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Ontario in the 1990s

Promoting Equitable Structural Change

An abridged version of the 1990 Ontario Budget Paper E(1991, April 29) by Floyd Laughren

Introduction

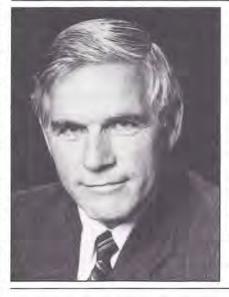
he Ontario economy is currently experiencing its worst recession since the Second World War. At the same time, the economy is undergoing profound and farreaching structural change. A dramatic illustration of this is the fact that 65 per cent of major layoffs in 1990 were the result of permanent plant closures, in contrast to the 1982 recession when 24 per cent of layoffs were permanent. The economy's capacity to adapt to these changes is impeded by a rate of productivity growth that has been below that of many other industrialized nations. Although a recovery from the recession is expected to occur early in 1992, the effects of structural change will continue to be felt for the rest of this decade.

The forces of structural change affecting Ontario's economy are many and varied. At the heart of these forces is a wave of technological innovation that is reordering the basis of production across a range of industries and increasing the value of knowledge as an input. The shift to knowledge-based production is accompanied by a general decline in the terms of trade for resource products, which have been a traditional strength of the Ontario economy, and an improvement in the terms of trade for the products of the manufacturing and service sectors.[1]

Closely related to this change is a shift in jobs from the manufacturing sector of the economy to the service sector. This shift is the result of improved productivity in manufacturing – a new design technology, for example, may eliminate part of a production process – and the increased demand for service products for business and personal consumption.

The impact of change is further inten-

sified by the growing integration of the world economy. The progressive dismantling of tariff barriers under the General Agreement on Tariffs and Trade (GATT) has raised the level of global trade significantly over the past four decades. The current revolution in communications and transportation technologies makes possible the location of production centres around the world and the further integration of national markets. Recent bilateral trade arrangements, such as the Canada-



U.S. Free Trade Agreement, are accelerating these trends.

The central goal of the Ontario Government's economic strategy is sustainable prosperity. This strategy is premised on the need not just to adapt to the pressures of changing economic conditions, but to support positive economic change for Ontario. A prosperous society must provide high levels of employment in well-paying, high-quality jobs. Prosperity must be environmentally as well as economically sustainable. It must also be socially sustainable, which requires that the costs and benefits of economic change be shared fairly. Individual workers must be assured that they will not be left to carry the burden of adjustment alone. Workers must receive an adequate return for their labour, just as investors require an acceptable return on their investment. A healthy and equitable society requires a public sector that provides the services necessary to promote the health, education and social well-being of its citizens. Ontario must promote equitable structural change through a comprehensive economic and social strategy aimed at sustainable prosperity.

This province has a number of underlying economic advantages that will help us meet the challenges of the 1990s. They include a diversified economic structure, experienced and qualified managers and workers, a favourable location in the North

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American market, and a well-maintained physical and social infrastructure. However, these advantages alone will not be sufficient to meet the challenges of structural economic change.

To discuss Ontario's competitiveness, it is important to distinguish between the factors that contributed to success in the past and those that will determine success in the evolving economy of the 1990s. This is important not only for business which must be competitive to survive, but also as a guide for effective public policy.

This paper examines the various factors that will affect our ability to achieve this goal and proposes that sustainable prosperity is best achieved on the basis of increased equity and social cooperation.

Structural Change and Competitiveness

Long-term competitiveness is based on the capacity to produce as efficiently, or more efficiently, than one's competitors and to adapt to structural change in a dynamic fashion. The key to long-term competitiveness involves a number of factors, including the ability to improve productivity performance, the skills and adaptability of the labour force, the quality of management skills, the capacity for technological innovation, organizational flexibility and a strong foundation of physical and social infrastructure.

A number of different factors can influence short-term competitiveness, which refers to the level of selling prices and costs currently prevailing in the economy, relative to those of our major trading partners. The most important of these are the exchange rate, interest rates and overall price and cost levels in the economy. These are essentially matters of federal economic and fiscal policy. Current federal monetary policy, by pursuing an unrealistically high value of the Canadian dollar, is impeding the investment that is needed for longer term competitiveness and the ability of Canadian firms to sell their products abroad.

