chapter five

INTERREGIONAL AND INTERNATIONAL ASPECTS OF CANADIAN INFLATION

Introduction

Much of the analysis of the previous chapters has treated the Canadian economy as a single entity with a good deal of control over what happens within its borders. It is evident, however, from frequent side references that there are two important respects in which this is an over-simplification. First, there are distinct regional aspects to Canada's inflation and unemployment problems and second, it is clear that developments in other countries, particularly the United States, have a significant effect on economic conditions in this country.

There are those who would link these two aspects of Canadian inflation, arguing that Canada is in essence simply a region of the North American economy and that any increase in Canadian prices and wages is largely to be explained by price and wage increases in the United States. This sounds very much like the way one might discuss the influence of the rest of the Canadian economy on one of its regions. Thus it could be argued that inflation in the Atlantic Provinces follows that in the industrial heartland of Canada for much the same reasons that inflation in the Canadian heartland follows that in the United States. As we have indicated earlier, it is not our view that the dependence of the Canadian economy on the United States either is or need be as complete as many Canadians seem to think.

Implicit in this chapter is a comparison between the forces at work which link the Canadian regions and the similar forces which bind Canada and the United States. It should be emphasized at the outset that while the Commission carried out a good deal of research on the regional[1] and international[2] aspects of inflation there remain puzzling features about both kinds of linkages. Thus, what we have to say here may well be modified as more is learned about the factors at work. While we do not feel that one can be dogmatic about any of the conclusions reached, we have tried to give as clear a reading as we can of our position on these issues.

The Regional Pattern

There is little dispute about the nature of the regional differences which exist in Canada. Levels of incomes, wages and unemployment differ among the various regions[3] of the country. These differences are of long standing and show little sign of change. On the other hand, rates of change of prices, wages and unemployment in the various regions are very closely related even in the short run. Thus prices and wages show virtually no tendency to move in ways which would tend to diminish the interregional disparities in unemployment.

Fully comparable price indexes on a regional basis are not available but the data at hand show a substantial parallelism in price movements. In Figure 9, trends in the Consumer Price Indexes for several major cities are plotted. It is clear that they correspond closely to one another even though they are not fully comparable. Examination of the various components of the indexes[4], and of the other price data, indicates that this association is closest among goods which can be traded among different areas, but it is also remarkably close in the case of services and items where such trade is impossible.

It is no surprise that the prices of goods which are readily transported among regions should move together. One would expect the forces of competition to produce this result, although even here transportation and distribution costs might weaken the extent to which competition tied price movements together. It is more surprising for other goods and services. Here the parallel movement of prices appears to stem largely from the similarity of movements of wages and salaries which is such a pronounced feature of the Canadian economy.

Levels of per capita incomes, earned income per person, average weekly wages and salaries or average hourly earnings have historically shown substantial and persistent differences among the regions. The pattern for 1968 is shown in Table XXIII. Of course, the figures are specific to that year, but had another one been chosen the ordering of relative magnitudes would

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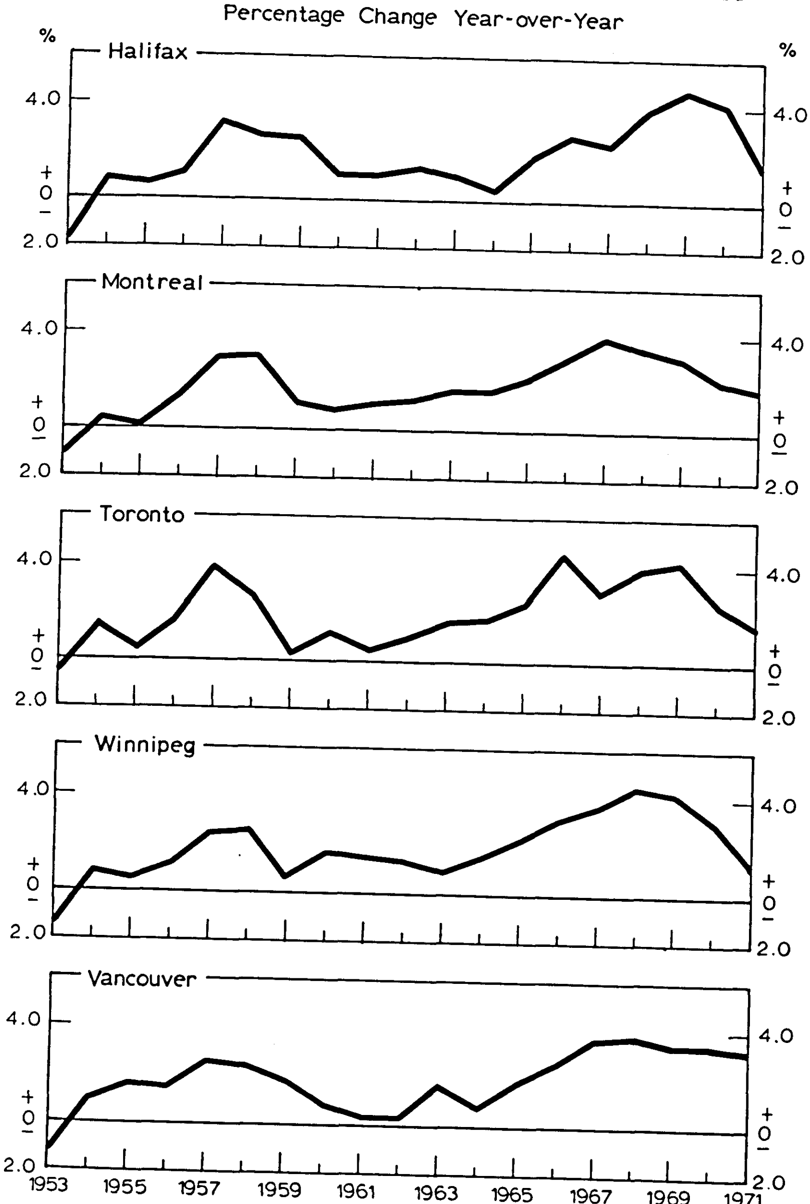
[1] Cf. Thirsk.

[2] Eg. Kelly; Scarfe; Taylor, Turnovsky and Wilson; Cragg, Nold.

[3] Regions are conventionally defined by the use of political units or groupings of political units. Frequently reference is made to five regions, the Atlantic Provinces, Quebec, Ontario, the Prairie Provinces and British Columbia. This grouping ignores the important differences between various parts of regions, such as Montreal versus the rest of Quebec, or Alberta versus the rest of the Priarie region.

[4] Thirsk, *op. cit.*, Ch. II.

Figure 9
CONSUMER PRICE INDEXES FOR MAJOR CITIES
Percentage Change Year-over-Year



NOTE: Index 1953 to 1960 was converted to a 1961 base using conversion factors supplied by Statistics Canada (Prices Division) have been very similar. It will be noticed that the disparities are greatest when income per capita is examined and least for the average wage series, reflecting differences in the proportion of the population who are at work and variations in the relative amounts of income from other sources.

TABLE XXIII

Regional Income Patterns, 1968

(dollars)

	Atlantic	Quebec	Ontario	Prairies	British Columbia
Per capita income	1,854	2,409	3,064	2,585	2,823
Earned income per person	1,470	1,979	2,543	2,134	2,316
Average weekly wages and salaries*	90.56	107.92	113.54	104.28	120.76
Weighted average hourly earnings*	2.20	2.46	2.81	2.81	3.42

*Industrial composite.

