolithic shift within the economy is thus an unwarranted simplification.

Most national accounting frameworks allocate to the service sector all activities not included in the three goods producing sectors: primary activities (agriculture, fishing, mining, etc.), manufacturing and construction. A wide range of specific typologies can be employed to distinguish between similar types of service activities. For example, it is common to differentiate distributive services such as wholesale and retail trade, communications, transportation and public utilities; producer services[1] such as accounting, legal counsel, management consulting, and financial services; consumer services such as restaurants, hotels, beauty salons and dry cleaners; not-for-profit services such as health, education, and religion; and government services such as public administration and defense. (See Table 3 in section 4 for a more detailed typology).

It is the set of activities referred to as producer services, those intermediate demand functions that serve as inputs into the production of goods or of other services (and that, as such, are perhaps more correctly characterized as indirect elements of the production process), that has the greatest potential for stimulating the economic development of a local economy. There are four reasons why this is so. First, producer services comprise the most rapidly growing sector in the majority of developed economies. In Canada, over the period 1971-1981, employment in producer services experienced a growth rate of 141.2 percent, nearly twice that of its closest competitor, the finance, insurance and real estate (FIRE) sector (Coffey and McRae, 1989). In the United States, 25 percent of the GNP now originates from producer services alone, the equivalent of the GNP resulting from the physical production of goods (Noyelle and Stanback, 1984). This increased demand for producer services, in turn, is a function of the changing organizational structure of goods producing activities, and of the enhanced role of product innovation and of market differentiation. Certain authors (e.g., Gershuny and Miles, 1983; McRae, 1985) have argued that the observed growth of producer services is largely a statistical artifact due to a displacement effect by which previously internalized functions are contracted-out to external producer service firms. A number of recent studies (e.g., Beyers, 1989; Tschetter, 1987; Kutscher, 1988), however, have empirically refuted this argument, demonstrating not only that producer service growth is real, but that output and employment growth have been achieved in internal and external producer services simultaneously.

Second, producer services can constitute an important element of the economic base of a region. Economic base theory posits that a region's economic base has two principal elements: basic or export-oriented activities; and nonbasic or residentiary activities (those serving the local population). There is obviously an overlap between the two; many specific activities can serve both functions. According to the theory, it is the former set of activities which serve a "propulsive" or "engine of growth" function; they create injections into the local economy which, through the multiplier mechanism and the circular flow of income, stimulate local economic growth.

For many years, services had been viewed in the framework of the traditional Fisher-Clark typology of economic activity which relegated them to a "residual" category composed of "nonproductive" activities. Consequently, all services had long been regarded as residentiary activities. It is now widely recognized, however, that a significant proportion of producer services, in particular, must be regarded as basic activity in that they are not only exportable (tradeable) but also highly responsive to external demand.

Producer services have emerged as one of the fastest growing components of both interregional and international trade. Canadian based consulting and professional services, alone, accounted for $987 million worth of international exports in 1985, representing a 24-fold increase over the 1969 value (Statistics Canada, 1988). Further, at the beginning of this decade, legal services established themselves

1 The terms "producer services" and "tradeable services" will be used interchangeably in this paper since the vast majority of tradeable services are found within the producer services group. In addition, producer services also may be considered to include the head (or divisional) office functions of firms in any sector of activity; the principal task of a head office is precisely to provide a range of producer service functions to a captive internal market.

as the principal export of the New York City economy (Ginzberg and Vojta, 1981). Export-oriented business and corporate services grew at an annual rate of 10.1 percent between 1977 and 1986, attaining a total of over $50 billion in 1986, and accounting for approximately two-thirds of New York City's export earnings (Drennan, 1987).

Third, it follows from the previous point that producer services may be characterized by a spatial distribution that is significantly different from that of the range of residentiary (principally consumer) services. In the case of the latter, their distribution clearly follows population patterns (Marquand, 1983; Coffey and McRae, 1989). Due to their potential tradeability, producer services do not necessarily face the same constraint of physical proximity to their market. In theory, the less populated nonmetropolitan regions may be able to develop export-oriented producer services.

Fourth, and perhaps most importantly, through their role in investment, innovation and technological change, producer services may contribute to spatial variation in the economic development process (Marshall, 1988). They may be regarded as playing a strategic role ("the locus of competitive advantage", according to Walker, 1985) within production systems of which they constitute one part of the overall division of labour. The key position that producer services occupy is essentially based upon the contribution that they can make to promoting or facilitating overall economic change and adaption. In an age of rapid technological change, certain producer services provide the source and mediators of that change (Marquand, 1983). Marshall et al. (1985) argue that producer services are an important part of an economy's supply capacity: they influence its adjustment in response to changing economic circumstances; and they may help to adapt skills, attitudes, products and processes to changes, or to reduce the structural, organizational, managerial and informational barriers to adjustment.

In concluding this examination of the role of producer services in regional economic development, two points must be stressed. First, all services are not created equal: certain types of services lead economic growth; other services follow from growth in other sectors. Second, the ability of producer services, or of any other element of the economy, to influence the level of economic development in a region is a function of the definition of development employed. If development is defined modestly in terms of incremental job creation, it may well be that public sector functions or consumer services (demand for which, in lagging regions, is largely financed by transfer payments) will be as effective an instrument as producer services. On the other hand, if development is measured in a more rigorous manner involving considerations of structural change, productivity increase, market-earned income and so forth, producer services stand alone among service activities as a possible focus for policy intervention.

The Interdependence of Goods Production and Service Production

There are two contrasting schools of thought concerning the increase of service activity (whether measured by employment or by output) in developed countries. The first perspective may be characterized as one of "deindustrialization", viewing these trends as highly negative, and emphasizing the loss of goods producing activities to newly industrializing countries. The second perspective views the relative shift of activity out of manufacturing and toward services as a natural evolution of advanced productive systems. This latter school of thought appears to be more realistic than the former, given that, in absolute terms, developed countries are producing more manufactured goods than ever before (Table 1). In spite of manufacturing's declining importance in Canada in terms of its relative share of both GDP and total labour force, its growth has continued in absolute terms, albeit at a rate inferior to that of services.

The process that is occurring in manufacturing is comparable to the historical evolution of agricultural production in developed countries: we are producing an increasing volume with a decreasing proportion of the labour force. The notion that we have become a "post-industrial" society is not strictly accurate. To paraphrase Mark Twain, reports of the demise of manufacturing activity have been greatly exaggerated. The remainder of this section examines the ways in which goods production and services are related.

The interdependence between goods production and services manifests itself in two major ways. First, there is an increasing complementarity between goods and services. The modern economies of developed countries are witnessing important transformations in what types of goods are produced, and in how these goods are produced (Noyelle and Stanback, 1984).

Table 1. The share of manufacturing and services in the Canadian economy, 1961-1986

	% of GDP		% of Labour Force		
	Manufacturing	Services*	Manufacturing	All services	Community, business & personal services
1961	19.6	36.2	21.6	55.3	19.6
1971	20.2	37.3	19.8	57.7	23.7
1981	19.3	42.3	18.5	65.0	28.3
1986	19.2	43.8	16.9	67.6	31.0
Growth rate 1961-86**	184.0	251.0	66.5	141.3	212.5

Source: Calculated from Statistics Canada, Catalogue No. 11-210 (Tables 1.15 and 1.16) and 93-152 (Table 1).

* Services produced by the "Business Sector"
** Growth rate of GDP contribution in constant dollars, and of persons in the labour force.

In terms of what is produced, there has been a marked trend toward greater product differentiation as consumers are attracted to more stylized products and as producers target special groups of consumers. The design, marketing and distribution aspects of goods production have thus become increasingly important. At the same time, many services closely related to consumption have come to the fore: maintenance, finance, and instruction. General Motors Acceptance Corporation, for example, a division of one of the United States' largest manufacturers, was originally established to assist consumers in the purchase of their motor vehicles by providing credit; GMAC has now emerged as one of that country's largest financial establishments. The relation between computer hardware and software is also often cited as an example of this complementarity; neither is able to function without its counterpart.

In terms of how goods are produced, there has been a marked tendency to substitute high-technology-embodied capital for labour in goods producing processes (Stanback et al., 1981). This has allowed management's attention to be shifted away from physical production, where processes are increasingly routinized, towards other areas which previously had been regarded as deserving of only secondary priority: corporate and product planning, research and development, advertising and marketing, and administrative control. In addition, increases in the size and complexity of manufacturing firms and the proliferation of government regulation in many countries have necessitated the incorporation of more diversified and more advanced levels of management expertise.

Second, as Gershuny (1978) has noted, in the emerging "self-service economy" there has been a substitution effect through which manufactured goods operated by consumers have displaced certain consumer services. Washing machines and automobiles, for example, have been substituted for laundry and transportation services. At the same time, however, as previously noted, increasing service inputs have been required to market, distribute and maintain these manufactured goods.

Nowhere is the interdependence between goods production and services more evident than in the case of the set of activities commonly referred to as producer services. From their origins as almost exclusively administrative functions in the 1950s (marketing, accounting, advertising), producer services have more recently expanded in scope so as to include broader functions related to innovation, information and control. The strategic role played by producer services within production systems is widely recognized, based upon the contribution that they can make to promoting or facilitating overall economic change and adaptation.

An establishment or firm has the choice of internalizing or externalizing its consumption of a given producer service input. On the one hand, the necessary service function may be provided internally, by the organization's own employees. This practice is fairly widespread; in the Canadian goods producing sectors between 20 and 36 percent of employment involves a service function; in certain subsectors such as chemical products and petroleum refining the figure increases to over 50 percent (Coffey and McRae, 1989). On the other hand, the establishment or firm may purchase the required input from a free-standing organization specializing in the production of such services. The possibility exists for a given firm or establishment to substitute between these two forms of factor inputs. The use of externalized inputs is largely a function of the degree of non-standardization and the unpredictability of the demand for a particular service (Coffey and Polese, 1987a), and of attempts to achieve a higher level of production flexibility and external economies of scale (Scott, 1988). (See Coffey and Bailly (1991) for a detailed discussion of the factors which lead to externalization).

In sum, the relationship between goods production and services is an intimate one; service inputs are an integral part not only of the physical production process itself, but also of activities that are both upstream (e.g., design, R&D) and downstream (e.g., marketing, advertising) of the latter. Rather than dividing an economy into goods production and services production activities, it is more desirable to conceptualize it in terms of an integrated production system, the specific elements of which represent individual points on the goods-services continuum. Further, as demonstrated in the following section, the specific position of an establishment along this continuum also has locational implications.

Canadian Locational Trends, 1971-1981[2]

Some Empirical Evidence, 1981

In the previous section the fundamental role played by tradeable services in the development of local and regional economies was identified. In order to evaluate the economic development prospects of nonmetropolitan areas, it is necessary to understand the locational dynamics of these activities. In particular, it is necessary to consider whether tradeable services tend to centralize in major metropolitan areas, or whether they have the capacity to decentralize to nonmetropolitan locations. Previous work (Coffey and Polese, 1988; Coffey and McRae, 1989; Coffey, Fullum and Polese, 1989) on the location of economic activities in Canada helps to shed some light on these issues.

Methodologically, sectoral and occupational employment data at a very disaggregated spatial scale are pooled into 10 "synthetic" (i.e., non-contiguous) region types defined on the basis of two criteria: 1) population size, or position within the urban hierarchy; and 2) location relative to a major urban area (Table 2). The terms "central" and "peripheral" designate municipal units or portions of census divisions that lie within (central) or beyond (peripheral) a 100 km radius of an urban area having a population of over 100,000 in 1981. The 100 km radius may be regarded as a realistic delineation of the zone of frequent economic contact between a city and its surrounding countryside. One of the principal virtues of this analytical system is that it enables one to distinguish between true decentralization and deconcentration, i.e., the dispersion of activities within the urban fields of large centres -- an extended form of suburbanization.

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2 Unfortunately, the detailed data from the 1991 Census that are necessary in order to bring this analysis up to date are not yet available.

Table 2. Synthetic region types in Canada

Region type	Population	Relative location	No. of units
1	more than 300,000	---	10
2	100,001 - 300,000	---	16
3	50,001 - 100,000	central	11
4	50,001 - 100,000	peripheral	8
5	25,001 - 50,000	central	19
6	25,001 - 50,000	peripheral	20
7	10,001 - 25,000	central	17
8	10,001 - 25,000	peripheral	19
9	less than 10,001	central	127
10	less than 10,001	peripheral	127

Perhaps the most effective method of describing the concentration of economic activity across a set of regions, while controlling for the size differences of the latter, is by means of location quotients[3]. Table 3 presents location quotients for 15 aggregated sectors by synthetic region type.

Table 3. Sectoral location quotients - synthetic region types, 1981

	Synthetic region type									
Sector	300+	100-300	50-100C	50-100P	25-50C	25-50P	10-25C	10-25P	<10C	<10P
PRIM	27	43	43	60	68	145	114	167	278	371
MFG1	94	84	116	73	132	87	174	120	123	110
MFG2	113	95	184	128	132	74	85	70	84	29
MFG3	111	148	142	31	157	59	94	14	79	18
CONSTR	95	92	95	122	89	116	79	81	123	112
TRANS	107	84	64	134	76	95	64	96	94	103
COMMUN	117	106	76	116	75	113	63	99	60	62
UTIL	98	98	110	99	127	126	72	87	87	114
WHOLE	116	92	81	110	82	82	76	63	83	64
RETAIL	100	108	114	120	111	117	110	114	87	86
FIRE	127	101	72	82	68	73	61	63	57	46
NONPROF	97	123	106	104	110	110	109	116	85	93
CONSUM	105	105	102	116	99	102	91	97	83	84
PROD	140	85	67	74	52	60	47	62	43	28
PUBLIC	103	119	94	98	92	101	116	119	75	90

It may be observed that primary activities and the traditional manufacturing sector (MFG1) tend to be concentrated at the lower end of the settlement hierarchy; intermediate manufacturing (MFG2) in 25,000-100,000 central regions and in 50,000-100,000 peripheral regions; and technical manufacturing (MFG3) in 25,000-100,000 central regions. Producer services and FIRE services are highly concentrated in the largest metropolitan areas; their spatial distribution is a direct function of position within the urban hierarchy. Note, in particular, the contrast in location quotient profiles between producer services and

3 The location quotient is an index of specialization that compares the spatial concentration of a given sector in a given region to that sector's level of concentration in a benchmark spatial unit -- in this case the entire Canadian economy. Thus, a sector with the same level of concentration in a given region as in the national economy will have a value of 100. Values below 100 indicate a lower degree of concentration relative to the Canadian economy, while those above 100 indicate a higher degree of concentration.

consumer services, the latter being far more evenly distributed. Figure 1 presents a graphical representation of location quotient patterns for selected sectors of activity.

Alternative methods of measurement reinforce this notion of the concentration of high order services (Tables 4 and 5). With the exception of the major metropolitan (300,000+) and rural (less than 10,000) categories, the shares of both total employment and service sector employment tend to closely correspond to regional population shares (Table 4). In the case of the 300,000+ regions, total employment and, especially, service employment shares are significantly higher than the population share. For rural regions, the opposite is true. Only in the case of the 300,000+ category is the share of producer service employment superior to that of service employment. In the case of the nine other region types, the percentage of producer service employment is considerably lower than that of service employment; this phenomenon is especially evident in the rural regions.

Table 4. Population and employment shares - synthetic region types in Canada, 1981

	Synthetic regions[1]										
	300+	100-300	50-100C	50-100P	25-50C	25-50P	10-25C	10-25P	<10C	<10P	Canada
Factors	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
% of 1981 Canadian population	45.5	11.6	3.1	2.4	3.0	3.0	1.1	1.4	15.5	13.4	100.0
% of 1981 total employment	52.6	12.3	3.1	2.4	3.0	3.0	1.1	1.3	11.2	10.0	100.0
% of 1971-81 total employment increase	50.8	10.4	2.7	2.5	2.8	3.5	0.8	0.9	14.3	11.3	100.0
% of 1981 service employment	56.3	13.2	3.0	2.6	2.8	3.0	1.0	1.3	8.8	8.0	100.0
% of 1971-81 service employment increase	53.3	11.2	2.7	2.6	2.6	3.2	0.7	0.9	12.3	10.5	100.0
% of 1981 producer service employment	73.5	10.4	2.1	1.8	1.5	1.8	0.5	0.8	4.8	2.8	100.0
% of 1971-1981 producer service employment increase	70.4	9.3	1.9	1.8	1.5	1.9	0.4	0.6	7.7	4.5	100.0

[1] See Table 2 for definitions of regions.

Table 5 presents a more detailed portrait of the metropolitan concentration of service employment in Canada, indicating precisely where the majority of service jobs, and producer service jobs in particular, are located. The 10 Census Metropolitan Areas (CMAs) are the individual components of region type 1 (300,000+). We find, for example, that 50.1 percent of all Canadian service employment is located in the 7 largest metropolitan centres. Producer service employment is even more highly concentrated, with 53.5 percent found in the 3 largest centres; the 10 largest metropolitan centres account for 80 percent of all producer service employment (Table 5).

Table 5. The spatial concentration of producer service employment in Canada, 1981

Census Metropolitan Area	Population % Canada	Population % cumul.	All services % Canada	All services % cumul.	Producer services % Canada	Producer services % cumul.
Toronto	12.3	12.3	15.8	15.8	27.4	27.4
Montreal	11.6	23.9	12.8	28.6	16.1	43.5
Vancouver	5.2	29.1	6.8	35.4	10.0	53.5
Ottawa-Hull	3.0	32.1	4.4	39.8	5.2	58.7
Edmonton	2.7	34.8	3.8	43.6	5.0	63.7
Calgary	2.4	37.2	3.3	46.9	7.3	71.0
Winnipeg	2.4	39.6	3.2	50.1	2.8	73.8
Quebec	2.4	42.0	2.9	53.0	2.2	76.0
Hamilton	2.2	44.2	2.2	55.2	2.3	78.3
St. Catharines	1.3	45.5	1.1	56.3	1.2	79.5

Summary of Major Trends, 1971-1981

A number of changes occurred in sectoral employment over the period 1971-1981 (Tables 6, 7 and 8). Rural regions and smaller urban places experienced the highest growth rates across a number of sectors, including producer services (Table 6). It must be understood, however, that these high growth rates, operating on a relatively restrained employment base, produced a modest level of absolute growth (e.g., 20,000 and 11,000 new producer service jobs for the rural central and peripheral areas, respectively) (Table 7). On the other hand, the 10 major metropolitan centres, in spite of relatively modest growth rates, experienced large absolute employment gains (179,000 new producer service jobs). Figure 2 graphically presents the relationship between growth rate and absolute growth in producer services.

Table 8, which should be interpreted in conjunction with Table 3, indicates relative changes in the degree of spatial concentration of economic sectors across the 10 region types. In almost all sectors, including producer services, the major metropolitan areas experienced declines in their level of service employment concentration relative to other region types, and to rural regions in particular. Figure 3 shows location quotient changes for producer services and technical manufacturing (MFG3).

Figure 1

EMPLOYMENT LOCATION QUOTIENTS, CANADA 1981

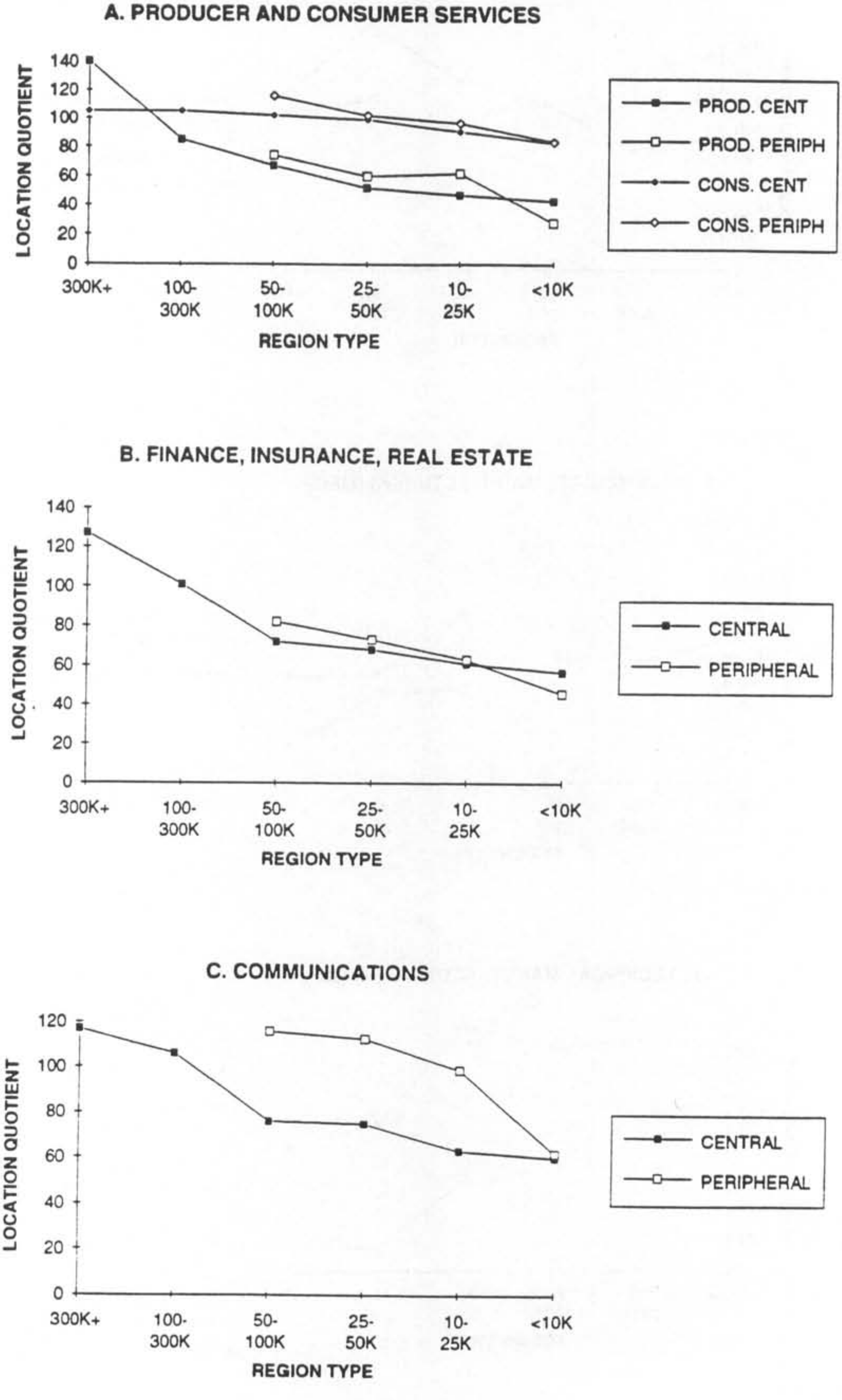


Figure 1 Con't.

