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au courant

Economic Council of Canada
Volume 9, No. 1, 1988

Conference on Prairie agriculture

- Evidence on job creation
- Perspectives on regional development
- New project on the service economy

PUBLICATIONS

New Council Report

Adjustment Policies for Trade-Sensitive Industries (EC22-152/1988E; $9.95 in Canada, $11.95 elsewhere).

This research report provides the detailed analytical findings that support the Council's Statement on managing adjustment in the manufacturing sector. The report looks at the adjustment of manufacturing firms and workers to changes in the marketplace, particularly the impact of growing international competition. It presents considerable new evidence on the adjustment responses of Canadian and foreign-owned firms; on the mobility of workers; and on the impact of change in "trade-sensitive industries" – those which have received sector-specific government assistance because of the pressures of international competition.

Research Studies

Research studies are published by the Economic Council in both official languages. A list of titles is available on request, and ordering instructions appear below. Each study clearly attributes the findings and conclusions to the individual author, or authors, rather than to the Council. One new title has been published since the last issue of *Au Courant*.

Creating Jobs in the Private Sector: Evidence from the Canadian Employment Tax Credit Program, by *Surendra Gera* (EC22-148/1988E; $8.95 in Canada, $10.75 elsewhere).

Discussion Papers

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No. 344 "Open borders: An assessment of the Canada-U.S. Free-Trade Agreement," by *S. Magun, S. Rao, B. Lodh, L. Lavallée*, and *J. Peirce*.

No. 345 "Trade-related, sector-specific industrial adjustment policies in Canada: An analysis of textile, clothing, and footwear industries," by *Jaleel Ahmad*.

No. 346 "Commerce sans frontières – Une évaluation de l'Accord de libre-échange entre le Canada et les États-Unis," by *S. Magun, S. Rao, B. Lodh, L. Lavallée*, and *J. Peirce*.

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FEATURE

Conference on the Future of Prairie Agriculture

Highlights from the two-day conference in Saskatoon:

SPEAKING OUT

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The future of Prairie agriculture

Prairie agriculture is in trouble. Not only have western Canadian farmers had to struggle through such natural disasters as drought and grasshopper infestation in recent years, but falling wheat prices have left many of them in financial difficulty. Were it not for substantial government assistance, in fact, net farm incomes on Prairie farms would be close to zero today.

Despite the downturn in agricultural fortunes, Prairie agriculture remains an important economic activity. In 1986 it contributed about $6.4 billion to Canada's gross domestic product, much of it in export earnings. Moreover, the health of the agricultural sector affects the whole gamut of industries tied into agricultural production – from fertilizer producers and dealers, and farm machinery manufacturers, to fuel suppliers, grain pools, and transportation companies.

What lies ahead for Prairie agriculture? How should policy makers and farmers prepare for future world markets? The Economic Council is examining these and other questions in its project on the Future of the Prairie Grain Economy – the first Council project to be jointly financed by the private sector and various governments. As part of that project, the Council took part in a Conference on the Future of Prairie Agriculture in Saskatoon in late March. The conference was sponsored by the University of Saskatchewan and supported by the Economic Council.

Andy Schmitz, who heads the Council's agriculture project, and Caroline Pestieau, Deputy Chairman of the Council, co-chaired the two-day conference, which attracted some 220 delegates, including farmers, bankers, community leaders, fertilizer and farm machinery companies, government officials, and others with a stake in the western farm economy. Participants were presented with the highlights of original research being undertaken by the Council as part of its agriculture project. The idea was to provide new information to farming organizations and others with a stake in the Prairie grain economy, to get feedback on research findings from the Council project, and to provide an opportunity for input into the policy recommendations that will be drawn up by the Council later this year. *Au Courant* attended the conference and files this report.

International perspectives

Will Canada be competitive in world grain markets in the future?

Much depends on what happens outside Canada, according to Professor Alex McCalla of the University of California at Berkeley. Professor McCalla outlined the structure and changing patterns of world grain production, consumption, and trade, and he examined possible future trends and their implications for Canada.

Over the past 20 years developed countries have become relatively more important as grain exporters, while the developing countries and centrally planned economies (Russia, in particular) have become major importers (see chart). In particular, the United States has changed from an insignificant trader to the dominant exporter. Western Europe has become a major exporter as well. Canadian grain exports have doubled since the early 1960s, and Australia and Argentina remain influential exporters. Russia, which had been a major exporter until 1970, has become a highly variable importer. Most developing countries, particularly those in Asia and North Africa, have become major importers. Thus the pattern of trade is now one of few exporters and many importers, McCalla explained.

Trends for Canada tend to mirror these developments. The share of Canadian grain exports destined for developed countries has fallen by over 300 per cent since 1960, while Canadian exports to the developing nations doubled over the 1960-85 period. As well, nearly 50 per cent of Canada's grain exports are destined for centrally planned economies, much of them going to Russia.

Production and trade

Between 1960 and 1985, world wheat production more than doubled – from 238 million metric tonnes (mmt) to 503 mmt. Trade in wheat also increased rapidly over that period (from 44 mmt to 93 mmt). Almost all of the increase in production was due to increased yields (rather than any dramatic increase in the area of land harvested). While production of coarse grains (corn, barley, oats, and so on) nearly doubled over that period, the growth in trade of those commodities outstripped that of wheat. Coarse grains are used primarily for livestock production. The use of wheat as a feed grain for livestock also increased more rapidly than production or trade in either wheat or feed grains. Furthermore, the market for medium-quality wheats is by far the largest and fastest-growing. The market for high-quality wheats, on the other hand, is growing very slowly. The implications of these developments for a Canadian wheat economy based primarily on high-grade, low-yielding varieties for human consumption should be carefully considered as Canada examines its future export prospects, McCalla pointed out.

Price instability

While grain prices remained relatively stable until the 1970s, they rose dramatically over that decade and then fell precipitously in the 1980s. Much of the price drop can be attributed to increased productivity (better yields) and excess supply. But domestic policies in many countries have added to the instability by encouraging rapid expansion in the grain sector, McCalla said.

In particular, U.S. farm policy has a significant influence on world markets. The rigid expansionist agri-policies adopted by the United States in the 1970s contributed to the boom mentality and high growth in grain exports during that period. But by the mid-1980s the U.S. share of world grain exports had plunged markedly, as other grain producers increased production. That led to the current "siege mentality," McCalla explained, whereby the United States continues to subsidize exports aggressively in an attempt to gain back its market share. Similarly, the phenomenal growth in grain production within the European Economic Community (EEC) is largely the result of its price support system under the Common Agricultural Policy. The result of these and other expansionist policies has been an escalating grain trade war.