There is a clear distinction between federal policies on competitiveness and the alternative approach supported by the Ontario Government.

The federal approach to competitiveness has included privatization, deregulation, tax reform including the Goods and Services Tax, the Free Trade Agreement with its accompanying limits on the nation's ability to implement economic strategies, and erosion of the social safety net.

Federal policies are leading neither to higher incomes nor to an enhanced capacity to adapt. At a time when organizational flexibility is essential, rising unemployment and declining federal support for social security programs and skills training and development are causing both employers and employees to adopt a defensive attitude to change.

Ontario cannot afford the rigidity induced by policies which focus on cutting wages and eroding public sector contributions to productivity. The alternative approach for government is to play a role as facilitator of structural change, not only to minimize the costs of transition and distribute them more fairly, but actively to promote the development of high-value-added, high-wage jobs through strategic partnerships. The approach of the Ontario Government is based on the conviction that sustainable prosperity is best achieved on the basis of increased equity and cooperation.

The importance of taking this alternative approach to competitiveness stems in part from changes to the way our economy works. In the past, with relatively entrenched methods of mass production and unvarying marketplaces, competitiveness was largely the outcome of reducing production costs, particularly labour costs. In contrast, competition in the 1990s is based on gaining strategic advantage in a rapidly changing marketplace by introducing innovative processes and products that are continually being adapted and customized.[2]

Policies predicated on the economic rules which characterized competitiveness in the past tend to identify wage levels and increases as the central impediments to economic adjustment. However, it is important to recognize that a narrow focus on unit labour costs fails to take into account the fact that Ontario workers have seen their weekly earnings decline by 1.1 per cent in real terms from 1979 to 1989. In the emerging global economy of the 1990s, the important long-term competitiveness challenge is to address the gap in productivity growth between Ontario and our major trading partners.[3]

Social and Economic Partnership

A preoccupation with cost cutting misses the more complex and future-oriented challenge of improving both productivity and strategic marketplace advantage in today's changing economic circumstances. Competitive success now depends not only upon each firm taking the initiative in the workplace and marketplace, but equally on the surrounding networks of social and economic partnership. By shifting the focus of the competitiveness challenge, the nature of the solutions also changes.

As the Organization for Economic Cooperation and Development (OECD) already pointed out in 1988, there is a vital interdependence between technological, economic and social change. Partnership approaches towards economic change recognize more effectively that the role of technology as a factor in stimulating economic growth is profoundly influenced and fashioned by the society in which it occurs.[4]

Policies which aim to facilitate structural adjustment must take into account the increased importance of knowledgebased inputs in every aspect of the production process. The impact of knowledge and emerging technologies underlies many of the other factors influencing long-term competitiveness in an evolving economy.

Ontario's success in addressing the challenges of the 1990s will depend on the ability of business, labour and government, working together, to increase the flexibility of our economy, its supporting institutions and society in general.

The sections that follow describe Ontario's economic foundation and discuss the issues of technology and innovation, social infrastructure, productivity and wages and labour force training. The paper concludes with some comments on future directions in Ontario public policy related to the Province's ability to address the economic challenges of the 1990s.

Ontario's Economic Foundation

Ontario is in a position to benefit from its diversified economic base, advantageous geographical location, sophisticated management, labour and technology and rich natural resources. The diversified structure of Ontario's economy, illustrated in the following paragraph, provides a sound basis for positive adjustment to structural change in the 1990s. Ontario has a mature industrial infrastructure, with a strong manufacturing sector, and is less reliant on agriculture and resource industries than the rest of Canada. In this sense, Ontario's economic structure is comparable to that of the United States.

Ontario's economic structure permits the development of broadly based and portable labour force skills and experience. It also provides considerable potential for the transfer of technology and knowledge between firms and sectors. Ontario has 16 per cent of its working-age population employed in manufacturing, second only to Germany among the group of seven industrial nations (G-7). Ontario manufacturing jobs have tended to be concentrated in highly skilled, highly paid industries such as auto and electrical products.

In the 1980s, Ontario's diversified economic structure and inherent strengths resulted in strong economic performance. Output in the 1980-89 period grew at an average annual rate of 3.6 per cent – faster than that of any major industrialized country, with the exception of Japan (Table 1). Currently, Ontario has higher output per capita than any of the G-7 industrial nations. This reflects high management and labour skill levels and a relatively high level of technological advancement.