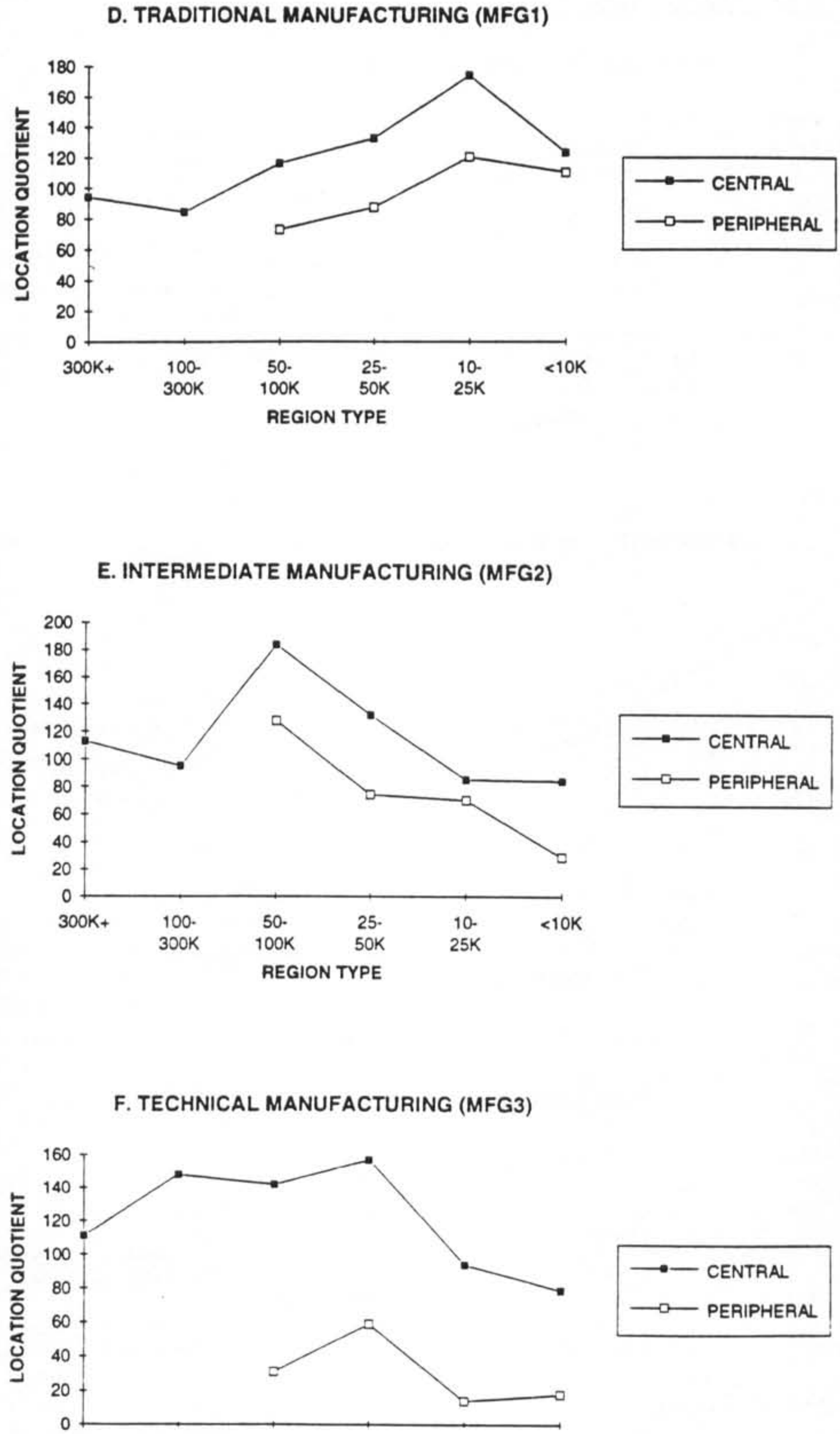


Table 6. Growth rates by sector - synthetic region types in Canada, 1971-1981

	Synthetic region type										
	300+	100-300	50-100C	50-100P	25-50C	25-50P	10-25C	10-25P	<10C	<10P	Canada
Sector	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Goods	27.5	20.2	24.9	32.8	33.8	50.5	22.0	16.4	42.7	28.8	29.6
PRIM	55.4	9.7	25.4	21.5	22.0	58.4	5.9	15.6	2.6	4.5	12.0
MFG1	21.0	18.3	19.6	34.2	29.2	31.5	26.1	17.3	94.9	88.8	33.7
MFG2	27.8	23.5	28.7	27.2	43.9	41.2	41.0	14.5	204.9	533.2	38.9
MFG3	20.5	21.2	16.5	21.4	31.7	52.8	25.9	64.1	119.9	204.4	28.0
CONSTR	35.7	25.1	36.5	47.4	45.1	73.9	19.5	14.2	59.6	49.9	39.9
Services	54.1	45.9	49.3	57.1	51.1	66.3	39.8	35.5	108.3	94.5	59.0
TRANS	33.3	22.1	27.7	21.8	32.1	24.6	24.0	10.1	97.3	70.9	38.6
COMMUN	56.0	50.7	48.8	48.2	54.4	59.1	25.3	25.8	150.2	88.1	59.9
UTIL	45.8	49.3	19.2	45.7	52.4	44.3	48.3	16.2	307.3	144.5	62.4
WHOLE	54.8	47.8	58.0	68.8	67.3	63.7	57.6	27.4	138.6	119.4	63.0
RETAIL	46.3	42.8	49.5	53.9	56.4	73.4	42.9	45.0	66.0	65.2	50.4
FIRE	67.5	64.9	68.7	87.6	75.9	111.7	62.8	61.8	253.4	313.2	79.4
NONPROF	44.8	40.0	39.5	53.0	43.0	57.8	34.6	34.5	84.2	80.6	49.9
CONSUM	69.3	65.6	71.5	86.6	69.4	87.5	56.7	45.2	113.3	97.1	74.8
PROD	127.8	110.6	112.1	143.1	107.6	169.6	104.2	70.7	1,869.0	1,540.5	141.2
PUBLIC	36.4	27.9	32.7	35.5	23.1	51.6	18.2	22.9	115.7	109.2	43.3
Total	45.8	37.8	39.5	49.6	44.3	60.8	32.5	28.5	71.5	57.7	48.2

The major changes that occurred over the 1971-1981 period may be summarized in the following manner. First, there was a relative (but not absolute) shift in employment in most sectors away from the 300,000+ region type (and to a lesser extent, from the 100,000-300,000 and 50,000-100,000 central region types) toward the two rural region types. The extent of this change is, however, insufficient to characterize it as a major urban-rural shift; the urban region types continue to dominate by all measures. Where service shifts away from large metropolitan areas have taken place, the data indicate that they involve primarily the types of routinized and standardized activities generally referred to as "back office" functions, e.g. data processing, security services, and non-strategic administrative tasks. The higher order "front office" functions, those involving strategic tasks or requiring face-to-face contact with clients, remained concentrated in the larger metropolitan centres (Coffey and McRae, 1989).

Second, of all of the employment growth that occurred outside of metropolitan areas (100,000+), 53.4 percent occurred in central region types, as opposed to 46.6 percent in peripheral region types; in the case of producer services, these figures are 56.9 and 43.1 percent, respectively. This indicates that where changes took place they did so principally in such a manner as to extend the urban field of large centres (i.e., deconcentration) rather than to promote differential growth in truly peripheral areas (decentralization). The "distance effect" thus appears to be especially important in the location of high order service employment. Third, medium and smaller sized urban areas within the urban shadow of a major centre had considerable difficulty in developing high order service activities. Beyond the urban shadow, however, the ability of these smaller and medium sized centres to successfully generate a certain level of high order service activity increased. Finally, the two rural region types accounted for only 25.6 percent of total employment increases and only 12.2 percent of producer service employment increases. Further, 56 percent of all employment increases in the two rural regions, and 64.5 percent of producer service employment increases were registered in the central rural regions. Once again the notion of the extension of the urban field of major metropolitan centres is reinforced.

On balance, during the period in question, the space-economy of the Canadian urban hierarchy may be characterized as one of relative stability resulting from two opposing forces. On the one hand, the growth of service activities tended to favour the (absolute but not relative) concentration of employment in the largest urban centres. In spite of negative relative shifts, the continued dominance of the large centres is unquestionable. On the other hand, there has been a significant shift in goods production employment away from the largest centres; these shifts took the form of both decentralization and decongestion (deconcentration).

Table 7. Absolute employment change by sector for synthetic region types in Canada, 1971-1981

	Synthetic regions										
Sector	300+ ('000)	100-300 ('000)	50-100C ('000)	50-100P ('000)	25-50C ('000)	25-50P ('000)	10-25C ('000)	10-25P ('000)	<10C ('000)	<10P ('000)	Canada* ('000)
Goods	315	58	23	17	28	33	7	6	158	104	749
PRIM	35	3	2	2	3	11	0.5	2	6	11	76
MFG1	84	16	6	4	9	6	4	2	65	51	247
MFG2	79	14	8	4	7	4	2	0.7	38	15	171
MFG3	34	11	2	0.5	4	2	0.7	0.3	17	4	75
CONSTR	82	14	5	6	5	9	0.9	0.8	32	23	179
Services	1,362	285	68	65	65	82	19	23	315	268	2,553
TRANS	70	9	2	3	3	3	0.6	0.6	26	21	137
COMMUN	50	10	2	2	2	3	0.3	0.6	9	7	85
UTIL	19	5	0.7	0.9	2	1	0.3	0.2	8	8	44
WHOLE	108	18	5	5	5	5	1	0.9	27	18	193
RETAIL	201	48	15	13	15	18	4	6	47	42	407
FIRE	154	28	5	5	5	7	1	2	26	20	253
NONPROF	239	66	15	13	15	18	5	6	66	63	505
CONSUM	229	52	14	13	12	15	4	4	50	42	435
PROD	179	24	5	5	3	5	1	1	20	11	254
PUBLIC	114	25	6	5	4	8	2	2	36	37	239
TOTAL*	1,677	343	92	82	93	115	26	29	473	372	3,302
Goods Employment Growth per Unit	34,474	3,598	2,107	2,106	1,467	1,637	435	320	1,246	822	2,002
Service Employment Growth Per Unit	136,200	17,813	6,182	8,125	3,421	4,100	1,118	1,211	2,472	2,110	6,826

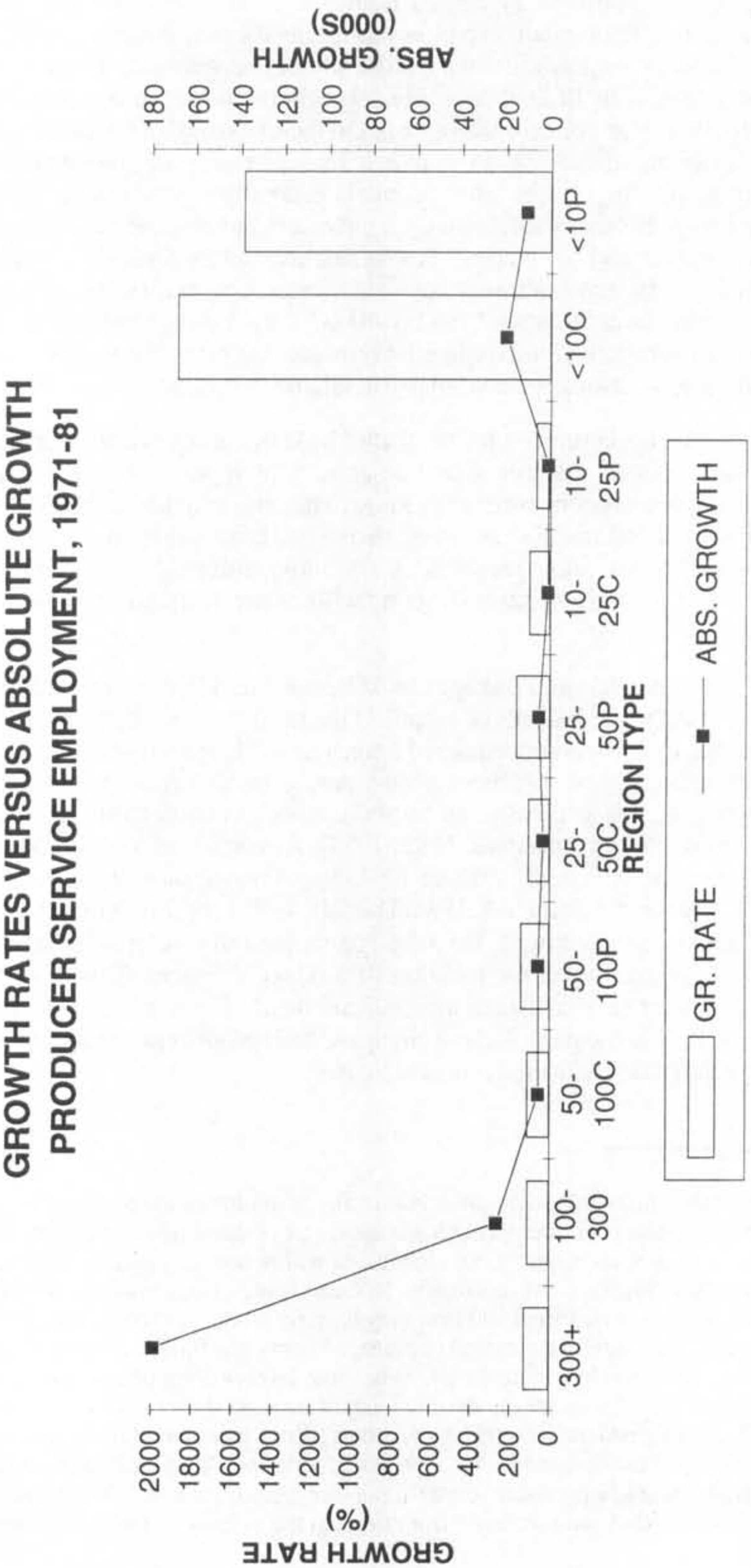
* Columns and rows may not exactly equal the total due to rounding.

Table 8. Change in sectoral location quotients* for synthetic region types in Canada, 1971 - 1981

	Synthetic region									
Sector	300+	100-300	50-100C	50-100P	25-50C	25-50P	10-25C	10-25P	<10C	<10P
PRIM	8	2	7	4	7	34	6	27	-73	-52
MFG1	-8	-4	-6	0	-1	-9	9	1	25	27
MFG2	-8	-4	-3	-13	8	-5	10	-4	40	22
MFG3	-5	3	-5	-2	8	5	9	5	26	10
CONSTR	-1	-4	3	5	5	15	-4	-5	-2	1
TRANS	-2	-5	-1	-20	-2	-20	0	-9	18	14
COMMUN	-1	1	-1	-10	-1	-10	-9	-10	16	6
UTIL	-9	-1	-31	-12	-5	-28	2	-18	47	33
WHOLE	-4	-2	2	3	4	-7	6	-7	17	13
RETAIL	-1	2	6	2	7	7	6	11	-4	3
FIRE	-7	-1	0	3	0	6	1	2	24	25
NONPROF	-2	0	-1	1	-2	-3	0	4	5	11
CONSUM	-2	2	4	6	0	-1	0	-4	4	5
PROD	-6	-5	-5	0	-7	2	-3	-14	37	24
PUBLIC	-3	-5	-1	-7	-12	-3	-10	-1	17	24

* 1981LQ-1971LQ

Figure 2



GROWTH RATES VERSUS ABSOLUTE GROWTH
PRODUCER SERVICE EMPLOYMENT, 1971-81
GROWTH RATE (%)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
ABS. GROWTH (000S)
180
160
140
120
100
80
60
40
20
0
300+
100-300
50-100C
50-100P
25-50C
25-50P
10-25C
10-25P
<10C
<10P
REGION TYPE
GR. RATE
ABS. GROWTH

THE SPATIAL CONCENTRATION OF PRODUCER SERVICES: UNDERLYING FACTORS

What are the principal factors underlying the empirically observed concentration of producer services within the urban hierarchy? Three general elements may be identified (Coffey and Polese 1986, 1987a, 1987b). First, a pool of appropriately skilled human resources must be present. There is general agreement in the literature that human resources represents the major factor underlying the location of producer services; the latter are generally much more labour intensive than manufacturing. Since labour is a factor of production with limited mobility, especially in the current era of two breadwinner households, the job often must come to the person. On the one hand, many producer services require a labour force with high qualifications, as manifest in a professional, university type education. A significant concentration of highly educated people is generally found in metropolitan areas: not only is this where a large proportion of them have been educated, but also they are attracted by high quality cultural and public services and by the large labour market. In this context, it is important to note that the gap in the level of educational attainment between the residents of metropolitan and nonmetropolitan areas increased in Canada over the period 1971-1981 (Coffey, Fullum and Polese, 1989). On the other hand, increasing externalization within high order producer services also requires a pool of labour with lower qualifications. Such personnel are similarly available in metropolitan areas.

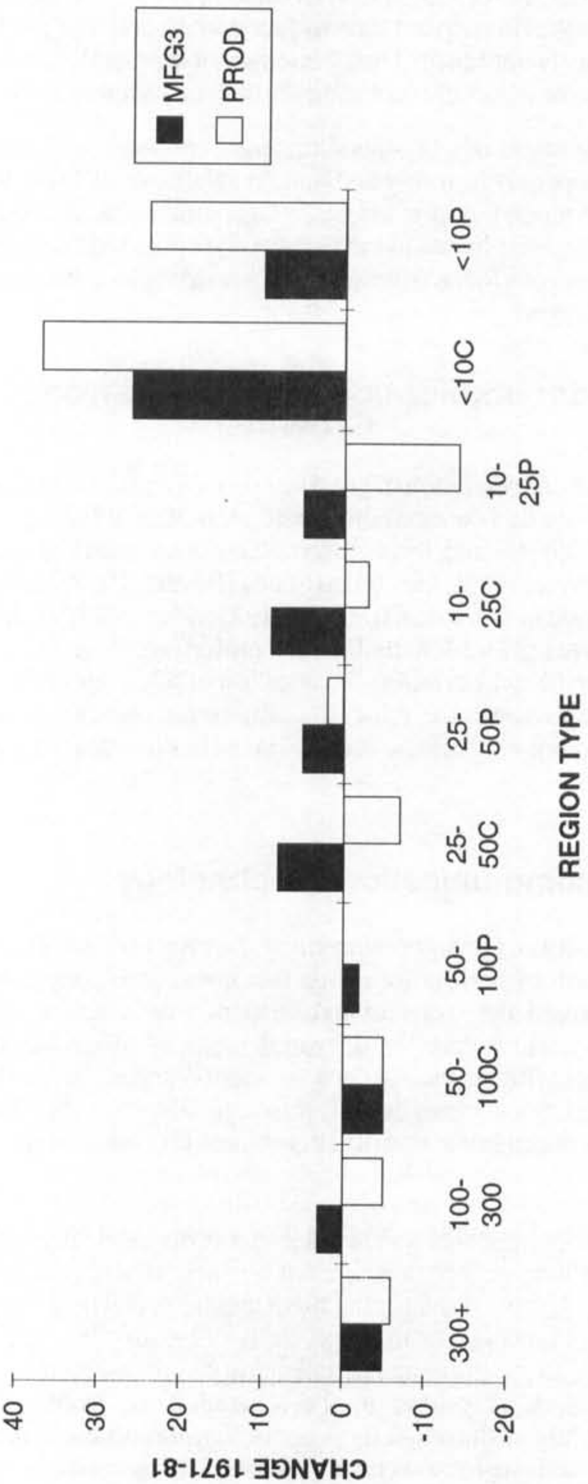
Second, there must be opportunities for backward linkages. Like manufacturing, the production of intermediate-demand services requires a particular mix of inputs. The spatial proximity between producer services and the sources or creators of knowledge, information and technical ability is crucial. A given producer service establishment must, therefore, have linkages to specialized consultants, complementary producer services, research institutions, universities, government organizations, hardware producers and so forth. In general, such facilities are available in greater scope and quantity in large urban areas.

Finally, opportunities for forward linkages must be present. Here the market for producer services is the issue. Approximately one-half of the output of the producer service sector is typically purchased by other service establishments; a wide range of empirical evidence has shown that the latter tend to be concentrated in metropolitan areas. Further, in those cases in which producer services are purchased by the manufacturing sector, it is generally not by the production units themselves but, rather, by head offices or regional headquarters (Marshall, 1982; 1985). As corporate control and its associated spatial division of administrative functions tend to be highly concentrated in a small number of large metropolitan areas (Noyelle and Stanback, 1984; Daniels, 1985), it follows that the demand for producer services will be similarly concentrated. Thus the spatial pattern of corporate headquarters imposes a marked centralizing influence upon the location of producer services (Wheeler, 1988)[4]. Further, the linkages between producer service establishments and head offices are becoming even stronger and more self-reinforcing than in the past. As firms increase their product range and their use of technology, so their need for specialized producer services increases.

4 To the extent that the nonmetropolitan production units of multiregional or multinational firms channel their purchases of producer services through a headquarters located in a metropolitan area, the demand for producer services in such nonmetropolitan regions will be severely constrained, particularly if the region is essentially a "branch plant" economy. In the extreme case, a branch plant of an externally controlled multinational or multiregional firm may have no producer service linkages with the local economy. It is therefore locally controlled or managed firms that furnish most of the demand for locally produced business services (Marshall, 1982). Where the level of local control over a regional economy is low, it follows that the potential for the development of local producer services will be modest. The acquisition of locally owned manufacturing or resource firms by external interests can thus have a debilitating effect upon the demand for local producer services. After indigenous companies are acquired, certain of their key producer service inputs are usually transferred to the new headquarters where, as noted above, they are purchased from firms in the vicinity of the head office (Leigh and North, 1982).

Figure 3

Location Quotient Change, 1971-81, Producer Services and Tech. Manufacturing



Where both forward and backward linkages are concerned, the concentration of producer services in a small number of large cities enables the transaction costs associated with the production and delivery of such services to be minimized. In particular, it is the cost of maintaining face-to-face contact between the producers, on the one hand, and their inputs and markets, on the other hand, that is potentially the most expensive element of intermediate-demand service production; this expense can be significantly reduced by spatial agglomeration. Evidence indicates that, unless the information transmitted is relatively standardized, new telecommunications technologies cannot be successfully substituted for face-to-face contact (Tornqvist, 1970; Pred, 1975; Gottmann, 1977). The conventionally held view that telecommunication technology will supplant face-to-face contact and thus produce a decentralization of producer services may be overly optimistic. On the contrary, it is possible that evolving telecommunications technologies will have the effect of increasing the concentration of these activities.

In sum, in large cities the forces of agglomeration tend to produce what may be termed a "complex of corporate activities": the spatial clustering and mutual symbiosis of 1) the head or divisional offices of primary, secondary, and tertiary sector firms; 2) high order financial establishments; and 3) the producer service firms that provide inputs to the first two types, as well as to each other. This complex of corporate activities is analogous to the concept of an industrial complex, in terms of its tightly woven network of input-output linkages.