Future trends

McCalla said that based on the current glut in grain markets, trade in this sector is likely to be stagnant into the early 1990s. In the short term, the domestic-policy responses of major exporters will continue to affect grain markets, but in the long term, "economic variables will dominate," he said. The case of India and of China may also have serious ramifications on trade in world grain markets. India's ability to feed itself and to become a small exporter in recent years could be replicated in other less developed countries, subsequently reducing the export markets for Canada and the developed world. In the medium term, China could dramatically alter the current balance in export markets by buying up more imports.

For Canada, the choices are limited. Much of what happens in world markets is "beyond Canada's control," McCalla said. What is vital to the future, he suggested, is cooperation and a multilateral approach to solving problems. Canada must also develop flexible policies that can respond to the significant changes that are likely to occur in the future. "With appropriate forethought a viable future can emerge," he concluded.

At the same time, many Canadians are concerned about the impact of U.S. actions on Canada. McCalla said that exporters in that country are "hung up" on maintaining their market share, despite the dampening effect on prices and the U.S. government's desire for a free market. It is unlikely that U.S. agricultural policy will change significantly in the near future, he said. The feed grain market may present opportunities, however, because of the expected growth in that area and the fact that U.S. exporters are relatively less concerned about their market share in feed grains.

Looking ahead

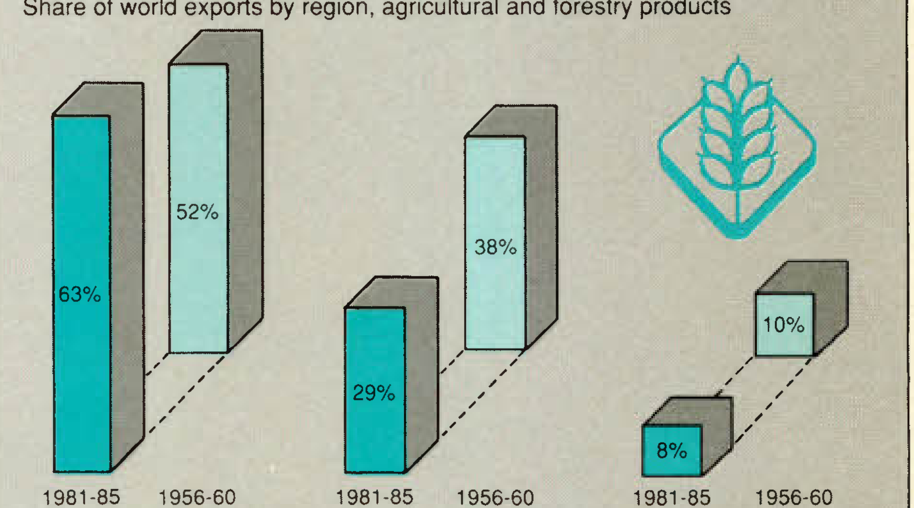
While the world demand for grain products is expected to grow in the medium term, the price of such products will depend heavily on U.S. government policies.

Canada is a major exporter of wheat, canola, and, to a smaller extent, coarse grains. But it does not set the world price for those commodities. Much of the price setting for cereals and oilseeds occurs in the United States and is influenced by the U.S. loan rate to farmers, the level of U.S. export subsidies, and the amount of U.S. government-held stocks. As a result, Canadian grain farmers face an uncertain future in the short term, Professor Hartley Furtan of the University of Saskatchewan told conference delegates. But in the long term the outlook for grain and oilseed prices is "rather optimistic," Furtan said in his forecast for grain markets.

By far the largest percentage of most Canadian grains are exported. Hence the future of the Prairie grain economy depends on developments in the world markets for wheat, coarse grains, and oilseeds. The largest producers of these crops are China, Europe, Russia, the United States, and Canada; the largest consumers are China, India, and Pakistan, which collectively represent more than half the world's population. While the volume of trade and export prices for grains depend on changes in the consumption and production balances in the major producing and consuming countries, Furtan argued that the policies set in the United States are key to the future of the Prairie grain economy. Other factors that will have a major influence on grain markets are income and population growth, weather conditions, and technological change.

Trends in agricultural trade

Share of world exports by region, agricultural and forestry products



Wheat

Assuming no dramatic changes in world wheat markets as a result of weather conditions, wheat prices are not expected to improve significantly until 1993, when world stocks are expected to drop (in relation to total consumption) to 20 per cent or lower. Should major producers respond by increasing production at that point, however, prices will remain stagnant. Meanwhile, global wheat production will continue to grow but at a rate slower than in the past 20 years, with China and Russia having the potential for large production increases. Canadian wheat production is expected to stabilize, and exports will fall marginally. The United States will continue to be the largest exporter and may step up production as wheat prices increase. (The United States has removed some 20 million acres from production since 1981, Furtan noted.) World wheat consumption will rise as well – primarily in developing countries, where income and population growth will be steady. China holds the most potential for increased wheat consumption, Furtan said.

Coarse grains

Coarse grain prices are expected to start rising in the early 1990s, as consumption outstrips production and stocks decline significantly. (Prices could respond sooner if China does not increase production or if it raises imports.) Current stocks, which stand at about a quarter of total world consumption, will have to decline to at least 16 per cent before prices rise significantly, Furtan predicted. In response to falling stocks and the expected rise in prices, major producing countries may increase production.

The future demand for coarse grains is linked to the demand for meats. In this regard, Pacific Rim countries represent a significant potential market. While corn is the major coarse grain and the United States dominates in world production, barley and wheat can compete in this market, especially in poultry production, Furtan pointed out.

Oilseeds

The world market for oilseeds (canola, flax, and soybeans) is expected to experience the strongest growth over the medium term. The current balance in world supply and demand will also favour strong prices in the near future. Production is expected to rise steadily to the mid-1990s, with the United States accounting for the largest increase. There may be room in the market for Canada to expand its production faster than it has over the past two decades, Furtan disclosed.

Canola production and exports have become increasingly important in western Canada, with Japan being the major importer of Canadian canola; recently, however, European producers have been challenging Canada in this market. At the same time, China represents a potential new market for Canada. And while traditionally there have been few policies in Canada to support domestic processing of oilseeds, Furtan sees opportunities in this area as well. Canola meal is used in animal feeding in competition with soybean meal. In addition, Canadian oilseed exports to the United States have increased markedly in recent years, largely as a result of the U.S. government's decision to grant status to canola oil as a generally safe product.

Employment and Immigration Canada

Grain prices will remain low in the short term.

