# au courant Economic Council of Canada Courant Volume 4, No. 1 1983

Restoring prosperity: new Council report



# **PUBLICATI©NS**



#### **New Council report**

Productivity has not grown in Canada for eight years now, an unprecedented situation with serious implications for living standard growth. What might be done about the problem is examined in this recently published Economic Council report, which is available in bookstores across the country.

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The Bottom Line:Technology, Trade, and Income Growth (EC22-113/1983E; \$8.95 in Canada, \$10.75 elsewhere).

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# au courant

Volume 4, No. 1

1983

#### The Bottom Line: Technology, Trade, and Income Growth

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ISSN-0226-224X

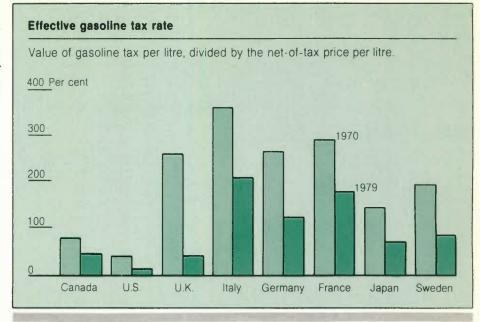
# Gas at bargain price in Canada

Canada has been able to count on energy at bargain prices for the past decade, unlike some of its industrialized trading partners.

That message emerges loud and clear from a review of energy pricing and taxation trends between 1968 and 1979 in eight industrialized countries – Canada, the United States, the United Kingdom, Germany, France, Italy, Sweden and Japan – carried out by Council economist Bobbi Cain, assisted by Pat Nevin.

Comparing energy prices across such a wide range of countries presents certain problems, which Cain resolves in the following manner. First, she chooses for comparison purposes an energy source widely used by all the countries in question, and one for which price and taxation data are available - namely, standard low octane gasoline. Secondly, she determines the gasoline price for each country in nominal terms – that is, in terms of local currency. Then, in order to calculate the real or inflation-adjusted gasoline price in each case, she deflates each country's nominal price by its consumer price index. Finally, to make cross-country comparisons possible, Cain converts both nominal and real prices to a common currency, the U.S. dollar.

The first chart illustrates how the

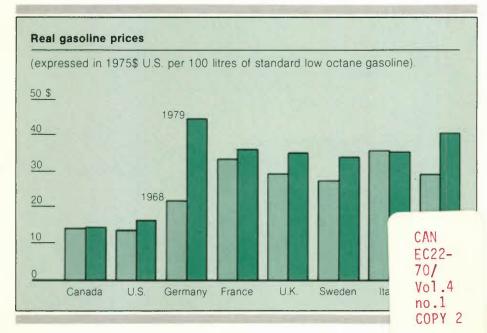


eight countries stack up in terms of real gasoline prices at the beginning and end of the survey period. Cain advises some caution in interpreting these results, however, since they reflect exchange rate changes as well as price increases. (For example, even though Italy had the greatest real price increase measured in lire, that currency's devaluation meant little price movement in terms of U.S. dollars.) But Canada's standing is clearcut, nonetheless; along with the United States, it records the lowest real gasoline price, and the slowest rate of price increase of the entire sample. Nominal prices in the two North American countries were also well below those elsewhere, Cain observes.

Domestic gasoline taxation policies in industrialized countries have been the subject of concern recently, Cain says. So in addition to her analysis of pricing trends, she also takes a look at changes in the effective rate of gasoline taxation (measured as the value of gasoline tax per litre, divided by the net-of-tax price per litre) across the eight countries.

As the second chart indicates, taxation rates were universally lower in 1979 than at the beginning of the decade. The steepest decline occurred at the time of the OPEC (Organization of Petroleum Exporting Countries) price explosion in 1973-74, an indication, Cain says, that governments then used taxation policies to shield the consumer from the full impact of gasoline price increases.

Although Canada's effective taxation rate did not drop as sharply as those in some other countries, it retained its place as a country with one of the lowest rates throughout the period. By the same token, Italy - the heaviest taxer relative to other countries in 1970 - remained in that position at the end of the decade. In contrast, Sweden and France, two of the most heavily taxed countries in 1970, witnessed a dramatic decline in effective rates over the period (with some upswing on France's part in 1979), so that in 1979 they ranked among the moderately taxed nations.



<sup>&</sup>quot;International Energy Comparisons: A View of Eight Industrialized Countries," by Bobbi Cain, assisted by Pat Nevin. Discussion Paper No.222.

Although Canada's productivity today is very close to record levels, in that it is only 3 per cent below its all-time high reached in 1978, a serious problem has arisen concerning its rate of change. Between 1950 and 1973, productivity - measured reasonably conventionally in the report by real gross national product (GNP) per person employed - rose at what was, for Canada, an historically handsome rate of 2.6 per cent annually. But from 1973 to 1981, the average rate of productivity growth was zero.

If this situation continues for very long, growth in real GNP per capita – that is, in real income, or living standards – could also decrease to zero, or even become negative. As it is, during the 1973-81 period, growth in real GNP per capita dropped to half of its previous postwar average – an annual 1.5 per cent compared with 3.0 per cent earlier.

Growth in living standards can occur in four ways:

• Real income per capita rises when an economy moves out of a period of recession into a period of full employment. Because more people who want to work are able to do so, and because underutilized plant and equipment are used more fully, total production grows and, with it, total production per capita and real income per capita.

• Real income per capita rises when the proportion of the population that is working increases as the result of higher labour force participation rates, or of a rise in the proportion of people of working age.

• Real income per capita rises when greater advantage is taken of trading opportunities. The pattern of production is then shifted towards goods and services that can be sold abroad, allowing the purchase of imports.

• Most significant and apart from any changes in these three areas, increased efficiency can lead to greater

Productivity has not grown in Canada for eight years now, says a recently released Council report. That situation is unprecedented, and potentially disastrous for living standards growth, warns the Council. It could lead to a static society much like what is considered to have existed during the Middle Ages. What might be done about the problem is examined in The Bottom Line: Technology, Trade and Income Growth.

national output, so that real income per capita rises. Such an increase in efficiency is what is meant, in the report, by "greater productivity." Productivity can appropriately be measured by output per person employed, although this is not the only possibility, and it in no way implies that workers are responsible for productivity problems. Improved productivity was a powerful force for increasing living standards until the early 1970s; since then, that influence has disappeared.

The last few years have been especially traumatic for real income growth, says the Council, because only two of the forces favourable to such growth – greater labour force participation and greater trade – have been in play. A protracted recessionary period in the past decade has slowed growth in living standards, compounding the problem posed by the disappearance of productivity growth.

The Council has, in the report, focused on two forces as important "engines" of productivity and income growth – technical advance and international trade.

Since much of Canada's productivity and income growth used to come from technical advance, measures to restore it or speed it up where it still exists could regain some of the ground lost. The Council has therefore examined closely what might be done in this area. Increased trade can play an important

role in living standards growth, too, but at the same time it creates problems of changes in industrial structure and threatens jobs. The Council examines trade policy with all these considerations in mind, and presents new evidence relevant to striking the proper balance among them.

A major problem is that of diagnosing the causes of the productivity slowdown itself. Only some causes are known at present; others are difficult, if not impossible, to measure precisely.

A comparison of the productivity growth rates for 39 industries between the 1961-73 and 1973-78 periods shows that the Canadian productivity slowdown, even in its initial stages, was widespread. Productivity growth actually improved in some industries, such as services to mining and communications, during the 1973-78 period, but 26 industries experienced slower productivity growth. The slowdown was especially severe in agriculture, mining, rubber and plastics, primary metal, metal fabricating, nonmetallic products, transportation and storage, electric power and gas, and wholesale trade - most of which recorded negative growth.