SOURCES: (1) System of National Accounts and The Labour Force **Statistics Canada.** (2) Employment Earnings and Hours **Statistics Canada.**

It is worth noting that, large as these differences are, they conceal intra-regional disparities which may be at least as serious a problem. For example, in Quebec per capita incomes are about twice as high in Montreal as in the Gaspé area[5]. Furthermore, while these regional disparities tend to appear in most industries or occupations, there are substantial variations in the magnitude involved and in some cases the patterns are reversed. For example, according to the data available, pulp and paper workers are paid most highly in Newfoundland though this is the province with the lowest average wage and income levels. Like the overall regional patterns, these more specific differentials have tended to show remarkable durability over time.[6]

The extent to which regional disparities are unchanging appears to apply in the short run as well as the long run. Rates of change of wages in the various regions move together in almost lock-step fashion. Figure 10 shows the pattern in average weekly wages and salaries over the last two decades. The same pattern is very evident when other wage measures are examined. The only important exception seems to be Quebec where some narrowing of the wage differential with Ontario appears to have occurred during the 1960s. Even here the adjustment has not been of large magnitude, and it may be that more recently economic forces have been at work to restore the earlier differential.

These closely parallel movements of wages as well as prices might be taken as a symptom of a well functioning market economy. With no formal barriers to the movement of goods, capital or labor within the country, the

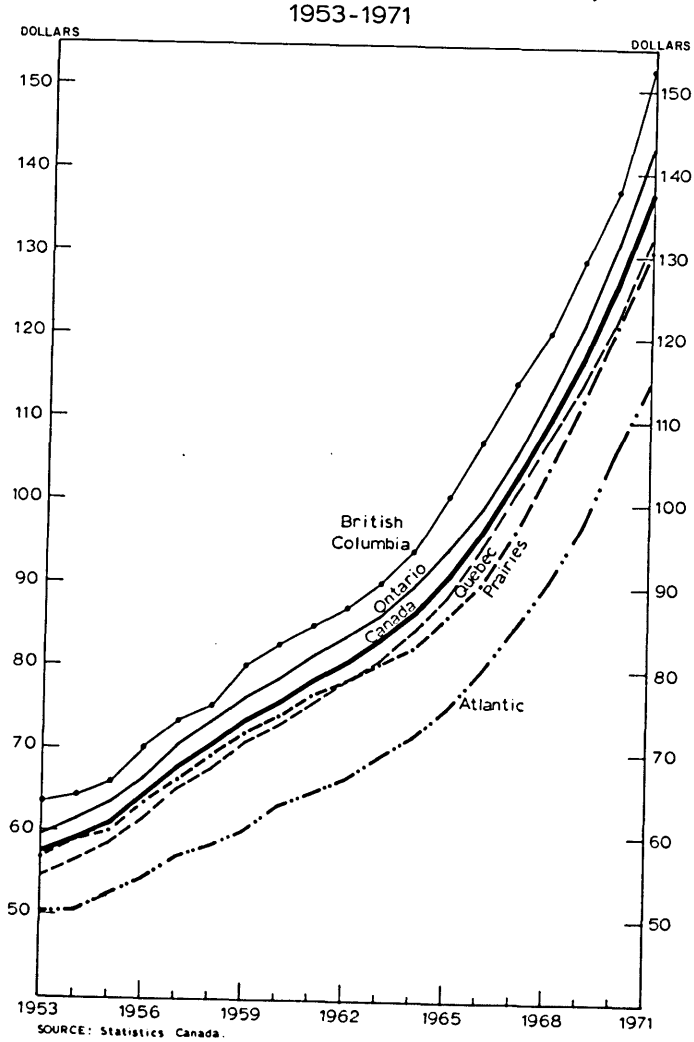
[5] Quebec General Council of Industry, *Towards Economic Objectives and a Development Strategy for Quebec,* Montreal, April 1970.

[6] Cf. Thirsk, *Op. Cit.*, Ch. IV.

forces of competition would be expected to even up the pressures of demand on capacity in various regions and result in similar price and wage movements in different areas. The recorded movements might be thought to indicate that this mechanism works extremely well and quickly so that little variation in rates of change is observed in prices and Wages. Such a view assumes that the pressure of demand on capacity would be about the same in all parts of the country on a continuous basis. On the face of it, this seems to contradict the unemployment data, so that a different view of the matter seems to be needed.

We noted earlier that there are no direct measures of the extent to which demand is pressing on the productive capacity of the economy. The most

Figure 10
AVERAGE WEEKLY WAGES AND SALARIES, BY REGIONS - INDUSTRIAL COMPOSITE, 1953-1971



SOURCE: Statistics Canada.

generally used indicator is the unemployment rate. Regional differentials in unemployment rates are as marked as they are in the income data. They have also shown remarkable persistence over time. Data from the various censuses extending back over 50 years indicate that the same interregional patterns have persisted over that period.

The pattern is shown in Figure 11 where we plot the unemployment rates in the five traditionally defined regions of the economy. The pattern shows the Atlantic Provinces experiencing the highest unemployment rates. Quebec comes next and while, for a time in the 1960s, a narrowing of differential with the more fortunate areas developed, this movement appears to have been reversed. British Columbia tends to fall in the middle with an unemployment rate somewhat above the national average. The regions which enjoy below-average unemployment rates are Ontario and the Prairies.

Cyclical variations in the unemployment rates in the various regions move closely together, as Figure 11 also shows. Apparently all regions tend to experience fluctuations in economic activity at about the same time. This would seem to attest to the pervasiveness of the national economic climate. Periods in which economic activity in one region was strengthening while it was slackening off in another are not readily apparent.

The magnitude of cyclical variation in regional unemployment rates tends to show much the same pattern as is evident in unemployment levels. The widest range of cyclical fluctuation in the absolute level of regional unemployment rates is found in the Atlantic region, with Quebec and British Columbia also experiencing a wider range of fluctuation between peaks and troughs in economic activity than Ontario and the Prairie Provinces[7]. This pattern rules out the possibility that the data simply reflect the concentration in particular regions of large numbers of persons who are only marginally employable, while in terms of people likely to be gainfully employed under normal conditions the unempoyment rates of the various regions are approximately equal. Rather, it seems likely that the factors contributing to regional unemployment differentials are varied and complex.

On the face of it, the existence of these regional unemployment differentials seems to reflect different degrees of demand pressure on capacity in the various regions of Canada. It would appear that when strong pressures

[7] This is not, however, the only possible way of comparing the degree of cyclical variability of unemployment between regions. Consider, for example, one region whose unemployment rate over many years has varied between two per cent and six per cent of its labor force, averaging four per cent. In another region, the range of variation in unemployment may have been between three per cent and nine per cent of *its* labor force, averaging six per cent. It is true that the range of variation in the *absolute level* of the unemployment rate in region B is wider than in region A. Yet in each region, the range of variation in unemployment rates above or below their *average* level has been the same in *percentage* terms—namely, plus or minus 50 per cent. Indeed, when the latter basis of comparison is used, it appears that percentage deviations above or below their average rates of unemployment have been greater in regions such as Ontario and the Prairie Provinces than in the regions of relatively high average unemployment. It should also be remembered that the number of people involved in a given change in unemployment rates is much larger in some regions than in others. Cf. Thirsk, *op. cit.*, Ch. II.