Important markets

In the immediate future, Russia, China, and Japan will continue to be Canada's largest grain markets, Furtan said. If Canada were to lose any of these three markets, the income to Prairie producers would be seriously eroded, he pointed out. At the same time, policies are needed to help expand the economies of the developing countries, since they represent important markets for Canada and the developed world. At home, Furtan said that in the short term there is no alternative but for Canada to continue providing special grain subsidies to help Prairie producers.

The trading environment

Prairie grain farmers would benefit from free trade in agriculture, new Council research indicates.

Prairie agriculture would be competitive in a world trading environment if competitors' subsidies were removed, according to Professor Colin Carter of the University of California at Berkeley. Professor Carter reported on his research into the magnitude of agricultural trade subsidies worldwide and the implications for Canada of a more liberalized trading regime.

To measure the potential impact of free trade in agriculture, Carter examined 10 different models of global agricultural trade. The models were constructed for varying purposes, but several of them are capable of projecting the likely outcome under freer trade, he explained. Overall, the global gains from removing trade barriers (agricultural subsidies and support programs) would be significant – anywhere from $22.5 billion to $74.9 billion a year in increased incomes for both producers and consumers. Under each model, grain prices would rise, while production would remain relatively stable and possibly fall off in some cases (wheat, in particular). The potential impact on net world trade in agricultural commodities is mixed, with a possible decline under some models and an increase under others.

The effect of trade liberalization on a country's producers depends to a large extent on the level of government assistance they currently receive, Carter explained. Because of the high farm subsidies in the United States, for example, the price increases associated with trade liberalization may not offset the drop in producers' incomes once support programs are discontinued. In Canada, on the other hand, the price increases from trade liberalization are more likely to offset the elimination of grain subsidies to producers, he said. Another concern is that the effect of trade liberalization may not be nearly as great in reducing output as protectionism was in increasing it, since much of the farm infrastructure is now in place in the new grain-producing regions. This could reduce the potential gains to the more efficient producers.

Carter undertook a case study to examine the potential effects of trade liberalization on Canada's agricultural trade with Japan. He found that Canada would gain considerably if Japanese agricultural trade barriers were removed. For example, the elimination of Japanese import duties on canola oil would increase the net revenue of Canadian crushers by 6.3 per cent a year and encourage more domestic processing in Canada. A recent study also estimates that Japan's food import bill would rise from $20 billion to $32 billion (in 1986 world prices) with the elimination of trade barriers.

Increasing protectionism

While Canada would benefit from trade liberalization in agriculture, protectionism in this sector has recently "gotten out of hand," Carter said. Japanese and European farmers receive the highest level of support on such products as rice, sugar, and dairy products. As for wheat, subsidies in the EEC were roughly four times those in Canada in 1987, while for barley they were about 10 times greater.

Export subsidy levels in the United States have increased recently under the U.S. Export Enhancement Program. The program provides export price subsidies that have enabled the United States to sell grain in export markets below the loan rate set under the 1985 U.S. Farm Bill. In some cases the subsidies under this program cover as much as 70 per cent of the variable costs of production. Originally the subsidy program was directed toward EEC customers only; it has since been expanded to include such countries as China and Russia. Carter said that subsidized grain sales to those countries have been especially harmful to Canadian farmers because those markets are so important to Canada. The program is damaging to exporting nations in general, because it results in lower world prices. "Clearly the importers are the large gainers," he said.

One of the obstacles to trade liberalization in agriculture is finding a way in which to identify and measure trade-distorting subsidies. So part of his research involved examining the use of "producer subsidy equivalents" (PSEs) to measure the rate of protection. A PSE is simply the percentage of the total value of production accounted for by trade-distorting subsidies. From such calculations, Carter discovered that although Canadian wheat farmers did not receive as much support as U.S. farmers, the difference was "not too substantial." He noted, however, that deficiency payments to Canadian farmers were introduced in response to U.S. policy actions.

Positive steps

Despite the growth of protectionism in agricultural trade, Canada "should not give up on the notion of trade liberalization," Carter said. He pointed to several positive steps in this regard. In fact, protectionism in agricultural trade has grown to such proportions that liberalization is finally beginning to receive serious attention by policy makers around the globe. Agriculture is on the bargaining table at the current negotiations under the General Agreement on Tariffs and Trade. The focus of the discussions will be on the policies of the developed countries. These nations have also agreed to reduce commodity price support to farmers. The United States has proposed that developed countries eliminate all subsidies that influence agricultural trade by the year 2000. The "Cairns Group" of 13 major small and medium-sized wheat- and rice-exporting countries (including Canada) has also called for liberalization of agricultural trade.

The changing farm

With the high cost of farming these days and the trend to larger commercial operations, many traditional family farms – once the cornerstone of Canadian agriculture – are in financial difficulty.

A Prairie farm that cost some $40,000 in 1961 could easily have cost $400,000 by 1981, making it increasingly difficult for anyone to get into farming. And if past trends continue, there will be fewer small farms in the years ahead and an increasing number of large corporate operations, according to economist Ludwig Auer of the Economic Council, who is deputy director of the Council's agriculture project. In his presentation, Auer outlined what has happened to farm incomes and costs over the past two decades, how farms have changed, and what Prairie agriculture could look like in the future.

Crop and livestock production on the Prairies has increased dramatically since the 1960s. As prices rose during the 1970s, Prairie farmers invested heavily, mostly in land and buildings. By 1985, farmers' cash operating expenses had more than quadrupled, with interest payments on loans accounting for about a fifth of the total. These interest payments are critical, Auer explained, because they cut into labour income (the income remaining after all other costs are deducted). By 1985, labour income was close to zero in all three Prairie provinces.

Employment and Immigration Canada

Prairie farmers would benefit from trade liberalization.

Financial stress

Between 1981 and 1985, Prairie crop prices fell some 20 per cent, leaving every fourth Prairie farmer in financial difficulty. Auer established four degrees of financial stress: nonviable (having no cash income after payment of cash expenditures); deteriorating (bordering on nonviable); vulnerable (when family income is not quite enough to meet living expenditures); and stable. The situation in Alberta was somewhat more favourable than in Saskatchewan and Manitoba, partly because of higher off-farm incomes in Alberta and more livestock production in that province.

The degree of financial stress varied among the major farm types. It was lower on grain and livestock farms and higher on mixed and specialty farms, Auer reported. The degree of indebtedness also affected the degree of financial stress. Young full-time farmers (below age 35) carried heavier debt loads, and nearly half of them were in financial difficulty. Elderly farmers (over age 64) experienced the least financial difficulty. Small marginal farmers were also in fairly good financial shape, probably because they didn't qualify for more loans during the boom period, Auer suggested. The impact of debt on the farm financial situation has been substantial, in fact. Had all farmers been debt-free, for instance, only 5 per cent would have been financially stressed.