Output Growth 1980-1989	Output Per Capita 1989*	
	%	U.S.\$
United States	2.7	20,981
Japan	4.2	22,901
Germany	2.0	19,520
France	2.0	16,880
Italy	2.5	14,933
United Kingdom	2.2	14,585
Canada	3.1	20,980
Ontario	3.6	23,930
*As measured by (GDP) per capita. Sources: OECD,, Department of Con Facts., +, +	Statistic	s Canada,, US

The province enjoys positive trade balances in several key product groups including passenger automobiles, trucks, office equipment, newsprint and aircraft parts. Ontario has more than 50 per cent of Canada's manufacturing output, making it one of the most diversified industrial bases in North America.

The Ontario service sector is also strong. This largely reflects the strength of the manufacturing base, Ontario's attractive location for Canadian head offices, the significant presence of the Canadian financial industry and a skilled labour force. With 36.5 per cent of Canada's population, Ontario generates over 44 per cent of the nation's employment in business services, finance, insurance and real estate. The service sector is expected to continue to increase its share of national output.

Ontario benefits from its close proximity to North America's largest and richest consumer market. In fact, the consumer market within a 400-mile radius (one day's trucking distance) of Toronto is larger than for any other major city in North America (see chart below). In addition to the consumer market, a substantial industrial market is also concentrated in this same 400-mile radius. Markets for machinery and equipment, just-in-time automotive parts and telecommunications equipment are particularly strong.

The skill levels of the Ontario labour force compare favourably with those of other jurisdictions. For example, the share of the adult labour force aged 25-64 with some post-secondary education rose from one-third in 1980 to 46 per cent in 1989.

This increase essentially eliminated the long-standing gap between the educational levels of the labour forces of Ontario and the United States.

Finally, Ontario's economic structure includes a rich natural resource base including forests, minerals, water and farmland which, managed in an environmentally responsible manner, will continue to contribute to Ontario's development and diversity.

Technological Change

Technological change is a key driving force in modern industrial economies. It is not a single event that takes place in an isolated segment of a firm or sector. It is a social process that is integrally tied to every phase of economic activity. Technological change through innovation presents opportunities and challenges for Ontario's enterprises, managers and workers that will require an investment in new technology, managerial practices and labour skills. Technical expertise constitutes a stock of knowledge that accumulates through a process of learning-bydoing at all levels of society and more particularly by managers, engineers and workers within firms.

Public policy that encourages an organizational culture supportive of technology and innovation in the workplace and in society at large will have a positive impact on the province's economic performance. Government can play a critical role by promoting greater coordination, facilitating changes to labour practices, encouraging labour and management cooperation in technology and innovation, and contributing to worker and management training and education.

The innovation process entails a complex set of relationships between networks of firms and external sources of knowledge, such as universities or government laboratories. The institutional infrastructure of a sector can constitute an important source of competitive advantage. This infrastructure may include a variety of practices involving firms or outside agencies, such as trade associations, apprenticeship programs, labour education facilities, joint marketing arrangements and regulatory commissions, each of which facilitates inter-firm cooperation. These sector-based institutions can play a critical role in improving the collective competitiveness of firms relative to those elsewhere.

Technological innovation is also driven by challenges such as the need for improved environmental protection. Worldwide, there is growing recognition that sustainable prosperity – and our very survival – depend on a healthy environment. An economic advantage will accrue to those who quickly recognize the universality of environmental concerns and who adapt to the new reality. Japan's adaptation to the first oil shock has made that country energy efficient. Germany's response to industrial pollution has put it in the forefront of the pollution abatement industry.

Many companies are already moving on environmental issues. For some businesses, this will necessitate short-term economic adjustments. Over the medium term, however, stricter standards can act as a spur to technological innovation, producing productivity gains from the systematic elimination of waste of production inputs.

The more rapid Ontario's progress in meeting the environmental agenda, the more likely we are to gain a comparative advantage in marketing the products and services of environmental industries to other jurisdictions having to meet higher standards.

Promoting Social Progress

In this period of rapid technological and social change, greater cooperation in the workplace, accompanied by greater security of employment and income, will be vital for both workers and employers.[5] Ontario workers will be more willing and able to contribute to successful economic change if they have confidence in Ontario as a fair society.