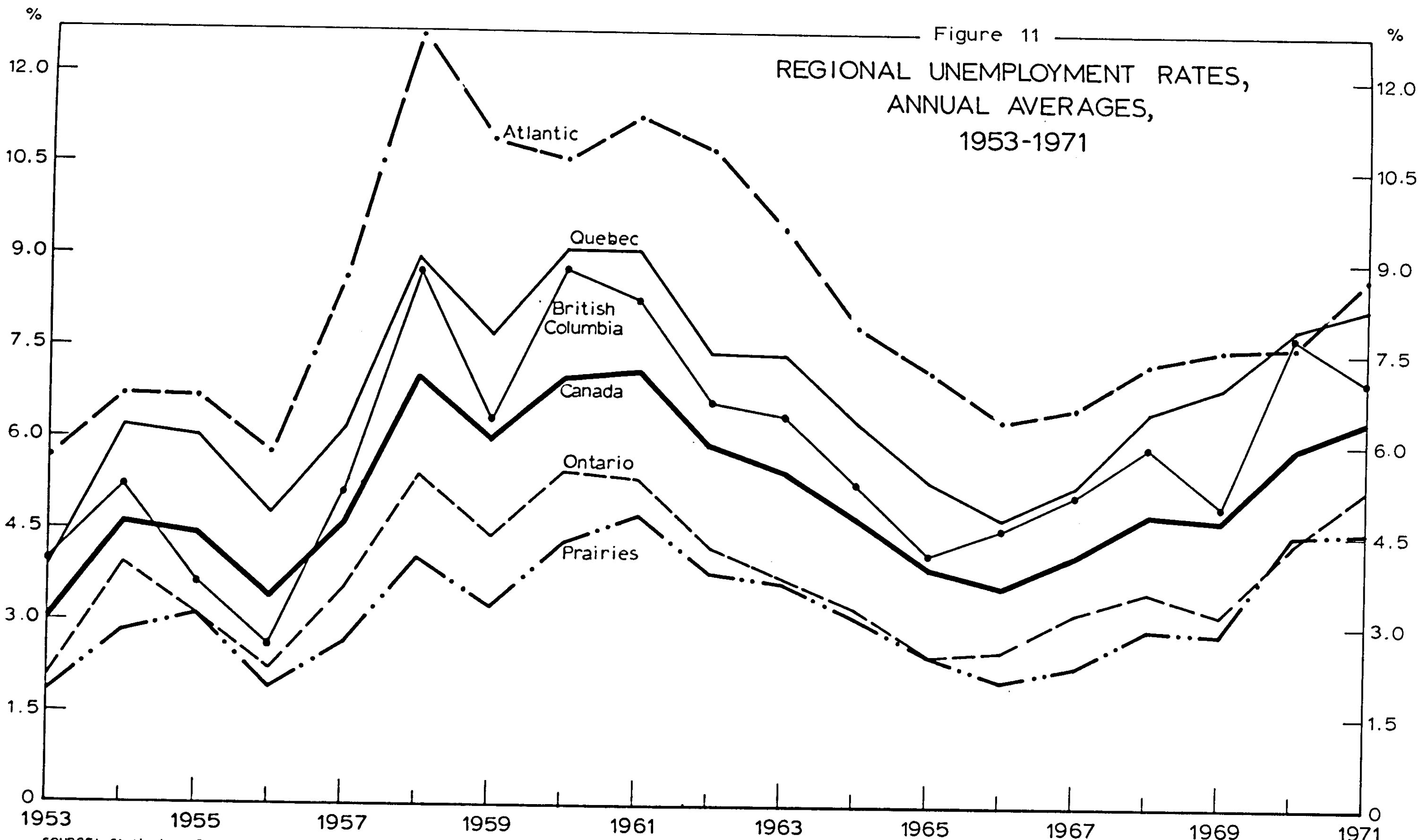


Figure 11

REGIONAL UNEMPLOYMENT RATES, ANNUAL AVERAGES, 1953-1971

SOURCE: Statistics Canada.

develop in Ontario, slack conditions are likely to persist in other regions, and that to get acceptable levels of capacity utilization in Quebec or the Atlantic region requires having very tight conditions in Ontario. When action is taken to restrain aggregate demand so as to prevent excessive pressures from developing in Ontario, the burden of the restraint also falls on those regions not experiencing tight conditions. Such a reading of the evidence on unemployment rates implies that overall demand management is faced with a continuing dilemma, since what is appropriate for some parts of the economy is inappropriate for others.

Why Do Regional Unemployment Rates Differ?

What could account for these regional differentials in wage levels and in unemployment rates, and in particular for their tendency to move together so closely in the manner described above?

One possibility is that the economy does indeed tend to operate in such a way as to spread the pressures of demand relative to capacity fairly evenly among the different regions of the country. However, because of differences in the characteristics of regional labor markets and in the nature of regional production capabilities, this process gives rise to different unemployment rates in the various regions, and changes in the pressure of demand give rise to changes in regional unemployment rates of differing magnitude. On this view, it is misleading to interpret differences in regional unemployment rates as a reliable measure of regional differences in the degree of capacity utilization, for the proportion of the labor force which can be employed without severe strains developing in local labor markets is different from region to region. This is not to deny the existence of major problems associated with regional disparities in unemployment rates. Differentially higher average unemployment rates in particular regions, however, are seen more as a reflection of the special difficulties encountered in smoothly matching locally available labor with possible job opportunities than as evidence of inadequate levels of demand in relation to the labor supply of these regions.

There is reason to believe that this is by no means the whole story. A good case can be made that the wage and price mechanisms which would normally operate to even up regional demand pressures are prevented from doing so, in varying degrees, by a wide variety of institutional arrangements. To this extent the problem of regional disparities in unemployment rates reflects the fact that some regions are in effect priced out of the market. The consequence is that employers do not find it worthwhile to offer enough jobs at the prevailing wage rates and existing levels of productivity in these regions to produce unemployment rates comparable to those in other areas of the economy.

Interest in the causes of persistently high regional unemployment rates focuses naturally on the Atlantic Provinces and Quebec. The relatively high unemployment rates typically experienced in British Columbia appear to stem largely from the heavy migration of job-seekers into that province and the special characteristics of some of its industries. The predominantly resource-based and export-oriented nature of much of its industrial activity appears to account for the incidence in British Columbia of more severe fluctuations in economic activity and in unemployment than occurs in Ontario. Similarly, the unusually low unemploymnt rates of the Prairie Provinces seem to reflect the large proportion of the labor force accounted for by self-employed proprietors and family workers engaged in grain farming. An additional factor is the tendency for the more transient unemployed in these provinces to drift to the west coast, especially during the winter months. The unemployment rate in Ontario is partly a reflection of the particular characteristics of its industrial structure and labor markets, but it is not unusually high by international standards and does not pose the same puzzles as the unemployment rates in the eastern regions of the country.

The cases of Quebec and the Atlantic Provinces are more difficult. There are several features of the economies of these regions which make it plausible that the same degree of tightness in their labor markets as in Ontario might be reflected in higher unemployment rates. Many of these markets are small and separated from each other by geographical barriers. The range of jobs which it is feasible for job-seekers to explore in these labor markets is much more limited than in Ontario and, similarly, employers have less varied pools of talent from which to draw. This feature in itself would tend to produce higher average unemployment rates because of the greater difficulty in matching available workers with available jobs. Of course it is far from being the case that all local labor markets in Quebec and the Atlantic region experience difficulties of this kind, while not all local labor markets in Ontario are free from such problems. The argument is, however, that narrow labor markets are much more common in these regions than in Ontario.

There is also some evidence that job turnover is normally higher in the Atlantic region and Quebec than in Ontario[8]. As we have pointed out in the previous chapter, job turnover tends to bring with it some unemployment. Apart from the greater seasonality of employment in these regions, which we shall consider in a moment, the reasons for this higher job turnover are not fully understood, but they seem to stem from two related sources. The first is the apparently greater willingness of people in these regions to pursue a way of life which involves employment in several industries during the course of a year, with the possibility of unemployment occurring in intervening periods. The second reason is that the combination of lower wage rates and the relatively greater opportunities for casual jobs than for regular employment makes continuous and strong attachment to a particular job relatively less profitable than in Ontario. In the Atlantic

[8] Cf. Thirsk, *op. cit.*, Ch. V.

Provinces, the average duration of unemployment is relatively long and the flows of people both into and out of unemployment are relatively high.