Canada is not alone in facing this problem. All of the major nations of the Organisation for Economic Cooperation and Development (OECD) experienced a significant slowdown in productivity growth over the 1973-80 period. Although substantial productivity growth continued in Britain, West Germany, France, Italy and Japan, the rates were only about half of what they used to be.

As a result, perhaps the most important lesson to be drawn from the facts about the slowdown is that any solution must apply to nearly all industries and nearly all countries.

One significant implication is that it is just as important to restore or speed up productivity growth in industries that supply services as in industries that supply goods, in industries that don't compete with foreign producers as in industries that do, and in industries that are outside the market system as in industries that belong to it. Industries that provide services (transport and communications, education, and so on) are roughly half again as important for the gross domestic product (GDP) as industries that produce goods. To focus entirely on goods production or, even more narrowly, on manufacturing alone would therefore severely restrict the scope for productivity improvement.

The international nature of the productivity slowdown should also warn us against adopting too narrow a perspective in seeking both explanations and remedies. With a broader perspective, the emphasis on technical change and international trade as routes to productivity improvement is a quite natural one. Indeed, a reasonable test of any approach, says the Council, is whether it would apply not only to Canada, but also - for example - to France, Britain, West Germany, Japan, and the United States. Approaches specific to Canada can be used, but they aren't likely to be sufficient on their own. The methods used to analyse Canada's problem should, in principle, also be applicable to other countries if they are to have the best chance of success.

#### **Balancing priorities**

Although the full implications of long-term zero growth in living standards are not yet known, some of the potential consequences are only too clear. One of these concerns the serious question of income distribution.

In the past, it was possible to achieve many desirable distributional changes by making use of the dividend that real income growth provided. Simply by using part of this dividend, social programs such as old-age pensions and unemployment insurance could be improved considerably. This could be done without cutting into people's living standards, simply by using part of the growth in living standards that they otherwise would have had.

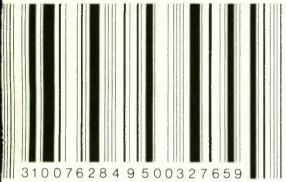
This is obviously a less painful and socially easier process than achieving the same distributional goals by forcing those citizens not directly benefiting to accept reductions in living standards. For any future improvements of this kind, in the form of government services or transfers such as pensions and unemployment insurance benefits, after-tax incomes may have to fall if zero productivity growth persists — which is why the problem is so serious.

Living standards growth is thus doubly desirable: for itself, and for the easing of distributional problems that it brings. Unfortunately, policies that can increase living standards without sacrificing other goals in any way are almost impossible to achieve; trade-offs have to be made in most cases. Policies that can improve living standards without undue cost, on the other hand, are easier to devise.

One "cost" often feared as a consequence of the productivity improvement needed to raise living standards is lost jobs. Improving productivity can destroy jobs if total output remains unchanged. Fewer people are needed to produce the output, so job numbers go down. But if output rises at the same time as productivity, and in rough proportion, few – if any – jobs will be lost. And, in the majority of real-life instances of productivity improvement, says the Council, output does usually rise by roughly the amount needed to avoid job loss. This is not to say that productivity improvements never cause job loss. They certainly do, at least for a while - when workers who are displaced seek new jobs, for example and sometimes the loss is permanent if the displaced workers have redundant skills and can't retrain. Therefore, any job loss implications stemming from policies aimed at improving productivity must always be carefully considered in the actual application of policies. But the historical and other evidence indicates that it has generally been possible in the past to improve productivity and, as a result, living standards without undue cost in terms



#### Technical advance key to growth



The universal product code: technical know-how at its best

Technical advance can be viewed as the introduction of new ideas, processes, and products, or of improvements to existing practices, processes, and products. It is a major source of productivity growth, although not the only one. While estimates of its relative importance as a major source of economic growth in modern times vary, few would deny that it plays a key role.

According to the Council, four major characteristics of technical advance must be considered in any search for appropriate policies to speed it up and thus enhance productivity growth.

The first of these characteristics is that – as mentioned earlier – technical advance occurs in all sectors and across all industries. Industries supplying services (for example, wholesale and retail trade; finance, insurance and real estate; transport and communications;

education; health care; and government administration) are about one and a half times as important for GDP as industries supplying goods. As a result, improving productivity growth in both these sectors is important.

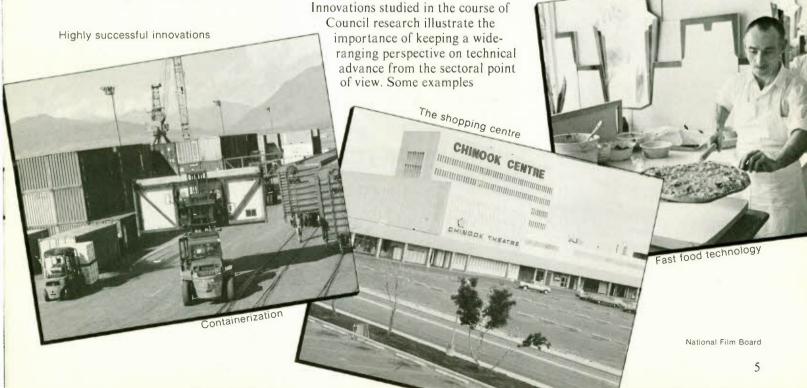
A similar situation applies in the case of trading and nontrading industries – the latter being those that do not face much, if any, foreign competition. A focus on improving productivity growth in trading industries only – which is often stressed in current discussions of Canada's competitiveness in world markets – would risk missing some very substantial opportunities for improving productivity growth in the nontrading industries, and hence living standards growth, since the trading part of the economy represents only about one-third of the whole.

Again, we have market and nonmarket industries. The difference between the two is that the goods produced or services supplied in nonmarket industries are provided free or almost free of charge. The nonmarket sector includes education, health care, and municipal, provincial and federal government administration. It is a large sector, almost the same size as all of manufacturing. While it is difficult to measure productivity growth in this sector, it seems certain that improving productivity would contribute much to growth in living standards.

include: in transportation – containerization; in retail trade – the supermarket; in the restaurant trade – techniques of fast food delivery; in steel making – the basic oxygen process; and in machine tool production – computer programming.

The second major characteristic of technical advance is that it is not solely a consequence of applied research and development (R&D); it occurs through a variety of activities. Applied R&D by industry and government is important. but so are the activities of individual inventors and the numerous day-to-day changes in products and processes made as a result of smart business thinking. These range from major breakthroughs, such as containerization, fast food technology and, in earlier times, the concept of assembly line operation, to a host of minor improvements whose cumulative impact is of great importance. Many opportunities for faster productivity growth would be missed if this second characteristic were unduly neglected.

The importance of applied R&D activity in comparison with all the other activities that create technical advance is an unknown. R&D activity is obviously very important, but nonetheless produces only a part of technical change. It is certainly true that much technical advance occurs in areas of the economy where R&D



spending is known to be very low – such as transportation, retail trade, banking, and construction.

A third important characteristic of technical advance is that it occurs all over the world. As in other areas, the world technological system is interdependent. Firms in all countries contribute to, and draw upon, an international pool of technology. It would be unrealistic to expect that any one country could consistently surpass all others in the innovative application of new and existing knowledge in all fields. Canada, as a small economy, accounts for only a small part of worldwide R&D. But, says the Council, we should be trying to exploit the advances of others - as well as our own - to the greatest extent possible.

The fourth consideration about technical advance is that its diffusion into Canada from other countries and throughout Canadian industry can be surprisingly slow. This is also true in the case of technical advances developed in Canada.