Disastrous effect

Between 1985 and 1987, cattle prices increased and wheat prices dropped sharply, having a "disastrous effect" on the financial situation of grain farmers in particular, Auer continued. He estimated that the proportion of farmers in financial difficulty would have doubled had governments failed to take action at this point. For its part, the federal government responded with the Special Canadian Grains Program, which provides payments to farmers to help offset low grain prices. The program seems to have benefited those who needed the most help, according to Auer. Overall, it lowered the share of Prairie farmers in financial difficulty by roughly one-fifth (see chart).

At the same time, those farmers in the most serious financial difficulty were probably not good managers, Auer found. Their productivity performance was below average, irrespective of the age of the operator, farming region, or use of capital, labour, and material inputs. Targeting government transfers at those farmers could help them, but it could also blunt the competitive edge of Prairie agriculture.

One method of stabilizing grain-farm incomes is to encourage farmers to diversify into livestock production. But Auer noted that resource productivity on livestock farms is lower, on average, than it is on crop farms. Another suggestion is to have government subsidies tied to farm incomes rather than commodity prices. Auer also pointed out that an increasingly large portion of farm-family income comes from off-farm work and investments.

In the past, Canada has adjusted much more slowly than many European countries (as well as the United States) in terms of the shift away from agricultural employment. This is partly because European countries have traditionally had higher levels of employment in this sector, but also because it is difficult to compare Prairie with European agriculture. Auer said he expects adjustment in Prairie agriculture to continue as more farmers leave the industry in the years ahead, even as grain prices (wheat, in particular) increase.

If the past in any indication, the number of part-time and elderly farmers will increase in future, while there will be fewer full-time marginal farmers and fewer full-time commercial farm operations. At the same time, Auer projected that by the year 2000 the medium-sized commercial family farm will continue to dominate the scene, accounting for close to 60 per cent of all farms and more than 70 per cent of total farm output. The number of large corporate farms, many of them also family-owned, is expected to account for 3 per cent of all farms and 20 per cent of farm output.

Identifying the problems

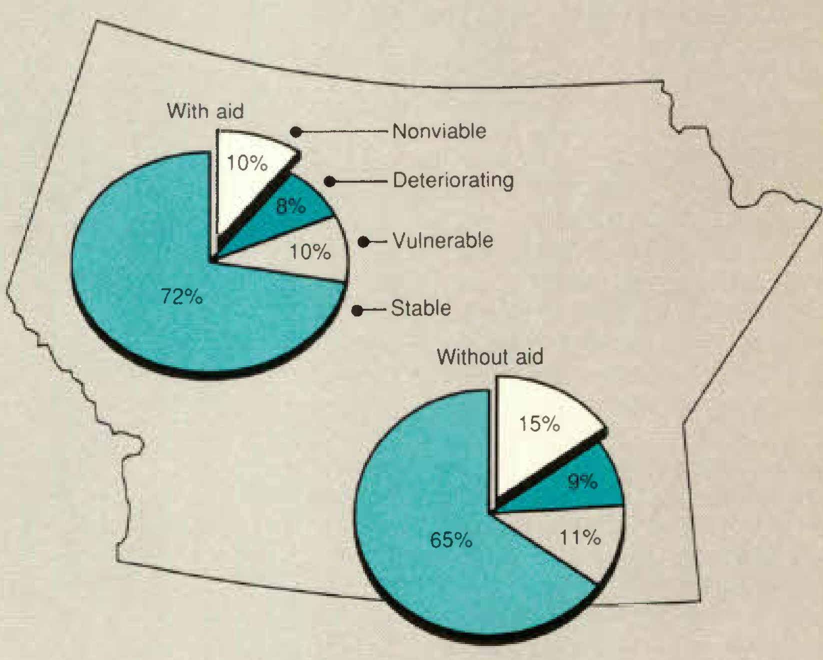
Why is Prairie agriculture in a crisis despite the massive government support provided under various programs?

One reason is that policy makers have failed to identify the fundamental problems in this sector, with the result that Canadian agricultural policy has in some ways contributed to the crisis in agriculture, according to Professor Murray Fulton and Professor Ken Rosaasen of the University of Saskatchewan.

The volatility of the export-oriented grain industry results in fluctuating grain prices and fluctuating farm incomes, as Prairie agriculture moves through its boom and bust cycles. A variety of policies and programs have been developed by the federal and provincial governments in an effort to stabilize the incomes of Prairie farmers and their communities. While such efforts have been reasonably effective at combatting the income problem, they have been almost ineffectual in alleviating the

How federal aid helped Prairie farmers

Impact of Special Canadian Grains Program on the financial situation of Prairie farms, 1987



massive debt loads faced by Prairie farmers. In the current downturn, the income from grain sales and government support programs is in many cases insufficient to service the huge debt in the farm sector. Farmers find themselves depleting their assets and sometimes looking for part-time or permanent work off the farm, in order to generate enough income to cover their living expenses. With a debt/equity ratio in the range of 1:2 to 1:3, Prairie agriculture can almost be considered bankrupt, the researchers said.

The research

Fulton and Rosaasen examined the policies adopted by governments in response to the crisis in Prairie agriculture and offered some suggestions for developing policies in the future. In their view, policy makers should give more emphasis to the debt problem. In addition, programs and policies must be examined in light of their implications for Canadian agriculture and what they prompt other countries to do, and in light of their impact on businesses affected by the health of Prairie agriculture.

In their examination of government involvement in the agricultural sector, the researchers concluded that many of the policies and programs outlive their usefulness, contribute to a new problem, or have unintended effects on other sectors. For example, the *Western Grain Stabilization Act* (which maintains the cash flow of western grain producers during periods of depressed prices or reduced sales) has been relatively effective at addressing the problem of fluctuating incomes; however, it has also increased feed grain prices in western Canada and subsequently reduced the viability of livestock production in that region. In that sense it discourages Prairie farmers from diversifying out of the grain-export trade.

Furthermore, government policies often have a destabilizing impact on Prairie agriculture. For example, subsidized interest rates and relaxed credit restrictions in the late 1970s and early 1980s contributed to escalating land prices by increasing the demand for land. Instead of making it easier for farmers to get started or to expand, the result was that land prices were simply bid up even higher. Hence government farm credit programs have tended to exacerbate the problem of fluctuating asset values. Overall, the researchers conclude that "Canada has a plethora of agricultural programs but not an agricultural policy." Too often these programs support yesterday's winners and fail to take advantage of tomorrow's opportunities.