Locational Trends: Implications for Nonmetropolitan Economic Growth

The high degree of spatial concentration of producer service activities in Canada has been noted, and a number of factors underlying this concentration were identified. It must be emphasized that Canada is not unique in this respect; similar locational patterns have been observed in Britain (Marshall, 1988), France (Philippe and Monnoyer, 1985), the United States (Beyers, 1989; Noyelle and Stanback, 1984), and across a range of European countries (Daniels, 1985; Illeris, 1989). It thus appears that many producer service activities are <u>not</u> locationally flexible, preferring, indeed requiring, large metropolitan areas. But what of the future? Next I examine the question of telecommunications technology and the conventional wisdom that it possesses the ability to change these observed locational patterns. A policy perspective follows, considering what measures can be taken to stimulate the growth of producer services in nonmetropolitan areas.

The Impact Of Telecommunications Technology

There are two major schools of thought concerning the effects of advances in telecommunications technology upon the location of high order office functions, including producer services. The first reflects what might be termed the conventional wisdom that assumes that new information and communications technology will permit the <u>decentralization</u> of office-based activities by making it possible to transact business without face-to-face contact (Webber, 1973; Downs, 1985; Kellerman, 1984; Kutay, 1986). Technological changes will, it is argued, reduce the effects of distance and thus eliminate the differences between home and office, between city and country, and between centre and periphery.

The second school of thought adopts a viewpoint that is diametrically opposed to the first. On the one hand, it is argued, sensitive negotiations cannot be successfully concluded without face-to-face contact. On the other hand, it is argued, even more fundamentally, that new information and communications technologies free office functions from the necessity of locating in proximity to the operations that they direct. This contributes to the growing <u>centralization</u> of office-based activities in a small number of metropolitan areas (subject, of course, to the separation of "front" and "back" offices at the intrametropolitan scale), while at the same time permitting the decentralization of goods producing activities into areas characterized by lower factor costs. The greater the extent of the geographic decentralization of production activities, it is argued, the greater the need for the centralization of key control activities.

While there is a paucity of empirical research on the spatial impacts of the evolution of telecommunications technology, that which does exist, on balance, lends strong support to the latter viewpoint. Hepworth (1986) demonstrates that firms in Canada are using telecommunications technology to maintain and to increase the level of spatial centralization in their organizational structures. Howells (1988), Daniels and Thrift (1986), Goddard and Gillespie (1986), Goddard et al. (1985), Moss (1987), and the Netherlands Economic Institute (1986) similarly show that, across a range of countries, advanced information and telecommunications technology has facilitated the greater centralization, diversification and internationalization of producer services. Further, much of the empirical work cited above (e.g., Beyers, 1989; Coffey and McRae, 1989; Noyelle and Stanback, 1984) provides indirect evidence to support this view. While not focusing explicitly on the impacts of technology, this research indicates that, during the recent period marked by significant evolution in telecommunications technology, very little decentralization has occurred. Rather, the centralization trends that have been observed in a broad set of countries have developed in parallel with, and very possibly as a direct result of, advances in telecommunications technology.

The principal factor underlying this failure of producer services and other high order office functions to behave in the manner suggested by conventional wisdom relates to the pattern of technological diffusion: there is generally a time lag in the adoption of telecommunications technologies, with the process of diffusion following the urban hierarchy. Thus, firms in metropolitan areas are able to enjoy an initial advantage in acquiring new technologies, and, due to the availability of skilled human resources, are generally better able to benefit from the options presented by the latter (Lesser and Hall, 1987; Goddard et al., 1985). The flexibility of modern technology can compensate the generally smaller firms in peripheral regions by allowing them to obtain economies of scope to replace the disadvantages of small scale, but small firms in the more highly industrialized regions also obtain this advantage. In the final analysis, the difficulty facing nonmetropolitan regions in benefitting from telecommunications advances once again reflects the traditional problems of the latter: their less diversified economic base, smaller local markets, and limited labour skills, all of which impede the rate of adoption of new technologies. Thus, the very cities that have customarily been the centres for face-to-face communication appear to be the ones that will benefit most from the spread of advanced telecommunication technologies (Moss, 1987).

The evolution of telecommunications technology appears to be a two-edged sword. In theory, it does have the potential to free various types of economic activities from the locational constraints that have ruled them in the past, as well as to permit firms in peripheral regions to manage multisite organizations without establishing any part of their operations in a metropolitan area. On the other hand, however, advances in telecommunications technology enable head offices and producer service firms in large urban centres to centralize their high level management, scientific and technical functions. The problem of regional disparities in the age of new telecommunications technologies is very likely to intensify (Lesser, 1987; Marshall, 1988).

Policy Prescriptions

Neither an analysis of spatial patterns in Canada, nor an exploration of the question from a more conceptual perspective indicates that there is much cause for optimism concerning the capacity for producer services to have an impact upon the level of economic development of nonmetropolitan regions. Although there are specific exceptions, and although there are <u>relative</u> trends towards decentralization observable, producer services generally continue to be highly concentrated in major urban centres. This is the underlying reality that public policy must confront. Nevertheless, it may be useful to explore some of the essential elements that a service-oriented regional development strategy might include.

Perhaps the first point that needs to be made concerns the complementarity between goods production and producer services. The close interdependence between physical production and high order services is now widely recognized; the latter may correctly be regarded as an integral element of any modern production process. It therefore follows that a regional policy aimed either at "productive" activities (i.e., primary and secondary activities) or at producer services, in isolation, will be destined to a suboptimal degree of effectiveness. Regional policy towards both will need to be integrated.

Stated in slightly different terms, regional policy must concern itself with both supply side and demand side aspects of producer services in lagging regions. Supply side incentives will only be effective if there is a demand for the service that is produced; in most instances, this will involve local demand, since producer service firms in peripheral regions cannot be realistically expected to export a large proportion of their output in the short term. Thus an important constraint upon the development of producer services in such areas is the poor performance of indigenous nonservice industries and the internalization of demand within large firms. This problem will not be easily resolved by a supply side policy; a more proactive approach is necessary on the demand side. More tangibly, a supply side approach needs to include such measures as human resource policies designed to create a pool of skilled labour in a given region and, at a different scale of organization, incentives aimed at the creation of producer service firms themselves. In theory, a substantial supply of skilled labour will assist a region in attracting or in generating high order producer service (and other knowledge intensive) firms. In addition to training and education initiatives, human resource policies may also include measures designed to improve the social-cultural-political environment of a given area, thus making it more attractive to the highly skilled labour force. Similarly, the presence of a range of producer service firms may enable a region to attract or to create complementary (i.e., nonservice) forms of economic activity.

The demand side approach consists of generating sufficient demand to stimulate the initial creation and subsequent growth of high order service firms. The growth of engineering services in Quebec is a particularly good example of this strategy (see below). Another element involves regional import substitution in producer services -- the encouragement of externally owned firms operating in a region to increase their purchase of locally produced services. In this manner one can attempt to avoid the classic "branch plant economy syndrome" in which multinational or multiregional firms operating in a region have virtually no backward linkages with the local economy. Similarly, a regional strategy towards the creation of local business might require that the latter make significant use of local services.

Either a supply side or a demand side approach, in isolation, is a fragile one; if policy intervention is to be attempted, both avenues need to be pursued simultaneously. It is, for example, well and good to pursue human resource policies, but if parallel efforts are not made to stimulate the demand for this resource the result will likely be the outmigration of the newly created skills.

In our view, the possibilities for the development of services in nonmetropolitan regions appear to be limited to the following:

1) producer services that respond to the demands of local economic activities (e.g., local manufacturing or primary sector firms);
2) producer services that respond to local public sector demand;
3) certain standardized and routinized "back office" service functions (e.g., data processing or mail order activities); and
4) tradeable specialized services derived from longterm local expertise in the primary or manufacturing sectors.

In the case of options 1) and 2), services are fulfilling a principally residentiary function. They may, however, assist the economic growth of the local economy to the extent that they create jobs and that they may be substituted for service imports from the exterior. Option 3) may be important in the provision of employment opportunities in a local area, but is unlikely to stimulate economic growth. Further, as noted, the available evidence suggests that these types of activities tend to deconcentrate on an intrametropolitan scale rather than to decentralize on an interregional scale. Option 4) represents the principal possibility for export development; the current expertise (and predominant position) of Quebec-based engineering consulting firms is a useful concrete example of this phenomenon and, as such, warrants a brief summary.

In the 1960s and 1970s, partially in order to either or both resolve and to avoid union problems, Hydro-Quebec, a provincial crown corporation, began to use the services of independent firms to provide the engineering and management for their vast hydro-electric projects. This contracting-out strategy is clearly one of the major factors (along with an enhanced educational system that was able to assure a supply of highly skilled human resources) in the success story of the Quebec engineering consulting sector. Due to this decision, local firms, at first in cooperation with external partners such as the American giant Bechtel, were able to simultaneously establish a viable level of activity, to develop a base of expertise, and to acquire foreign technology. Over time, this combination has propelled several Quebec firms, which now work without foreign assistance (e.g., Lavalin, SNC), to the status of major actors in the global context. The evolution of the Quebec engineering sector may be contrasted with that of Ontario, whose crown corporation, Ontario Hydro, chose to maintain a large internal engineering department (Verreault and Polese, 1988).

Finally, the need for locationally-specific policies must be stressed. Our research on the Canadian space-economy suggests that small and medium-sized cities (in the 25,000-100,000 population range) that are not in the zone of influence of a large metropolitan centre have some potential for the development of producer service activities to serve local demand. Centres within the "shadows" of major urban areas, and places below this size threshold do not appear to have such potential. Thus, if a regional policy based upon high order service activities is to be attempted, it needs to be tailored according to the characteristics of individual areas; a blanket approach will likely prove to be highly counter-productive.

Conclusion

The evidence that has been presented here suggests that the conventional wisdom concerning the capability of "footloose" producer service activities to enhance the economic development prospects of nonmetropolitan regions is unjustifiably optimistic. The potential for high order producer services to locate outside of major metropolitan centres is highly limited. The main locational shifts of producer services that most developed economies are witnessing are occurring primarily at the intrametropolitan level. In terms of specific policy interventions to stimulate producer service activities in lesser developed regions, considerable caution must be exercised. It is not at all clear that such interventions will have a high probability of success; even more than in the case of manufacturing, the forces of spatial concentration acting upon these activities are very strong.

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CROSS-SUBSIDIES, PREDATION AND THE RESTRUCTURING OF RURAL PLACES AND SINGLE INDUSTRY TOWN ECONOMIES

Rural Urban; Symbiosis and Predation

Our objective is to develop arguments for a proactive rural development policy in Canada that can provide full participation by rural places and single industry towns in the national economy. The arguments reflect the interdependence of rural and urban societies. Rural and urban places share a linked evolution. What goes on in one is influenced by changes in the other.

Economic theory shows that market forces can be counted upon to provide unambiguous benefits to both rural and urban places, but only when the market fully captures all the relationships among the participants. In a world where markets fail to incorporate important linkages it is possible that uninhibited reliance on market forces can make either society or both societies worse off.

We argue that the existence of a host of extra-market forces, or cross-subsidies, that link the urban and rural components of society create a situation consistent with market failure. One particular context of these forces is a kind of predator-prey relationship between rural and urban areas, reflecting the basic symbiotic relationship that underpins the existence of both and a disproportionate capability to extract the benefits. When, in contrast, competitive forces fail to acknowledge the existence of extra-market relationships the forces cannot by themselves move society to a situation where resources are optimally allocated. In fact competition may strengthen predation.

When a significant percentage of resources are voting citizens perceiving their role to be that of prey, pressure on the political system for action will mount. To avoid the consequent politically induced distortions of efficiency, governments could play a pro-active role in balancing the benefits of market and the extra-market interests of society. Governments in this model can complete the market by shaping the internalization of intangibles, public goods/costs and uncertainties needed to make markets work more efficiently.

Sweeping Changes and Second Thoughts

The sweeping changes that have taken place in Eastern Europe and the Soviet Union reinforce the generally held belief that market forces have triumphed as Marxism and central planning have withered. Democratic political institutions and market forces appear to be on the rise.

Many of these changes seem far from the small towns of Canada, but their effects are already being felt. The decade of the 1980s showed clearly how changes in world commodity prices, exchange rates, trade policies and financial markets have affected Canadian agriculture, forestry, mining and the energy sectors in Canada. Policies in developing nations are adjusted to reflect effects of new trade agreements, impacts of new technology and new social forces, thus making these countries more competitive. The changes in the former European and Soviet communist block will be no less sweeping in their effects in rural Canada.

Ironically, while we praise the virtues of market-based systems, major segments of the population in Canada and the United States continue to find themselves not fully participating in the benefits. Despite gains in the 1960s and 70s, rural people are one of these segments. Recent studies show aggravation of employment and income problems among rural residents in Canada and the United States (Gorham and Price, 1992; USDA, 1990; Fuller, Ehrensaft and Gertler, 1989). This clearly should be cause for alarm.

What is less clear is what, if anything, can be done to bring those people in our domestic economies who have yet to taste the fruits of the economic victory of capitalism into the celebrations. In the waning euphoria over the radical changes taking place in foreign lands, we begin to see our domestic problems in a new light. The changing world order is not confined to changes in other nations.

A major challenge of the next decade is to focus upon those elements of a market economy that enhance the production and distribution of goods and services, and to find ways to ensure these elements apply throughout the nation, including rural areas. At the same time, we recognize that every market outcome may not be what is desirable for society, or perhaps for particular segments of society. In those cases we need to find ways either to modify market forces reflecting societies' multiple goals, or find better ways to heal those wounded by abrupt changes in policy or the market.

The social costs of adjusting to newly unleashed market forces can be painful and politically volatile. In a recent New York Times article Louis Uchitelle depicts these adjustment costs that have plagued countries such as Mexico, Poland and Argentina, in terms of unemployment, growing disparities in wealth and incomes, and social disruptions (Uchitelle, 1991). The author goes on to assert that current conditions in the United States parallel the problems of nations that are just now embracing the North America model. Similar concerns exist about the adverse impacts of market forces in Canada. In New Zealand, where a major reduction in the role of government had taken place since 1984, there is also evidence of major disruptions to rural wellbeing as the economy adjusts to new global conditions.

The longer term benefits of reduced waste and better resource allocation associated with market forces are prominent in policy makers' minds. The short term costs of change and the potential for long term distribution and disparity in standards of living associated with the discipline of market forces, however, may not be compatible with the dual objectives of economic efficiency and of rising standards of living in a civilized society.

It would be a mistake to interpret the failure of centrally managed economies as a mandate for blanket deregulation and the abandonment of government programs. Rather, the failure of centrally planned economies should more appropriately instill a healthy scepticism about our ability to determine economic outcomes. We should neither try to "trick the market" into doing what we want, nor should we accept that market outcomes are always best. What is presently needed is a rebalancing of the roles of government and market forces ensuring that all elements of Canadian society, both rural and urban, fully participate in the economy and are appropriately rewarded.

In the next section of the paper we introduce a way of thinking about the appropriate role of government and market forces in society. This section is followed by a discussion of changing global structure of manufacturing and services that suggest problems which resource-based rural communities face in seeking to diversify their economic base. We then show how urbanization and specialization have led to a weaker position of rural areas and a growing feeling of urban predation or exploitation. The next part of the paper presents an argument for thinking about economic development in an ecological systems context. After this we return to a discussion of the rebalancing of market and government roles in the economy and finally a discussion of conclusions.

The Complementarity of Market and Government Forces

Economic activity may be organized in a wide range of ways. The range extends from the one extreme of pure "laisse faire", where the government plays no role in the production and distribution of goods, to the other extreme of a centrally managed economy where the government determines all production decisions and the final distribution of goods. In between many intermediate structures are possible. In theory either extreme is capable of satisfying many of societies' objectives. But in practice the conditions necessary for this result are met for neither extreme. In particular, each extreme is hard on human rights and on broad participation in the economy.

Market forces, signalling and responding to available information, are Darwinian in nature. They place a premium on short term adaptability to enhance probabilities of survival. But, allowing markets complete freedom to determine social and ecological outcomes can result in mistakes. The goals and outcomes of the exercise of market power and natural selection may not be socially or ecologically optimal over time. As a result, multi-objective societies may collectively choose to temper the restructuring forces of the market on rural places to prolong the period of reversibility of the changes.

Virtually all nations now accept the need for market based economies. But markets mean different things and are capable of different outcomes in different regions. Even in developed nations as similar as Canada and the Unites States, which both have a substantial degree of integration of rural and urban systems, there are marked differences in what is perceived to be the role of government relative to markets. In the United States the government is seen primarily as an impartial referee, ensuring that everybody plays by the same set of rules. In Canada the role of government is broader, with government acting within the teams to ensure that everyone plays, the injuries are healed and that the teams are ready to play the next season.

Discussion of a "level playing field" in the United States is about refereeing the game. Concern rests with enforcing fairness in the sense of equality of opportunity. That one team may accumulate more resources and skills on some other playing field, and, therefore, generate more favourable odds of burying an opposing team, is not seen as an appropriate concern. By contrast in Canada, ensuring that all participants in the game have 'reasonable' odds of success is a concern. Government is expected to participate as a partner to even the odds and to ensure that outcomes are inimical to the blend of objectives for the game.

The Canadian view of government as a legitimate partner of less well-endowed communities or companies is incompatible with the U.S. notion of a level playing field. Having the opponent's government as referee for an away game is not compatible with the Canadian public view of a level playing field either. While citizens of both countries speak of the importance of allowing the play of market forces they are not necessarily talking about the same thing.

Differences between countries in the perceived role of markets and government between rural and urban constituencies are relatively unimportant as long as trade relations are relatively minor and not formalized. However, as trade grows as a share of rural and urban GDP and trade links become more formal, difference in the view of the role of markets become important. Now that Canada, the United States and Mexico have embarked on a formal linking of economies these differences in perceptions of legitimate market forces and government policies are becoming apparent.

Rural areas in Canada and Mexico are particularly susceptible to the slope of the playing field as economic linkages are formalized. They produce products that are either exported to the United States or are in direct competition in third markets with similar products from the United States. The relatively weak position of Canadian rural economies has resulted in them receiving significant amounts of government assistance. Consequently within the playing field paradigm, policies important to rural areas (including royalty payments for forest products, freight subsidies, import restrictions, marketing boards, and other types of intervention) are 'whistled down' by US referees as unfair competition.

Sectoral, social and macroeconomic policies within Canada reflect a national schizophrenia over economic disparity and federalism. The partitioning of responsibility and fiscal power among various levels of government and among disparate regions takes place as a continuing predatory struggle among market forces and governments. If Canada were to become a more pure economic rather than a political union, as is being currently proposed, one could argue, as many have, that there would have to be fewer restrictions on interprovincial trade than exist today to make the union viable.

Ironically many of the interprovincial trade barriers were created precisely to isolate rural activities from market forces and to provide captive markets for Canadian utilities and transport. Consideration of a concept like 'economic union' calls into question the viability of made-in Canada brands of "market behaviour" founded over the years on the contradictions between layer upon layer of interregional non-tariff barriers and supply management, and the promotion of a growth/export based rural economy.

Limits to our social and political ability to alter both nature and markets must be recognized. An important lesson from the communist block experience is that we cannot expect to stand in the way of market forces on an ongoing basis and succeed. This is a lesson in common for both the referee and the team player roles for government in the economy.

Persistence of rural economic systems cannot be viewed as simply maintaining given structures or ideologies, however preferred they may be at the time. This conclusion suggests that collective initiatives should be of a nature that facilitate adjustment within individual institutions and enterprises in a community to enable it to redefine on a continuing basis the sustainable type and level of production.

Resource Dependence

Rural areas face considerable difficulty redefining their particular place in the economy. This difficulty reflects the limited range of opportunities available to them, and limited knowledge of what is going on in the rest of the world. In addition, traditional primary industries such as agriculture, forestry and mining entail high fixed costs and are site specific, which tends in the short run to lock communities involved in these products into a specific activity. Global competition in traditional generic commodities usually involves regional specialization if the nation is to remain an efficient producer. This specialization in a resource-dependent economy leads to the development of communities that do one thing well, but that cannot readily switch to a new activity.

Workers in resource communities constitute a labour that has been trained in skills specific to materials handling. Neither the equipment nor the labour force, including management institutions, are readily transferrable or transformable to other activities. As the demographic structure of rural areas evolves to a higher proportion of older workers this problem increases in magnitude. Similarly, the industrial plant and equipment for resource extraction cannot be readily retooled to incorporate the extremely dynamic nature of high value-added downstream processing responsive to the needs of end users. Thus, again the problem of low opportunity costs helps to perpetuate generic production in rural places.

The speed of the dynamics process is probably the most significant characteristic of economic globalization. However, the rigidities are problematic but not insurmountable when growth prospects diminish and development is required. If the current function of a rural economy, bound tightly to a single resource is no longer demanded, survival of the community requires developing a new stream of valuable outputs. New outputs entail write-offs and restructuring in manners consistent with the dynamic global restructuring of production, demand, markets and institutions.

Important questions to come to grips with are: Who pays for the rural write-offs? Can rural enterprises manage to keep pace with the dynamics of continuing globalization? Or, will these dynamics produce an equally continuous stream of write-offs? Can the conditions for participation in the global economy be harmonized for rural and urban participants on the basis of willingness to pay?

Rural enterprises continue to be confronted with these questions together with the need to specialize. Larger communities and regions require diversification as their foundation for long run economic stabilization. Yet by their nature they cannot take advantage of the synergies associated with diversification since they lack the population base and diversity of skills and vision to engage in a large number of different activities.

Ultimately markets will judge the success of adjustment. But initially the community itself has to determine how it chooses to respond. Thus, a necessary step in adapting to change is for the community to develop a vision of its place in the global economy. For a rural county or municipality of 3500 this may seem a heroic task that is beyond its capacity. However, all it entails is to determine what it is that the community can produce that some other part of the world will value enough to purchase. Then a strategy must be developed to ensure that the enterprises within the community work to make themselves efficient suppliers of those products or services. The closer these valuable outputs are to the end user, however, the more often the definition of the outputs and strategies will have to change. This may occur several times a year.

Economic Growth or Economic Development

In part rural development is about ways to enhance the degree of cooperation between rural and urban places, and to correct the outcome of predator-prey tendencies in rural and urban relationships. An ecological systems approach provides a useful way of thinking about growth and development in this context. Growth may be interpreted as "doing more of the same", while development involves structural change that reorients the economy (Flammang, 1979).

Development often comes about either because of changes in the external environment or from self-determination in human systems such as rural economies. "Development without growth" emerged as a popular concept during the 1960s. This concept was an anathema for many resource-based rural communities. Their economic trajectories during this century have been based on the opposite; growth without development. The basic function of the community remained constant and the employment mix remained stable. Prior to the 1980s the cyclical fluctuations in undifferentiated commodity demand were not threatening to the basic economic and social structure of the community.