A Council survey of innovation in five industries showed that the median lag for adoption of product and process innovations was five years following first world use. In other words, for over 50 per cent of the imitative technologies, the lag was five years or longer; in some cases it exceeded 10 years. For example, a process for the continuous processing of polystyrene developed in Italy was first adopted by a Canadian firm seven years later; blast furnace oxygen enrichment, which was in wide use throughout Europe, the United States, and Japan, was first adopted in Canada 22 years after being first developed abroad; and the vacuum casting of uranium was developed in Germany and the United States 31 years before adoption in Canada. There is thus an important role for public policy in assessing whether unnecessary lags exist in the diffusion of new technologies and in eliminating them where they do exist.

As mentioned, not only do lags exist in the diffusion of new technology into the country, but such lags are also substantial for diffusion within the country.

Regional case studies carried out by the Council showed that the shopping centre – a service sector innovation – was first adopted in Alberta. Adoption followed in Ontario one year later, in British Columbia two years later, and in Quebec, Saskatchewan, and Manitoba between four and six years later. In the case of the Atlantic provinces, the lag was 16 years.

It is true that obstacles to the spread of technical change exist, as do slow adopters or laggards. However, substantial benefits could be realized, says the Council, if the diffusion process into and throughout Canada could be speeded up.

#### Call for policy mix

The facts about technical advance imply that policy towards it in Canada is too narrowly focused, in two quite distinct senses, says the Council.

First, policy attention emphasizes mainly the domestic production of new technology, through applied research and development expenditures, while badly neglecting two other important ways of speeding up technical advance. More research and development would be good, but so would more stress on these other two methods. One of them is the more rapid adoption of new technology from abroad, where the great majority of new products, processes, and techniques originate, and its adaptation as necessary to Canadian conditions. The other is the faster spread, or "diffusion" of new, "best practice" techniques, wherever originating, from their first Canadian user to all potential users in the country.

Second, policy concentrates on manufacturing, paying virtually no attention to the enormous nontrading sector of services and construction. That is like trying to make a jet plane fly better by overhauling only one of its four engines.

Eight Council recommendations in the area of technical advance give expression to these two concerns. Adaptation and diffusion are the burden of the Council's first recommendation:

• Federal and provincial policy towards technical change should put greater emphasis on a) the adaptation of new ideas, products, and processes already in use abroad but not in Canada, and b) on the diffusion of new ideas, products, and processes, whatever their origin, to other firms and regions in the country after their first

successful application.

Adaptation and diffusion in relation to the service sector are highlighted in the next four recommendations, the first two covering the "nonmarket" service industries, and the second two the "market" service industries:

- Provincial governments should take steps to ensure the efficient adaptation of new operating techniques, whatever their country of origin, as well as the diffusion of existing "best practice" techniques within Canada, in such provincial and municipal nonmarket industries as health care, education, and public administration.
- In a renewed effort to spread "best practice" administrative techniques for the federal government across the nation, the federal Treasury Board should reinstate previous requirements that government departments carry out productivity comparisons.
- Trade associations in the service sector should regularly inform member firms about new ideas and "best practice" technology and management methods in use in Canada and abroad.
- Government should provide financial assistance to these associations specifically for this purpose.

Two further recommendations rest on evidence regarding the role of multinationals in adoption and adaptation on the one hand, and of the patent system in diffusion on the other. They are:

- The Foreign Investment Review Agency (FIRA) should give much greater importance to the introduction of new technology and the enhancement of productivity when considering applications for new investment by foreign corporations. New technology "imported" in this way could significantly speed up the processes of adoption/adaptation and diffusion.
- The Patent Act should be amended in order to give the Patent Office a mandate to establish and operate a patent technical information service to promote innovation in Canada. This could be helpful in aiding faster but still economical adaptation of new technology, particularly for small domestic firms.

The eighth recommendation reiterates the Council's concern that greater emphasis than previously placed on adoption and diffusion should not be at the expense of present government plans to increase R&D spending:

• The Council endorses the federal government's target of raising R&D spending to 1.5 per cent of GNP by 1985, considering this a minimum requirement, and recommends that the target be disaggregated by industry.

## Rationale for government support

Governments influence technical advance directly through grant and subsidy programs, tax measures, contracting out to industry of government R&D requirements, R&D work in government laboratories, and support of university research. There are also many indirect channels of influence.

The basic rationale for the more direct support measures is the argument that not enough technical advance will occur as a result of private market incentives.

One way of looking at this is the following. We might consider a project which, if undertaken, will generate technical advance; this might consist of a project to develop a new type of aircraft, for instance. With regard to any such project, we might ask two questions:

• Would the project, if undertaken, have "risk-adjusted" benefits to society that exceeded its costs?

• Will the private sector fail to undertake the project because its "riskadjusted" benefits to the private individuals or companies concerned are judged to be less than its costs?

The answer to both of these questions should be yes if there are to be

good grounds for government assistance. On the first question, we should not assist projects if, from a social point of view, they cost more than they are worth. On the second question, we should not assist projects if they would go ahead anyway, without assistance.



Support for R & D: weighing the costs and benefits

National Film Board



Moreover, if assistance is given, it should be just sufficient to induce the private sector to undertake the project, but not over-sufficient.

This is not to say that the actual outcome of every assisted project must be such that benefits always exceed costs. In a field like research and development; this simply wouldn't make sense. It is not possible to find "winners" – especially "big winners" – without inadvertently picking "losers" as well. Hence the reference to "risk-adjusted" benefits. But there should be a reasonable attempt to ensure in advance that the benefit of successful projects will be high enough to cover both their costs and an allowance for the inevitable failures

The Council examines several important programs of assistance to R&D, such as the Enterprise Development Program (EDP) and the Defence Industry Productivity Program (DIPP), to discover if these basic cost-benefit principles are adhered to, and if not, if

they could be. The conclusion is that it is far from clear that these basic principles are being followed.

The Council therefore makes a key recommendation: that subsidies be awarded to technical innovation projects only when two conditions are met: a) the projects must be worthwhile to the country; and b) the subsidies must be necessary, in the sense that the projects would not provide a reasonable profit without them.

Implementing this obvious-sounding but important recommendation would be a great improvement. The research results also show that some other changes would be highly desirable. Four that the Council embodies in actual recommendations are:

- Subsidy program administrators should make sure that subsidized projects are incremental not only to the firm but also to the industry to which the firm belongs this to ensure that worthwhile projects elsewhere are not displaced.
- Greater care should be taken, when assessing the benefits of projects that are actual or potential recipients of R&D subsidies, to evaluate the incrementality of additional jobs created.
- There should be two categories of subsidies in the DIPP. The smaller category should include subsidies for specific projects that should meet the two conditions that apply to innovation projects subsidized under other programs. The larger category of subsidies should be aimed at keeping certain firms deemed essential in the defence production field that might otherwise leave it because of insufficient profits. The subsidies should be calculated to offset this insufficiency.
- Where the object of a DIPP subsidy is to ensure that the recipient firm remains in the defence production industry, an appropriate board, responsible to Parliament, should be created to oversee the relationship between the firm and the subsidy program.

# Manufacturing copes well with competition

Opinions vary as to whether a faster approach to free trade would be good for Canada. Most would agree that multilateral trade growth has helped Canadian living standards grow in the past and could do so in the future – an

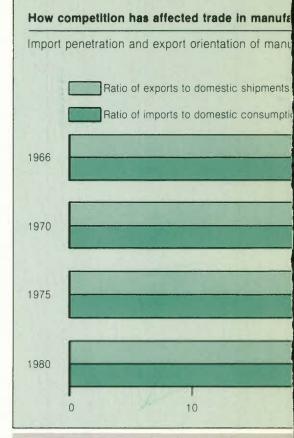
important consideration in light of the recent years of zero productivity growth and its implications for living standards.

There is disagreement, however, on the question of how harmful the other effects of trade growth may be in changing the nature of Canada's industrial structure and forcing workers out of jobs and firms out of business.