The debt problem

Fulton and Rosaasen examined the debt problem in particular. They noted that the crisis in this regard is the result not only of current low grain prices but also of the boom period five to 10 years ago, when farmers began bidding up the price of land as they expanded operations or entered the industry. While the majority of farmers appear to be able to ride out the current devaluation of their asset values, a significant portion of them cannot. The question facing Prairie agriculture is who will pay – farmers, financial institutions, or governments? The researchers pointed to a number of options, including interest-rate reductions and equity financing. Should farmers and local financial institutions be left to cover most of the cost, the impact on rural communities could be quite severe, they said. If financial institutions take the biggest part of the loss, they may be less willing in the future to supply the credit needed for a capital-intensive industry like agriculture. If governments absorb a large portion of the losses, some of these short-run concerns will be mitigated, but at the expense of taxpayers and at the risk of encouraging future debt crises.

The researchers outlined a number of major policy approaches that might be considered in the future – supply management, the decoupling of government assistance (so that it is not tied to production of a particular commodity), the adoption of a Canadian version of the U.S. Farm Bill, and a modification of existing policies. While no one policy is perfect, they noted, each contains elements that have been, or will be, proposed.

In developing new agricultural policies, the researchers emphasized that it is imperative to take account of past lessons. In particular, the problems of debt and income must both be addressed. This will require two different types of policy initiatives, they pointed out, because the root causes of these problems are different. The role that Canada plays in the international market and its influence on the behaviour of other countries must be emphasized, since cooperation is the key to solving problems that are international in scope. Finally, there must be an attempt to streamline agricultural policy. The cost of many policies, each pulling or pushing in different directions, is enormous. In fact, many policies are introduced in order to correct the problems created by earlier policies. Such conflicts tend to ensure that only a few of the policy objectives are ever actually attained.

Government policies often have a destabilizing impact on Prairie agriculture.

Diversification of Prairie agriculture is one of the key elements to overcoming the crisis in this sector, according to a group of panelists who looked at the options in this regard.

Diversification could mean the production of various commodities whose prices are inversely related, so that farmers would be somewhat more protected against falling wheat prices, for example. It could also mean developing upstream and downstream activities in the input supply and processing industries, for instance. The panelists also suggested looking at the impact of irrigation on diversification and at such issues as transportation, economies of scale, and environmental concerns such as soil degradation.

Conference participants agreed that what is required from governments is consistent policy and possibly a national agricultural strategy. Some suggested that many of the problems in Prairie agriculture are partly the result of government policies that distort economic decisions. Others pointed to the growth of government subsidies and global protectionism as serious constraints to the future of Prairie agriculture.

One issue that highlighted much of the debate throughout the conference was whether or not Prairie agriculture would be viable in the years ahead. Conference Co-Chairman Andy Schmitz noted that Prairie agriculture is a boom-and-bust industry that will undoubtedly see its fortunes improve over the next decade. But the inherent instability of agriculture will require better management in the future. "We will always be on a knife's edge," he concluded.

Creating jobs in the private sector

During the late 1960s and early 1970s many western governments began looking for new ways to combat that period's soaring unemployment rates.

One such method was direct job creation. Two of the best-known strategies in this regard were public-service employment programs (to build infrastructure such as roads, for example) and wage or employment subsidies to the private sector. In recent years, the federal government has substantially increased its support for direct job-creation measures. Federal outlays in this respect rose from about $170 million in the 1975/76 fiscal year to an annual average of about $500 million between 1977 and 1986. Until recently, these funds were spent mainly on public-service employment programs. Lately, however, the government has been emphasizing private-sector initiatives like wage subsidies. How effective have these measures been?

To help answer that question, Council economist Surendra Gera undertook a detailed study of the Canadian Employment Tax Credit Program (ETCP) as part of his research on unemployment issues. The program was established in 1978 to stimulate additional private-sector employment, as well as to improve the employability of program participants, who were drawn mostly from the ranks of the hard-core unemployed and who had to be referred by a Canada Employment Centre.

Program details

Designed as a two-year program, the ETCP was extended for a third year and ended on March 31, 1981. The aim was to create about 50,000 jobs annually across Canada. To be eligible for tax credits, employers had to create jobs that constituted an addition to their work force. The jobs had to be full-time (at least 35 hours a week), had to pay at least the appropriate provincial minimum wage, and had to last for a minimum of three months. Credits could be paid for as long as nine months (later changed to 12) for each eligible worker. Employers benefiting from the ETCP could not be directly subsidized by any other government program.

The program was regionally targeted. Employers in the Atlantic provinces and Quebec's Gaspé Peninsula received the largest credits ($2 per person-hour of additional work created), while those elsewhere received either $1.75 or $1.50 per person-hour, depending upon local unemployment rates. Firms could "collect" their employment tax credits by deducting them from their federal income tax. If a firm's federal tax was less than the total credits earned in any one year, it could carry all or part of those credits forward, for up to a maximum of five years. The credit was neither transferable nor refundable.

In his study, Gera was primarily interested in three questions:

- Was the program economically efficient (i.e., did its net benefits exceed its net costs)?
- Did the program lead to a net increase in employment?
- Did the program improve participants' long-term employment prospects?

The experience

The great bulk of ETCP hiring was done by small and medium-sized firms (see chart). In addition, the vast majority of participating firms hired only a small number of workers; in fact, about two-thirds of them hired only one worker.

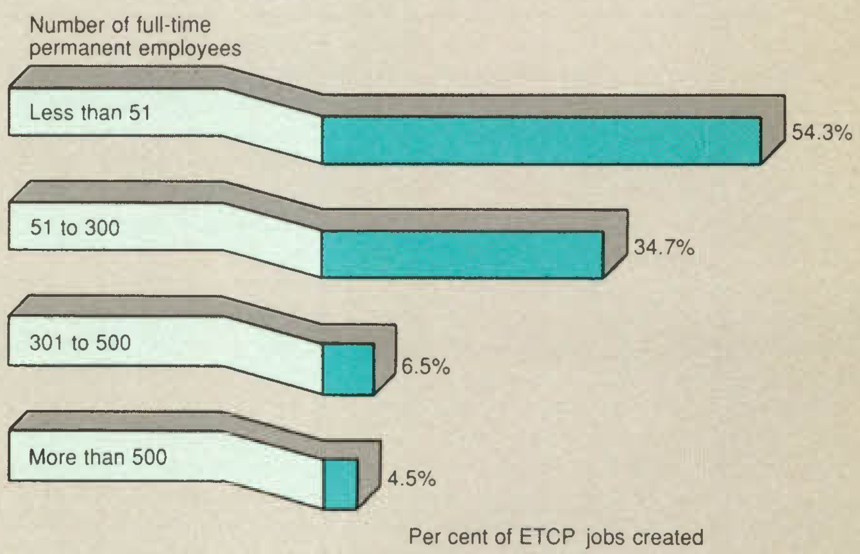
Almost half the firms doing the hiring were in the manufacturing sector, although that sector (as of 1979) employed only about 20 per cent of all Canadian workers. In contrast, the service industries, which employed 66 per cent of all Canadian workers but accounted for only 36 per cent of ETCP hirings, were somewhat underrepresented. Manual occupations, such as fabricating and assembly or processing and machining work, accounted for slightly more than half the additional jobs.