Events in the 1980s suggest that the environment for resource based communities has changed significantly. These communities no longer are in a position to think about growth. They must think about development. The current set of changes in Eastern Europe and the Soviet Union, and the growing emphasis on market forces reinforce the need for a change in attitude and approach. Traditional growth-focused responses no longer lead to success. Communities that seek to perform a function for which there is no demand will fail, just as species whose habitat is disrupted and cannot adapt become extinct.

Diversification: Generics Versus Niche Products

Two logical development options for resource-based rural economies facing declining incomes and employment are either to diversify or to find a new economic base. A switch to manufacturing historically has been the most common means to economic growth for nations and communities. However, problematic changes taking place in primary commodity sectors also are showing up in manufacturing and according to Porter (1991), for the Canadian economy as a whole. One important aspect of these changes is the shift to a demand for the skills of learning and science and for unskilled labour, from a demand for the artisan skills and supporting culture upon which the country and especially rural economies were founded (Freshwater, Ehrensaft and Apedaile, 1991).

This demand shift is technology driven and, therefore, probably irreversible. Major issues associated with the shift are the effects of multinational enterprises on the location of home offices and associated investment and production decisions (Porter, 1991), and the declining importance of undifferentiated commodities relative to differentiated products and services oriented to dynamic niche markets (Piore and Sabel, 1984). Rural communities face additional complex dilemmas in defining their place in the production and distribution of goods and services within the larger Canadian economy, as it too struggles with changing global markets and technology.

Global markets and the dominance of multinational corporations in the production of bulk commodities and mass-produced goods leads to pressure to concentrate this type of production at sites where labour is cheap and the product can be readily distributed to markets. A second type of manufacturing deals in goods that require higher-order labour skills and do not lend themselves to large scale production. This type corresponds to the so-called niche product for small specialized markets.

Piore and Sabel argue that the future of North America lies in the second type of good. Canadian input costs and social objectives increasingly preclude much of the former type of production. If this is true then rural areas will have to find ways to become part of this adaptive manufacturing process, or accept the lower labour returns associated with generic goods of the first type. While rural areas may be able to upgrade to the new industrial organization required to compete successfully in small-batch, flexible manufacturing, they will require major investments in improving labour, transportation and telecommunication (Barkley, 1991).

A subsidiary issue is that manufacturing is becoming a less dominant part of the national economy. Most employment and income growth has taken place in the service sector, especially in rural places. Rural areas continue to look at services as the new engine of growth. However, the logic of the Piore and Sabel argument raises questions about this orientation. Some services are generic in nature, where cost and convenience is the primary consideration in selecting the provider. Laundromats, dry cleaners, fast food restaurants, consumer finance and a growing portion of the medical industry fall into this category of generic services. A second type of services is those based upon individual attention to specific client needs through personalized service of an artisan nature subject to diseconomies of size. In a rural context pest management services that scout fields for thresh-hold levels of infestation before spraying would fall into this category.

Rural areas face limited market volume for both types of services, in the same way as Canada does confronted by the global scene. Small market size weakens the potential for service-led economic growth. However, the greater challenge lies in the area of specialized services where distance and rural depopulation may preclude putting together a large enough customer base to reward even microfirms adequately.

Globalization accentuates pressures to choose technologies and enterprises that offer economies of scale of operation. When these pressures are added to the bifurcation of the manufacturing and service sectors and to the dynamics of demand, the ability of rural communities to diversify is seriously constrained. Paradoxically, successful diversification away from the generic outputs of the rural economy requires specialization.

Firms are required to specialize in the frequent redefinition of product lines and in the design of contractual alliances with other intermediate goods and services manufacturers. The acceleration of the dynamics of end-user oriented diversification can be summarized as "niche today gone tomorrow." Design skills, contract negotiating skills, retooling, multiparty financial arrangements, skill in personal relationships and a worldly attitude appear to be the human resource qualities required for rural diversification through specialization in a globalizing national economy.

Forces Impeding and Promoting Revitalization

Perhaps the single greatest conundrum for rural development is the forces that appear to be leading to the collapse of the economy and its supporting social structure in rural communities are the very forces that will have to be harnessed to revitalize rural areas. Recall some to the more prominent changes.

Improved transportation systems expose rural areas to outside competition and allow rural residents to leave the community. Improvements in education enhance the capabilities of rural children and improve the opportunities for pluriactivity, but provide access to job opportunities in urban areas. Expanded global trade introduces new competitors for rural products, while making available new technological options. Deregulation forces rural residents to bear higher costs of goods and services, but enhances the potential for local economic autonomy.

Each of these changes weakens the traditional structure of rural communities, while offering potential for new opportunity within the rural place itself. Better transportation allows rural areas to sell to a broader market. Improved labour force capacity allows rural businesses to get into new activities that require a more skilled labour force. More open global trade can mean new markets for rural products if they are competitive in price and quality.

The dilemma of dual negative and positive contexts of global change for rural areas can be illustrated by developments in rural retail trade in the United States. Walmart recently became the largest retailer in the nation by building stores in small communities. In almost every case where Walmart began operating in a community a combination of competition and predation led to a collapse of local retail businesses. They were unable to maintain either market share or profit margins, due to the combined inferiority of their marketing technology, their tendency to partition and protect market shares, and their inability to achieve scale economies in the procurement of goods. This static behaviour failed in the face of the predator strategies based on pronounced and extensive economies of size of the distribution technology developed by Walmart.

In the meantime, rural entrepreneurial and business leadership migrates. Communities may end up losing a vital element of local initiative that impedes future development. In small communities the retail sector is a primary source of entrepreneurial activity. As the local retail sector withers there is a parallel reduction in the business skills of the community. As a result, despite the short term benefits of lower Walmart prices for consumer goods, long term business initiative in rural places may fall further behind that of their urban counterparts.

Rural consumers in this example receive a wider array of goods at lower prices than before. However, Walmart is able to generate above-normal margins to finance further predation in other places because the full benefits of their volume buying is not necessarily passed on to the consumer. Reduced competition in rural places allows them to price at "what the traffic will bear." The monopoly power of Walmart in rural areas is now providing the corporation with the resources to challenge other retail chains in suburban markets. Walmart exploited a market opportunity in rural areas that other retail organizations ignored.

Competitive Pressures and Rural Bargaining Power

As rural communities embrace local control and accept the predominance of market forces, the playing field metaphor assumes central importance. It would appear to be at best unethical for senior levels of government to encourage rural local initiative when market participants have radically different amounts of information, different degrees of bargaining power and widely divergent resources. The outcome of bargaining and market processes under such conditions is biased to the better endowed.

The situation most resource communities find themselves in at present suggests they are not well endowed with information, mercantile traditions or bargaining power. Therefore, pure reliance on the market can be expected to produce outcomes for rural economies that are akin to playing poker with a marked deck in the hands of a professional gambler.

Rural places in Canada are rarely in the position of being one of the dominant considerations when major changes in national policy are debated or when market exchanges are consummated. Rural places are not the sites of home offices. On one hand they remain in relatively upstream types of economic enterprise, remote from price determination in final product markets. On the other hand, they are downstream of urban social and economic externalities. Consider only the last of these three issues of bargaining power.

In the language of economists, rural places must accommodate the externalities of public policies for urban places and of global market-based decisions. By absorbing these "external costs" rural areas subsidize activity in urban areas. The extensive nature of these cross-subsidies makes movement to a pure market economy unlikely to result in desirable outcomes.

There are many examples. Rural places absorb, through lower wages, rents and returns to capital, many of the downstream adjustment costs of technology, shifts in consumer preferences and economic restructuring. Rural places process industrial wastes and pollution through crops, grasslands, forest, lakes, streams and marshes. Rural places provide landfill sites and golf courses. Rural places also take the stress and institutional dislocation of serving urban people saturating rural communities with secondary homes, tourism, fishing and leisure driving.

These externalities are the costs of private urban enterprises and urbanization which are not captured in market prices, but which can be removed geographically to rural places so as to protect urban wealth and quality of life. Processing these externalities within the rural economy constitutes production of a public good for which the end user is amorphous, remote and, therefore, unpaying. This public good, though potentially tradeable in the sense of economic base theory, is not tradeable under most current economic arrangements and policies.

The displacement of these costs from the balance sheet of the larger economy contributes to national competitiveness in global markets by artificially inflating urban industrial productivity measures. These costs, if properly assessed to their urban origins, could exceed the value of production from forestry, agriculture and fishing for many rural places in Canada, and perhaps in the aggregate national accounts. These costs are likely large enough that if attributed to the industrial sector, they could reduce Canadian competitiveness in international markets. These are "playing field" issues.

To a considerable extent the magnitude of the problem of externalities is a reflection of different levels of market power. Rural economies are forced to bear the costs of these externalities because the natural resources themselves, the capital committed to developing the resources, and the labour and business organizations in the rural community have low, if any, opportunity costs. As a result, rural equity holders typically receive a residual return. The more remote the rural community is from the core of the general economy, both in space and economic importance, the more this problem is exacerbated.

Two operational development goals are for rural areas to determine how to position themselves to recover the costs of these urban externalities, and to find ways to improve the odds that their interests will be internalized within the markets and policies of the larger national economy. Chances of attaining these goals can be increased by a better understanding of the nature of the economic relationship between rural and urban places.

Persistent erosion of the terms of trade experienced by rural areas suggests consideration of replacing the competition paradigm by a predation paradigm because however much the terms of trade change, the symbiotic nature of rural and urban existence cannot be eliminated. This reasoning suggests that exploitation of either party by the predation of the other is ultimately tempered by their mutual dependence. Corrections to the condition of a prey are a fundamental building block for ecology models and perhaps for future economic models.

A social contract for the provision of public goods between the urban and rural economies appears to be one option for transforming predation into a mutualist outcome which satisfies human standards of wellbeing and freedom. Currently rural economies depend in an unsatisfactory way on politically determined income transfers tied artificially, in a market distorting manner, to generic commodities such as cereals, milk, fish and logs.

Balancing Market and Government Influence

Global market signals to rural economies in Canada are filtered and transformed through a complex policy environment that influences decision making on a regional and commodity basis, particularly in terms of business starts. Three main policy sets can be identified: sectoral, social and macroeconomics. Sectoral policy deals with particular industries including agriculture, forestry, mining and energy. A specific department or ministry headed by a member of the Cabinet at both the federal and provincial level typically is charged with aiding, regulating and developing each sector.

Our past sectoral policies have mainly tried to "trick the market" by manipulating prices or the ability for individuals to enter particular markets. Rural areas have traditionally looked to sectoral policy as a source of relief when times have become tough. Yet, sectoral policy is becoming increasingly ineffective as global economic integration and a greater willingness to accept market driven outcomes influence public policy.

Social policy, by contrast, is oriented to shifting risk from individuals to the collective population. Included among these policies are unemployment insurance, medical care, education, cultural affairs, social welfare and other similar programs. While these programs do not have a direct development function they do provide income transfers and support functions that can enhance development activities. They reduce the need for individuals and firms to maintain liquid contingency balances and so advance consumption and capital formation.

Active use of social policy for development purposes is constrained by one of two phenomena. Either the policy is generally available to all, in which case it conveys no particular benefit to any region, or the policy is targeted on the basis of eligibility criteria to specific groups and funded from general revenues, in which case it has a narrow base of support. Policies in the first group spread their benefits too thinly over a wide client group to have a major effect. Those in the second group are subject to continual pressure to broaden eligibility and are subject to efforts to divert funds to programs with broader political support.

In a market-oriented society policies also suffer from the dilemma of appearing primarily redistributive in nature. Rather than creating wealth directly they reallocate it with the expectation that the reallocation will increase future production. Typically social policy has no explicit rural focus, although rural areas often benefit disproportionately from particular social policies because they have a high percentage of eligible residents.

Finally, macroeconomic policy covers the broad set of fiscal and monetary policies and external trade relations that determine the broad economic environment for the various sectors. Macro policy tends to be applied uniformly across regions and between rural and urban places. However, particular sectors can be affected to varying degrees by policies that were developed to address national issues.

A paradoxical contradiction exists between the interaction and interrelatedness of these three types of policy, and the autonomy and independence of their originators, each with their own set of purposes. This contradiction helps to obscure the environment in which market signals are interpreted. The institutionalization of regulations further constrains the dynamic pace of output redefinition, retooling and strategies in rural places to match global change. This problem of policy and regulatory deadweight underlies the common complaint of commerce and business about too much government.

Balancing market and government influence does not mean that more or less government is necessarily or uniformly better. Balancing requires design, discretion and efficiency. There are five issues; first, the multiobjective nature of the rural economy; second, the need to temper short term opportunism with consideration of long term efficiency; third, the balancing of the referee (interventionist) and team player (participant) roles of government; fourth, a way to determine the nature, quantities, and payments for rural public goods and services; and fifth, the efficient operation and performance of markets. The larger compensation role of government in redistributing income and setting limits to economic hurt is an over-riding factor in the balancing.

The Mutuality of Rural and Urban Interests

The mutual dependence of urban and rural areas upon each other ultimately necessitates either a strong wealth generating rural economy, or the preservation of rural places through ongoing subsidies. Abandonment of rural places does not appear to be an option, although individual enterprises and communities are expendable even if there is a favourable rural policy bias.

What is not acceptable is a persistent broad based driving down of incomes and wealth in rural places by market conduct or policies that deny the principle of mutuality in the urban-rural relationship. Urban areas will continue to require access to the broad set of outputs, both public and private, from a healthy rural economy.

In part, a perception of this mutuality of interests explains the willingness of urban interests to support sectoral programs for rural commodities. While these policies generally entrench the interests of the urban manufacturing firms and municipal leaders, they also typically limit the extent of decline experienced by rural places.

Entrenchment of urban interests involves interventions in markets through the enhancement of monopoly power by means such as patents, licenses and regulations of entry and exit, which enhance the market transfer of income out of the rural economy. These transfers are tempered, however, by subsidies, commodity support prices, development programs and other forms of government assistance that act, generally after the fact, to offset the market and policy induced erosion of rural communities.

This perverse expression of mutuality is urban-driven. The urban economy is apparently market oriented and, therefore, legitimately founded on the principles of enterprise, competitiveness and efficiency. The rural economy in contrast grows more dependent over time on the willingness of urban taxpayers to redistribute their earnings in the form of compensation. The consequent welfare and rent seeking image of the rural economy is viewed pejoratively by urban and rural constituencies alike.

Net income attributable to rural labour, capital and land becomes largely a function of these compensations. Markets effect the payment for intermediate industrial inputs generated usually in urban places. Thus rural investment decisions are financed from compensatory income transfers instead of market-driven earnings. The result is non-viable location decisions for rural business, inefficiency and high cost outputs, declining business successions and worsening rural urban economic disparity; all contributing to rural depopulation.

Synthesis: Overfishing and Species Extinction

Clearly, neither markets nor government in the new global economy lend assurance to a belief in an imminent reinvigoration of rural investment and rural places. The historical pattern of capital and labour extraction from rural areas continues to be the option of choice. The critical issue for the near term is whether the process has gone on so long that the residual level of capital and labour in rural areas is sufficient to preserve rural economic activity at levels required to manage the territory. Just as a fishing ground can be over-fished to the point that the fish population drops below the critical threshold for survival, so too can rural communities be stressed beyond the point of unassisted recovery.

Once this point of depopulation is reached in enough rural places, whole regions could be mothballed pending a future era of value to the urban economy. Problems and costs of irreversibility would have to be considered. Alternatively, recognition of a current mutual dependence of urban and rural interests would require a major infusion of revenue to restore rural areas to a point where they can provide needed public and private goods and services to the urban economy. An alternative to financial infusions from urban sources based upon mutuality, is for rural economies to find foreign sources that are less subject to domestic influence, less preoccupied with rural resources as a source of capital and labour for urban development and which are a direct conduit to global demand.

Can the dynamics between rural and urban areas be better managed? The interest of senior levels of government in seeking a better system is simple. Ultimately a nation, like an ecosystem, needs diversity and full use of its resources if it is to thrive. As the world becomes more integrated, the pressures for change will become more intense and the magnitude of the rewards and penalties for success and failure will increase.

The interests of rural communities are even simpler. The old processes of economic growth have been severely constrained by predation and by changes in the rest of the world. If rural communities are to prosper in the future they will have to respond to the new environment and adopt principles consistent with economic development.

This means that both rural areas and the nation will need to accept the challenge of rural economic development. Ways must be found to ensure that rural residents, their skills and resources, can fully participate in the benefits of national development in the global economy. Today neither current market conditions, nor current sectoral policies are particularly relevant for development of rural places.

Rural areas are tied by more than sectoral interests to the rest of the nation and to the rest of the world. While it may be tempting to ignore rural places because they appear relatively unimportant, the links between urban and rural well-being run in both directions. In the past urban interests have been willing to support rural programs, but the current needs of rural areas are different than they once were, and urban tax bases are depleted, so new programs will need to be defined.

What is still unclear is the nature of these programs, because most rural areas have yet to determine their strategy for development. The nature of the relationship between public policy and market forces needs to be rethought. The increasingly limited ability of sectoral policy to assist rural areas suggests that "tricking the market" is not working.

Instead, we may have to work toward establishing more of a social contract between rural and urban based partly on willingness to pay for amenities and urban externalities, and partly on long-run protection against irreversible deterioration of resource bases that include human skills and institutions. The principle of a negotiated social contract is grounded in the joint dependency of rural and urban places.

Conclusions: Toward a Willingness to Pay

The first conclusion is that sweeping, fast moving changes are upsetting the relationship between the rural economy and the larger national economy. Not all market outcomes in this dynamic situation are necessarily best, nor balanced in terms of the multiple long-run interests of rural and urban Canada. Consequently rural people, in particular, are not participating fully in the development of the Canadian economy, nor in the benefits of that development. The problems are related to the inherent nature of markets to exploit the low to zero opportunity costs of rural natural resources, capital and labour; and to the diminishing returns associated with inputs and skills for rural businesses, institutions and individuals.

The second conclusion is that traditional reliance on growth strategies should give way to development strategies. More of the same is not an adequate base for the full and rewarding participation of rural equity in the national economy. Development should focus on raising opportunity costs for rural inputs and choosing technologies which extend the range or output for economies of size.

The third conclusion is that the undifferentiated nature of rural commodities leads to vulnerability to lower cost offshore competition. More difficult still, these commodities also are considered by most countries to retain strategic value in addition to economic value, resulting in markets distorted by protectionism. The alternative for rural places is to redefine differentiated outputs for niche markets. However, niche markets tend to be transitory, more-so the closer the product or service is to the end user. Therefore, rural development by restructuring output must be dynamic, design oriented, capable of rapid retooling, and tied beyond domestic markets into the global restructuring process.

The fourth conclusion is that the global forces relating to technology, integration of financial markets, information and trade liberalization, that are reducing the profitability of resource-dependent enterprises, are those global forces which offer the opportunities for rural development. Rural places need to define their development strategies, leapfrogging the domestic economy and tying directly into the global economy with product lines, finance and intermediate input systems.

The fifth conclusion is that the "level playing field" metaphor means different things in different countries according to whether government is perceived as a referee in market plays or as a participant within the teams on the field. Market imperfections are here to stay. The ideal of perfect competition is subordinate to national strategic interests. Competitive discipline is considered too Darwinian for social acceptance. Attempting to trick the market with rural incentives, price supports and regulation to achieve desired results appears to be unworkable.

The sixth conclusion is that the current relationship between the urban and rural economies may be more amenable to modelling with the predation paradigm than with the competition paradigm. Structural issues and questions of long run terms of trade and efficiency require recourse to comprehensive approaches incorporating all of cooperative, predator and competitive behaviour.

The last and most important conclusion is that rural and urban economies need to engage in a process of negotiation of a long-term social contract for the public goods and services produced in rural places. The present arrangements pretending that the entire value added in rural places can be captured in undifferentiated commodity markets is impoverishing rural people. Reliance on antipoverty income transfers over the long run is neither spiritually nor economically satisfactory. Diversification and development programs for rural places require a market and policy climate radically different to that of the traditional generic growth-based strategies of the past.

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THE STATE AND RURAL POLICY IN ADVANCED INDUSTRIAL SOCIETIES: THE NEW REALITIES OF THE LATE TWENTIETH CENTURY[5]

Introduction

It is ironic that what is now called "rural policy", a coherent set of programs and public policies aimed specifically at enhancing the living standards of rural people and the viability of rural living; did not become an academic or public policy issue until the time when the conditions for undertaking such policies were unfavorable. It has only been with the playing out of a set of new forces which have demonstrated the vulnerability of rural regions, places, and peoples that there has been a clearer recognition of the need for such rural policies. There is growing awareness that many rural areas, especially those in remote regions and those yet dependent on the classic rural/primary industries, are undergoing, or threatened with, decline. More fundamentally, there is a growing recognition that the very viability of rural life outside of the perimeters of metropolitan space is at stake. But the circumstances of the early 1990s are such that there is neither a fiscal nor an ideological basis for the social investment in rural regions that will be required.

In this paper we will lay out what we see are some of the general parameters that are affecting or will affect "rural policy." We will, however, consider rural policy in a much more general way than that referred to earlier (i.e., direct or formal rural policy). We will focus primarily on indirect or latent rural policy, by which we mean state policies that substantially affect rural areas despite the fact that they are not aimed specifically at rural areas, communities, households, labor markets, and so on.

Since we are non-Canadians and are more familiar with the portion of North America south of the border, our analysis will be aimed at a relatively general level and stress the U.S. case. There are strong similarities of culture, settlement history (as white settler colonies), of geography (e.g., large expanses of sparsely settled peripheries), and political regime types (neoclassical regimes; Esping-Andersen, 1990) between the two countries. Given these similarities, observations from the U.S. context can be of considerable relevance to a Canadian audience. There are, however, some key differences that relate to rural policy and rural development, e.g., the somewhat greater breadth and depth of the social insurance "safety net" in Canada than in the U.S.; divergent trends in rural-urban per capita income ratios (relatively stable in Canada, and appreciably divergent in the U.S., since the late 1970s; Buttel et al., 1992; Ehrensaft and Freshwater, 1991). Some of these differences in policy environments and outcomes are integral to the analysis we will develop later.

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5 This paper is based, in part, on the work of the State and Rural Policy Working Group of the Task Force on Persistent Rural Poverty of the Rural Sociological Society and on the "white paper" (Buttel et al., 1992) prepared for the Task Force. The preparation of this work was made possible by the financial support provided by the W.K. Kellogg Foundation and the Regional Centers for Rural Development to the Rural Sociologic Society Task Force.