In the third section of its report, the Council looks at these questions in depth, first considering whether trade policy might need to be modified to take account of the emerging effects of growing trade volume on the size and nature of Canada's manufacturing sector. Is our manufacturing sector losing out in competition with foreigners, in both export and home markets, and at risk of shrinking drastically? On the question of exports in particular, is there, at present, a special crisis that justifies further government support to exports, or enrichment and extension of the types of support already available? Is there evidence of incipient "deindustrialization?"

The Council finds – contrary to fears that have been expressed in several quarters - that the manufacturing sector has not withered, and is not withering, in the face of increasing international competition. Greater import penetration of our markets has indeed occurred, but it has been matched by greater penetration of Canadian manufactures in foreign markets, through exports. The conclusion holds at a very fine level of disaggregation. Even in the case of high-technology manufacturing, as opposed to manufacturing in general, Canada is not losing out, and, says the Council, is a far cry from deindustrialization. In its judgment, "there is no evidence of this process even beginning."

Nevertheless, many people are advocating a special new kind of government assistance to exports – the public funding of R&D in exporting industries. A special study in this area was therefore done. It concluded that R&D expenditures in the firms sampled showed a positive correlation with propensity to export. However, the research found no measurable relationship between government support of R&D activities in the private sector and effective performance in export markets. It thus appears that other fac-



tors, as yet undefined (but possibly including such elements as "managerial leadership"), may enter the picture – in which case government support for R & D would not, of itself, necessarily have any effects on exports.

# Adjusting to import competition

The increase in import competition that has taken place over the past two decades has had important repercussions – both positive and negative – on firms and workers in Canada.

On the positive side have been the gains from increased trade – in particular, higher real incomes resulting from greater specialization, longer production runs, larger plant scale, and an increase in productivity.

On the negative side has been the need for firms to adjust to import competition (with some even going out of business) and for workers displaced by this competition to find new jobs.

Since the exposure of the Canadian manufacturing sector to trade and competition increased during the 1970s, the Council took a close look at

Firm rate,

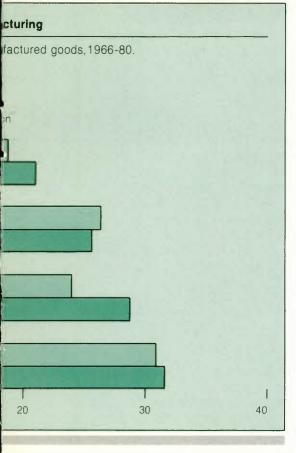
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the resulting adjustment process for both firms and workers.

The data base for the analysis of firm adjustment covers two years – 1970 and 1979 – and accounts for virtually all manufacturing employment in those years. This allows a detailed study of the entry and exit patterns of firms and, among other things, of how the entry/exit process reacts to trade.

Firms within each industry were divided into three categories: new firms, or "births" (those that existed in 1979 but not in 1970); exiting firms or "deaths" (those that existed in 1970 but not in 1979); and continuing firms (those that existed in both 1970 and 1979).

A surprising and little-known fact, says the Council, is that "birth rates" and "death rates" are very high. This is true of the average Canadian manufacturing industry, but it is also true of other industries and in the United States. The picture is one of an extremely dynamic industrial structure, with thousands of entries and exits over the decade.

Given these high business birth and death rates in the normal course of

events, there are possibly two extreme ways in which any industry might adjust to the need for contraction or expansion, such as might result from increased foreign competition. For instance, contraction could occur, in principle, either through a rise in death rates or a decrease in birth rates. A significant finding of the analysis is that the dominant mode of adjustment, whatever the degree of contraction or expansion of an industry, takes the form of shifts in the birth rates of firms, with changes in death rates playing a much lesser role.

In sum, the major adjustment mechanism to variation in industry growth rates occurs in the form of changes in birth rates, implying that the conventional picture of a rather traumatic adjustment process is somewhat misleading.

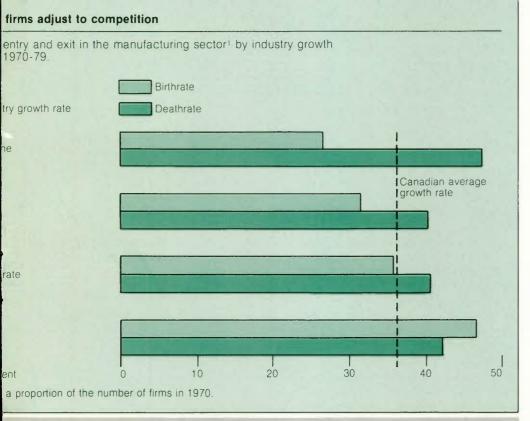
Concerning the impact of changes in imports and exports and in tariffs on entry and exit over the 1970-79 period, it might be expected that increases in imports – and the competition they tend to generate – would reduce entries and increase exits, while increased exports would be likely to produce the reverse. Generally, this was the case. There was one exception, however, in that, as imports increased, there was less rather than more exit, a phenomenon difficult to explain as it is in contradiction to apparent "common sense."

Because there are more Canadian than foreign-owned firms, they bear the brunt of increased import competition; at the same time, they are able to take advantage of opportunities provided by increased exports. It could be argued, then, that this rationalization process should boost the domestic sector's competitive position.

The other side of the debate about the adjustment of industry to increased trade focuses on the employment experience of those who lose their jobs, either because of plant shutdown or a permanent reduction in activity. Of all the aspects of the adjustment process, perhaps the most significant, from a public policy viewpoint, is the possibility that considerable social and economic dislocation will result from freer

trade. However, it would appear that adjustment is less severe than might have been expected.

The Council found that about two-



thirds of displaced workers found work in the 1970s, mostly in other industries. And the spells of associated unemployment, while not exceptionally short, were not exceptionally long either. This would seem to imply that coping with labour adjustment problems in a constructive way, through policy, may not be as difficult as has been thought up until now. At the same time, a minority of workers do have serious trouble in finding alternative employment; in the Council's view, these workers deserve special help.

These conclusions remain important and useful, says the Council, in spite of the fact that they are based on evidence from the 1970s, when unemployment was much lower than at present.

Finally, an important facet of the impact of greater trade exposure is its implication for efficiency and productivity. Data suggest that the productivity gains much discussed in the free-trade literature of the 1960s do, in fact, occur. The picture, says the Council, is not simple, and the evidence is not completely clear-cut, but the gist of it is that lowering trade barriers does, in general, yield greater specialization as well as higher productivity, larger plant sizes, longer production runs, and reduced product diversity.

# Trade policy prescriptions

The threat to growth in living standards resulting from the productivity slowdown makes any income gains from trading more valuable than ever before. Even so, it is far from easy to arrive at a balanced view on the record and the options for Canadian international specialization and trade.

In the area of import policy, the issues concern the reduction or removal of trade barriers, the growing volume of trade, and the effects of these developments on living standards, on the industrial structure, and on the adjustment costs. According to the Council, the effects that imports are having on Canada's industrial structure are sufficiently balanced by the effects of increased exports that there is not cause for great concern. The question then, in considering policy towards imports, is how best to balance the need to maximize improvement in living standards against the need to minimize adjustment costs as trade barriers fall.

The simultaneous reduction of trade barriers through bilateral or multilateral action increases trade volume and generates increases in real incomes and productivity in Canada. At the same time, adjustment problems arise, because workers and businesses have to move out of industries or product lines when products are being displaced by imports and into expanding industries or product lines.

An important issue is how best to balance the modest income gains that result, for a large proportion of the population, from lower trade barriers and from a higher volume of trade, against the possibility of heavy transitional losses for a smaller proportion of people – a task that is far from easy. The new evidence helps here.