Regionally, about three-quarters of the 113,182 jobs created were either in Ontario or Quebec; another 11 per cent were in British Columbia. Despite the program's targeting of Atlantic Canada, that region did not benefit to any great extent; in all, the Atlantic provinces accounted for less than 7 per cent of the jobs created.

The typical program participant was young, male, unattached, and unemployed. Females accounted for only one-third of all participants, though they represented 45 per cent of Canadian unemployment at that time. Over half the group was under 25, and nearly three-quarters had no dependants. About half of them had been drawing unemployment insurance benefits just before joining,

Small firms did most of the hiring

Per cent of ETCP jobs by size of firm, 1978-79



while 75 per cent had drawn such benefits at some point during the previous 18 months.

Economic efficiency

Through a series of calculations, Gera determined that the ETCP was indeed economically efficient, both in Canada as a whole and in all the provinces. The program's major benefit was the value of its participants' output, as represented by their wages. Its major cost was the "social opportunity cost" (SOC) of those participants – the economic value of what they would have been doing had the program not existed. The SOC is a composite measure, made up of such things as the wages that workers might have earned without the program, as well as the value of their leisure time.

Gera's results show that the weekly SOC of program participants varied considerably – from $26.74 per week in Newfoundland to $93.50 per week in Alberta and $88.46 in British Columbia. There are a number of reasons for this large interprovincial variation. To begin with, participants would have been much more likely to find alternate work in the two western provinces than in Newfoundland. Second, wages tended to be higher in Alberta and British Columbia. Third, the estimated value of the leisure time that participants gave up by joining the program was much greater in the two western provinces because the demand for labour was far higher there.

The program was of greatest net benefit in high-unemployment provinces such as Newfoundland and New Brunswick, because the weekly SOC was lowest there. Thus Gera concludes that the program designers were correct in providing greater tax credits in the high-unemployment provinces.

Employment impact

Not all the jobs created under the ETCP were truly new jobs. Gera found that about 13 per cent of them merely displaced existing jobs and thus did not constitute net additions to total employment. Moreover, he estimates that about 67 per cent of the program's participants would have been hired even without the subsidy. These impacts were greatest (70 to 75 per cent) in Ontario and the Prairies, and lowest (49 per cent) in Newfoundland. In all, Gera found that only about 20 per cent of all ETCP jobs represented a net addition to employment. Again, this figure tended to be larger in high-unemployment provinces like Newfoundland (41 per cent) and smaller in wealthier provinces such as Ontario (14 per cent).

A more positive finding was that the net program cost of $9,400 for each person-year of employment was quite reasonable compared with the cost of creating the same employment through other means, such as public-service programs, income-tax cuts, or protective trade barriers.

Gera's evaluation of the ETCP is least positive on the question of the benefits received by program participants. He found that the program did not succeed in increasing participants' employment prospects; nor did it increase their average weekly wages. There was, however, a modest increase in the average duration of their completed employment spells. This increase was somewhat larger for women than for men.

The lack of improvement in employment prospects did not surprise Gera, however, given that most program participants had a long history of employment difficulties and came from the lower end of the wage spectrum, where there are few opportunities for obtaining higher earnings.

Mixed results

Overall, Gera views the results of the ETCP as being rather mixed. Nonetheless, he regards wage subsidy programs as job-creation devices that are reasonably promising. First, such programs are direct, visible, and flexible; and they tend to work quite quickly. Second, their private-sector focus makes them politically acceptable. Moreover, unlike certain other job-creation measures, wage subsidies do not appear to be inflationary. Existing evidence suggests that such subsidies can cut unemployment by 0.5 per cent without simultaneously increasing inflation.

Gera concludes that well-designed employment subsidy programs have an important role to play, particularly during periods of high unemployment. But he cautions that they are no panacea for the problems of the labour market. Such programs should complement, not replace, sound macroeconomic demand-management policies. Employment subsidy programs should also be kept simple, so as to reduce administrative costs, and should not be narrowly targeted at particular socioeconomic groups, he adds.

Creating Jobs in the Private Sector: Evidence from the Canadian Employment Tax Credit Program, by Surendra Gera (EC22-148/1988E; $8.95 in Canada, $10.75 elsewhere).

Employment and Immigration Canada

More than 110,000 jobs were created under ETCP.

Lessons in regional development

Council Chairman Judith Maxwell spoke recently on the subject of regional development at the Canadian Economic Climate Forum in Ottawa. Following is an edited version of that speech.

Socially and politically, the people who founded this country did so because they wanted to pursue a destiny separate from that of their U.S. cousins. Economically, the provinces came together as one nation because they saw benefits in unity. They believed Confederation would create an economic surplus; the sum of Canada would be more than that of its parts.

There was a fairly obvious social contract implied in all of this. The partners in Confederation expected not only a share of the harvest produced by unity but also a role in its cultivation. They expected a piece of the economic action – the industrial growth, the jobs, the growth of local communities, and so on.

The challenge of fulfilling that contract has been part of our history from the start; but we've met it only partially. While the track record is good on the distribution side, we haven't been very successful in sharing economic development itself. I want to argue that we need to shift gears on regional policy and also that we need to find some new levers to get economic development established more strongly in the poorer provinces. The Council will be making a major statement on the issue late this year.

Public expenditures

Governments are engaged both in the redistribution of income and in economic development, in three main ways (see chart): transfers to individual Canadians to support their current living standards; transfers to businesses and communities to promote economic development in the private sector; and direct spending by governments (on roads, airports, and other infrastructure, for example). There is a fourth category not included here (expenditures on education and health care, for example).