The New Context Of Rural Policy: The Making And Unmaking Of The Post-War Order

Understanding the world, and the role of rural places, spaces, and peoples in that world, seemed to be a relatively easy task when we began graduate school in the early and mid-1970s. What was occurring then seemed to be pretty much a linear extrapolation of what was the case in 1960 or 1965. The social sciences had for several decades become committed to a developmentalist/modernizationist point of view that saw social change as being immanent in social structure and as being knowable in its directions, which the social sciences felt confident to forecast in terms of various "tendencies." Though this view of the world still survives and is of value, it has been battered by the realities of the past two decades. We can now see in retrospect that what seemed like an incremental unfolding of post-World War II trends into the early 1970s was based on a theoretical view of the world that is now being rapidly revised. One of the main emphases of this new understanding is the notion that world development must be seen as being discontinuous and cyclical as much as it is linear and progressive.[6]

It is useful to begin by considering briefly some of the discontinuities of national and global social change that bear on rural policy today. Prior to and shortly after World War II, several conditions propitious for rapid capital accumulation emerged. Assets were devalued during the Depression, and real interest rates declined, making large-scale capital investments more attractive. War investments and pre-War and wartime technical developments in the chemical, surface-transport, and electronics industries created the basis for widespread mass production and mass consumption. New institutions for regulating the social relations of industry and class relations of society parliamentary democracy, institutionalization of class struggle in electoral politics, corporatist associations, and collective bargaining were in place. Many of the these institutional arrangements were worked out during the Depression, but their enduring importance would not become clear until the onset of rapid investment and growth after the War. This shift is typically labeled that from competitive capitalism to "Fordism" (Lipietz, 1987), to "organized capitalism" (Lash and Urry, 1987), and so on. We will refer to the institutional arrangements of the late 1940s to the early 1970s more simply and generically as the <u>post-War order</u> (see Ruggie, 1982). There were, and continue to be, significant variations in the ways in which the post-War order was manifest among the advanced countries, e.g., as between social-democracy of Nordic Europe, corporatism of Germany, and the neoclassical/laissez-faire systems of the U.S., U.K.,

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6 Some long-term cyclical changes include the rise, decline, and resurgence of ethnic identity; long phases of economic expansion and contraction; the supplanting of world empires by the nation-state system and national economies, with the national state and economy now being supplanted by international financial markets and world market integration through transnational firm practices; and so on. As Wallerstein (1991) notes, classical social theory developed under conditions of the consolidation of the nation-state, and thus took systems of political authority, economic organization, social identity, and so on to the properties of (national) societies, which became the unquestioned unit of analysis in social science. He argues that insofar as these epochal shifts can and must be located in the dynamics of world economy and geopolitics, modern social science must "unthink" (or, in other words, largely abandon) the nineteenth-century classical "paradigms" if it is to develop a meaningful perspective on large-scale social change. Though Wallerstein's claims are arguably exaggerated, his central notion -- which in the context of a paper such as this can be stated that one cannot think of rural policy by privileging the national unit of analysis or seeing rural problems as being national problems -- is important and provocative.

and Canada. Nonetheless, there were significant commonalities among the various national manifestations of the post-War order.[7] Among the most important of these commonalities were the following.

The post-War order was characterized by an integrated shift between the rise and consolidation of the industrial working class on one hand, and rapid capital accumulation and growth in the mass of profit on the other. The industrial working class accounted for a large and, until the mid to late 1950s, a still growing share of the occupational and class structures of the electorate. This translated into growing power of trade unions and labor parties. Bolstered by growing power of labor in the electorate and a growing efficacy of strikes and work stoppages in industry, there was an increased role of collective bargaining (in countries such as Canada and the U.S.) or corporatist wage determination (e.g., in Germany). State provision of welfare benefits, unemployment insurance, old age benefits, and medical benefits, by increasing the "social wage," put a floor under private wage and benefits levels. Fiscal and monetary policy stressed "social Keynesianism" the growing use of fiscal and monetary policy to manage the economy (i.e., to maintain a balance between unemployment and economic expansion), to mildly redistribute income, and so on. State fiscal capacity and the ability simultaneously to fund infrastructural investments and underwrite social insurance programs (i.e., the "welfare state") progressively grew. Bolstered by low structural unemployment, there was a clear pattern of rising real wages; more specifically, a pattern of growth in wages in tandem with increased productivity in manufacturing industry.

The post-War order reflected a symmetry between two "logics" of social and economic organization. There was an economic logic of linking mass production with mass consumption, since rising industrial productivity enabled real wages to rise without inflation, while rising real wages enabled further expansion of production. There was also a political logic of the state capturing a portion of the increased surplus made possible by the growth of production, and redistributing this surplus through state social investment programs to underwrite further capital accumulation and through social welfare programs to mitigate the social dislocations of technological change, occupational change, large-scale internal migration, and so on.

The post-War order, though it occurred in a world market environment that witnessed the rise of multinational firms and a growing role of direct foreign investment, was fundamentally an era of nationally-ordered accumulation. The "national integrity" of economies enabled fiscal and monetary policies to be employed to regulate the economy, and to do so with minimal threat of dire consequences through trade and monetary imbalances or through deterioration of international competitiveness. In addition to the U.S. being the world's dominant industrial power and the dominant military power, the U.S. dominated and regulated the world monetary system through the Bretton Woods system of gold/dollar standard and of the U.S. dollar serving as the international reserve currency (Block, 1977; Wood, 1986). As we stress later, the dollar-dominated, dollar-denominated trading system provided for by the Bretton Woods agreement reinforced the primacy of the national economy, and hence of national regulation of the economy.

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7 See Lash and Urry (1987) and Goldthorpe (1984) for useful discussions of patterns of convergence and divergence among the advanced industrial countries. While the existence of such commonalities is a matter of considerable agreement, there is less consensus on why this has been the case. There are two major classes of explanations. One such explanation is nation-centered and rests on notions such as the "logic of industrialization." It is argued that the structural similarities of the advanced countries can be accounted for by the fact that they experienced their industrial revolutions at similar points in time and through similar (labor-intensive, mass production) technologies. Another (world-systemic) explanation is that patterns of large-scale social change exhibit similarity across space on account of their being "synchronized" internationally through world trade or geopolitics.

North American rural societies were closely shaped by the post-War order. The rural manifestations of the post-War order affected both agriculturalists and nonfarm rural people. Agricultural commodity programs, for example, were implemented or reinforced, essentially as an extension of the welfare state to farmers, who had fared particularly poorly during the Depression.[8] The nature of agricultural production began to parallel that of manufacturing industry. Agricultural production came to be based on industrial inputs (e.g., chemicals, machinery) produced within the dominant industrial complex. Farm production became specialized at both the enterprise and regional levels, and took the form of mass production of undifferentiated commodities (Kenney et al., 1989). Agricultural productivity increased significantly, through a treadmill of technological change that increased the capital intensity and decreased the labor intensity of agriculture (Cochrane, 1979). There was accordingly a rapid decline of farm numbers and a shift of labor outside of the farm sector. Mass-production-oriented industrialization of the food system paralleled that of nonfarm industries.

One of the concomitants of the rapid technological advance and productivity increase in manufacturing in the post-War order was the emergence of the "product life cycle" as a major principle of industrial location. New technology and market maturation caused older industrial processes to no longer be profitable in the high-wage environments of major metropolitan areas. The product life cycle led to a pattern of intra-country industrial decentralization, in which routine, wage-sensitive manufacturing industries were relocated to rural areas (Glasmeier, 1991). As a result, by 1970 in the U.S., the nonmetro labor force had become more industrial than the metro labor force. Industrial decentralization in turn led to rural economic diversification. This "industrial transition of rural America" (U.S.D.A., 1987) helped to compensate for the fact that increased labor productivity in the classic rural/primary industries generated continual declines in rural primary sector employment. Rural economic diversification led to agriculture and the rural economy becoming increasingly "decoupled" in all but the most remote and sparsely populated rural regions.

Labor displacement in the classic rural industries was also compensated for, in part, by the social insurance/welfare state programs and social Keynesian policies of the post-War order. Rural economic viability came to be based on transfer payments and on social Keynesian spending on regional economic development, infrastructure, service delivery, and related programs. The result of the two compensatory patterns of industrial deconcentration and social Keynesian/redistributive spending was a dramatic pattern of rural-urban income convergence. Rural incomes were, on average, about 70 percent of urban incomes in 1950, but had risen to 78 percent of urban incomes by 1973.

The post-War order persisted for about 25 years, until the early 1970s. A long phase of decline ensued, having been triggered by the OPEC oil embargo (and rapidly rising oil prices) and by the international financial disorder associated with the U.S. government having monetized the debt incurred in waging the Vietnam War. What we failed to realize as graduate students in the mid-1970s, however, was that we were just then entering a period of a combined technical, economic, and political disintegration of the post-War order. Some of the major components of its exhaustion have been as follows.

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8 At the time of the Depression, farmers were a sufficiently large share of the labor force, and farm production was a large enough share of the economy, that a farm depression could trigger a economy-wide depression. As we note later, however, farm production in the advanced countries is now such a small share of national product that its fortunes have little impact on the economy as a whole.

There was a slow, but steady decline in what in the U.S. has been referred to as the "midwestern industrial complex," consisting of the major industries (autos, steel, electronics, rubber, consumer durables) that were the manufacturing backbone of the post-War order. This decline took many forms: disinvestment, deindustrialization, movement of production offshore, and dramatic loss of market share to foreign competitors.[9]

The withering of the mass production manufacturing economy led to slow economic growth and to rising structural unemployment and income inequality. The OECD countries have averaged less than 2 percent annual growth in per capita income since the mid-1970s, compared to an average of about 3.9 percent during the 1960s. Slower accumulation has decreased the fiscal capacity of states and led to deepening fiscal crises. This decreased fiscal capacity and the decline of working class political power have combined to limit the scope of social insurance and social Keynesian macroeconomic stabilization programs. As the social wage has fallen, there has been a significant decline in the real wages of non-supervisory workers, which have fallen back to the level the late 1950s. In contrast to the post-War pattern in which accumulation and wages grew in tandem, the new pattern appears to be that accumulation is consistent with stagnant or declining real wages (Therborn, 1986). The decline in real wages has been most pronounced for those who live in inner cities and in rural areas. Economic dynamism has been largely confined to the industrialized suburbs and to upper-middle-class suburban "hot spots" such as Contra Costa County, California, or Fairfax County, Virginia (see Reich, 1991, for an overview).

The disintegration of the post-War order has also corresponded with the weakening of the national type of economy. Though the declining integrity of national economies has usually been discussed mainly with reference to the "liberalization" of markets in commodities and goods, the "footlooseness" of multinational firms, and "the new international division of labor" (Frobel et al., 1979), the globalization and deregulation of finance are arguably as or more important than industrial relocation and declining trade barriers. As Dicken (1992:358) notes, "international financial flows and foreign currency exchanges now dwarf the value of international trade in goods."[10] World trade has increased in its volume and share of world output since the early 1970s, though the rate of increase in world trade volume in the 1980s was about 4 percent per annum compared to 8 percent per annum in the 1960s (Dicken, 1992:17). Nonetheless, the growth of world trade is paralleled by its politicization in the form of trade wars, conflicts over trade balances and subsidies, and so on. The bulk of world trade remains administered trade, either that whose terms are negotiated between states (such as import quotas) or that between subsidiaries of the same multinational firm. Though there has been a trend toward a global market in goods, the more important trend has been toward a multi-polar world economy, with three major spheres of trade and accumulation (North America, Europe, and East Asia).[11] Nonetheless, the creation of a virtual world market in money and finance represents a particularly dramatic departure from the nationally-regulated monetary systems that prevailed during the post-War order. But, as will be stressed later, the increased mobility of financial capital has been plagued by instability due to the global debt crisis and the lack of a mechanism of regulation and stabilization comparable to Bretton Woods.

9 The mass-production heavy industrial structure has given way to the rise of flexible, computer-integrated production and just-in-time production and inventory-control systems. These new ("high-technology") production processes both minimize labor inputs and permit market segmentation in order to appeal to differentiated consumer lifestyles. These flexible systems permit the disaggregation of the production process across space. Economies of the industrial countries have increasingly been dominated by the high-technology industrial location pattern. R&D and management are performed in one location (typically a suburban place with a large pool of technical labor) while production occurs elsewhere (typically in a nonmetropolitan area or NIC with a low-wage, disciplined, educated labor force).

10 In the mid-1980s Drucker (1986:782-783) calculated that the London Eurodollar market turned over about $300 billion each working day, or about 25 times the daily value of world trade in goods and nonfinancial services. He also calculated that foreign exchange transactions in the main world money centers were about 12-fold the value of trade in goods and services.

11 The multi-polar pattern of world trade is driven mainly by regional trade blocs whose rules involve some type of discrimination against countries that are not members of the bloc.

At the political level, the restructuring of the midwestern industrial complex accelerated the trend of the decline of industrial working class as a component of class structure and the electorate that began midway through the post-War order. In most of the OECD countries the industrial working class declined from its 1950s peak of approximately 45 percent of labor force and electorate to about 15 percent today. Accordingly, there was an erosion of the position of working class or labor parties and a rise of the parties of the right. The post-War pattern of dominance by class-based parties, in which labor parties were predominant due to their advantage in having a large working class constituency, has given way to a growing role of interest-group and social-movement politics. In particular, so-called new social movements, typified by the ecology, peace/human rights, and feminist movements, have increasingly supplanted labor parties as the main vehicle of left or oppositional politics.

Just as the agricultural sector and rural economy were closely shaped by the post-War order, they have been strongly affected by its disintegration in many respects. Many of the problems of the agricultural sector, however, relate to the fact that its technology and production processes remain largely the same as those of the post-War period. Agriculture remains stuck in a position of producing undifferentiated commodities at a time when mass production of uniform products is unprofitable and in decline. The agricultural sector has also suffered on account of the environmental destructiveness of its technology, which has led to farmers and agriculture having lost legitimacy and public support among a more environmentally concerned public. Since the early 1980s, there has been a permanent farm crisis (Goodman and Redclift, 1989), which in some countries such as the U.S. and Australia has been experienced as a concrete economic crisis of overproduction and lower prices, while in other countries, such as those of the EEC, there is a persistent farm policy crisis; in each case, the farm commodity program safety net has been under pressure due to fiscal constraints on states and to depressed world market prices aggravated by state export subsidy programs to dispose of surpluses. The past decade's international monetary instability, particularly as reflected in instability in exchange rates, has contributed to unstable international agricultural commodity markets. Agricultural trade disagreements (if not "wars") over export subsidies, domestic protectionism, and nontariff barriers are now commonplace. Since the U.S. shift to monetarist policy in the late 1970s, there has been a pattern of high real interest rates, which adversely affect this interest-rate-sensitive sector.

The (nonfarm) rural economy has also experienced major shifts following the disintegration of the post-War order. The selective dismantlement of social Keynesian domestic spending programs has pulled the props out from under U.S. peripheral regions whose viability had become based on state programs of citizenship entitlement, redistributive spending, and public infrastructural investment (Buttel and Gillespie, 1991).[12] Due to the industrial decentralization that occurred during the three decades after World War II, in which low-technology manufacturing firms became disproportionately located in rural areas, the demise of traditional mass production industry over the past 15 years has had particularly dramatic impacts on the rural economy. There has been a very significant flux of industry both into and out of rural areas as manufacturing firms have responded to international competition. The major flow of industrial investment has been that of rural manufacturing firms moving either offshore or to lower-wage regions. There has been a smaller, but significant compensatory flow of industrial relocation from metropolitan to rural areas by firms seeking cheaper, nonunionized labor.

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12 The dismantlement of social insurance and domestic spending programs has been highly selective, however. Nonentitlement domestic spending programs, particularly infrastructural investments, employment and job training programs, human service programs which were administered by localities in areas such as housing and community development, and service subsidies have fared least well (see below), having declined by about 35 percent between 1982 and 1986. Entitlement programs in general have fared best. No less than 10 percent of the U.S. population, for example, is currently (mid-1992) enrolled in the food stamp program. Old age assistance programs have fared particularly well in the 1980s and 1990s, and have become integral to the economic bases of most rural areas (U.S.D.A., 1987).

The rural economy of the early 1990s also differs from that of the post-War order in the greater level of socioeconomic differentiation that now exists among its regions and places. The spatial differentiation that is occurring reflects four major forces or factors:

(1) Proximity to metropolitan centers - Proximity to metropolitan areas has long been associated with higher levels of income and greater economic diversification among rural places (Lobao, 1990). In addition to the traditional benefit associated with metro proximity, proximate nonmetropolitan places, where cheaper rural labor adjoins large pools of technically-trained metropolitan labor, have benefited most from the emerging spatial pattern of high-technology investment (Glasmeier, 1991).

(2) Differential ability to attract investment - With the decline of federal investment in infrastructure and services, the ability of places to attract private investments depends on whether their tax bases are sufficient to provide services.

(3) Direct competition of rural regions with the newly industrializing countries (NICs) - As liberalization of markets has proceeded, rural regions in North America find themselves having to compete more directly with the NICs and other Third World countries that have cheaper labor and land. Rural North America can no longer expect to benefit from capturing "hand-me-down" industrial relocation that filters down the metropolitan hierarchy, since low-wage areas in the Third World are now formidable competitors for routine manufacturing.

(4) Dependence on primary industries - The primary industries are generally experiencing depressed world market prices and a painful process of restructuring. Rural places dependent on these industries have fared least well.

The upshot of these changes for nonmetropolitan America has been a dramatic shift in its relative income standing compared to urban/metropolitan America. Between 1979 and 1987, average annual earnings per job in nonmetropolitan U.S. counties fell 8 percent in real terms (compared to a 2 percent real decline in metro areas). Nonmetro residents' per capita incomes as a percentage of metropolitan county incomes declined from 78 percent in 1973, to 73 percent by 1990. Increased urban-rural per capita income disparities are paralleled by disparities in unemployment, poverty, and net out-migration rates (see Galston, 1992).

New Trends Affecting Rural Policy

Internationalization

"Internationalization" is by no means a phenomenon of the late twentieth century. World trade was important to the world economy from the time it was consolidated through overseas expansion of Europe in the late fifteenth and sixteenth centuries. The history of the West has been an "internationalized one," of mercantilism and world empire. The history of North America was one in which their colonial economies became organized as suppliers of primary materials to the European metropole.

Nonetheless, it is in the nature of rural socioeconomic issues and rural policy today that one's assessment and diagnosis must pay particular attention to the world economy and to the political, economic, and social dynamics that lie well outside of the prairies, forests, and meadows of rural places and spaces. "Internationalization" is on nearly everyone's list of the most potent forces that have affected nonmetropolitan areas in the past decade or two and that will continue to shape the rural U.S. But we suggest that internationalization is much more multifaceted than is often recognized. Internationalization is commonly conceptualized as a secular, linear trend or outcome of greater global economic integration, of the shift of power from national states to "stateless" multinational firms and to the World

Bank and IMF, and so on. Alternatively, internationalization is seen as cyclical expression of the crisis of the post-war international order, which is destined to be reversed as an inevitable new protectionist mood reduces the volume of world trade and increases the share of trade that is "administered." Both of these are probably true, though in a highly complex manner.

Late twentieth century internationalization, in our view, must be conceived of as both cause and consequence of the crisis of the post-War global political-economic order under the dominance of the U.S. Bretton Woods, a resort in the White Mountains of New Hampshire, was the site of a UN monetary and fiscal conference where the fundamental internationalized arrangements for the governance of post-war national economies were ironed out. The Bretton Woods agreement, as institutionalized in the World Bank and IMF, and as underwritten by the U.S. dollar, framed the post-War consolidation of major national market economies. The Bretton Woods agreement weakened the gold standard by establishing the U.S. dollar as essentially a world currency, convertible into gold, and thus liberalized world trade. At the national levels, as noted earlier, the post-War order was anchored in social-Keynesian policy, a policy of steadily-increasing state expenditures employed to achieve macro-economic goals and to mildly redistribute income. This institutional nexus of international and national political economy anchored a nation-centered social contract between capital and labor. The organization of the national economy pivoted on a particular class structure (mainly the property-owning and working classes associated with manufacturing industry), combined with a policy orientation that depended as much on national, as on international, institutions of regulation. Ultimately, however, hastened by the deficits associated with the Vietnam War, the post-war order began to exhibit increasing instability. This emerging crisis, which was manifest in its full form a decade later, was essentially a crisis of the dollar as the international reserve currency. The Bretton Woods system of international monetary regulation was dismantled in the early 1970s (Block, 1977), to be followed by a system of exchange rate realignment in which regulation has been largely ineffective.

The national model of economy was possible only so long as the dollar/gold standard operated. For each state, the requirement of the dollar/gold standard was a stable national trade account as a condition of low interest rates and a favorable environment for capital investment. Stable trade depended on balanced participation in the world market (Phillips, 1977). Within this model, based as it was on key farm and labor constituencies of the national polity, social protection of economic sectors was legitimized through the Keynesian policy of national regulation. At the same time, the international institutional framework sanctioned freedom of enterprise and trade. This combination of national and international regulation characterizes what Ruggie (1982:393) has termed "embedded liberalism," where "multilateralism would be predicated upon domestic interventionism."

The seeds of the U.S. demise can in retrospect be seen as internal to American hegemony itself. American hegemony encouraged rivalry via international trade and investment on the part of other industrial countries, as their own systems of nationally-focused accumulation suffered declining profitability. The American demise released internationalizing forces, in two ways. First, with the decline of the U.S. as the world's dominant economic power, the stable inter-state hierarchy, both within the industrialized world and between North and South, unravelled. Second, international capital markets, based initially in the Eurodollar markets in the 1960s and universalized in the 1970s via the prosperity of the oil-producing states and the rise of petrodollar-based offshore banking, came into their own. The result was the formation, for the first time in world history, of "a single world market for money and credit supply" (Harvey, 1989:161). Thus, in the absence of a stable system of regulation of class and geopolitical relations, nation-states were set adrift to negotiate their own competitive position in the world economy. This process of negotiation occurred across two phases; one of relatively unlimited international liquidity (the 1970s) and a later one of relatively limited international liquidity (typified by the 1980s debt crisis). Each of these had the effect of elevating international forces within and among states.

The demise of Bretton Woods was a threshold in the history of nationally-ordered market economies, in the sense that it ended national currency regulation via the gold/dollar standard on the one hand, and promoted the centralization of banking capital on a world scale on the other. The accompanying stagflation (high levels of inflation coincident with high unemployment) brought sustained recession in the industrial countries, followed by relocation of investment to middle-income Third World countries. Stagflation also hastened the decline of the power of organized labor.

At the close of the 1970s, the U.S. devalued its overvalued dollar, producing a global recession with two notable effects on the process of internationalization in the 1980s. First, monetarist ideology and austerity policies led to a dramatic restructuring of class relations, particularly that of widening the gulf between workers based on their conditions of employment (e.g., unionization, job security, eligibility for and extent of benefits). Second, the recession undermined the global debt structure, leading to a redistribution of wealth on a global scale via net South-to-North capital drain (currently in excess of $40 billion annually). This capital drain was largely made possible by the structural adjustment policies imposed on developing country states by international financial institutions to ensure debt repayment. In short, monetarist-type monetary policies (typically combined with the fiscal stimulus of public sector deficit spending) have reinforced the demise of national regulation and exacerbated trends toward restratification of and inequality among world nations. Speculative movements of capital and the pressure to export have deepened the crisis of unstable global production in an era of unregulated exchange. As such, internationalizing forces represent attempts, by <u>both governments and firms</u>, to resolve the economic problems of the modern world economy through new forms of production and new means of regulation.