The massive changes anticipated in what we produce and how we produce it will force employers and employees to venture into new territory. From entrepreneurs and CEOs to workers and students, confidence in a secure future is an essential part of welcoming rather than resisting change. Programs that reduce earned income differentials, promote equity and maintain quality of life increase the flexibility of the labour force and society as a whole in ways which facilitate positive economic change.

One of the ways of introducing greater fairness and improving workplace relations and productivity is to develop a stronger commitment to employment and income security. Such arrangements encourage greater commitment from employers to invest in both the enterprise and its workers and an increased willingness among workers to accept new work arrangements and retraining. Government can set the stage for this by introducing measures such as pay equity, employment equity and a fairer minimum wage.

Public services and Infrastructure

Other critical contributors to a dynamic and productive economy are public services and infrastructure. One of the most direct contributions to income security, fairness and cost competitiveness is our universal and publicly funded health care system. Because our system is not tied to either employment or a specific employer's benefit package, as is the case in the U.S., Ontario citizens have complete security in health care coverage. This translates into a greater ability and willingness of people to accept change and to move between firms and industries than would be the case if the availability of basic health care coverage were firmspecific and tied to employment status.

Furthermore, our health care system is more cost-effective than the private system in the U.S. The provision of universal and publicly funded health care services

consumes 8.6 per cent of Gross Domestic Product (GDP) as opposed to 11.2 per cent of GDP in the U.S. This is also reflected in the fact that, for an American employer, medical coverage per employee in 1990 is estimated to have a direct cost averaging \$3,000 Cdn., while an employer in Ontario would pay an average of \$640 per employee.

Public investment in physical infrastructure also contributes to a high quality of life and productivity growth. For instance, investments in water supply and waste treatment facilities can reduce input and maintenance costs by improving the quality of the environment. Similarly, publicly funded transportation networks increase efficiency in the movement of goods, thus decreasing congestion and business costs. In addition to quality-oflife considerations, U.S. studies suggest that the decline in U.S. investment in infrastructure may have played a significant role in the slowing of productivity growth in the 1980s.[6] Maintaining and enhancing Ontario's infrastructure will reduce barriers to change and facilitate new investment.

Firms and highly skilled workers are increasingly interested in locations which offer residents a high quality of life. Ontario's low crime rate, low infant mortality and long average life expectancy provide a stable and secure personal lifestyle. Local government services and organization compare well with many other cities around the world and Ontario has some of the best cultural and recreational facilities in North America. Ontario public policy has fostered respect for a variety of cultures and support for the retention of the cultural and linguistic heritage of many different groups in society.

Governments also help to shape the general conditions underlying investment and a high quality of life through the regulatory and legal framework established to ensure consumer protection, environmental preservation and planning of rural and urban development. To advance economic growth and at the same time make social progress requires an integrated approach that recognizes the interrelationships between the two. Ontario will not be able to have one without the other.

Productivity and Wages

Productivity growth is essential for long-term competitiveness because it enhances industry's ability to expand production and maintain or increase international exports and market share. It is this capacity to produce more with the same levels of inputs - energy, raw material, labour and capital - that provides the basis for high-value-added jobs and stable income growth for workers and employers.

Discussions of competitiveness tend to focus on reducing input costs or the amount of labour and other inputs used in production. While this is a characteristic response during a recession, it fails to address the longer term challenge upon which future competitiveness and sustainable prosperity depend. If recession-induced cost reductions involve laying off skilled workers or postponing needed investments in workplace skills and new technology, these short-run moves will be counterproductive over the longer term.

Recently, some commentators have cited high unit labour costs and wages as reducing the short-term cost competitiveness of Canada, as well as impairing successful structural adjustment.[7] However, it should be noted that while unit labour costs for manufacturing have grown more quickly in Ontario than in any of the major industrial countries (except Canada), real manufacturing wages in Ontario have not increased over the last decade, and total wages have fallen as a share of GDP, even though the proportion of the population working increased by 10 per cent. Over two-thirds of the Ontario-U.S. unit labour cost differential was caused by lagging Ontario productivity growth and another fifth by the fact that real U.S. manufacturing wages fell even faster than those in Ontario. In contrast, the other G-7 countries achieved both productivity and real wage gains.