While all of these approaches have their place, there is reason to worry that transfer payments have become a substitute for successful economic development. In Newfoundland, for example, transfers to persons accounted for 29 per cent of total personal income in 1986. This compares with 11 per cent in Ontario. Year after year, we are paying out huge sums to support living standards. We are building up a dependency on government cheques but failing to build up the capacity to earn income.

Over the years the Economic Council has contributed to both research and advice to the regional development debate. In 1977 we published *Living Together*. In that study, the Council identified differences in productivity levels as a critical factor in explaining regional disparities. The Council recommended that both federal and provincial governments make sustained efforts to raise productivity levels in the lower-income regions. We said that certain factors were crucial, including education, use of best-practice technology, management training, and efficient location of important support services.

Greater efficiency

Similar findings emerged from the study carried out by the Council in 1980 on Newfoundland's economic problems. The Council noted, for example, that greater efficiency in the local sector would lead to higher real incomes by reducing local prices and by allowing for higher wages. That would enable consumers to buy more locally produced goods and services. Lower costs would make it feasible to produce locally some of the goods and services that are currently being imported. Finally, greater efficiency in the local economy would encourage existing export industries to make greater use of local goods and services. In other words, a virtuous cycle would replace a vicious cycle.

The Council offered a long series of recommendations aimed at narrowing the productivity gap between Newfoundland and central Canada. Special emphasis was placed on the training of both managers and workers, and on more efficient infrastructure. We found, for example, that success was more likely when development was cultivated in small and medium-sized communities that had good transportation links to the outports and also to major ports.

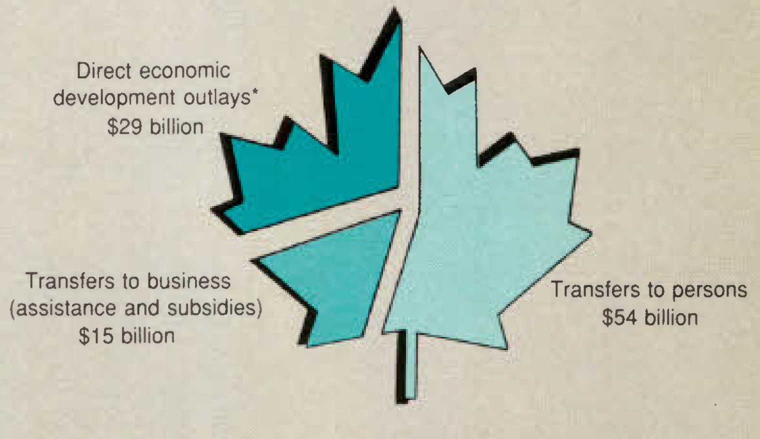
In short, the Economic Council has found that Canada's disadvantaged regions tend not to be using their local resources in the most efficient way. In that sense, they are not living up to their potential.

Location grants

Government programs have been consistent with at least part of these findings. Large sums of money have been invested in infrastructure and in education and training over the past 20 years. And considerable effort and money have

How Ottawa helps combat regional disparities

Federal government expenditures, 1984



*Includes resource conservation, transportation and communications, and regional planning.

been committed to attracting industrial plants into the regions. These location grants attract most of the headlines, but they are not by any means the main source of success.

The concept of "location grants" assumes that there are large industrial plants that are "footloose" – they are willing to locate in a depressed region provided they are offered the right package of incentives. Some plants, enticed in this way, have survived and prospered, providing good jobs for local people.

But enthusiasm for location grants has cooled. Many footloose plants have turned out to be uneconomic, not necessarily because of their location but because of such shortcomings as faulty market studies or weak management, for example. In other cases, location grants haven't fit in with local economic realities. The strategy is geared to large plants at a time when the main driving force for job creation is small business. Finally, location grants or direct subsidies to firms are highly exposed to countervailing challenge under U.S. trade law. Indeed, there is a growing tendency in the 1980s for firms facing import competition to charge their competitors with unfair trade.

GATT code

The Canada-U.S. Free-Trade Agreement requires both countries to abide by the subsidies code under the General Agreement on Tariffs and Trade (GATT). While the code does not discriminate against programs or policies that aim solely to redistribute income or jobs within a country, it is hostile to any grant or subsidy that is put in place specifically to influence trade or trade-related investment patterns. In the Council's view, the GATT code could, if properly implemented, exert a healthy influence on the design of regional policy in Canada. The trade agreement should also act positively in some cases on the way that U.S. institutions have interpreted U.S. trade law. Binding arbitration by the bi-national panel should put pressure on both countries to live by the GATT code.

The trade agreement will probably force Canada to make clearer distinctions between programs intended to redistribute income and those which redistribute economic activity. In effect, it will be more difficult for Canada to justify grants or subsidies targeted at specific firms to influence their location choices. I do not regard this as a hardship. We economists have been telling governments for years that these grants, subsidies, and tax incentives do not have a very high social payoff. In our recent Statement, *Managing Adjustment*, for instance, we pointed out that modernization grants, intended to make existing plants more competitive, added little or no incremental investment.

Specific problems

Research done here and in the United States points out that location incentives boil down to an "airborne economic operation" – an attempt to parachute in, in one neat package, a whole combination of inputs (ideas, management skills, financial capital, and so on). But parachutes are not what we need.

First, location grants automatically define the local problem as one that can only be solved from outside. By making this idea central, the location-grant approach downgrades, and may even inhibit, local initiatives unless the new plant is very intimately integrated into the community.

Second, typically it is not necessary for a community to import ideas, management skills, and financial capital in one package. In fact, it is usually both possible and better to unbundle these three ingredients and to foster their formation within the community. In all cases, outside resources are put to best use when they are directed by, or responsive to, local inputs of ideas, people, and capital. The resulting activity may be small-scale, but it can generate major payoffs in earned income and in mobilizing local resources.

The role of governments

As a result, we should expect to see an important change in the role of governments. While they should not dissociate themselves from regional and community development policy, they may have to become less directive in their approach, and they will have to design programs that bank on local talent and strength. Principally, they need to find new levers for development – levers that place more emphasis on spawning growth within the community.

For the past year the Economic Council has been engaged in a study that examines regional development from a bottom-up perspective (see *Au Courant*, vol. 8, no. 1). Through a number of case studies we are looking closely and in detail at strategies used by a wide array of different communities to build on local resources. Out of this study we hope to provide some guidelines for those who design regional-development policy. We know that the right strategy for regional development will have to meet several challenges. It must promote both efficiency and equity. It must mobilize the social and economic potential within communities. It must define new roles for governments that reconcile their desire to be involved and their need for accountability with the need to play a supporting role to community leadership. Finally, it must bring to Canada's regions not just a skim-off from the total national economic gains but a share in development itself. The goal, in short, remains what it has always been – fulfilment of the social contract of Confederation.