The notion that structural obstacles to the matching off of job-seekers with available jobs are particularly severe in these labor markets seems to accord with the record of vacancies. It appears to be the case that, for any given unemployment rate, vacancy rates are higher in Quebec and especially in the Atlantic Provinces than in Ontario[9]. Unfortunately, the only data on vacancies which extend over any substantial period of time are contained in the operating records of the Canada Manpower Centres and their predecessor, the National Employment Service. These records may be suspect in some degree because of differences in the role played by these facilities, and in their use by the public, from one region to another. For the short period of time which it presently covers, the recently inaugurated Job Vacancy Survey indicates that vacancy rates were substantially higher in the Atlantic region than in Ontario. This was not the case in Quebec, where short-term vacancy rates were lower, and longer-term (over a month) vacancy rates about equal to those in Ontario. These statistics, however, cover only the very recent period of high unemployment in Quebec, and for this reason the evidence from the Job Vacancy Survey is far from conclusive[10].

Another feature of the economic structure of the eastern regions which helps to account for their higher average unemployment rates is the unusually wide range of seasonality which they experience. Seasonal fluctuations are considerably greater in the Atlantic region and in Quebec than in Ontario. This is partly matched by greater seasonal fluctuations in labor force participation, so that the seasonal swings in employment rates do not produce as much seasonal unemployment as they would with a constant labor force[11]. These seasonal patterns help to account for the large turnover experienced in these regions. They also tend to produce more seasonal unemployment which is reflected in higher average or seasonally-adjusted unemployment rates.

Experts are not in complete agreement on how seasonality should best be measured, or on its effects on the unemployment rate. Illustrative calculations are presented in Table XXIV providing estimates of the magnitude of seasonal fluctuations in employment and in the labor force. These are based on the differences typically observed between the annual peaks and

[9] Cf. Thirsk, *op. cit.*, Ch. V.

[10] As yet data on the rates of pay associated with the vacancies have not been released and there is no information on how they would compare with prevailing wage rates in the region. It might be the case that the rates of pay offered were too low for people to accept the jobs. The presumption is, however, that the rates of pay associated with the vacancies should not normally be far out of line, since the criterion for establishing the existence of a vacancy is active recruiting efforts by employers. It is hard to believe employers would devote their energies to hopeless endeavors.

[11] However, it should be noted that the seasonal pattern in employment is to some extent a result of the seasonal pattern in labor force participation. As mentioned in the previous chapter, seasonal swings in employment can be regarded as tending to reduce average unemployment levels to the extent that they coincide with seasonal swings in labor force participation which would have occurred in any event.

troughs of the series expressed as a percentage of the peak seasonal values. The figures are shown relative to Ontario, a value of 1.0 indicating that the degree of seasonality measured in this way is equal to that of Ontario.

In the third column of Table XXIV we provide estimates of the effect this seasonal pattern has had on the unemployment rate. The calculation is based on a comparison of the average rate for the year 1969 and the rate this would have produced in the month when unemployment is typically at its seasonal low, given the normal seasonal pattern. This calculation abstracts from the non-seasonal influences affecting the monthly unemployment rates actually recorded during 1969[12]. Finally, another set of calculations, based on the difference between the rate actually recorded for the lowest month and the average rate for the year[13], is also shown in Table XXIV. The figures are expressed as a percentage of the annual average labor force and are illustrative of various possible ways of estimating the amount of seasonal unemployment reflected in the annual rate[14].

TABLE XXIV

Regional Differences in Seasonal Unemployment, 1969

	Seasonality Employment as proportion of that in Ontario	Seasonality in Labor Participation as proportion of that in Ontario	Estimated Contribution to unemployment rate, Calculation One	Estimated Contribution to unemployment rate, Caluclation Two
Atlantic	2.5	1.8	2.8	2.6
Quebec	1.5	1.1	1.6	1.5
Ontario	1.0	1.0	0.8	0.9
Prairies	1.5	1.4	1.3	1.3
British Columbia	1.2	1.0	1.4	1.0

PIC Calculations using Labour Force Survey Data. For details of Cols. 1-3, see Cragg, *op. cit.*, Ch. IV. Col. 4, see Thirsk, *op. cit.*, Ch. V.

It will be noticed that these calculations indicate much more seasonality both in employment and in labor force participation in the Atlantic region than in Ontario, as well as substantially higher seasonal unemployment. Quebec also has considerably more seasonal employment than Ontario, but this is not matched by greater seasonality of the labor force participation. These seasonal patterns, in conjunction with the other factors mentioned, go a long way towards explaining the higher observed unemployment rates in the Atlantic region and Quebec relative to Ontario's unemployment rate.

[12] Cf. Cragg, *op. cit.*, Ch. IV.
[13] Cf. Thirsk, *op. cit.*, Ch. V.
[14] As noted in Chapter IV, these methods of calculating what the unemployment rate would be in the absence of seasonality are necessarily arbitrary, but the regional comparison is valid.

Many of the features which account for the unusually high average unemployment rates experienced in the Atlantic Provinces and Quebec may also help to account for the unusually wide fluctuations in unemployment which they experience. With narrower labor markets than Ontario, it might be expected that a similar change in the unemployment rate in these regions would reflect a less marked change in the ease with which employers are able to fill job vacancies or job-seekers find positions. Furthermore, changes of this sort in labor market ease or tightness may be less evident to participants in less well-integrated labor markets than they would be in Ontario, so that when a change occurs it may take longer for it to be appreciated generally. Thus the features of these labor markets which help to explain their higher unemployment rates may also help to account for the wider cyclical variability in unemployment rates which they experience.

These differences in economic structure are probably reinforced by patterns of migration[15]. When regional unemployment is relatively low, the pull of higher wages in the more prosperous parts of the country is likely to lead to more migration than when unemployment is higher, since the risk of not finding a job—and hence of not being able to enjoy the higher wages—is less. In the short run, such migration tends to increase unemployment or fill vacancies in the area to which the migrants are going, and to reduce unemployment or create vacancies in the areas from which they come.

This feature of migration behavior is reinforced by a tendency, when unemployment rises, for recent migrants who lose their jobs to reutrn to the area they had previously left. As a result, their unemployment is often recorded in the latter region rather than in the one in which they lost their jobs. Such return migration is, however, less important in explaining regional unemployment patterns than the tendency of plentiful employment opportunities elsewhere to pull people from the less prosperous regions.

It may also be noted that immigration patterns have some tendency to reinforce the effects produced by internal migration. Immigrants naturally tend to go mainly to the more prosperous regions and these flows respond, with lags, to general economic conditions. Thus, throughout most of the post-war years, over half of all immigrants to Canada were destined to Ontario. At the same time immigration served to reduce the extent of the pull of the tight Ontario labor market which would otherwise have been felt by those with roughly comparable skills who remained unemployed in other regions[16].

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[15] Cf. J. Vanderkamp, "Migration Flows, their Determinants and the Effects of Return Migration", *Journal of Political Economy*, 79:1012-1031, September/October 1971, and "Interregional Mobility in Canada: A Study of the Time Pattern of Migration", *Canadian Journal of Economics*, 1:595-608, August 1968.

[16] The importance of immigration as a factor in the total Canadian labor market can be judged from the fact that 16 per cent or over 1,300,000 members of the labor force in 1971 were immigrants who had come into the country since 1945. The participation rate of immigrants in the labor force has been around 65 per cent, some 10 percentage points above that for Canada as a whole. For several years prior to 1962, the unemployment rate among immigrants was consistently somewhat higher than the national rate. Since 1962, the reverse has been the case.

There is, finally, some evidence[17] that changes in output are more nearly matched by changes in employment in the eastern regions than elsewhere. This may arise from differences in industrial structure, in the skill composition of the labor force, and in attitudes which make employers more inclined to lay off their employees when demand slackens.

The differences in economic structure discussed above lend considerable plausibility to the belief that market mechanisms do indeed tend to even up the pressures of demand in labor markets throughout the country, although a similar degree of market tightness is indicated by different unemployment rates in different regions. A plausible case can also be made, however, that the operation of these market mechanisms is frustrated in considerable measure by institutional factors, with the result that many job-seekers in the eastern regions of Canada are, in effect, priced out of the market.