As noted earlier, the main part of the adjustment in industrial structure occurs through a decline in "birth rates" rather than through a rise in "death rates," making for a less painful adjustment process than has, perhaps, been traditionally perceived. For workers, job displacement also poses fewer problems than might have been expected, although about one-third of workers displaced will experience serious difficulties in finding alternative employment. Moreover, the new data show that the gains from trade, much discussed in a theoretical way in the 1960s and 1970s, do exist in practice. The other side of the coin is that unemployment is higher now than at any time since the Great Depression, so that adjustment problems for both workers and firms may be much harder than the new evidence, which relates to the mid-1970s, implies.

Balancing all these considerations is a judgment call, says the Council. On adjustment problems, it concludes that, though much is being done, more could be and should be done, and recommends measures to help both firms and workers, as follows:

• The wide variety of existing programs for assistance to industry should continue to be re-examined, with a view to further reconciling their objectives and simplifying eligibility conditions and provisions for assistance; this review should also focus on the degree to which there remains a need for further increasing assistance to business

firms as the country moves towards freer trade – for such positive adjustment purposes as the expansion of distribution networks for exports and the financing of shifts to new product lines, new facilities, and new locations.

• In addition to the assistance available at present, special assistance, in the form of both direct income payments and help in obtaining new work, should be given to those of any age and in any industry or location who, having lost their job for reasons among which policy-induced competition from imports plays a significant role, can't find work within a reasonably short time.

On the tougher question of the speed of approach to freer trade, currently set by agreements under the General Agreement on Tariffs and Trade (GATT), the Council makes two recommendations. One is based on a view that its new evidence on adjustment costs and income gains, which suggests a faster approach to freer trade might be desirable, is just offset at the present time by the unprecedented severity of the unemployment problem, which makes any adjustment costs very high. It therefore recommends a simple continuation of the present pursuit of freer trade, resisting current pressures towards greater protection. For the future, when the recession is over, it believes its new evidence warrants a faster reduction of trade barriers. Therefore its two recommendations are:

- The federal government should remain committed, for the time being, to the present plans for reducing trade barriers under GATT, and that it should resist the temptation to create any new nontariff barriers.
- As soon as clear evidence exists that the current recession has ended, consideration should be given to accelerating the process of reduction of both Canadian and foreign tariffs and nontariff barriers.

Comments and Dissents
Two Council members have
expressed dissent with some of the
material and recommendations contained in The Bottom Line. In addition, one Council member, supported
by two others, has appended a comment. For details, see pages 133 to
137 of the full report.

# Provincial policies in an energy boom

How the energy boom and associated province-building policies might affect western and eastern economies, is the subject of a new paper by two Alberta economists.

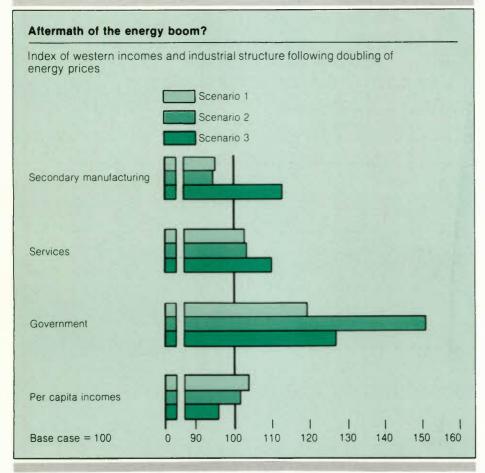
K. H. Norrie and M. B. Percy completed the report as background research for the Economic Council's western project. It is the third in a series of papers by these authors dealing with the nature of western economic development since 1971 (see Au Courant, Vol. 2, No. 1, and Vol. 3, No. 3). In this paper, Norrie and Percy develop a two-region economic model, in order to find out how an energy-rich West, and an industrialized East without energy supplies are affected by a shift in regional terms of trade caused by an energy price increase.

Each region in this new model is composed of six sectors, five of which are common to both – renewable primary industries; resource processing or primary manufacturing; secondary manufacturing; non-traded services; and government. In addition, the western region produces petroleum, and the East, capital equipment.

First of all, the authors set out a basic projection (base case) which assumes all land and capital is privately owned, and that both regional governments tax private sector income at a common rate. Then they test out the effect of a doubling of energy prices on the income and industrial structure of both regions in three scenarios.

#### First scenario

The first scenario assumes that the western regional government taxes surplus energy profits or "rents" derived from the price increase at the same rate (50 per cent) as it taxes other sectors in the economy. Tax revenues are then used both for general purposes, and to subsidize government services — a province-building tactic intended to attract people into the province.



#### Second scenario

The second scenario is similar to the first, except that the West now levies a higher tax (75 per cent) on energy rents – the actual policy followed by western governments after 1973.

#### Final scenario

In the final scenario, the western government takes 64 per cent of energy rents, and uses revenues not only for the purposes described in the first two scenarios, but also to lure prospective immigrants into the region by providing a lump sum payment to all westerners, irrespective of length of residency.

#### Results

The results of their exercise - some of which are shown in the accompanying chart - serve to confirm conclusions reached in earlier work, Norrie and Percy say. In all three scenarios, a "westward shift" in population inevitably takes place in response to the improvement in western terms of trade. But neither the gains for the West in terms of industrialization, nor the disadvantages for the East are clearly identifiable. In the first two scenarios, the western region becomes more specialized in energy and services; at the same time secondary manufacturing and the traditional primary exporting sectors decline in importance. While government policies can offset these trends, western residents will likely pay the price in terms of lower gains in real per capita income, the authors say.

Meanwhile, eastern per capita incomes decline as a result of the energy price increase, but the industrial structure remains largely unchanged. Wage declines in the East could eventually be felt out West as well, the authors caution, due to worker mobility and the smaller size of the western region.

Only in the third scenario does secondary manufacturing actually grow in the West, but the costs of this diversification are very high. Real per capita incomes now are actually lower than in the base case, suggesting that long-time residents are worse off in these circumstances than they were before oil prices increased.







"Economic Rents, Province-Building and Interregional Adjustment: A Two-Region General Equilibrium Analysis," by K. H. Norrie and M. B. Percy. Discussion Paper No. 230.

# IN SHORT SUPPLY JOBS AND SKILLS IN THE 1980s

## Foretelling the job future

Where will jobs be plentiful a few years down the road? And in what areas will

employers have real problems finding skilled workers?

Those are two critical questions addressed by a Council paper written prior to the recent recession, which deals with the tricky process of estimating and projecting occupational demand.

Unfortunately, say authors Tom Siedule and Norman Leckie, there has never been a surefire method of foretelling the future in this all-important area, primarily because Canada lacks a well-developed manpower information system. In the absence of dependable projections, decision makers have had to rely on current labour market conditions for their manpower planning, often with unhappy results. So the research they carried out for the Economic Council's 1982 report on labour markets was principally designed to "outline a way of filling this gap in our knowledge," Siedule and Leckie say.

#### Skimpy information

Information on occupational demand is skimpy, the authors explain, largely because of some major technical difficulties. The three main sources of data – the Job Vacancy Survey (now discontinued), the Occupational Employment Survey (also shelved), and the Census of Canada – all have shortcomings, rendering them unsuitable for serious econometric work. So, to date, economic models used to forecast future economic performance have not been capable of projecting demand by occupation.

To overcome this obstacle. Siedule and Leckie devised a new method of their own, which took into account the two key components of total labour demand: employment (workers actually hired), and job vacancies (jobs left empty through a shortage of skilled workers). Their approach entailed modifying an existing economic model capable of forecasting manpower requirements by occupation, and using it along with their own newly developed technique for estimating and projecting job vacancies. This procedure enabled them to predict where jobs would be needed, and where they would be hard to fill during the years 1981-85.