Ontario's productivity as measured by output per capita is higher than for any of the G-7 countries. But, as shown in Table 2, Ontario has not experienced as much growth in labour productivity over the past decade as the leading industrial countries.[8] Of particular concern is Ontario's performance relative to the U.S., its major trading partner.

Labour Productivity Growth, Real Hourly Wages and Unit Labour Costs in Manufacturing 1979-89 Table 2				
Productivity Growth*	Real Hourly Wages**	Unit Labour Cost***		
Ave	erage annual g	rowth		
	%	%	%	
Japan	5.5	1.4	3.7	
United Kingdom	4.7	2.8	1.9	
Italy	4.0	0.8	2.9	
France	3.4	1.0	1.7	
United States	3.6	-0.8	1.9	
Germany	1.8	1.4	2.8	
Canada	1.5	0.2	5.5	
Ontario	1.3	-0.1	5.2	
*As measured dollars divided **1979-88 exce *** Unit labour output divided constant dollar Sources: U.S. OECD, Statisti	by person-hou opt for Canada cost equals th by labour cost s. Bureau of Lab	urs. a and Or be value ts,, both	ntario. of in	

Investment in machinery and equipment is an important element in increasing productivity of the labour force. The

level of investment per worker by Ontario manufacturers is very low when compared with that of competitors. Between 1979 and 1988, Ontario manufacturing investment in machinery and equipment per worker was 29 per cent below that of the U.S. This reflects lower U.S. interest rates, a cutback in the U.S. manufacturing labour force in basic industries and increasing U.S. investment related to defence production. Strong growth in investment will be necessary if Ontario is to keep pace with technological changes and realize the associated productivity gains.

Also important is the fact that, during the past few years, capital investment in manufacturing has shifted away from construction and towards machinery and equipment, and more specifically towards high-technology equipment such as numerically controlled machine tools, computer-assisted design and computer-assisted manufacturing systems. This intensive, rather than extensive, investment improves industries' capacity to absorb technological change and thus is supportive of productivity growth.

The need for structural changes will challenge Ontario's ability to improve real wages unless productivity is improved faster than experienced in the 1980s. Rather than a selective focus on the wage component of unit labour costs, we need to examine the full range of factors which influence productivity, including workplace organization, labour force education, technological investment and social programs. The focus of public policy must be on fostering a culture that is conducive to innovation and increasing the skills and adaptability of the labour force.

Quality of the Labour Force

Ontario's role in the emerging global economy will depend largely on the flexibility and skills of our labour force to produce higher value-added goods and services. While investors seeking lowwage locations have many options, a welleducated, skilled and experienced labour force can be found in only a few jurisdictions.

In 1990, the World Economic Forum ranked Canada third among 23 major industrialized countries for the quality of its human resources. Among the factors considered, Canada ranked high on youthfulness of population, labour force and employment growth, labour flexibility, employee incentives and educational effort. With 38.6 per cent of Canada's labour force, Ontario contributes substantially to this national standing. In order to improve in areas where we are not as advanced, the Premier's Council on the Economy and Quality of Life will invite industry, labour, and community groups to work with government to enhance the quality of our labour force, economy and environment.

Although Ontario's skilled labour force compares favourably to other jurisdictions, differences between the skills required in a changing labour market and those available are apparent. A February 1991 report by Employment and Immigration Canada identified 120 occupations where employers noted that labour is in short supply in Ontario. These shortages represent both a challenge and opportunity for industry, labour and government to work together in providing workers with training and upgrading opportunities for increased employment and income security.

According to the Canadian Labour Market and Productivity Centre, positive efforts are being made to improve our skills base. In 1987 Canada ranked tenth among 22 OECD countries in public sector spending on training for adults. Canadian public expenditure on training, measured as a per cent of GDP, exceeded that of Japan, the United States and Britain.

However, private sector participation in training in Canada is low compared to other jurisdictions. A review of training in industry undertaken by the Premier's Council revealed that U.S. firms invest twice as much on formal training per worker as Canadian firms, and German firms spend up to four times as much.[9]

The Premier's Council, and more recently the Economic Council of Canada, have made recommendations for improving the development and adjustment capacity of the economy. Among the recommendations is a call for a partnership among socio-economic players through which labour, business and other economic agents would share decision-making and responsibility for labour market programs.