There are two ways in which this can happen. On the one hand, some employers may be prevented by institutional factors from offering employment at wages below a certain level, even though these lower-paid jobs might find willing applicants. This results in a form of job-rationing in certain areas of the regional economy and thereby adds to unemployment. On the other hand, however, additional institutional factors may make many job-seekers unwilling to take lower-paid jobs even where such jobs are available.

There are, for example, certain national employers who pay the same wage rates in all parts of the country[18]. Others have regionally differentiated wage structures, but as a matter of course give identical percentage increases to employees in all regions. There are also cases of collective bargaining of a multi-regional character which tend to produce similar effects. In all three cases, the institutional framework in which wage patterns are set militates against wages being responsive to changes in relative economic conditions in the various regions. Furthermore, there are certainly instances where emulation of wage increases in Ontario has played an important role in the process of wage-setting in the eastern regions.

It would be seem implausible that such institutional links among regions could dominate the wage-setting process entirely, even though they clearly play a major role. In some areas of wage-setting only the most indirect and nebulous connections among regions can be found and yet, oddly enough, the co-movement of wages in these industries seems as close as in others[19]. One would have expected wage trends in these industries to show more regional variation, both because of the lack of direct ties and because of the effect on local employment and labor supply of wage trends in the industries where

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[17] Cf. Neil Swan, "Differences in the Response of the Demand for Labour to Variations in Output among Canadian Regions: A Preliminary Interpretation", Kingston, Ont., Queen's University, 1971. (Discussion Paper 41).

[18] Cf. Thirsk, *op. cit.*, Ch. IV.

[19] Cf. Thirsk.

binding institutional wage links exist. Nevertheless there can be no doubt that in percentage terms, changes in average wage rates for the various regions move closely together, both in total and in particular industrial divisions. The degree of similarity is such that the association between wage changes in the eastern regions and those in Ontario is closer than the association between these wage changes and the corresponding regional unemployment rates[20]. This could be taken as evidence that regional wage rate changes are institutionally linked to such an extent that they are unaffected by regional variations in demand pressure. It could also be interpreted, however, as evidence that regional variations in unemployment rates are simply a poor guide to the relative tightness of regional labor markets, which may not in fact vary nearly as much as these rates might suggest.

Even if the trend of some wage rates in these regions is in fact responsive to changes in local economic conditions, the existence of strong interregional ties affecting the trend of other wage rates may, nevertheless, contribute to their high average unemployment rates. The effect of these national patterns is to establish rates of pay in some jobs which are much higher for the levels of skill and ability required than is the case in others. As a result, it would be quite sensible for people who are looking for work to spend longer trying to obtain such jobs rather than settling quickly for lower paid alternatives. This would apply in the case of essentially similar jobs offered by different employers. It would also tend to produce less smooth progression in wage rates for the different types of jobs which an individual might hold than would be found in Ontario. Since the prospective rewards for making a careful search among openings are larger with such a wage structure, this may provide an incentive for accepting longer periods of unemployment. Although these arguments have some plausibility, they are at present in the area of supposition rather than of established fact.

To the possible effects on regional unemployment of the institutional tying of some wage rates to those in Ontario must be added those resulting from the levels of minimum wage rates legally in force. If these are kept high enough to have a significant effect, they will tend to put a floor on wage rates not only at the minimum level but also at related levels higher up in the skill category. This too will have the effect of removing many potential jobs from the market.

The level of unemployment in the less buoyant regions may also be influenced by the unwillingness of unemployed workers to accept job offers because of the income support available to those who are unemployed and by the value placed on leisure relative to steady employment. In the less buoyant regions as in other parts of the country the opportunity to draw unemployment insurance or to obtain welfare payments may mean that unless a quite well-paying job is available there is little economic incentive

[20] Cf. Thirsk, *op. cit.*, Ch. IV.

to accept employment. This tendency will be strengthened if the way of life of the population has been less subject to the discipline of the industrial system and there is a greater willingness to accept temporary periods of unemployment.

In the present state of knowledge it is not possible to attach weights to the various influences which might explain the higher unemployment rates typically experienced in the eastern regions of Canada. Thus it is probably the case that pressure to maintain excessively narrow wage differentials relative to Ontario has contributed in some measure to the relatively high unemployment rates of these regions. If it were not for these institutional forces linking wage rates in the different regions, it is possible that a lower national average unemployment rate could be achieved and sustained. To some extent, at least, wages in these and other areas of high unemployment are too high for the levels of productivity achieved with the result that they are being priced out of the market.

Even if this were not so, however, the structural characteristics of labor markets in the eastern regions of the country make it highly unlikely that they could achieve unemployment rates as low as in Ontario. Their unemployment experience is not simply the result of rigid elements in the wage structure on either the demand or supply side of the market, but is also a reflection of the greater difficulties encountered in these markets in matching available jobs with those who are looking for work.

International Linkages and "Imported" Inflation

The question of how and to what extent Canada can avoid importing inflation from abroad is similar in many respects to the questions we have just been discussing about the way in which inflation in Canada affects particular regions of the country. Just as the eastern regions of Canada are linked to the industrial heartland of the country by numerous channels of economic influence and institutional ties, the Canadian economy itself is linked to the international economy—particularly that of the United States—by many channels of trade and finance, institutional influences, and information and opinion flows.

There are also, of course, some significant differences between the intra-regional links within the country and the international links connecting Canada with the outside world. Regions within Canada do not have their own currencies, central banks, exchange rates or exchange reserves. Intra-regional flows of trade and finance are not subject to tariff and other barriers, nor are migration flows subject to restrictive immigration laws. The various regions share a common system of federal taxation, social insurance and transfer payments. Finally, no region within Canada approaches the national economy in terms of its relative size on the world scene or the diversification of its economic structure.

For all of these reasons, it should not be surprising to find that there is much less scope for regional variation in cost, price and unemployment trends within Canada than there is between Canada and the United States.

Nevertheless the view is widely held that the course of economic events in the United States is bound to exert a dominant influence over the behavior of the Canadian economy at all times, and that in particular Canadian experience of inflation is necessarily determined in large measure by price and cost trends in the United States. This view draws support from the empirical observation that over a period of many years rates of change in average wage and price levels in the two countries have moved in broadly parallel fashion, as indeed have rates of demand expansion, output and employment growth, and levels of capacity and manpower utilization.

There is, of course, a range of views on this matter. At the one extreme are those who believe that rates of increase in Canadian prices and wages are inexorably tied to similar rates of increase in U.S. prices and wages almost without regard to the behavior of the exchange rate or to levels of capacity utilization and unemployment in Canada. In their view, policies of demand restraint in Canada cannot prevent us from experiencing about as rapid a rate of inflation as in the United States, although such policies can retard the growth of output in this country and raise unemployment. By the same token, strongly expansionary demand policies in Canada can be relied upon to generate high levels of output and employment with little danger of generating more rapid inflation than in the United States.

A more orthodox view stresses the crucial role of exchange rate policy in determining how far Canadian experience of inflation can diverge from that of the United States. Accordingly to this view, so long as Canada remains strongly committed to maintaining the external value of its currency unchanged at some fixed level in terms of U.S. currency (or within narrow bounds under a floating exchange rate system), cost and price trends in Canada cannot be permitted to diverge very far or for very long from cost and price trends in the United States. If unusually strong demand pressures develop in the United States and lead to a burst of relatively rapid inflation, Canada too will be forced to expand demand and tolerate a comparable rate of inflation if it is to avoid appreciation or an eventual revaluation of its exchange rate. By the same token, the desire to avoid depreciation or devaluation of its exchange rate will force Canada to keep its rate of inflation from exceeding that of the United States, by setting some limit to its rate of demand expansion and accepting the associated level of unemployment.