Internationalization paradoxically involves both de-regulation and re-regulation. Individual states have lost sovereignty, having become "disempowered by the internationalization of capital and weakened by the concomitant collapse of the . . . Keynesian 'social contract'" (Peck and Tickell, 1991:26); declining sovereignty has thus translated into declining regulatory capacity (e.g., deregulation of financial markets in the U.S., as discussed below). But in the vacuum created by the decline of national regulation, two immature new forms of regulation have appeared. The first is re-regulation such as that proposed for the European Community (i.e., the European Monetary Union). NAFTA is another example, in that it provides for freedom of investment and, to a lesser extent, liberalization of trade.[13] Second, there is global regulation, where, anchored collectively by a 1974 agreement of the advanced country central banks (Cox, 1987:301), the transnational banks wield influence in the multilateral lending institutions and among policymakers in the OECD governments.

This shift in multilateral financial institutions towards global regulation is exemplified in the Structural Adjustment Loan. Adjustment loans extract and underwrite policy changes such as market liberalization, sectoral restructuring, privatization, and export promotion to service debt. These policy shifts redistribute power within the state from program-oriented ministries (e.g., agriculture, education, social services) to the central bank and to trade and finance ministries. In effect, this expresses a decline in the national coherence of states (McMichael and Myhre, 1991).

Of particular relevance to rural economies in the U.S. is the spatial reorganization of production relations that has emerged through internationalization forces. A key change has occurred in the relations between developed and developing countries. Once mainly a geopolitical phenomenon, the relation between advanced and developing countries has increasingly been transformed into a <u>sectoral relation</u>. New patterns of technology and productive organization, aided by the greater velocity of financial capital (Green, 1987), have enabled "enterprises [to] seek greater flexibility in adjusting production to . . . differentiated demand" (Cox, 1987:321). The links between producing and consuming regions across de-regulated national boundaries have been strengthened, while those within nation states have been weakened. As noted earlier, the upshot for rural producers in the U.S. is their being subjected ever more directly to competition by foreign producers of food and fiber commodities and industrial goods who have cheaper labor, land, and raw materials at their disposal.

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13 NAFTA, however, appears to politicize trade in goods as much as it liberalizes trade.

If history is a reliable guide, the disorder of the 1980s and 1990s will yield to a new order, much as the institutions and arrangements laid down during the Depression foreshadowed those of the post-War order. We will not speculate here as to what the new order may look like, except to note parenthetically that many observers suggest that the future will see an extension of the role of the state-directed, state-assisted, or even state-owned corporation of the Japanese type. Among the reasons for this claim is that the Japanese-type industrial corporation will be best able to survive, given its access to state subsidies and diplomacy to cushion the shocks of operating in a liberalized environment of finance and trade; states will likewise be reluctant to leave their economic futures to the vagaries of international competition; hence the potential attractiveness of state-assisted firm to both governments and private capital.[14]

De-/Re-Regulation of Markets and Its Spatial Consequences

As the 1990 U.S. census data become available, new forms of inequality that have been documented only anecdotally are becoming visible and attracting increasing public attention. The spatial pattern is complex but recognizable. As noted earlier, broad regional (metro-nonmetro) inequalities have increased, but intra-regional inequalities have widened even more. The emerging landscape is one in which many large cities and small rural communities are faced with serious erosion in median household income and population and, consequently, in "fiscal capacity." The American landscape of the 1990s is also punctuated here and there by suburban "hot spots," such as Contra Costa or Orange Counties in California and Fairfax County in Virginia, places where growth in population and income has far outpaced national norms over the course of the 1980s. At the same time, urban analysts have focused on a parallel process, the increased concentration of poverty populations in the central cities, the loss of inner city population, and the increasing disparity between central city and suburbs in almost every respect: jobs, housing, and the quality of public and private services. The third angle is that of the so-called "post-suburban city," the places where employment and investment became concentrated in the 1980s. The evidence here is also compelling, indicating the presence of new agglomerations of advanced business services in suburban counties, leading to job growth and increases in purchasing power for suburban residents (Kling et al., 1991). Although rarely conjoined, the fiscal and economic deterioration of the central cities and of rural communities and the booming growth of suburban "cities" are inextricably linked manifestations within the nation's space economy of adjustment to the internationalization of markets and the division of labor.

The U.S. path to adjustment and its spatial consequences set it apart from other industrialized countries. The distinctiveness of the U.S. path lies in two areas: first, the degree to which the nature of state regulation, particularly during the 1980s, has sharpened firm sensitivity to rapid changes in financial and product markets (the one exception to this tendency being in the defense sector); and second, the justification and allocation of public expenditures, including social welfare expenditures, in terms of firm "requirements." Taken together, firm-led adjustment to economic internationalization and firm-led social expenditures have affected the locational patterns of productive activities and the place-to-place character of public services and infrastructural investment. The result is a landscape characterized by increasing inequalities among places and among people.

Although we are often given that impression, the internationalization of markets is not a sufficient explanation for the landscape of inequality taking shape in the U.S. Discussions of competitiveness and market segmentation tell us only part of the story, for economic processes continue to be mediated through political processes at the national, subnational state, and local levels. For this reason, the new

14 Previous long-term historical transformations from one world order to another have been accompanied by a shift in the world's dominant economic power. The practices and institutions of new dominant power tend to be influential in shaping those in the rest of the world. It is, of course, often speculated that Japan is destined to become the world's dominant economic power.

spatial inequality requires political-economic rather than just economic explanations. We need to consider, in particular, how the product and financial markets to which American firms respond have been shaped by government policy and how firms have responded to these markets in ways that have exacerbated intra-regional inequalities. Second, we need to consider how the ability of U.S. firms to adjust to the internationalization of the economy is related to public social investment. The allocation of these investments in the contemporary U.S. has contributed to, rather than having ameliorated, both place-based and household-level inequality. It is the interaction of these two closely aligned processes that is constructing the emerging space economy.

The regulation of market economies has drawn renewed interest in the 1980s in conjunction with economic internationalization. Macroeconomic analyses of the relationship between states and markets have been concerned primarily with the direction and control of industrial investment (e.g., Zysman, 1983; Cox, 1986; Hall, 1989). A major point of contention among analysts of the relationship between states and markets has concerned the political basis for these industrial investment regimes that is, how governing relationships are established politically, how they are maintained, and whether and under what conditions they can be altered. Although there are commonalities among industrialized economies in that all have tended toward some new forms of regulation, there is general agreement that regulation has taken different forms.

There are three recognized "types of regulatory systems governing financial markets in industrialized economies: the capital market system, with resources allocated by competitively established prices; the credit-based system with administered prices; and the credit-based, bank-dominated system. The U.S. is the foremost example of the first type. What this means in practice is that adjustment to changes in market conditions is formulated and led by individual firms rather than being negotiated by "social partners" (labor and management) as in Sweden, or being state-led through industrial policy, as in Japan. Within a capital market system, as exemplified by the U.S., government ability to influence investment decisions or employment policy is purposively weak in contrast with the other systems.[15]

By definition, capital market systems are highly responsive to short-term changes in market conditions and militate against long-term investment strategies. In the U.S., however, this sensitivity was heightened in the 1980s. Given the relationship between regulation of financial markets and firm decisions with respect to product markets and labor deployment, the changes in the regulatory regime governing financial markets in the 1980s are central factors reshaping the U.S. political economy. Prior to deregulation in the 1960s and 1970s, non-depository financial institutions, such as brokerage security services and insurance companies, devised short-term investment products or instruments that yielded a higher return than the interest savings accounts of thrift institutions, which were restrained from competing by interest rate restrictions. At the same time, Eurodollar markets generated other unregulated investment opportunities. Partially as a consequence of these developments, there were a series of legislative acts which removed many of the previous controls on banks and thrift institutions and paved the way for the contemporary financial service industry. One of the most important consequences of this restructuring is that financial institutions no longer rely on a residentiary deposit base to finance lending operations, but rather draw investment funds and invest across regions, countries, and sectors. As a consequence, the industry has changed from one in which the central activity is the provision of services to a wide range of customers to one in which the central activity is the sale of financial products to a narrow range of customers.

15 Note that these categories of state regulation of finance bear a strong relationship to the Esping-Andersen (1990) typology of systems of "welfare capitalism." This correspondence suggests that systems through which rights of social citizenship are institutionalized are crucial in distinguishing among state forms and regime types of the advanced industrial nations, and that differences among states in their systems of welfare capitalism have shaped their financial regulatory policies and their overall responses to internationalization forces.

In general, the removal of national regulatory provisions has made for much more competitive financial markets, which have in turn affected product markets in the U.S. and labor deployment policies. A second change in the regulatory environment that is deepening tendencies toward firm-led adjustment is non-enforcement of anti-trust law, which has accelerated the process of merger and acquisition that began to reshape the industry in the 1970s.

The profit orientation of contemporary financial institutions means that they are strategically targeting certain populations and certain communities. Bank services appear to be proliferating in some areas, particularly suburban counties, and being eliminated in less accessible and poorer areas in rural communities and central cities. The move from service to sales, and the reorientation of service provision to the high end of the market, has been accompanied by an emphasis on short-term commercial loans. This has reduced the availability of long-term, fixed-rate financing crucial to community and small business development. In addition, pressure to exit less profitable markets has led to a less stable local financial market, one more characterized by rapid turnover. Another implication of the emerging distribution of financial services is a loss of certain types of expertise in some locations.

Decisions not to enforce anti-trust regulations are associated with concentration and, by extension, with more centralization of service provision. In nonmetropolitan areas in the U.S., the restructuring of the retail sector has resulted in the so-called "Wal-Marting" of rural America, i.e., the replacement of locally-owned stores by discount retail chain stores in more centralized locations. The restructuring of retailing, stimulated at least in part by regulatory changes, has encouraged rapid centralization of retailing and affected nonmetropolitan communities and some central cities in the following ways: decreased sales tax revenue, increased unemployment, redistribution of employment opportunities to higher-order centers, and decreased local investment. The increased debt load carried by firms is encouraging them to restructure operations to reduce labor inputs.

Firm decisions to seek out more profitable markets and less costly production locations obviously take place in response to an already constructed socioeconomic terrain, one which is the product of both market and nonmarket investments. Thus, while firm-led adjustment may not "recognize" the significance of public social expenditures in constructing that terrain, firm locational choices respond to such expenditures. In the U.S., public social investment decisions affect firm-led adjustment (market decisions) in several significant ways. The decentralization of responsibility for public social expenditures, including everything from physical infrastructure to incarceration, has exacerbated place-to-place differences in fiscal capacity and service quality. This raises the relative cost of doing business in locations with higher fiscal burdens. At the same time, "solutions" to lagging economic growth are perceived to lie in the dismantling of the public sector to mirror market processes. Decisions to privatize an already largely private system have consequences for the location and quality of necessary social services. These social investment decisions create the set of location choices faced by firms, affecting the overall cost (social as well as economic) of doing business in various places.

In the U.S., the way in which the firm-market relationship has been regulated has flowed from and contributed to what is a weakly organized social welfare state. This is exemplified in a number of ways, one of which is the reliance on private employee benefits as a form of social welfare. As a consequence, firm-market regulation policies and social welfare policy move together in a way which departs from the pattern of other industrialized economies. Since, in the U.S., social welfare is tied to the requirements of firms rather than defended in a separate political arena, changes in firm requirements vis-a-vis the market are reflected in shifts in the content and extent of social welfare spending, and more generally in the forms of state intervention. The decisions that firms make to adjust to market conditions and the associated shifts in social welfare expenditures are translated into investment and expenditure patterns which have a spatial dimension.

Several shifts occurred in the definition and provision of public goods in the U.S. in the 1980s. The first substantive change in policy was a break in an already weakly-defined responsibility of the nation-state for the well-being of places located within its boundaries. There was a conscious effort to sever the bond between national and place-based prosperity (Barnekov et al., 1989). This position was expressed via dramatic cutbacks in non-entitlement human service programs which were administered by localities in areas such as housing and community development, and employment and job training. Overall, federal spending in these areas declined 35 percent between 1982 and 1986. The second was increased "commodification" of public services, including social welfare services such as health care (Esping-Andersen, 1990). Third, under the "New Federalism," state and local assistance from the federal government declined precipitously. The proportion of the federal budget devoted to local assistance programs declined from 15.5 percent in 1980 to 10.7 percent in 1987. Per capita state and local spending increased 31 percent between 1984 and 1988 (in comparison with an 18 percent inflation rate). Much of this growth was driven by health care costs and federal mandates to expand medicaid. At the federal level, the biggest cuts were absorbed by those programs which were oriented toward "in-need" populations and places. Throughout the 1980s, grants-in-aid programs for rural areas were dramatically slashed. And, even basic infrastructural investment projects were eliminated from the budget. Rural communities (as well as central cities) are relatively disadvantaged by the effects of privatization on the location and character of social services. In addition, they are in a much weaker position in terms of basic fiscal capacity, and therefore, with respect to what they can offer to firms.

Although the reorganization and redistribution of services is market-driven, it is also a response to politically-influenced location costs. These include those which are not immediately related to production, that is, public goods such as education, health services, and physical infrastructure. With respect to the quality and cost of public goods, suburban locations appear to be "more efficient" because of the state-subsidized investment in suburban infrastructure from the 1950s through the 1980s, and because the wealth of the residential population supports higher property tax levels which support local services. In addition, the defense expenditures of the 1980s were highly skewed toward suburban locations and thus provided a form of localized "military Keynesianism." By contrast, central city locations are "less efficient" because their infrastructural base is old, and the population is poorer and less able to locally support necessary public goods. In other words, state intervention plays a very significant role in shaping the relative "efficiency" of urban or suburban locations.

In sum, the U.S. is singular among industrialized economies in the degree of vulnerability to market forces because its adjustment is microeconomic and firm-led, rather than mediated through societal-level institutions. Although there are state-market regulatory systems which are quite similar to that of the U.S., such as those of other "neoclassical regimes" (Esping-Andersen, 1990) like Britain and Canada, a prominent difference increases the risk and vulnerability factors in the U.S. regime. In these other firm-led adjustment systems, a nationally-organized social welfare system serves to mitigate the effects of firm-led adjustment policies (King, 1989). The lack of such a system in the United States deepens the vulnerability of individuals to the consequences of firm-led adjustment and, arguably, produces a different set of political responses. The fact that there has been a sharp trend toward rural-urban income divergence in the U.S. while the income standing of rural Canadians relative to their urban counterparts has been stable indicates that rural people (as well as inner-city populations) are particularly vulnerable to firm-led adjustment processes in the absence of a national social welfare system.

Some Speculative Observations On The Future

To this point our discussion has stressed the implications of how the current configuration of states and markets is affecting the prospects of rural regions and peoples. Here we want to offer some speculative observations about what the future may hold for rural North America. We are now well into an emerging era characterized by several important, but often unrecognized forces that have major implications for rural regions and communities.

The first broad trend is that toward "dematerialization" of industrial production. In the early part of the twentieth century when, for example, material costs accounted for 60 percent of the sale price of an automobile, a slump in the agricultural and other raw materials industries would precipitate a recession, if not a depression, in the larger economy. By contrast, the amount of materials required per unit of output in 1990 has been estimated to be only about 40 percent of that at the beginning of this century, and is decreasing at a compound annual rate of 1.25 percent. Now, by contrast, material costs for the average semiconductor microchip, the prototypical industrial product of the 1980s and 1990s, account for about 2 percent of its sales price. Materials now constitute a tiny, and continually declining, proportion of the GNPs of the advanced industrial countries (Drucker, 1986, 1989). In the 1980s, which were a period of depressed raw materials sectors, the primary industries had virtually no impact on the larger economy.

In the early 1970s, at the time of the Russian Grain Deal, the vigorous expansion of the world grain trade, the rapid but temporary rise in world food prices, and of the Arab oil embargo, it was thought that the Malthusian realities of population growth and finiteness of resources would lead to a renaissance of the raw materials industries. The raw materials boom lasted less than a decade, having become a raw materials bust. One of the intriguing socioeconomic puzzles of the modern era is how it is possible that the world can be characterized simultaneously by biospheric and resource scarcity and by declining real prices for raw materials. Much of the answer, of course, is income inequality and truncation of purchasing power by poor people, poor regions, and poor countries.

Dematerialization is, on balance, a good trend in the context of the resource-scarce world in which we live today, though it has been, and will continue to be, adverse for rural areas in which the primary extractive sectors remain a major economic base. Even if the rate of economic expansion doubled, to become roughly what it was in the 1960s, there would not likely be a renaissance of the extractive sectors. We also anticipate that for fiscal and environmental reasons, we will eventually see the imposition of carbon and other environmental taxes. Their impacts on rural economies will be mixed. In addition to restricting demand for energy, carbon taxes would probably restrict the demand for raw materials in general, and thus decrease profitability. Carbon taxes would thus be adverse for the rural extractive industries. But carbon taxes would be expected to make long-distance commerce more costly, and thus cause decentralized rural economies to be more viable.

The same mixed picture will likely be the case with respect to a second, related trend, that of "greening." The rising tide of green sentiment could lead to policies that recognize the value of rural-based resources. Or greening could lead to a romanticization of the countryside and to policies that emphasize its preservation over its economic functions, and thus to a neglect of the economic and social needs of rural people.

A third trend concerns the advanced economies having evolved in a direction of extraordinary labor productivity in the production of basic goods that was unforeseen, and unforeseeable, by the classical economists and sociologists of the nineteenth century.[16] It is no exaggeration to say that, in principle, food, shelter, clothing, transport, and other basic goods could be produced by less than 20 percent of the labor forces in most advanced industrial countries today. This level of labor productivity means that the linkage between productive work and income has been substantially severed. There are two possible implications of this trend for rural areas. One such implication is that in politics and policymaking we will continue to ignore the hyper-mechanization of production, and believe that all able-bodied people can hold productive employment, and that should they wish not to starve they must do so. Given the spatial and scale disadvantages of rural regions and the fact that its primary and secondary industries are subject to further labor displacement, rural areas will fare poorly as long as we continue to adhere to myths about the link between productive work and access to income and well-being. Another, quite different implication would be that we will eventually come to terms about the work/income link having been irrevocably severed, and will move to some guaranteed income regime to deal with unemployment. Historically, rural people have fared best when the entitlements of citizenship are broadly given, regardless of place of residence. It is nonetheless ironic that rural regions, which because of their greater shares of employment in the primary/extractive and secondary sectors, are the ones that are today bearing

16 As an example, the share of the total U.S. labor force accounted for by the Fortune 500 declined from 17 percent in 1975 to 10 percent in 1990 (Reich, 1991:6). Conversely, it has been estimated that 90 percent of new jobs in the U.S. in the year 2000 will be so-called service sector jobs (Galston, 1992).

the greatest burden of "restructuring" having increasingly severed the link between income and productive work.

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RURAL RESTRUCTURING AND LOCAL WELL-BEING: RELATIONSHIPS AND POLICY INITIATIVES IN TWO HISTORICAL PERIODS

In recent years, there has been a growing lack of consensus among researchers and practitioners with regard to strategies for achieving rural economic development. This lack of consensus stems from both the complexity and magnitude of the problem and from our difficulties in understanding the new economic environment in which we are immersed. The purpose of this report is first to show how the dynamics of the rural economy and its effects on communities has changed over time, and second to point out recent perspectives and potential policy directions. My approach is from an academic and U.S. standpoint, grounded in sociology, but concerned with praxis.

Why be concerned with economic structure and change? Implicit or explicit concern lies in the fact that economic structure affects peoples' well-being (social and economic). Research bears this out in that income levels and poverty are closely connected to all aspects of social well-being. Included are mental (social-psychological depression, farmers' suicides) and physical health (infant and other types of mortality), community disruption (teenage fertility, crime, motor vehicle accidents), social or community solidarity (organizations, political activism) and educational levels and quality of local educational institutions. Consequences of the growth of temporary low-paying services for women may heighten fertility rates, while better job opportunities lower teenage fertility.

Conventional perspectives (neo-classical economics/functions sociology) view economic development in the following way. Workers and employers are mutually dependent upon one another and labor market relationships between these groups occur in a context of formal-legal equality. Values shared by employers are assumed to be those shared by people, and what is "good" or beneficial for local employers is seen as good for everyone else in the community. Any increase in jobs or the local tax-base is assumed to be equivalent to improvements in the economic well-being of the entire community. As a consequence, solutions prescribed to industrial restructuring generally are framed in those that emphasize economic growth or efforts to recapitalize localities rather than in social changes that might alter fundamentally relationships between workers and their households and employers.

My perspective on economic restructuring, built from sociological and critical political economy, questions the previous assumptions and strategies. We need to look at how economic well-being is created and the role of economic structure in this process.

My focus is the local community. The following elements are key to understanding: 1) economic structure (types of firms and industries including those in the farm sector and the quantity of "good" jobs they produce) (in a sense, demand-side of well-being); 2) bargaining power workers and their households have with employers that increase the ability of workers to exact market rewards from employers or, alternatively, to resist demands of interests of employers (supply-side). Labor organizations and state social welfare policies may enhance workers' power. Welfare policies, for example, allow workers to withhold labor in the face of poor pay. Labor market conditions, such as availability of employment, also are important. Labor force characteristics heighten or weaken people's ability to demand better employment conditions (race and ethnicity, gender, and education). Spatial characteristics, such as location and ecological characteristics, affect the types of industrial jobs in an area. Historical conditions are embodied in different parts of the country, as are ecological constraints.

In sum, the economic well-being of a particular area results from the ways in which surplus is accumulated economically, and from the conflicting relationship between employers and workers/households over the conditions and terms of employment. Employers have differential stakes and abilities to support workers and their households. Workers possess different resources and the state varies in intensity in support for the interests of employers. All of these translate into variations in the levels of socioeconomic well-being at which a particular labor force can reproduce itself.

Here I present a broad perspective on well-being as it occurs locally. Exogenous forces affecting this are the role of the state and the international economy, and the time period involved is important.

Insights from regulation theory are relevant. Regulation theory views capitalist development as a succession of periods, or regimes of accumulation. Each regime has its own internal limits which lead to major crises and possibly a new regime. These crises represent not simply a fall in the rate of profit, but also a way in which capital is restructured in order to restore for a time the harmonious relationship between production and consumption.

Rural Well-being and Policy under Fordism

Fordism

A regime of intensive accumulation (extraction of relative surplus value) began in the 1920s. A Fordist regime of accumulation refers to a link between mass consumption and mass production. It was given formal expression in the 1948 General Motors UAW pact which connected wage and productivity increases. It was characterized by high productivity, rapidly rising real wages, an oligopoly economy, rising standards of living, large corporate power, welfare statism, and full employment. In other words, workers had high bargaining power. Keynesian economic management of public investment, transportation, and utilities to stimulate demand was included.

The economic structure was a segmented economy with two types of privatized economic sectors and their specific firms. A core or oligopoly sector involved large scale firms with a major share of production in their home industries. They generated highly skilled and remunerated occupational positions with an internal job ladder. On the other hand, peripheral firms had small labor forces, informally organized divisions of labor and generated lower-paid, less skilled positions. Production also was organized by the state (as an employer) and wages ranged between those of the core and periphery. Farming had a bimodal structure, with the growth of small, part-time farms, increased market shares for the largest farms, and a declining middle sector.