Employment and Immigration Canada

Grants to entice big business to smaller regions don't always work.

S·P·E·A·K·I·N·G · O·U·T

Canada is experiencing a rapid shift from a resource- and goods-producing economy to a service-based one.

That shift is causing major alterations in the patterns of employment, in the types of jobs being created, in the skills required by workers to fulfil those jobs, and even in the way in which industrial relations is conducted in Canada. The Economic Council is studying the impact of this transformation in a new project entitled "Employment and the Service Economy." To find out more about it, *Au Courant* spoke with project director Gordon Betcherman.

Gordon Betcherman

Au Courant: *What was the original motivation for undertaking this project?*

Betcherman: The Council has been doing research in the area of labour markets for some time. Most recently we studied the impacts of technological change on the labour market. As we concluded that research, we became interested in looking at some other aspects of how the labour market is changing. One of the more fundamental changes that has been taking place over the years is the shift from a goods-producing to a service-sector economy.

Au Courant: *What do you see as the primary aim of the project?*

Betcherman: Our primary goal is to look at the Canadian labour market to see how the transformation to a service economy has affected various aspects of employment. Ultimately, we want to be able to see whether or not public policy in this area has kept pace with the changing world.

Au Courant: *What will the project examine in particular?*

Betcherman: One of the most important issues, as I've said, involves an examination of the whole range of labour market programs in Canada. We want to find out, for instance, whether training programs are being provided in the types of jobs and skills that are growing in demand as a result of the growth in the service economy. We shall be looking at labour adjustment policies in general, because of the large amount of displacement that is taking place as employment falls off in the goods-producing industries and as new job opportunities are created largely in the service sector. These displaced workers require assistance to make the adjustment easier. Are present policies effective and, if not, what changes are required?

We shall also be investigating the potential for maintaining high employment growth in an economy that is becoming increasingly service-oriented. For example, do we need a strong goods-producing sector in order to feed growth in the service industries? This has become a controversial question, not only in Canada but in virtually all industrialized nations. The answer has significant implications for industrial policy.

Another important consideration is the interrelationship between demography and the demand for labour in the service sector. Traditionally, many service-sector jobs, particularly entry-level jobs, have been filled by young people and by women returning to the labour market. In the future, demographic trends indicate that there are going to be fewer and fewer young people, while, at the same time, the rapid increase in female participation in the labour force appears to be slowing down. If these two traditional sources of service-sector workers are contracting, who is going to fill these jobs? We shall also be looking at the role of women in this segment of the labour market.

The shift to a service-sector economy also has implications for industrial relations, and collective bargaining especially. Unlike the manufacturing sector, where roughly half the workers are represented by unions and engage in collective bargaining, the service sector shows relatively low rates of collective bargaining, particularly when you look at the non-government service sector. Since collective bargaining has historically been very important to labour relations in Canada, we want to look at why it has had trouble taking root in the service sector and at how the traditional model might be adapted to service industries.

Au Courant: *How important is the service sector? How substantial has the growth in this sector been?*

Betcherman: The growth in service-sector employment in proportion to the rest of the economy has been truly remarkable. For instance, right after the Second World War about 40 per cent of the Canadian labour market was employed in service industries. Today this sector accounts for more than 70 per cent of employment. That kind of numerical shift is really quite striking.

Au Courant: *Has growth in the service sector been at the expense of growth in other sectors?*

Betcherman: In terms of employment, both the primary and manufacturing sectors have been declining while the service sector has been expanding. However, the picture is slightly different if you look at it from the point of view of production. The manufacturing sector, for example, has not declined in terms of output. Gains in productivity have been an important factor in this regard.

Au Courant: *How will the research be conducted?*

Betcherman: It will involve using a range of statistical techniques. One example is "input/ouput analysis," which we shall be using to examine the linkages between various economic sectors. This technique will enable us to identify how the output of one industry affects another, for example. As I mentioned earlier, this is important in considering the question of how much service-sector growth is driven by a strong goods-producing sector.

look at the skill levels required for these jobs and whether or not the jobs offer employment stability. Statistical analysis can only provide so much information in this regard. These are

Over the years there has been a fundamental shift from a goods-producing to a service-sector economy.

The 1986 census data will be invaluable to us. It will bring us up to date on various developments in the labour market, including the number of people working in different occupations. We shall also use the census data to look at such things as the distribution of earnings, to see the effect of shifts in the labour market. This will enable us to examine the contention that many of the newly created service-sector jobs are either very high- or low-paying.

We shall also be using an econometric model developed at Trent University to help us understand the growth of the service sector. Essentially we are trying to gather a wide range of statistical data and to employ a variety of techniques to cast light on many unanswered questions.

Finally, we hope to do some qualitative analysis. By that I mean looking at such things as the quality of employment, to find out whether or not the new service-sector jobs are the kind that Canadians find desirable. We want to

issues that require an element of qualitative analysis.

Au Courant: *How will you investigate these qualitative issues?*

Betcherman: One way is to undertake a series of case studies of various occupations. This would enable us to identify the actual skills required for these occupations and the type of work that is actually done on the job. We shall also be conducting interviews with people in the field and with members of occupational associations, in order to get a feel for what's happening in various occupations and, most importantly, to determine whether or not Canada is developing people in these fields to fill the expected demand in the future.

The quality of Canada's labour force is critical to a successful service economy. Many service industries are operating in increasingly competitive markets, sometimes on an international scale – in financial and business services, for example, and in communications. Therefore it's essential that Canada have the education and training infrastructure to sustain and develop a first-class labour force.

Au Courant: *Is the Canadian situation comparable to what's happening in other countries?*

Betcherman: That's something we intend to examine as well. We're hoping to compare the Canadian experience with that of other developed countries – including the United States and Japan, and perhaps West Germany. The shift to a service economy is certainly not a phenomenon that is restricted to Canada. However, the pace of the shift and the types of jobs that are being created appear to be somewhat different in some countries. We expect to examine how the shift to the service economy has differed among countries and to identify the key variables that drive these differences.

Au Courant: *What will the project produce?*

Betcherman: The Council plans to publish a policy Statement in the fall of 1989, based on the results of our research. The Statement will be accompanied by a research report detailing the findings on which the Council bases its policy recommendations. As well, we expect to publish a number of background studies throughout the duration of the project and following the publication of the Council Statement.

Service sector jobs are increasingly important.

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WORKING TO IMPROVE CANADA'S POLICY PERFORMANCE

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