It is not incompatible with the above analysis to believe that even under a fixed rate regime, the pressures on Canada's exchange rate resulting from divergent price trends in the two countries may take some time to develop and may be temporarily resisted by various means. Thus there may be more latitude than is sometimes realized for prices in Canada to diverge temporarily from the trend of U.S. prices *in the short run*. Nor does such a view deny the existence of various channels through which the prices of many goods in Canada are directly tied, via the exchange rate, to the prices of similar goods in the United States. What it does deny, however, is that these direct price links will automatically preserve balance of payments equilibrium and stability of the fixed exchange rate without the need for appropriate adjustment of demand management policies in Canada directed towards this end.

The logic of this position is that if a country like Canada wishes to exert a greater degree of independent control over the behavior of its domestic cost and price level, it must be prepared to accept greater flexibility of exchange rate movement over time. Advocates of a fully floating exchange rate argue that the stability of Canadian costs and prices could be effectively insulated from a rapid inflation of U.S. costs and prices by this means, since the impact on trade flows of the diverging internal price levels of the two countries would be automatically neutralized by appreciation of Canada's exchange rate. In practice, of course, the matter is more complicated. For example, a floating exchange rate would move not only in response to the relative change in U.S. and Canadian price levels, but also in response to temporary swings in capital flows of independent origin, to which the economy would be forced to adapt.

Leaving aside the question of the kind of exchange rate system most suitable to the needs of a country like Canada, there remains the empirical question of the extent to which Canadian experience of inflation during the 1960s was simply imported directly from the United States under the exchange rate policies actually followed.

There are a number of channels through which external influences directly or indirectly affect costs and prices in Canada.

To begin with, it is obvious that rapidly rising demand abroad—particularly in the United States—is likely to provide a strong stimulus to Canadian exports and capital investment. If the surge of foreign demand is fuelled by rapid monetary expansion in the United States, it may also be difficult for Canada to avoid following a similarly expansive monetary policy if it is regarded as undesirable to allow the exchange rate to come under upward pressure from capital inflows attracted by higher Canadian interest rates. The net effect will be to increase the pressure of demand on productive capacity in Canada and thus the degree of upward pressure on Canadian costs and prices.

In addition to these indirect effects via demand channels, an inflationary boom in the United States will tend to raise costs and prices in Canada directly in areas of the economy where these are closely linked to similar costs and prices in the United States. This can be seen most clearly in the case of internationally traded goods.

Thus, for example, Canada produces a number of important commodities which are traded on world markets at a price set by international conditions of supply and demand. The prices of these commodities in Canada are determined basically by the world price. Canadian conditions of supply and demand have little direct influence on world conditions or world prices and so, except for variations in the exchange rate, the Canadian price of these commodities will rise if their price abroad rises. These are the kinds of commodities whose producers have very little discretion over the prices charged.

No one knows exactly how large a part such commodities play in the Canadian economy, mainly because they shade off into commodities whose prices are heavily influenced by international economic conditions but whose Canadian producers do have some discretion in price-setting, perhaps because transportation costs provide a buffer. Thus, it might be thought that steel, though not traded on organized commodity markets, would be sold at prices determined on the world market. As events following the Canadian dollar devaluation of the early 1960s show, however, Canadian steel producers actually do have a substantial margin of price discretion. On that occasion they took the opportunity to increase their share of the domestic market rather than raising their prices fully into line with the increased prices of foreign suppliers of steel.

Foreign price movements generally do, however, strongly influence Canadian prices in the case of goods for which export demand or competition from imports is an important feature of the market facing Canadian producers or distributors. An increase in foreign prices unmatched by an increase in Canadian prices will tend to stimulate the demand felt by Canadian producers as purchasers switch towards Canadian sources of supply. Similar changes in relative prices and shifts in demand occur when Canada's exchange rate is devalued. The effect of this increased demand is to put upward pressure on Canadian prices of the goods in question as output rises toward capacity. In attempting to increase their output, the Canadian producers will try to hire more labor and may raise wages in the course of doing so. If the increased demand in these industries is not matched by offsetting declines in demand elsewhere in the economy, overall demand pressures on the capacity of the economy and on costs and price levels generally will increase.

Another route through which rising foreign prices exert upward pressure on Canadian prices is by increasing the cost of imported raw materials. These goods are important inputs into Canadian production and when their prices rise, Canadian prices will also tend to rise as these costs are passed on.

Like those previously mentioned, this channel of foreign influence on Canadian prices may be of considerable importance. It is not, however, the dominant one. Thus, if one compares the pattern of Canadian price changes in recent years which might have been expected if this were the main channel of transmission with the pattern that actually occurred, the similarity is not very great[21]. Indeed, a closer approximation to the actual record is achieved by assuming that Canadian output prices simply move in harmony with output prices in other countries.

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[21] Cf. Kelly.

Finally, there may be a tendency for at least some Canadian wages and prices to be raised in line with foreign wage and price increases even where no demand or cost-raising mechanisms affecting the position of Canadian producers are involved. In most cases, of course, mechanisms of this kind are present in some degree, but even in such instances the similarity of movement of wages and prices is often closer than might be expected simply as a result of identifiable forces of this kind.

Thus many researchers have found that even when account is taken of their impact via demand and cost effects, U.S. prices or wages still seem to have a residual effect on Canadian prices or wages through channels which are not readily apparent[22]. Rather disturbingly, in some cases it appears that this residual influence works without respect to changes in the exchange rate. That is, a particular price or wage change in the U.S. is reflected in Canadian prices or wages in the same way whether or not the exchange rate also changed during the period.

There are a number of possible reasons for research findings of this kind. First, they may arise for spurious, technical reasons. Historically, changes in demand pressures on capacity and in unemployment levels in Canada have closely paralleled similar changes in the United States. As in Canada, U.S. prices and wages appear to respond to changes of this kind in economic conditions in that country. Any failure to capture Canadian demand and cost conditions fully in research studies may thus leave room for U.S. prices and wages to seem to play a larger role in determining Canadian prices and wages than is actually the case. While it is possible that this accounts in part at least for such findings, it is quite possible, and indeed likely, that they also reflect the existence of additional links with the U.S. than those mentioned above.

Thus it is quite possible that changes in certain U.S. prices and wages are used by Canadians as indicators of particular price and wage changes that would be appropriate in Canada. As we have noted repeatedly, the situation facing those who make economic decisions is surrounded with a great deal of uncertainty about future market demand conditions and about the appropriate wage or price response. Historically, product and labor market conditions in Canada have broadly paralleled those in the United States and the responses appropriate to U.S. conditions have also turned out to be appropriate to conditions in Canada. Thus by entering into the formation of expectations about Canadian demand conditions, wage and price changes in the United States may well impinge directly on Canadian wages and prices.

In many cases this expectational link may be even more direct. Thus changes in demand conditions in the United States may be thought of as applying to Canada as well, and not simply as indicators of the way the situation may be developing in Canada. Canadians are exposed to a flood of information about U.S. economic conditions through the various communications media. It is not unusual to find Canadian economists or business men

[22] Cf. e.g., Taylor, Turnovsky and Wilson, or Bodkin, Bank, Reuber and Robinson.

discussing current developments on the basis of reports on U.S. television or in U.S. news magazines and treating these developments as applying to Canada. If this carries over to domestic decision-making, the result would be that some Canadian decisions are made on the basis of demand conditions in U.S. product and labor markets.

It is sometimes argued that direct emulation of U.S. rates of wage increase plays an important role in the setting of Canadian wage rates. The discussion of "parity" in collective bargaining is often pointed to as an indication that such behavior exists, and the case of the automobile workers is often cited as a specific example. However, the automobile industry is a special case, especially with the existence of the U.S.-Canada auto agreement, the logic of which would tend in any event to produce parallel movement in the wages of automobile workers in the two countries. It seems highly unlikely that similar forces are very general in the economy. It is difficult to argue that the degree of labor mobility across the border has, in effect, created a single labor market, or that collective bargains where parity is a real issue play a major role in the determination of wage changes in Canada.