#### Job vacancies

The accompanying chart highlights some occupations where skilled workers were likely to be in short supply throughout that period. People trained in these areas "could be expected to command fairly advantageous positions as far as hiring and compensation are concerned," say the authors. Upcoming energy-related projects foreseen at the time probably accounted for the number of jobs calling for engineering and architectural-related occupations, as well as workers in metal-related occupations. The demand for construction trades personnel was expected to grow faster than the supply of carpenters, masons, pipefitters and glaziers, at least partly because of the launching of a number of construction projects in the West. In addition, employers could have trouble recruiting suitable numbers of workers in some of the service industries – most strikingly in the food and beverage preparation area, where chefs, bartenders, and waiters would be sorely needed.

#### Occupational employment

The focus shifts somewhat when the authors looked at the second component of total labour demand – occupational employment. Many workers would likely be employed, they found, in the area of nursing and therapy, mining, service sales, engineering, mathematics, statistics and systems analysis (understandable given the remarkable expansion of the informa-

tion computer industry), and in many clerical occupations.

Moreover, manufacturing jobs were not expected to grow dramatically in the medium-term future, Siedule and Leckie discovered. This finding aptly illustrates why a reliable method of projecting occupational demand is urgently needed. Given that manpower requirements in manufacturing should not be high, policy makers could be misled by current media emphasis on the pressing need for particular bluecollar skills, such as millwright and tool and die making. If policy makers prescribed manpower measures purely on a squeaky wheel basis, the authors note, then this relatively small labour market would be supplied with too many specially skilled workers in the years to come.

"Occupational Demand:Estimation and Projection," by Tom Siedule and Norman Leckie. Discussion Paper No.229.







The material on this, and the following two pages, is based on papers written in connection with the Council's 1982 report on labour markets, In Short Supply: Jobs and Skills in the 1980s (see Au Courant. Vol. 3, No. 1).

# Where Jobs will be available Job vacancies as a percentage of total vacancies, averaged over 1981-85. "Other" engineering and architectural (e.g. supervisors, surveyors, draughtsmen, technicians) Food and beverage preparation Metal processing, shaping and forming, machining and fabricating Construction trades (e.g. foremen, carpenters, painters, glaziers) Per cent vacancy share 0 2 4 6 8 10

# IN SHORT SUPPLY JOBS AND SKILLS IN THE 1980s

## Small jobless group hardest hit

The story is the same in good times and bad - a small band of Canadians bears

the main brunt of the unemployment problem.

In 1982, for instance, fewer than 10 per cent of the unemployed were without work for six months or more. But they accounted for more than 30 per cent of overall unemployment the time spent looking for jobs. If you're part of this group you can count on a long search for another job unless you quit the labour force altogether.

If you are an employed Canadian, you can expect to hold on to your job for a very long time, even though you may experience 10 job changes during your career. For example, more than one-third of Canadian workers aged 20 to 44 can expect to remain in their jobs for more than 20 years. If you are a younger Canadian worker, you are probably among the majority who slip in and out of jobs rapidly, experiencing six job changes before turning 30.

An Economic Council study of this flow of people in and out of the work force shows that there is a "high degree of permanence" to both employment and unemployment in Canada, say Council researchers Abrar Hasan and Patrice de Broucker, the study authors. They argue that an accurate picture of unemployment can be gained only by

looking at the movement of people between jobs, unemployment, and dropping out of the labour force. Looking at unemployment alone, they note, will miss the many discouraged workers who just give up looking for jobs.

Their study was originally based on data from 1980 and earlier, but they later tested their conclusions with 1982 information. Data on regions as well as specific demographic groups are also examined.

#### Long-term unemployment

The authors find that individual spells of unemployment are often short - 55 per cent ended after less than a month in 1980. The number of people out of work for long periods is much smaller, yet proportionately these people have to shoulder a much larger share of the unemployment burden than other Canadians. The authors discover that those out of work for three months or more account for almost half the time that all the unemployed are out of work.

Being without work for a long time has another damaging side-effect. "As the period of unemployment lengthens, the chance of finding a job diminishes, the authors say.

Many simply give up: about 44 per cent of unemployment spells end with workers leaving the labour force; for women alone, the proportion rises to 52 per cent. Some of these dropouts are caused by discouragement at poor job

prospects. The authors estimate discouraged workers could have added up to 2 per cent to the national unemployment rate in 1980.

If the long-term jobless problem were solved, the unemployment rate would drop several percentage points. The problem of long-term unemployment gets too little attention from policy makers, partly because the theory that the unemployed are able to find jobs quickly is still popular. Even in good times, the authors say, many of the long-term unemployed will still be out of work because the normal market system cannot generate enough jobs.

In looking at specific groups, Hasan and de Broucker found that women have a "relatively adverse" unemployment experience. A greater proportion of women than men risk being unemployed at any given time. Although their average length of unemployment tends to be shorter, they are more likely to become discouraged and leave the work force.

Teen-agers aged 15 to 19 enter and leave unemployment at much higher rates than young adults aged between 20 and 24. But young adults are unemployed for much longer periods than teen-agers.

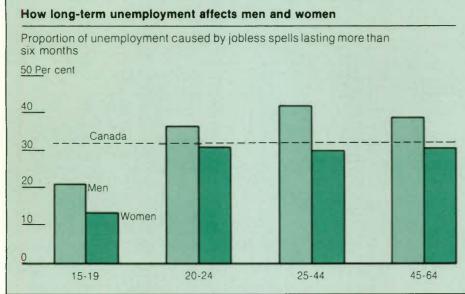
#### Regional unemployment

The authors say that if discouraged workers were added on a regional basis to the unemployment rolls, the unemployment rate would be 3.5 per cent higher in Quebec and the Atlantic provinces and less than 1 per cent higher in the Prairies.

More than 50 per cent of unemployment spells end with workers leaving the labour force in Atlantic Canada, a high for the country. In Quebec and the Atlantic provinces, worker discouragement is probably the main reason for leaving the work force, while other motives dominate in regions such as the Prairies, say Hasan and de Broucker.

Spells of unemployment lasting at least six months amounted to only 2 per cent in the Prairies in 1980 but rose as high as 7.2 per cent in Quebec. These levels climbed significantly last year because of the economic slump.

Unemployment, Employment and Non-Participa-45-64 tion in Canadian Labour Markets, by Abrar Hasan and Patrice de Broucker. Available later



13

# IN SHORT SUPPLY JOBS AND SKILLS IN THE 1980s

## Blue-collar training needs a boost

What this country badly needs right now is a top-notch system of training in

blue-collar industrial skills. But that's unlikely to happen as long as Canadians persist in looking down their noses at apprenticeship programs, says a recent Economic Council paper.

Apprenticeship training – whereby people learn such trades as carpentry, plumbing, construction, and mechanics – should be a very important element in Canada's manpower training system, argues York University professor Klaus Weiermair, in analysis carried out for the Economic Council's 1982 report on labour markets. Yet it is ill-developed, and in many cases ineffective, for a variety of reasons.

### Poor view of apprenticeship

First of all, it suffers from the wellentrenched Canadian view that bluecollar occupations lack social status. Historically, Weiermair says, apprenticeship training in this country, as dis-

tinct from that in Europe or Japan, has been looked on as a welfare policy for society's marginal or outcast elements. Academic, rather than vocational, education early on became the traditional route to success and earning power, so that apprenticeship in the trades was not regarded as a rational career choice by young people, and manpower training itself developed into a system which provided only low to medium level skills. The availability of highly skilled immigrant workers and journeymen at relatively low wages during the 1940s and 1950s, further reduced any incentive to establish effective programs.

#### Some standardization

Second, apprenticeship training in Canada has suffered to some extent from the fact that it is provincially controlled, allowing for wide variations in terms of entry requirements, program content, and qualifying examinations. Moreover, the existence of 12 different systems has impeded the development of a uniform standard for certification purposes. Many occupations, for exam-

ple, are apprenticeable trades in some provinces and not in others.