In many sectors of the Ontario

economy, industry, labour and government have implemented cooperative arrangements that encourage greater employee involvement in the planning and operation of their workplace. Employee participation in activities such as workplace health and safety committees, educational leave programs and the implementation of workplace-based training programs have resulted in improved working conditions, output and industrial relations. Further examples of where partnerships have been established in Ontario include human resource training and development arrangements in the steel, plastics and electronics sectors. In addition, there are over 70 Training Trust Funds in Ontario whereby industry, labour and government contribute matching funds to a training trust which supports training and upgrading opportunities identified by employers and workers.

For many individuals, a lack of literacy and numeracy skills compounds the difficulties they experience in obtaining or upgrading jobs or participating more fully in the labour market. With government support, industry and labour have been working closely together in implementing workplace-based literacy and numeracy programs which improve safety, efficiency and output in the workplace and lead to greater employment and income security.

One example is the Ontario Federation of Labour's Basic Education for Skills Training program, operated in conjunction with the Ontario Ministry of Education. Through this program, workers are trained as language teachers to help fellow workers increase their literacy skills. In the area of long-term skills training, industry and labour participation on Provincial Advisory Councils - voluntary bodies which provide direction on apprenticeship standards and curriculum has helped Ontario raise the number of apprentices training annually from 40,000 in 1987 to 50,000 in 1990, an increase of 25 per cent.

The challenge for industry, labour and government is to build on these partnerships in responding to and coping with demographic, technological and economic changes which face our labour market. We must increase and better coordinate our training efforts.

Conclusion: The Need for a New Approach

Sustainable prosperity in the 1990s can only be achieved if we take into account the growing interdependence of technological, economic and social change. A new economic strategy based on broad social partnerships is needed. It will require strategic public and private initiatives in a climate which allows partners to develop a sense of collective responsibility. It must ensure that all Ontarians share equitably in a prosperity that is both environmentally and socially sustainable.

Successfully meeting this challenge will depend largely upon enhancing productivity growth through new investment, innovation, research and development and enhanced managerial and workforce skills. We must introduce new technologies into all sectors of the economy and reap the productivity gains generated by innovative working relationships.

Ontario needs integrated and innovative economic and social policies which address the following issues:

 new approaches to public education and job-specific skills training to provide people with the knowledge and flexibility to respond to the changing economic environment of the 1990s;

 public policies and private sector practices to provide workers with the security and influence necessary to enable them to accept and initiate change;

 industry and/or sectoral strategies to facilitate firm-specific adaptability;
greater investment in infrastructure,

technology and innovation; and exploration of better ways to channel the

capital resources of Ontario to finance restructuring and promote regional development.

The changes that are required reinforce each other and must happen together. However, they will not, in most cases, be carried out by government alone. The only way to both refine and realize this new strategy is through partnerships among the key participants — government, labour, business and community groups. A concerted and cooperative The Government's intention is to enlist the participation and advice of business, labour and all interested sectors in designing and implementing our strategy for sustainable prosperity.

[1. Terms of trade reflect the relative foreign exchange earning capacity of exports of a particular commodity or sector.]

[2. Michael H. Best discusses the nature of product and process improvement, and the kinds of firms within which such improvements occur in The New Competition: Institutions of Industrial Restructuring, 1990.]

[3. The section, "Productivity and Wages", elaborates on these issues.]

[4. Organization for Economic Cooperation and Development, New Technologies in the 1990s: A Socioeconomic Strategy, 1988.]

[5. Paul Osterman and Thomas A. Kochan, "Employment Security and Employment Policy: An Assessment of the Issues", New Developments in the Labour Market: Towarda New Institutional Paradigm, eds. Katherine G. Abraham and Robert B. McKersie, 1990, pp. 155-184.]

[6. David Alan Aschauser, "Is Public Expenditure Productive?" Journal of MonetaryEconomics, March 1989. William F. Fox and Tim R. Smith, "Public Infrastructure Policy and Economic Development", Economic Review, March/ April 1990.]

[7. Relative unit labour costs compare the labour costs per unit output, expressed in a common currency for different jurisdictions.]

[8. A proxy commonly used for total productivity is labour productivity which is a measure of the amount of output produced per unit of labour.]

[9. Premier's Council Report, People and Skills in the New Global Economy, 1990 p. 91-92.]