Our own interpretation of the part played by external links in influencing the behavior of Canadian prices and wages during the 1960s may be summarized as follows. A dominant influence was the fact that rates of demand expansion and levels of capacity utilization in the two countries tended to move in broadly parallel fashion over the course of the decade. The devaluation of the Canadian dollar by more than 10 per cent early in the period served as an additional source of upward pressure on Canadian prices and wages over the next several years during which this new fixed rate was maintained. In part this was a reflection of direct price links in the area of internationally traded goods and subsequent spill-over effects into other areas. In part too, however, the devaluation added further demand stimulus in the export and investment sectors of the Canadian economy, and the fixing of the exchange rate made it difficult for Canadian monetary policy to be much less expansionary than in the United States.

The result was that for some time Canadian prices tended to rise appreciably faster than in the United States. By 1965-66 the inflationary boom in that country was becoming very intense, and before long the U.S. unemployment rate had fallen appreciably below the rate in Canada—a reversal of the situation earlier in the decade. Beginning in 1967 the rate of increase in the U.S. price level exceeded that in Canada by a significant margin through to 1971. Such an observation is not difficult to explain in terms of the differing degree of demand pressure on capacity in the two countries, but much less understandable if the direct links between overall price levels in the two countries were the dominant factor.

On the whole, therefore, our reading of the evidence is that overall price and cost trends in Canada are not necessarily dominated by those in the United States, although the exchange rate policy followed by Canada is of key importance. In the short run, there appears to be some scope for divergent cost and price behavior in Canada even under a fixed exchange rate. In the longer run, however, the possibility of insulating Canada to any important extent from inflation in the United States would seem to require the accommodation provided by an appreciating exchange rate, both to overcome the problem of direct price links and to permit the maintenance of substantially different demand policies.

chapter six

THE "TRADE-OFF" BETWEEN INFLATION AND UNEMPLOYMENT

Introduction

We are now in a position to summarize our view of the causes, processes and consequences of recent inflation in Canada. We have indicated that a buildup of strong demand pressure on Canada's productive capacity and manpower resources initiated the outbreak of inflation in the mid-1960s. Once the process of inflation had gathered considerable momentum, it proved highly resistant not only to the disappearance of excess demand conditions but also to a degree of demand restraint which generated a substantial amount of temporary excess capacity and unemployment. Why inflation has persisted as stubbornly as it has during this recent period of slack demand is the central question to which we have addressed ourselves.

We found that while something could be learned from studying the performance of the economy as a whole, some conclusions could only be drawn after we had focused on how particular wage and price decisions were arrived at in individual markets.

We have stressed the critical role of wage-setting decisions in the labor market in determining cost and price trends since the mid-1960s. There are two reasons for this. First, labor costs account for much the largest part of the total of costs, profits and other payments covered by the selling price of a unit of output. Second, the puzzling question of why inflation has persisted well after demand pressures have slackened is one that arises during periods when profit margins tend to be contracting sharply, while the share of labor income tends to be rising. As we have made clear, this does not imply that employees are more self-seeking than owners of the capital assets used in the productive process. It merely means that given a well-entrenched inflation, the characteristics of the labor market are such as to generate only a limited and lagged wage response to a slackening in the rate of demand expansion.

In particular, with the exception of certain situations noted earlier in which the power of unions has either increased substantially or has come to be used more effectively, we do not believe that the activities of labor unions have been a major factor in Canada's recent inflationary experience, notwithstanding widespread opinion to the contrary. We have argued that over a period of years including both recessions and expansions, unions whose power is growing can be expected to achieve higher earnings for their members than they would otherwise enjoy, but, other things equal, this will be at the expense of employment in those areas of the economy which are becoming more highly unionized. As a result, the supply of labor will rise correspondingly in other areas of the economy, and relative wage levels in such sectors will become correspondingly depressed.

Our analysis has suggested that since typical union contracts stretch over fairly lengthy periods of time, an *unexpected* demand inflation might cause union wage rates to lag behind the movement of wage rates generally. If such a demand-induced inflation were then halted rather abruptly, continuing large union pay increases might appear to be generating inflation independent of demand. Many of these increases, however, would be provided for under existing contracts or would represent "catch-up settlements" incorporated in new contracts.

The suggestion that unions are not a major independent source of inflation is consistent with the view that unions can reasonably be described as attempting at all times to advance the welfare of their members. The successful pursuit of this objective, however, results only in relatively higher wages for union members than for non-union workers, not in continually rising general wage levels.

It is worth noting that an inflationary recession like that experienced at the beginning of the 1970s is not a new phenomenon, but rather an old one in somewhat altered form. It is sometimes said that the "laws of economics" are no longer working the way they formerly did. This conclusion is drawn from the persistence of "inflationary" wage increases in the face of abnormally high unemployment, a phenomenon attributed to the activities of labor unions. It is worth recalling, however, that in the early 1930s when unionization was still relatively insignificant in North America, a considerable period elapsed before wage and price levels showed much response to the massive rise in unemployment experienced at the time. While it can be argued that an absolute decline in money wage levels is likely to meet particularly strong resistance, there is a sense in which a money wage which does not fall when it might be expected to do so is as difficult to explain as one that continues to rise at a faster rate than might be expected.

Our basic explanation of the recent inflationary recession turns on the nature of the labor market. As we have pointed out, one characteristic of labor markets is that buyers and sellers ordinarily cannot observe quoted prices for standardized items as they can in continuous auction markets such as stock or commodity exchanges. The heterogeneous characteristics of both jobs and employees help to explain why many agreements to buy and sell labor are made only after a time-consuming and expensive search on both sides. The lack of regular price quotations implies that both sides of the labor market exercise some discretion in making or accepting particular offers. If wages have been rising at much the same average rate for some time, then an easing of demand pressure will have to affect these discretionary judgments before much change can occur in the rising trend of prices for labor services. Only after excess supply conditions in labor markets have become obvious will there be much tendency for the average size of wage increases to diminish.

We have also pointed to a second characteristic of labor markets which makes it unlikely that enough slowing of the rate of increase in wages will occur in the short run to equate demand with supply, even when it is widely recognized that labor market conditions have eased considerably. Given the desire for security on the part of wage and salary earners, both employers and employees find it in their interest to manage their relationship on the understanding that some security of jobs and relative pay levels will be provided in return for somewhat lower wages and salaries over time. Thus, employers will be restrained in their own interest from cutting back on pay increases so long as they believe that a period of slack demand may represent only a temporary pause in a long-term inflationary trend.

While there are obvious institutional differences between non-union and unionized labor markets, we have suggested that similar forces are at work in both. For example, the interruption of an inflationary demand expansion can be expected to have lagged effects on the rate of wage increase not just for non-union labor but also in the unionized market. In this market previously agreed upon wage increases will continue to take effect despite the slackening of demand. For some time as expiring contracts come up for renegotiation both parties to the wage bargain will have limited evidence on which to predict a change in future demand conditions. If demand for labor continues to be weak, then the longer-run effect will be an eventual downward adjustment of expected rates of wage inflation—and hence of actual rates of increase of bargained wages—to conform with the slowing of demand growth actually experienced. But this is a longer-run adjustment, and if inflationary expectations are deeply rooted, wage increases in both union and non-union markets may continue for some time to anticipate more rapid inflation than is consistent with actual demand conditions. In large measure the trend of prices will reflect this upward pressure on labor costs, and the combined result of these wage and price trends will be to dampen the growth of output and employment so long as these trends continue.

The "Trade-off" Between Inflation and Unemployment

It has long been a common belief that, at least over short periods of time, relatively low levels of unemployment and relatively rapid inflation go hand in hand. Conversely, depressed output and employment conditions have long been associated in the public mind with periods of decelerating inflation or, in earlier times, periods of falling prices. This view, once based upon casual evidence, has gained support in recent years from systematic study of the relevant data, originally stimulated by the work of Professor A. W. Phillips on the historical relationship of wages and unemployment in the United Kingdom. In recent years a number of attempts have been made to provide an analytical explanation of why a relationship of this kind might be found in economies where fluctuations in output and employment have been a normal part of economic life.