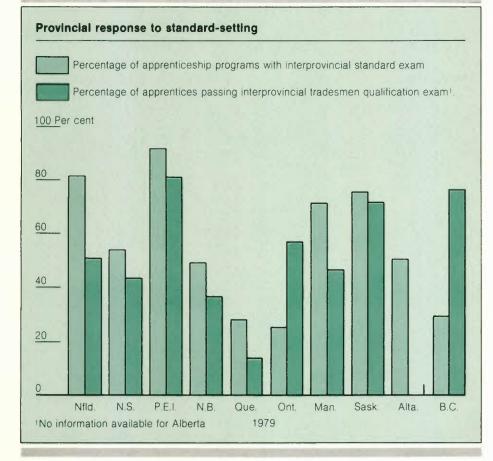
The federal government, through the training branch of the Department of Employment and Immigration, has been able to introduce some measure of standardization by the establishment of its national Red Seal program, entitling apprentices to work outside their province after passing an interprovincial exam. But the effectiveness of this program fluctuates a good deal across trades, and also across provinces, as the accompanying chart indicates.

Further, some provinces have been more successful than others in providing quantity and quality of training programs, he finds. In terms of quantity (measured by growth and size of programs, and by the relative size of apprenticeship training with respect to the provincial labour force), Alberta clearly leads all the other provinces, followed by British Columbia and New Brunswick. In Quebec, which brings up the rear, "apprenticeship training can safely be regarded as an unimportant source of skilled manpower development," Weiermair comments. However, authorities in that province are coming to recognize the nature of the problem, he adds.

Interprovincial variations in quality are harder to assess, he says, but judged purely in terms of failure rates and average marks achieved in the Red Seal exam, the western provinces fare very well, and Quebec, once more, appears at the bottom. A more balanced approach to education in the West, coupled with less reliance on immigration, probably explains superior provincial performance there, the author says.

#### **Employer reluctance**

A third impediment to apprentice-ship training can sometimes stem from employer reluctance to undertake lengthy and costly on-the-job training, particularly when business is bad. Employers are more likely to take on this commitment, according to Weiermair's analysis, when they lack cheap sources of substitute skills (from community colleges or private trade schools, for example); when the training is specifically geared to the firm's needs, rather than general in nature; and when they are well-informed about the costs and benefits.



#### Recommendations

Weiermair makes a number of policy recommendations designed to improve the system of apprenticeship training, including:

- the creation of a national independent research institute to assemble much-needed basic information in the occupational area,
- institution of measures to standardize apprenticeship training across Canada;
- introduction of a policy package

aimed at making apprenticeship training a convincing career and educational alternative, through its effective integration into existing provincial systems of education.

"Apprenticeship Training in Canada: A Theoretical and Empirical Analysis," by Klaus Weiermair. Available later this year.







# Corporate tax cut pays off most

Among the range of fiscal tools available to governments to stimulate the economy, a corporate tax cut or higher investment tax credits would pay off better than other tax measures in boosting economic activity, increasing jobs, and slowing down price increases, says a study prepared for the Economic Council of Canada.

In his study based on the experience of the pre-recession 1970s, Ottawa economist Carlton Braithwaite ran simulations on the Economic Council's CANDIDE model to test what would happen to the economy if a number of tax changes were brought in.

He chose to look at the impact of a corporate tax cut, an increased investment tax credit, higher tax depreciation, a personal income tax reduction, and a manufacturers' sales tax cut. He assumed each measure would cost the federal treasury \$1 billion in lost revenue in the first year.

Measuring the direct effects of each method, Braithwaite found that the manufacturers' sales tax reduction topped all the others in stimulating economic growth and employment and controlling inflation.

But when costs as well as benefits were included, the corporate tax cut

headed the list, followed by the investment tax credit increase.

Comparing the three investment incentives first, Braithwaite reduced the corporate tax rate by about 13 per cent and increased the investment tax credit by 80 per cent and the tax depreciation rate by 27 per cent.

#### Corporate tax cut works best

Looking at their direct influence on investment only, the author finds that the corporate tax measure works best on the non-residential construction industry while the investment tax credit is the most effective in the machinery and equipment sector. Overall, the tax depreciation method lags behind the others.

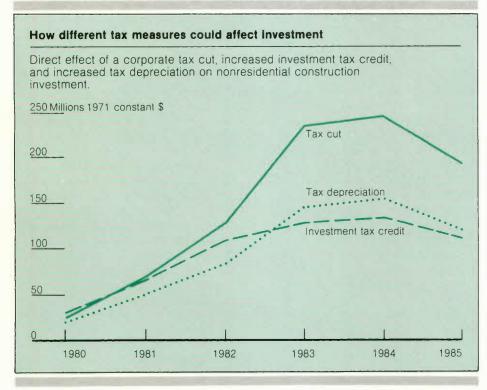
In percentage terms, investment increases range from less than 1 per cent to more than 2 per cent a year better than projected results under the unchanged policy scenario.

Studying the effect of these investment incentives on other aspects of the economy, Braithwaite concludes that all three contribute to growth in consumption, employment, labour productivity, and corporate profits and a slight decrease in the unemployment rate. Generally, the consumer price index is a shade smaller than it would otherwise

Of course, the revenue loss means an increase in the federal deficit and in federal government interest payments. The deficit increase ranges between \$600 million and \$1.6 billion a year. But all these improvements are based on assumptions of an accommodating policy by the Bank of Canada. The results are not nearly as good under a tight monetary policy.

Braithwaite also looks at a personal income tax reduction, which would yield a \$1 billion loss in government revenue in the first year. He concludes that prices increase faster under this approach than under other methods and there is little change in the unemployment rate.

So the author recommends using investment incentives to stimulate the economy, supplemented by other policies such as a more accommodating monetary policy. The incentives, he says, would be best applied selectively to industries where they will be most effective in increasing productivity.



The Impact of Investment Incentives on Canada's Economic Growth, by C. Braithwaite. (EC22-112/1983; \$8.95 in Canada, \$10.75 elsewhere).

Its economic analysis of Canada's retirement income system, published over three years ago, has stood the test of time very well indeed, the Economic Council reported to the Parliamentary Task Force on Pension Reform in April.

The Task Force had asked the Council to make a submission on pension reform, drawing on the expertise it developed in the researching of a major report, One in Three: Pensions for Canadians to 2030 (Au

Courant, Vol. 1, No.1), published in the

spring of 1980.

The analysis and suggestions that report contained are by and large still valid today, the Council stated in its submission, "Pension Reform in Canada." Indeed, "for the most part, intervening events have served only to strengthen many of its conclusions," it affirmed.

The Council report was first and foremost an economic analysis focusing on the long-term implications for the economy of Canada's system of income security for older people.

The report found that the cost of providing Canada's senior citizens with adequate income support could be strongly affected by demographic

in incorporating the best features of public and private systems; fairness, as for example, in sharing the "pension burden" between present and future workers; and timeliness in implementing necessary measures.

With those objectives in mind, the Council made a number of specific recommendations, including:

• ensuring a basic income for all older people, by according top priority to improvement in Old Age Security (OAS) and Guaranteed Income Security

(GIS) programs. Price indexation of these programs should continue, said the Council, and a parliamentary committee should be created to keep in touch with the economic problems of older people through public hearings, and to make recommendations for discretionary increases in the GIS as necessary;

• initiating measures to ensure a fair distribution of the pension burden. This would require future pensioners to bear an increasing share of costs now both through increased contributions to the present Canada and Quebec Pension Plans (CPP/QPP) and through expansion of private pension plans.