What does this mean for local well-being (poverty, median family income, income inequality) in rural areas? Cross-sectional results from my study of over 3000 U.S. counties during the 1970 Fordist period reveal the following:

1) Within industry structure, greater core (larger establishments) employment related to higher well-being. State and peripheral firms have more negative effects, with the effects of peripheral employment being least favourable.

2) Farming was characterized by "larger family farming" having better well-being. Small farms had poorer conditions. Industrialized farms had slightly poorer conditions, and revealed greater income inequality.

3) Worker power created better conditions where bargaining power was higher, a higher white and educated population existed and a unionized workforce confronted a labor market with greater employment opportunities. Areas with a legacy of resistance to labor organizations and institutionalized discrimination had worse conditions.

4) Spatial characteristics included better conditions closer to metro areas, when a lower farm population was involved, and outside of the South.

Well-being was highest in counties where a Fordist regime was most highly developed. Farming was a little different in that industrialized farming related to slightly poorer conditions. The variance explained in these models averaged nearly 50 percent for worker power, 41 percent was spatial, and 25 percent economic structure. Nationally, nonfarm industry explains seven times as much variance as farming.

What were the rural development policies of the period? U.S. economic development policy (de Janvry et al., 1987) continued to subsume rural areas into Fordism. After World War II, the U.S. pursued a policy of national economic growth without serious regard for its distribution. It was based on the idea from neo-classical economics that benefits would "trickle down" from urban areas (linear assumptions). Others (de Janvry) argue that there was a general urban bias in development programs. Rural areas in a sense underwrote the development of urban areas in that cheap food benefitted industry both as a wage subsidy and in the growth of input industries in urban areas. To support cheap food, governments supported large, commercial farms through university research, commodity programs, taxes, extension services, and regulation of the agricultural industry. The combined policies of national economic growth and commercial farm support were actually de-development policies for rural areas. Farm policy was believed to serve as general rural development policy.

Sector specific policies such as commodity programs in agriculture, however, are not a substitute for rural development. The State response to curb unrest historically (eg., New Deal, War on Poverty) suggests a rural agenda that has never been given sustained support.

1970-1980 Rural Revitalization and the Transition from Fordism

Movement of capital on a more rapid and global scale than seen previously occurred in the 1970s. This included the snowbelt to sunbelt, rural to urban, and first to third worlds. Capital was circumventing previous spatial barriers. Transportation and communication improvements reduced the importance of location for markets and production inputs, technical changes in automation processes allowed for smaller production facilities and separate workplaces, locational flexibility enhanced large corporate structure, and more industrial sites were available to industry (Storper and Walker, 1984). The diminishing importance of location in regard to nonlabor factors of production made labor issues, particularly costs, important. Most literature to the mid-1980s focused on the movement of firms to lower wage, unorganized labor areas. Later literature, however, recognizes the more complex meshing of labor force attributes and firm needs. The state was less able and willing to support the interests of workers. Again, these initial changes in Fordism seemed to signal benefits and a general industrial revival for rural areas.

Three aspects of rural restructuring are evident: 1) it involves changes in economic structure, including farming; 2) there are changes in the balance of social relations; 3) it has been uneven spatially. There is some indication of transitions in Fordism as one moves from understanding local well-being over the time period 1970-1980. In **Industrial Structure** counties with greater core industry had higher well-being (median family income, less poverty) but those with larger business establishments had a growth in poverty and lower median family income. Counties with greater peripheral and state employment continued to have poorer conditions over time.

The bargaining power of workers and households was compromised in that unions, state income transfers or welfare and education had diminished capacity to shelter workers from the market. The gap between minorities and whites remained the same, and that between unionized and nonunioned workers widened (greater income inequality). With regard to income, counties with a greater white population, higher AFDC and education had no significant income gains over time, but counties where unions were stronger and unemployment higher experienced income losses.

The Northeastern section of the country experienced the greatest changes, while most benefits accrued in the South. Counties with a higher percent urban (places of 2,500 or more) population did not gain during the 1970s, but metropolitan proximity continued to confer income gains.

All of these relationships appear to reflect the commonly noted patterns in industrial restructuring during the 1970s. Highly industrialized and unionized counties with large business establishments lost advantageous opportunities because unionization, income transfers, and education had diminished capacity to shelter workers in the face of economic restructuring.

Rural Development Policy at the Local Level

Rural development policy at the local level taps into the cracks in urban Fordism along three fronts: economic structure, bargaining power, and space. Rural industrial policies of the 1970s attempted to induce private capital to contribute to economic development in certain areas. A "trickle-down" approach was meant to occur for the poor. Included were business recruitment programs that resulted in bidding wars for industry that would locate in rural areas. Branch plants were instituted far along in the product life-cycle. Later on other attempts to recapitalize localities moved to retention/expansion programs. This involved enterprise zones and business incubators.

Bargaining power was modified through calls for a "better business climate", that stressed low unionization. Positive attempts were made to upgrade rural education, and tax breaks were offered. Spatial issues were addressed through the idea to reduce spatial barriers by means of infrastructure development and telecommunications. This was designed to make rural areas more like urban areas.

To what extent these policies enhanced rural well-being is a matter of debate. In general, however, rural well-being increased in the 1970s, more owing to the general, national economic climate (decline of Fordism in cities, net in-migration to rural areas) than to any economic development policy. Although not all rural people (e.g. women, minorities, and the poor) benefitted, rural areas experienced lower poverty and higher median family income than did urban areas.

Rural Economic Policy

Costs and benefits of rural industrial recruitment are well-known and documented (e.g., Summers et al., 1976). New industry increases population growth but new jobs go to the "cream" of the local labor force. Inequality may increase among segments of the population and increases in the fiscal resource base of the community often is outweighed by community costs of providing infrastructure. Falk and Lyson's study of the South showed that development benefitted urban but not rural areas.

Forty states have business retention and expansion programs, but less than 25 percent of business incubator programs are located in rural areas. Evaluation of jobs generated and business success is fragmentary, and difficult to evaluate. Enterprise zones have been described as a "third world" strategy for rural well-being.

State technology programs (Fox and Murray, 1993) involve movement from basic research and development to providing the basis for ongoing innovation and the flexibility to adapt more rapidly to structural and technological change. Various technology transfer and extension programs are included. Many variations occur and in 1988, 8 states earmarked none of their general fund monies for technology initiatives, whereas 18 allocated monies to the same cause. In Ohio, the Thomas Edison Partnership and Pennsylvania resources are targeted to technology transfer and more extensive support for basic R&D and the commercialization of new products. Little is known about the effectiveness of these programs, but they received a scathing critique by Roy (1988).

Financial assistance programs evaluated by Fox and Murray (1993) provide only fragmentary evidence of success of industrial development bonds and loan and grant programs. It is doubtful that these programs can create new economic activity and new jobs. "In most instances, the use of (these) ..simply substitutes for private sector resources, and causes the displacement of existing firms and resources" (Fox and Roy, 1993:35).

Bargaining Power Issues

A comprehensive review of state and local government policies was conducted by Fox and Murray (1993). Does reducing bargaining power through low taxes help? Taxes are presumed to influence development through the profit function, and costs of doing business. They also can affect labor migration decisions but may do so positively if public service delivery increases. Current knowledge suggests that small differences in taxes between two localities are unlikely to influence location decisions. Taxes can be important where a state or area differs significantly from the norm. In that case high taxes may be more important in driving firms away than low taxes are in attracting firms. Taxes spent on local education are likely to have positive net results. It is unlikely that small tax credits (eg. $1000 for hiring an employee) will influence behaviour. Tax concessions have costs and benefits. Information suggests that they make little difference in a firm's location decision, but they may erode the local tax base.

It is accepted that inadequate stocks of human capital not only restrict the total number of jobs forthcoming in a region, but also influence the quality of employment in terms of earnings. Education will increase local bargaining power, but to what extent this will promote development is debateable. An ERS report concludes that low levels of education of the local workforces were not significant contributors to the economic problems of rural areas in the 1980s. Rather the problem seems to have been on the demand side, with a lack of job creation, especially for better educated workers. This depends on the historical period. For example, a 1970s ERS report stated that earnings fell more in the 1970s for better educated than less well-educated in urban areas. In part, this added to outmigration of people from urban to rural areas.

Less than 3 percent of disadvantaged workers in both urban and rural areas in 1987 were served by the Job Training Partnership Act. The programs under the Act, however, seem to be more successful than their predecessors. CETA earnings, for example, gain from $200-600 per year, and decay with time. Success also varies across demographic groups with women realizing larger earnings than men. Classroom training, on-the-job training, and public service employment yield benefit cost ratios in excess of 1, whereas adult work experience programs entail costs in excess of benefits (Fox and Murray, 1993:24).

A total of $3.7 billion was spent on Federal jobs program spending for displaced and disadvantaged workers. This compares to $30 billion spent by employers for on-the-job training. Little is known about private sector on-the-job training but many think it is inadequate. The Michigan Skills Fund, for example, allows businesses to take out short-term, interest free loans, and to pursue employee retraining independently.

Child care was provided largely by the workers themselves. Some states such as Tennessee and Maryland give loan guarantees for development of private day care facilities. The cost-effectiveness of workfare remains uncertain in programs such as California's GAIN.

While more research focuses on the labor force, a recent MIT study "gives less emphasis to the training of the American workforce than to the knowledge, skills, and practices of its business owners and managers...". This employer knowledge problem may be particularly relevant in rural areas, where access to information about new technology and work organization often is more limited (Florida et al, 1988:10-11). A number of Japanese auto executives interviewed said some American suppliers were unwilling to try to reduce defect rates, preferring instead not to do business with the transplants.

Leistritz and Ekstrom (1990) studied 314 mainly rural (ND, SD, Nebraska) exporting firms. Of these 29 percent produced nondurable goods, 50 percent manufactured durables, and only 6 percent provided services. Work attitudes and labor productivity (60 percent saw these as critical or very important) were rated twice as important as wage levels (27 percent). Also, 15 percent saw the presence of a union as critical and 48 percent saw absence of unions as critical. Four year college degrees were important only to 10 percent of the firms, 20 percent wanted unskilled labor, and 31 percent preferred industrial or technical training. Personal taxes, and the overall tax burden on business were important, as was community attitude toward business development.

Spatial issues

Infrastructure (highways, gas, electric, water, sewer) is an essential but not sufficient ingredient for development (Fox and Murray 1993). Expansion beyond a minimum core level will have a differential effect on growth depending upon the characteristics of the regions where investment is made, and how investment is made (best financed by grants). Infrastructure expansions have more effect on stimulating development in intermediate distance locations. Infrastructure investment has positive but diminishing returns, and low returns occur in low density states like North Dakota and South Dakota. With regard to transportation, 53 percent of employers saw motor freight as critical, but interstate highway access was not critical (Leistritz and Ekstrom, 1990).

Rowley and Porterfield (1993), after reviewing numerous studies that provide evidence on the effects of enhanced telecommunications, state that their effect on rural development is inconclusive. At least some of the barriers to rural development can be overcome through enhanced telecommunications, but negative effects also may result. For example, they do not reduce isolation for passenger and cargo transfer and may increase the need for travel. Jobs that decentralize may be low wage and open rural markets for urban business. Increased efficiency may eliminate other jobs. Also, positive effects may not reach those in most need. This may widen information gaps and the quality of remote learning may be lowered. Telecommunications do not increase fiscal resources and local populations must overcome a lack of familiarity to adopt new methods. Without telecommunications, however, rural areas will fall farther behind.

The Crisis in Fordism

There is growing evidence and a realization that changes in Fordist productivity in the 1970s were not just quantitative (e.g., decrease) but actually were qualitative in the nature of the accumulation process. This became more evident as the decade of the 1980s passed.

A crisis of Fordism occurred as we exhausted the dominant methods of production. This changed the factors essential to the post-war boom. Productivity could not be sustained at initial rates because of social and technological limits related to emergence of the world economy, compromises between labor and capital, and demand management policies of the state. Rapid increase in wages during the 1960s and early 1970s fueled domestic demand for consumer goods which was met increasingly by imports, which added world competition for U.S. markets. Conversely, some say Fordism was eroded by worker resistance. This crisis was perceived by observers in many ways "as a series of crises -- in energy, the monetary system, debt, trade, food and the like -- or as a general cyclical, structural, or systematic crisis." Rising unemployment created a fiscal crisis of state.

In contrast to the mass production and consumption of the Fordist era, current production is flexible with regard to the labor process, products, and patterns of consumption. For example, people are trained to do a number of varied tasks, often following the team system and "learning by doing" such as instituted by Japanese firms. Products are manufactured in small batches for specialty consumer markets, and labor markets show sharp distinctions between skilled and nonskilled work.

Two types of corporations dominate; the very large and the very small. However, the organizational relationships between large and small firms differ with new systems of coordination. American "core" auto assemblers tend to be vertically integrated, have dispersed suppliers on short contracts and foster competitive relationships among suppliers. The Japanese system involves greater outside sourcing by assemblers, use of tiered supplier systems and long contracts.

The period is marked by innovation, just-in-time production, team production, job rotation, and job classification changes. Turnover time for products and capital is less. The coupling of income with productivity increases and the bases of union control found in the Fordist system are now broken. The state is less able and willing to protect the interests of workers. It moves away from intervention and deregulates markets, resulting in massive social marginalization among some population groups. This creates a rise in the informal sector of economy, and pluriactivity or multiple survival strategies increase.

Spatial trends in the post-Fordist era (Gottdiener, 1989) include greater polarization between rich and poor in all areas. In the central city, gentrification continues but not the return of families to the suburbs. New specialty shops emerge with continued growth of informal economy. Sectors that are growing in the current crisis period include some real estate, manufacturing, and service sectors. The suburbs continue to be important in defense related hi-tech industries, home economy, and information economy. Rural areas have part-time farming and tourism, but have lost some attraction for low wage industry. In fact, some firms are moving back to urban areas in the northeast. Regional trends feature hi-tech in Arizona, California, Colorado, Connecticut, Florida, Massachusetts, New Jersey, New York, Texas, and Washington. The Midwest drops out entirely as the old monolithic industrial belt is gone (Glasmeier, 1993).

Spatial changes in the organization of production under post-Fordism are a response to changes in class relations both nationally and internationally, and represent new sets of relationships not just a "geographic reshuffling of the same old pack of cards". Moreover, this "geographic reshuffling" has occurred on an unprecedented global scale and at a rapid pace.

Rural Areas in the New System

Existing studies provide limited information on the impact of economic change in rural areas. Temporal considerations (Miller, 1993:11) show that small firms appear to create most of the jobs and help stabilize employment over the business cycle. Policy makers, however, "must be careful not to generalize partial patterns of business cycles or patterns undergoing secular changes as absolute, atemporal facets of life". Recent studies of job growth in the economy thus may overstate the contribution of small firms to job growth over a longer period. In some periods, larger firms may be in a rapid expansion phase. Information shows that nonmetro employment in firms with over 20 employees declined during the recessionary period (1980-1982), and then began to increase over the 1982-86 period. Between 1984 and 1986, very large firms (over 500 employees) accounted for about one-third of the net employment growth.

Micro-studies of firms report little evidence that business taxes affect site selection, although personal taxes may do so. At the aggregate level, however, taxes appear to have more affect. This is a very complex issue, because taxes may be seen as either business or personal. Also, the benefits of higher taxes may lead to improved community services and quality of life. The costs and benefits of each issue are important.

We know that the macro-political economy has changed. Global economy now has a much greater affect on rural people than in the past, and has resulted in a decreased ability and willingness of national governments to respond. Less than 17 percent of 36,000 local governments now get general purpose federal funds in any given year.

Geographic space per se has become a key to successful competition. Spatial location is seen to resolve accumulation problems, and "spatial fix" is vital to the stability of capital. Space constrains economic activity less but is exploited more. Innovations in telecommunications and transportation produce new information about rapidly shifting markets and financial and input costs. Speed and accuracy are needed to respond to highly volatile market conditions. Concomitant expansion of aspects of economy, such as business services, facilitate spatial advantages. The State has aided in mobility of capital as it has become responsible for more fixed infrastructure. Also, federal social services serve as a safety net for destabilization caused by industrial relocation.

Now that technological barriers have diminished, firms can seek out special labor forces in rural locations. These include not only areas where bargaining power of workers is less but also where particular worker attributes mesh with employer needs. Focus now is placed on labor sourcing, including qualitative aspects of the labor force (skill levels, willingness, ability to perform flexible work assignments, as well as traditions of unionism, costs). Rural areas that have particular labor force qualities may gain. Rural labor markets also are less formal, and higher education does not guarantee jobs.

Extensive diversity exists among rural areas, and their performance with regard to generation of employment is anything but uniform. Chanyalew and Biere (1991) studied 12 North Central states between 1980-1986. The eastern part of the region experienced the most growth, largely from increases in manufacturing. Eastern counties with employment declines also had declines in manufacturing. The most obvious variables did not account for growth, including being near a highway and adjacent to a metro area (except in the Great Plains).

Barkley (1993) reviews the literature on manufacturing decentralization and argues that decentralization has become weaker owing to manufacturing's urban drift (long wave theory, automation, surplus labor of third world). Looking at relative urban-rural employment shifts between 1981-1986, there is limited support for the hypothesis that vertically disintegrating firms are less likely to relocate production to nonmetro counties. There is some evidence that firms follow people to be close to markets, which may disadvantage rural areas. Countering these factors are cheap prices for rural land and the fact that rural plants tend to be new and can be retrofitted for new technologies. This applies to textiles but may not be true for other industries.

Rural high-tech industries are affected by pre-existing industries. Distinctive spatial structures and links set up under postfordism, such as Japanese auto manufacturers in the midwest, are built upon previous networks in place. Glasmeir (1993) states that rural high-tech industries linked to agriculture and other resource extraction use common inputs such as machine tools and dies.

Producer services are tied to the goods producing sector, particularly in rural areas. From an historical perspective Hansen (1993), states that "Despite the widespread notion that rural areas lack entrepreneurial talent, there is evidence that new firms are founded mostly by persons who have parents who ran their own businesses, including farmers." In the U.S., people from rural areas are more likely to create new firms than are people from cities. Also, examples from rural Jutland attribute rural growth centers (production-service complexes, niche markets, solar power and electrical appliances, furniture) to endogenous cultural factors, not to state support. Rural areas in the U.S. that have been characterized by large corporate farms, tenant farming, low education, and discrimination are unlikely to be seedbeds of innovations. In short, a history of bargaining power appears to increase innovation.

Consumer tendencies associated with post-Fordism include ethnic or regional restaurants, regional or rural Appalachian crafts, new fads in furniture made out of twigs, and southwest rural designs. All of these may benefit rural areas, as will organically grown/organic/locally grown alternative agricultural products.

The question arises of what is rural development? The realization that spatial differences will intensify under post-Fordism leads inevitably to growing inequality between urban and rural areas. One also must recognize that cycles of accumulation in a single country can produce spatially uneven effects as a result of prior social uses of space. Probably it is best to discard the concept of rural development, as is being done in the third world development literature. "Change" may be a better term.

Rural Development Policy

Policy solutions derived under Fordism included 1) filtering down of branch plants, mimicking the industrialization of the city, 2) increasing power of labor through education, unionization, and state welfare, and 3) infrastructure development that is no longer a remedy for this new environment, or only in certain areas and certain historical periods. Development is more problematic because global changes have had increased effect on local people, and development strategies are place specific. Also, there are temporal aspects to all strategies, and no one over-riding strategy will suffice. Costs and benefits exist for all strategies, and certain groups of people are becoming increasingly marginalized. State support for development efforts can no longer be counted on. In short, no longer will any one plan benefit each rural community. In a sense, development strategies have to become more flexible as well.

Nationally, accelerated growth may be attained by boosting consumption, investment, government spending, and net export. There is a need for a comprehensive rural development program that is not tied to farming (or support commodity programs) middle groups. Urban bias must be eliminated in federal programs, and focus must be placed on the most marginalized rural groups (children, women, minorities).

Rapid global change makes industrial recruitment uncertain and large industries footloose. One can not rely on state or national politics which are breaking down. People have more opportunity to make changes at the local level, but are cut out more from national politics, as current economic restructuring has intensified the political importance of local systems of stratification. In the face of restructuring, classes have become more politically fragmented and distributional struggles have moved from workplace to consumption issues. Locality is increasingly the site for political action for the redistribution of rewards (e.g., welfare rights, environmental issues, urban protests).

Betterment involves greater well-being, access to means of production that sustain improvements, and self-determination. Protecting old jobs and communities while organizing new jobs and people are important aspects (Buller and Wright, 1990). Assumptions that should be made about targets of development include the following:

1) residents are not homogeneous,
2) out-groups or have nots should be a major focus,
3) for one group to have more control over benefits of change, another group may have to lose some control,
4) improving one group's self-determination, may have to lower anothers, and
5) change may differentiate target groups.

Potential strategies include building on community strengths (small places have benefits and existing networks), looking for guidance to the third world and international experiences, and looking for success stories. The economic structure supports the types of farming and industry that are amenable to local control and that have the most benefits to local people. Farming options should address sustainable communities, stewardship of land and natural resources, and options such as landbanking. Industry should concentrate on small, local business, local control and workers' ownership. Blakely (1990) recommends strategies that involve community development corporations and community cooperatives.

People can be empowered in a number of ways. Social services, job training, and access to health care are important. Extending the protection of labor legislation to all workers, including farm laborers and supporting neighbourhood and community organizations (NGOs) help empowerment. Improving education and skills, but recognizing that educational levels and quality are outcomes of economic well-being, also will help. Finally, rural areas need more central government subsidies as the best educated people leave.

Privatization or free market strategies are bankrupt. First, there is no such thing as a "free market" as all economies must be centrally coordinated to some degree. There have been various experiments with laissez-faire economics that have been disastrous (e.g., late 1800s US -- gave rise to regulation of meat-packing industries, establishment of FDA). As is often noted, the private sector is concerned with profit not people. It is unable to police itself and consumers as a group are too diverse to do so.

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THE IMPACT OF FREE TRADE ON SMALL AND MEDIUM ENTERPRISES IN THREE QUEBEC REGIONS

The Free Trade Agreement (FTA) between Canada and the United States has been in effect since January 1989, and may be extended to Mexico in the coming months. We know that nearly 80 percent of exchanged goods between Canada and the U.S. already were free of customs fees. With the FTA, therefore, the main concern was to evaluate to what extent the withdrawal of the trade barriers would affect enterprises producing those goods that could still benefit from protectionism. Not less than $6 billion, divided almost equally between the two countries, was at stake. It was important for Quebec government authorities to estimate the consequences of this move on the most fragile enterprises: the manufacturing SME's located outside of the Montreal region.