## Pension reform trends, inflation, and productivity

growth - factors beyond the scope of retirement income policies themselves. On the other hand, its work also suggested that a wide range of policy alternatives could be employed with no significant cost in terms of economic

Any reform in the pension system, said the Council, should be structured around four key requirements: clear primary objectives, concerning the provision of basic income and income replacement for older people; flexibility in adapting to demographic trends and

#### Nobel laureate addresses Council

Economic theory and policy have taken on considerable importance in our present crisis-prone times, Nobel Laureate Lawrence R. Klein told a large audience at a recent seminar hosted by the Economic Council. For that reason, economists should be taking a careful look at three schools of economic theory: monetarism, rational expectations, and supply-side economics, which share a common faith in the magic of the market and the need for a low-profile government.

Presently Benjamin Franklin professor at the University of Pennsylvania, Dr. Klein has had a distinguished career as professor, researcher, consultant and author. In addition, he has served on a variety of boards, including those of the Institute for Advanced Studies in Vienna, and the Commission on Prices for the Federal Reserve Board. He is a senior advisor on the Brookings Panel of Economic Activity, and acted as co-ordinator of President Carter's Economic Task Force in 1976.

In developing both macroeconomic theory and the econometric models used

to measure the impact of various economic policies on future economic performance, economists recently have had to deal with a number of new ideas. One of these, monetarism, can be defined in its most extreme form as the notion that "money alone matters" that the best way of controlling inflation lies in controlling the money supply. But his own scrutiny of this theory, as well as that of other economists, particularly in the light of current events, has cast doubt on this approach, Klein remarked. His own assessment, he added, would be that money indeed matters, but by no means exclusively.

#### Rational expectations

Another prevailing theory influencing economic thought and model design, he said, is that of "rational expectations" - the idea that economic models should take account of prevailing public attitudes on what the economic future has in store. The major problem in trying to build these expectations into economic models, Klein explained, lies in the assumption that

the general public has the same information at its disposal as do econometricians. In reality, the typical citizen does not interpret the economy as the experts do, Klein observed. Surveys and sample investigations remain the best test of the public's expectations, in his opinion.

#### "Supply-siders"

A third theory is that put forward by "supply-siders" in the United States, who argue that personal tax cuts increase motivation to work, to save and to invest, and, hence, stimulate productivity. But putting this theory into practice has had the reverse effect in the U. S., Klein noted, culminating in a severe and prolonged recession. In his view, "supply-sider" policies do make a slight, but long and drawn-out contribution to economic well-being, insufficient to justify their use as a cornerstone of national economic policy.

Each theory, Klein concluded, has had some influence on the development of macroeconomic policy and econometric modeling, but generally in terms of evolutionary modifications, rather than in the forms envisaged by "true believers."

# S·P·E·A·K·I·N·G·O·U·T

Regulations made by governments or by professional associations are sometimes costly to consumers, wasting resources and reducing competition.

Some progress has been made in dealing with this problem since Economic Council reports were published in 1979 and 1981, says the Council's senior policy advisor, Robert Jenness, but a lot remains to be done.

Taking a fresh look at the question in a recent interview with Au Courant, Jenness said the most urgent needs for change are in the fishing and transport industries. But there are still significant problems in other areas including the legal and medical professions, which regulate themselves.

Au Courant: Among the issues you examined two years ago, which requires the most urgent action today?

Jenness: I would say that two areas probably are at the top of the list for urgent action. Fishing obviously has been the concern of the federal government for some time because of the severe plight of the industry, and despite the optimism that was generated earlier with the opening up of the Two Hundred Mile ocean limit. The faster changes can be introduced in that area, the better.

Au Courant: Let me interrupt here to ask whether the recent Kirby Report on the fishery adopts the same approach the Council took to regulating the fishing industry? Jenness: Yes, the Council report, which preceded the Kirby Report, had explicit concerns about the economic problems of harvesting fish resulting from their being what is known as a common property resource - that is, a resource that is freely accessible rather than owned by any single individual or organization – and so subject to excessive use and undue depletion. The Kirby Task Force agreed with the Council that the problem could only be resolved if fishermen were given property rights to a share of the fishing resource. The Council

recommended individual quotas in the separate fisheries and the Kirby Task Force, along with, I might add, the Pearce Commission studying the Pacific fisheries, endorsed the idea of individual quotas associated with either boat quotas or specified amounts individual fishermen could take. Au Courant: To return to my original question, what is the second area where urgent action is needed? Jenness: I feel transportation is pretty close to the top of the list. And I think changes here are more possible now that we are coming out of the worst excesses of the current slump. It was the Council's view at the time of its report that the removal of many of the entry and other controls over what is carried, where, and by whom, would in the medium and longer term directly improve economic performance. Indeed, it is precisely because transportation directly enters into the costs of production and our ability to compete internationally that it is important that regulatory reforms be initiated, if only to keep us reasonably cost competitive with the United States. where deregulation has been con-

Au Courant: Are there cases of self-regulation which create economic problems and harm the consumer?

Jenness: Yes, there are some rather complex problems associated with professional bodies and licensed occupations. Initially what you have with most professions is a situation where governments, primarily provincial, have delegated regulatory powers to professional self-regulatory organizations. And these in turn, exercise control and constraints on the activities of individual members of the profession. Now many of these controls are for the general benefit of consumers in that they are designed to protect against malpractice or fraud. But there is another side of the activities of the organizations, which is less satisfactory from the consumer point of

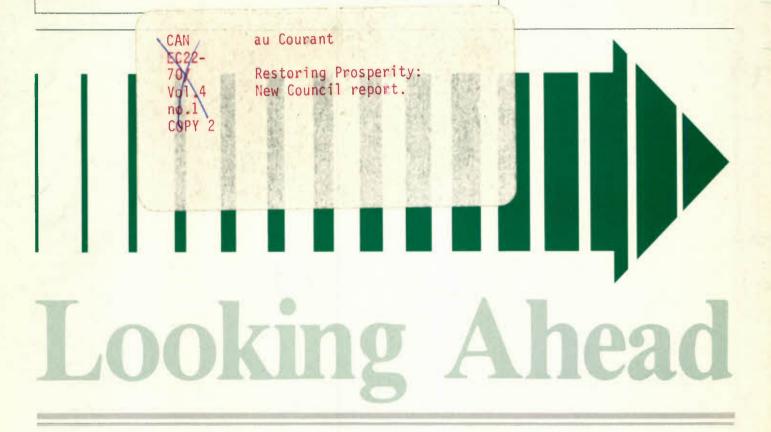
view. These organizations can not only prescribe prices and practices, but frequently can also limit entry through competitive examinations or licensure or certification. And they can shape or restrict information such as, for instance, the posting of prices, the advertising of services, and so on. Au Courant: Can you give me some examples?

Jenness: There is no assurance, for instance, that consumer interests are adequately represented in the internal determinations of the provincial medical, dental, or legal associations. And this has manifested itself, for instance, in bar associations taking action against individual lawyers who advertise, and in the medical associations defining the tasks of physicians and limiting the role of auxiliary occupations such as paramedics, medical technicians, or midwives. The result is less use of lowerpriced but perfectly capable professionals to perform many of the tasks now carried out by more highly trained and more expensive professionals. All this has the effect of raising prices to the con-

Au Courant: What sort of regulatory controls over professions was the Council proposing? Jenness: Remember that occupational licensing effectively segments the labour market into groups with exclusive rights to practice. What the Council sought was to open up competition within and between occupations, so that, for instance, certain practices could be done by less costly methods, and the public would have more comparative choice over individual fees and services. Au Courant: Do you see any progress at all along those lines? Jenness: No, I do not see much progress. In fact, a recent decision by the Supreme Court of Canada confirming the right of the B. C. Bar Association to discipline one of its members for advertising suggests that the course is running in the opposite direction.

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