This evaluation was conducted by the GREPME between summer of 1990 and winter 1992. The three regions were identified by the Office de la planification et du developpement du Quebec as central regions as opposed to metropolitan regions (Montreal, Quebec City and Hull) and to peripheral regions (like Gaspesie and Abbitibi-Temiscamingue or Saguenay/Lac-Saint-Jean). One of the three selected regions, Mauricie/Bois-Francs (as large as Switzerland) is often called the Trois-Rivieres region. The second region, Lanaudiere, is located between Trois-Rivieres and Montreal. The third region, Basses-Laurentides, is just north of Montreal. This paper highlights some elements of a broader research program by emphasizing enterprises located in a rural setting.

After having identified the products especially affected by the FTA, and having pin-pointed all the enterprises involved in production of these goods, in the three regions, 20 enterprises were pre-surveyed in situ in order to prepare the survey. By using the three digit CTI code, the following sectors are affected by the FTA: food products, clothing, wood products, portes et chassis, furniture, processed paper, commercial printing, machinery, and motor boats.

A mail out survey involving 979 enterprises was undertaken. A total of 242 questionnaires were returned, which accounts for 27.5 percent of the population. Among these enterprises, 144 (59.5 percent) are located in a rural setting. Here I provide varied information on the attitude of representatives of these enterprises with respect to FTA, and compare them to those of representatives of businesses located in a urban milieu (eg. Trois-Rivieres, Saint-Jerome, Joliette and Louiseville). Primary concern is to judge to what extent the rural enterprises can compare themselves favourably to their urban counterparts in regards to strategic planning.

Sample Overview

The average number of employees for rural enterprises was 22.7; the average number for their urban counterparts, 34.7 employees, is significantly higher. Ninety-eight rural enterprises (68 percent) have less than 20 employees as compared to 60 (61 percent) for urban enterprises. In terms of job creation, rural enterprises increased by 23.2 percent in the last three years, while urban businesses increased employment by 42.9 percent. This result parallels the greater proportion of urban firms that have increased their total income during the same period (89.6 percent) as compared to rural firms (66.7 percent).

Rural enterprises are slightly more conservative than urban enterprises toward the FTA, but there is no significant difference in opinions (Table 1). Approximately one-third of rural respondents are in each of the three response categories.

Table 1. Quebec respondents opinion of the FTA in 1990

	Location of enterprise					
	Urban setting		Rural setting		Total	
Response	No.	%	No.	%	No.	%
In favour	38	40.0	50	36.5	88	37.9
No opinion	31	32.6	45	32.8	76	32.6
Against	26	27.4	42	30.7	68	29.3
Total	95	100.0	137	100.0	232	100.0

In all, only 70 (28.9 percent) enterprises have taken some initiatives to either take advantage of the FTA or to protect themselves against its possible consequences. Again there is no significant differences between rural and urban enterprises. The same situation prevails for the number of enterprises (22.7 percent) whose representatives believe that the FTA might be profitable for them, as opposed to only 17.7 percent which are afraid of negative effects. Those who have adopted new measures to cope with the FTA are mainly the largest enterprises, with more than 50 employees but less than 250. Seven of the 13 rural medium-sized enterprises have reacted in some way to the FTA.

Measures adopted by enterprises fall into three categories. First, some initiatives relate to production of new product(s), improvement of the same product (top-of-level, new design), the abandonment of a particular product, and price reduction. Second, some initiatives relate to productivity through increasing productivity, modernizing equipment, production costs reduction, or man-power training and rationalizing. Finally, USA-oriented measures include sales increase, marketing improvement, commercial scanning, networking and improving after sale service, to establish firms in the USA, to buy an American enterprise, or to get a joint-venture with an American enterprise. Most of the adopted measures, therefore, are either market-oriented or deal with the improvement of productivity.

Significant differences are evident between rural and urban enterprises with respect to the market location and exporting status (or the interest in exporting) (Table 2). Only 11.7 percent of rural enterprises are not involved in exporting as opposed to 28.1 percent for the urban enterprises. With an additional 34.6 percent of rural entrepreneurs interested in exporting in the near future, the current and future rural exporters easily outnumber their urban counterparts.

Table 2. Status vis-a-vis exporting and location of market

	Location of enterprise					
	Urban setting		Rural setting		Total	
Market	No.	%	No.	%	No.	%
Exporting	51	53.1	74	51.7	125	52.3
Non-exporting	27	28.1	17	11.9	44	18.4
Interest in exporting	18	18.8	52	36.4	70	29.3
Percent of local sales	29.8		44.4		38.7	
Percent of Quebec sales	83.4		90.9		87.9	
Percent of foreign sales	5.8		2.2		3.6	

One reason why rural enterprises are not opposed to the FTA relates to the fact that they benefit from a strong local market (44.4 percent of their sales), and they do not feel threatened by a possible invasion of U.S. enterprises. Their solid roots in their local environment insure their traditional market for years to come. This is especially true for the smallest enterprises which, at least, at first glance, appear to be less vulnerable. In-depth analysis was required to get better information on this vital issue.

The vulnerability of enterprises

The impact of the FTA on enterprises involved was evaluated by taking into account two different dimensions. First, sensitivity refers to the importance of the enterprises's product-mix affected by the agreement. Depending on this importance, enterprises were classified according to a sensitivity index (from 0 to 100). Second, dynamism was measured by sub-variables derived by data analysis (factorial analysis) and knowledge of SMBs problems. A second index was derived from the following:

1) Specific measures adopted by the enterprises to protect themselves against, or to take advantage of the FTA.

2) The nature and importance of integration of enterprises in their regions. Enterprises were asked whether they make use of different kinds of resources (local and outside of their region) and to what extent they are satisfied with their contribution, whether they are part of a local or national network, and whether they take advantage of any governmental programs. This sub-index reveals that rural enterprises are less prone to benefit from different kinds of support than are urban businesses. The most significant difference refers to governmental programs: apparently because of a lack of adequate information, only 20 percent of rural enterprises, as compared to 33 percent for the urban ones, have used these programs recently.

   Information does not circulate efficiently and entrepreneurs do not find the time to exchange information. One thing is obvious: entrepreneurs prefer informal information networks (like breakfast business meetings) to formal ones. Somehow, for enterprises located away from small urban centres, getting together is difficult and their representatives feel isolated in spite of the availability of modern communication technology.

3) The importance of commercial and technological scanning and of research and development. Approximately one third of the surveyed enterprises use commercial scanning. There is no significant difference between rural and urban settings. Slightly more than 40 percent claimed to be into technological scanning. Again, 38.5 percent of the rural enterprises are only slightly above the average, but a greater number of rural enterprise representatives (19 percent vs 12.9 percent) are complaining of a lack of resources to undertake a serious technological scanning. Finally, 24 percent of rural enterprises are involved in research and development activities while this proportion is 30.9 percent for the urban enterprises.

4) Relative importance of past and foreseen investments: no significant difference was registered between rural and urban enterprises.

5) Strategic behaviour: Different questions, relating to attitudes to identify either a conservative or an aggressive behaviour on the part of the entrepreneurs, were asked and scored by using a Lickert scale. No significant difference could be identified between rural and urban enterprises.

While the sub-index of dynamism is somewhat less favourable for rural enterprises, the global index gives an average level of vulnerability of 112.7 for the whole sample. With an index of 116.6 rural enterprises are slightly more vulnerable than their urban counterparts, which have an index of 106.8.

The sample could be divided into three groups of enterprises: 1) not at all or very little threatened, 2) vulnerable, and 3) highly vulnerable. Twenty-four percent of rural enterprises are highly vulnerable to the FTA, as compared to 18.4 percent of the urban businesses (Table 3). Approximately 55 percent are not really threatened.

Table 3. Distribution of Quebec enterprises according to their vulnerability to the FTA

Enterprise category	Not vulnerable	Vulnerable	Highly vulnerable
Food products			
Urban	5	3	1
Rural	11	3	6
Total	16	6	7
Clothing			
Urban	0	5	5
Rural	7	4	11
Total	7	9	16
Wood products			
Urban	6	2	1
Rural	11	6	6
Total	17	8	7
Portes et chassis			
Urban	7	3	3
Rural	19	5	6
Total	26	8	9
Furniture			
Urban	12	7	2
Rural	5	8	5
Total	17	15	7
Processed paper			
Urban	1	4	3
Rural	1	1	0
Total	2	5	3
Commercial printing			
Urban	8	1	2
Rural	6	1	0
Total	14	2	2
Machinery			
Urban	15	0	0
Rural	18	1	0
Total	33	1	0
Sailing boats			
Urban	0	2	1
Rural	0	1	1
Total	0	3	1
All sectors			
Urban	54 (55.1%)	26 (26.5%)	18 (18.4%)
Rural	78 (54.2%)	31 (21.5%)	35 (24.3%)
Total	132	57	53

Industrial sectors which are most vulnerable are clothing and sailing boats. Furniture and processed paper are less vulnerable, but above average. Machinery, manufacturing and commercial printing are not particularly vulnerable to impacts of the FTA (Table 3).

With respect to the size of the enterprises, 31 percent of enterprises with less than 20 employees are highly vulnerable to the FTA, while less than 30 percent of enterprises with between 100 and 250 employees are vulnerable. For the enterprises with less than 9 employees, nearly 70 percent are not vulnerable. The smallest and largest firms, therefore, are least vulnerable.

Discussion

According to different informants, the most profitable enterprises are highly involved in research and development and do not hesitate to get into advanced technology. Quality is the key component. Many respondents put the emphasis on the quality of their products either to enter the American market or to face U.S. competition on the national market. The most vulnerable enterprises, therefore, should be stimulated to invest in new technology. The total value of equipment per employee in the most vulnerable enterprises in our sample amounts to only $410, as compared to the average of $1600 for all enterprises.

The most vulnerable sectors require particular attention on the part of governmental authorities. Nearly 20 percent of the labour of the three regions is involved in these sectors. Increasing their dynamism is their only way of survival. They could compete if they get into research and development and commercial as well as technological scanning.

If quality is essential to survive, money is still "le nerf de la guerre". Under-capitalization is always a problem. In Quebec, like everywhere else, what is really missing with respect to capital is a regional risk capital fund. While entrepreneurs do not have difficulties procuring small loan guaranties or risk capital, they have more problems when it comes to amounts in the range of $30,000. This problem is particularly important to the clothing industry, where investments in the three years preceding the survey were dramatically below the average ($3,500 vs $17,100).

The future of the smallest enterprises is not in jeopardy. According to our findings, the medium-sized enterprises are those which are most affected by the FTA and need special support on the part of their traditional partners.

The Enterprise Environment (the milieu) and the Networks

Information does not reach enterprises easily. Forty-five percent of our respondents evaluated the information they have received on FTA as inadequate or incomplete. Formal information networks are not adapted to the situation and needs of enterprises. Many informants referred to the need for improving the efficiency of the different organizations in charge of providing information, and of the assistance programs especially designed for SMBs. Some studies, however, have revealed that the majority of SMBs are familiar with between 10 and 25 organizations, but are in touch on a regular basis with only 5 to 9 of them. This may relate to a lack of human resources and the time required to take advantage of such relationships.

Governmental Assistance Programs

No more than 25 percent of the surveyed enterprises have made use of one or more governmental programs in the last three years. Technical assistance from both federal or provincial governments is available, but too often fails to reach the enterprises it is designed to serve. For instance, the Federal Development Bank was evaluated as less efficient than it used to be a few years ago. To be more efficient these programs should be redesigned with a better knowledge of the kind of enterprises that really need specific assistance. By putting the focus on labour training, governmental authorities will achieve a better adaptation of their programs to identified needs associated with improvement of productivity and the quality of products.

Priority should be given to enterprises which show a real potential for enlarging their market over the frontiers (exporting). The lack of know-how on how to enter a foreign market appears to be a major obstacle, especially for rural enterprises which feel too isolated to face this new challenge. Governmental authorities should provide encouragement to any initiative taken by entrepreneurs themselves, to organize networks in order to share the basic information needed to successfully find a niche, and to enter the U.S. market. In other words, governmental programs should be reoriented in order to stimulate the interest of non-exporting entrepreneurs in foreign markets, and more specifically in U.S. markets.

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THE RELATIONSHIP BETWEEN THE PUBLIC AND PRIVATE SECTORS AS PROVIDERS OF BUSINESS SERVICES IN SASKATCHEWAN

Introduction

Labour force data from the Census of Canada shows that Saskatchewan's labour force grew in the periods 1971-81 and 1981-86. In the first period the expansion was half the national average but in the second period the provincial economy temporarily escaped the recession of the early 1980s, and the labour force grew at a somewhat faster rate than the national average. By the mid-1980s, the recession reached Saskatchewan and construction and mining activity experienced losses. Interestingly, however, Saskatchewan experienced a positive gain of 2.89 percent in labour force in the manufacturing sector, even though manufacturing in other parts of the country was experiencing losses. During this period of expansion, the economy was undergoing a restructuring as service sector employment grew sufficiently quickly to replace agriculture as the province's single largest employer. By 1986, the service sector, narrowly defined, employed 50 percent more than agriculture.

This gain in manufacturing and services sectors indicates that the Saskatchewan economy is diversifying away from primary agricultural production and resource-based industries. The researchers were motivated to undertake surveys of the rural manufacturing sector and the service sectors, initially, to learn about small, emerging manufacturing firms located in rural Saskatchewan, and then, to understand the linkage between manufacturing and the increasingly important export services sector.

In the fall of 1990, we conducted a survey of selected Saskatchewan rural and urban manufacturing firms; this was followed, a year later, by a similar survey of the services sectors. Both surveys were augmented by a series of personal interviews and both in turn, were aimed at those firms with a potential to export out of the province. The segment of the services sector which was captured in the research was, primarily, that of business services which is mainly producer oriented; i.e., the final output being purchased by the manufacturing sector, other business services and government.

The literature on the service sector has traditionally concentrated on either or both sector growth and the spatial requirements of this sector. The literature suggests that in many regions the trade in services has grown at the same time as the manufacturing sector has been declining. However, as a result of the manufacturing survey we discovered that much of the business service activity in the province is used locally. For example, over 60 percent of firms in Saskatchewan that have export sales of more than 19 percent use the services of public and quasi-public research institutes. The magnitude of services exports cannot be wholly explained by the growth in manufacturing. In the Canadian Business 500 sales ranking Saskatchewan Wheat Pool is ranked at 55, Saskatchewan Power Corporation at 144, SaskTel 164. These rankings suggest that these firms sell more than primary commodities as they rank higher than comparable firms in provinces of similar size. In the ranking of the next 250 firms, Cooperators Data Services Ltd. is ranked 508, of interest as will be explained below. Thus, this highlights the importance of these institutes as providers of business services and are a response of Saskatchewan manufacturers to increased competition and the need to diversify both products and markets. Leistritz (1991) reinforces the notion that Saskatchewan manufacturers are export oriented, certainly more so than similar manufacturers in North Dakota.

Growth in Manufacturing

There are a number of theories about the way in which firms develop and grow, and the stages through which a firm must pass. Common to these theories is the idea that the successful firm gains in expertise as it matures and adapts to the demands of the market place. Mansfield suggests that there are three components to growth and adoption of technology: product ideas; a centre of intelligence and adequate cash flow. It is generally recognized that there is an abundance of product ideas in Saskatchewan. There are, however, difficulties in recognizing which of these ideas can be developed to meet market demand, as well as in learning to adapt production processes to respond to market requirements. There also is the difficulty in ensuring adequate cash flow as products and markets are developed. In the past ten years there have been a number of provincial and federal government programs introduced to help entrepreneurs acquire marketing related management expertise, while at the same time the growth in product oriented business services allows the firm to respond to market needs.

Access to adequate cash flow is a perennial problem for small business and is not unique to Saskatchewan business.

There is a parallel issue. The Saskatchewan economy has always experienced the problem of thin markets. Traditionally producers have faced thin markets for commodities, however, the market for professional services is also thin and subject to fluctuations in the business cycle. Firms operating within Saskatchewan need world class expertise in order to compete globally but have the problem that their requirement for specialized professional expertise does not warrant employing such people full time. As a response to this problem there appears to be a typically Canadian solution. There are emerging alliances between the public, private and cooperative sectors of the provincial economy in recognition of the need to develop centres of intelligence. It is against this backdrop that the local market for professional scientific and technical expertise has developed co-operatively.

This paper will provide a number of illustrations to demonstrate how these alliances are contributing to centres of intelligence in a number of Saskatchewan businesses and how in turn the public and quasi-public sectors are strengthening their position as providers of business services.

The Changing Role of Saskatchewan Research Council (SRC)

SRC has always been a provider of professional services, but in its early days its mandate was to support the primary sectors of mining, oil and gas, forestry and agriculture. Geological and agricultural engineering are still an important part of SRC, but as the provincial economy has diversified, there has been a shift in mandate so that today the branches of Technology Transfer and Business Development and Operations are more responsive to the needs of small business in Saskatchewan. Memorandums of understanding have been signed with research councils in other provinces and so, although the primary focus of SRC is to business in Saskatchewan, the services offered are available to businesses across the country.

SRC has evolved so that it is able to offer support to newly emerging firms, many of whom are too small to develop large enough centres of intelligence to address all the technical requirements necessary to compete in the global market place. Leading edge technologies are applied to the needs and wants of clients in a number of ways. For example, a small producer located in Perdue, Saskatchewan, approached SRC to provide expertise in the development of E-ZEE Wrap, a plastic wrap dispenser that had previously been made of metal and wood. The dispenser has not only gained consumer acceptance but has received a number of awards for design excellence. Larger more established firms are the recipients of benefits from SRC's activities, as they are sometimes used as pilot plants in the development of innovative techniques and processes.

SRC is not confined to helping local business, but is available to anyone. In this way, as a provider of services to the manufacturing and resource sectors, the research council is gaining in-house expertise which in turn is offered not only as an input into final demand products but also as an exportable service to international partners. The Council has affiliates such as the Prairie Agricultural Machinery Institute which provides agricultural machinery manufacturers with an independent body to test new or modified machinery and allows them to gain credibility before entering the market place.

Services are available to the private sector on a cost recovery basis. There are a number of provincial and federal government programs which can be used to offset the cost. SRC staff will help firms to apply for these grants.

The Role of Public Utilities

Saskatchewan Power Corporation has a mandate to encourage Saskatchewan firms to supply products to Sask Power that have in the past been supplied by out of Province firms. Manufacturers are identified as potential suppliers and are then approached by Sask Power. Those firms which are interested in becoming suppliers are shown how to manufacture to Sask Power specifications. Those that are successful are guaranteed a contract for a limited period. This contract allows the firm to buy production equipment or to apply for operating capital from the bank. After the initial contract expires, the firm is required to enter an open tendering process, which may or may not be successful. This process has allowed Sask Power to reduce costs and local firms to gain expertise; the next phase of the program is to encourage these same suppliers to apply for private sector, federal government and other tenders. Thus from a program concerned with import substitution, Sask Power is now the supplier of a business service that allows firms to learn how to tender and gain broader access to markets.

SaskTel has been more direct in its approach to gaining larger markets. SaskTel International was made a subsidiary of SaskTel in 1986 to market technological expertise to clients on a global basis. For the first four years it was a department within SaskTel. However, it is now independent and has financial control of its own affairs.

The evolving and continuing relationship makes this concept interesting. SaskTel International operates with a core staff of 15 people and contracts with SaskTel for its international labour pool. Five years out of the country is all that is possible for telecommunication engineers before they become too out of date. Being able to rejoin SaskTel's labour pool after overseas work ensures that engineers are able to regain expertise, and both companies are able to maintain a centre of intelligence. Being a subsidiary of a parent company has the advantage that financing is available during the very expensive proposal and project development stages. The reputation of the parent also gives the new company credibility in the beginning years.

On occasion the technology that is developed for an overseas client is adapted for the domestic market and can be tested and evaluated by SaskTel. For example, NavTrax Vehicle Navigation System is a vehicle positioning system which combines an integrated system that combines Global Positioning System technology, digital mapping and data communications which allows a company to know where the employee is in relation to the vehicle. This technology is designed for use to track employees in remote areas, such as oil and gas fields. Because it is also a dispatching system, however, it also can be used in large organizations that need accurate fleet management (e.g., to direct appropriate vehicles to an emergency). Domestically NavTrax is being tested by the Calgary Police Service and Amoco (Saskatchewan Report).

Role of Co-operatives

Co-operators Data Systems Ltd. (CDSL) is an information system processing firm. Its main product line is a package of financial services available to accompany its exchange switching processes. The company developed the automated banking system for Saskatchewan Credit Unions and became an industry leader in Canada. It is the expertise in financial services that gave CDSL the ability to tender for the contract to supply the Government of Saskatchewan with the technology to track prescription drug usage as a cost cutting measure. CDSL had previously set up an independent research branch in Regina to develop technology applicable to the health care field as a potential for future business development. When the government required the technology to put health care information on a health card it was the first enquiry of its kind. The request was ahead of the available technology. Developments of this type are very expensive, and it is difficult to gain market acceptance until a test market has been set up. In this case, the Saskatchewan government made the cash available for the development of the technology and provided a guaranteed market for the product. The resulting technology again made CDSL an industry leader.

Information technology is one of the newest export services, but unlike financial services, it is not politically expedient to have health information cross political boundaries. Therefore, as is often the case with information technology, CDSL has to develop the software as the final demand product. This creates its own problems as the software has to fit with existing hardware in individual countries. It is interesting to note that an unexpected benefit to the Saskatchewan health card development, and subsequent implementation in the province, was that many places regard Saskatchewan as a convenient sized test market. The project, therefore, was validated without the additional expense of setting up a test market.

The Role of the Educational Institutions

The role of the educational institutions is complex. In addition to providing basic education these institutions also provide business services to local producers. However, academics export services in the form of basic and applied research and consultative services. Purchasers are the same groups that buy business services from other agencies; manufacturers, other business services and government.

However, there are two ways in which educational institutions differ. One is the way in which the universities employ experts who, in the course of their academic research activities, discover products and processes with commercial applications. These activities have, in turn, spawned research and development companies that sell both business services and products (e.g., companies such as SED Systems, Philom Bios, VIDO etc.). Educational institutions also function as developers of highly qualified individuals, many of whom wish to stay in the province when they finish their education and to do so have to create their own business. This, in part, explains the number of software companies, consulting agrologists and others at work in the province.

Conclusion

The Saskatchewan economy is diversifying away from primary commodities of agriculture, and resource-based industries. During the period 1974 to the present, the services sector grew, but unlike many regions this growth does not seem to have occurred as a result of a decline in manufacturing. The manufacturing sector, although small, grew somewhat faster than the national average in the early 1980s, and responded to the recession of the last decade by strengthening its export orientation.

The needs of manufacturing have strengthened the requirement for business services, especially those services which help firms become more export oriented. Theories about the ways in which firms develop and grow postulate that firms must develop centres of intelligence in order to respond with globally competitive products. As a response to thin markets for the professional services necessary for these centres of intelligence, interesting alliances have developed between the private and public and cooperative sectors in the province of Saskatchewan. Further research is being carried out to determine if the expertise gained by service firms in the service of local manufacturing is, in turn, being exported.

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