Our own analysis of the labor market, which draws upon and extends the recent work of various economists, provides analytical support for the existence of a short-term relationship of this kind. At the same time, however, both theory and accumulating evidence make it increasingly apparent that the relationship is considerably more complicated than it was once thought to be. As we have emphasized in our earlier analysis, there are lags in the response of wages and prices to changes in the pressure of demand. This alone implies a trade-off. If prices and wages do not respond immediately to a change in demand, then output and employment will. It also implies that the trade-off is only transitory if wages and prices eventually respond fully. It is our purpose here to examine more closely the question of whether in the end wages and prices can be expected to respond fully to a change in demand, with no lasting effect on output and employment levels.

One reason why employment responds to an increased rate of demand expansion is that there is normally some slack in the labor market. While this is clear in periods of pronounced recession, it is also evident from what we have said earlier that this is also the case at "normal" levels of unemployment. Indeed, if we were to define "full employment" in Canada as the lowest level of unemployment at which existing rates of price and wage increase have no tendency to rise, then it is evident that under these demand conditions there will be many labor markets in which a significant proportion of the labor force is classified as without work and actively seeking work. Why is this?

An Economic Explanation of "Normal" Unemployment

Most explanations of unemployment begin with a classification of various types such as frictional, seasonal and structural. We have found it more helpful to classify the circumstances producing measurable unemployment at the "full employment" level into a set of categories more clearly related to the traditional economic concepts of demand and supply. The offer and acceptance of a job is like the proposal and acceptance of marriage: it requires two willing partners and success in finding each other. Thus, unemployment can arise from problems on the demand side or the supply side of the market, or from difficulties and delays in bringing demanders and suppliers together.

Unemployment which can be attributed to the demand side of the market will result if employees are willing to accept jobs at a given money wage but employers are not prepared to hire all qualified applicants for work. This could be described as job rationing unemployment. Conversely, if the employer is willing to hire at a given wage but the employee declines to accept the job, the unemployment can be attributed to difficulties on the supply side. In this case the employee is in the same position as someone who offers a product for sale but specifies a minimum price. This is called the "reservation price" for the product, since the seller is prepared to reserve his supply from the market at prices below the reservation price. An employee whose alternatives are such that he is not prepared to accept a job at a wage less than a particular figure is in effect reserving his time for himself, and his resulting unemployment can be described as "reservation price" unemployment. Finally, if both employees and employers respectively are willing to offer and accept jobs at a given wage level but have not yet found each other and successfully negotiated an arrangement, this will be reflected in temporary unemployment. This concept is close to what has been called "frictional" unemployment, but it is more meaningful in economic terms to call this "search" unemployment.

Taking these in reverse order, search unemployment can be thought of as that part of measured unemployment under prosperous economic conditions which is not in fact a waste of human resources but rather a necessity if people are to find their most effective and profitable employment. In the labor market, as in most other markets, there is always some unsatisfied demand and some available supply at the equilibrium price. Thus in markets for products, sellers maintain inventories of unsold goods and buyers who wish to make a purchase often shop for some time before they are satisfied that a particular article is the best they can get for the price. Similarly, in the housing market at any point of time some apartments are vacant and some potential tenants are searching for an apartment of the kind they want at a price they are prepared to pay. In labor markets when overall demand and supply are approximately in balance, there will be some unemployment which fulfills an analogous function. The typical job-seeker, rather than take the first job that comes along, will find it to his advantage to take some time to find a reasonably suitable opening. Although some job-seekers already have an existing job, many others (including new entrants into the labor force) do not, and hence are classified as unemployed.

A second kind of unemployment which may exist even under "full employment" demand conditions can be thought of as arising from forces on the supply side of the market, although the determination of wages or unemployment necessarily involves both supply and demand factors. There may be jobs or potential jobs available for which unemployed people in the area are qualified, but they may choose not to take these jobs at the particular wage levels offered. This means that their supply price for certain jobs is above the wage offered. There are many reasons why this might be the case. Numerous individuals, including many young people, some housewives and some approaching retirement, have only a marginal attachment to the labor force and will choose to work only if labor market conditions are particularly favorable. With the existing levels of unemployment insurance benefits, any increased earnings from holding a job may not be thought worth the effort. The same will be true of some recipients of public welfare payments who may also lack the motivation and work habits of the regularly employed. There are also many unemployed persons whose decision to accept a job is affected by the size of their own accumulated resources or their access to sources of support from their families or others.

In all such cases, it could be argued that the resulting reservation price unemployment is not "involuntary" since the individuals concerned choose not to work at the current money wage available. It is not a matter of their being unable to find any type of work because of some form of job rationing. Many of these people do, however, turn up in the unemployment figures. In response to an inquiry as to whether they are looking for work some may well respond in the affirmative, since they are looking for work in the sense that they would accept a job if the pay were sufficiently high. Seasonal unemployment, for example, involves individuals who expect to be unemployed more or less regularly, but who can also look forward to future seasonal employment and thus are unprepared either to accept low-paying temporary jobs or to move to another labor market.

This explanation in terms of the supply price for labor services can also be applied to the unemployment which arises from inadequate mobility. If there are qualified unemployed persons in one part of the country and jobs available in another, the economic explanation for people choosing to remain wholly or partially unemployed is that the wage required to attract the supply of labor to the new location and fully compensate for any costs or other disadvantages involved is above the wage being offered.

A third kind of unemployment which may exist even under "full employment" demand conditions is attributable to what we have described as "job rationing"; that is, a situation in which unemployed suppliers of labor are willing to accept work at the going wage, but there is a limited demand for their services. When an excess supply of labor develops, firms will be in a position to reduce the rate of increase in the wages they pay, but they may nevertheless choose to continue offering wage increases larger than would be required to maintain their desired work force. We have argued that such behavior is profitable for the employer if it lowers the average wage he has to pay over the longer run for a given quality of labor. Since job rationing implies an excess supply of labor willing to take employment at existing rates of increase in wage levels, it might be supposed that the involuntary unemployment created in this way could be eliminated by expanding demand without raising the rate of wage increase. Unfortunately, this is not so.

One reason for this is the degree of dispersion in the labor market conditions confronting particular employers at any point of time. We have already discussed chronic regional disparities in unemployment, but even in parts of the country in which there is a reasonable overall balance between labor demand and supply, conditions in particular sub-areas of the labor market will show a good deal of diversity. This is partly the result of continuous shifts in the demand for the final output of particular firms or industries arising from changes in taste, new commodities, changing techniques of production and new sources of competition. It is also partly the result of changes on the supply side of the labor market as the number and skill of people seeking work in particular occupations vary over time.

These fluctuations in demand and supply in different labor markets cannot be offset completely by geographical or occupational shifts except over the long run. This means that even with a steady average rate of wage increase, some labor markets will be in balance, some will be characterized by excess demand and some by excess supply. One implication of our earlier analysis which suggested the likelihood of asymmetrical wage responses as between tight and slack labor markets is that a larger proportion of the labor force will be found in excess supply markets than in excess demand markets.

Long-term understandings between employers and employees will not prevent firms from offering larger wage increases when their labor market tightens, but they may well restrain firms from offering much smaller wage increases even after they have come to recognize that they could do so without an excessive loss of employees. Thus, a given degree of slackening of demand pressure in a particular labor market will lead to a smaller reduction in the size of the wage increases offered than a corresponding degree of tightening in another market will produce in terms of enlargement of wage increases.

To offset this asymmetry of wage response and to maintain a stable overall average rate of wage increase, there must be more workers involuntarily unemployed by job rationing in the abnormally slack labor markets than the number who are temporarily drawn into employment in the abnormally tight markets through any consequent reduction in search or reservation price unemployment. The greater the dispersion in labor market conditions the greater will be the extent of involuntary unemployment due to such job rationing.

With continual demand fluctuations in individual markets there will be other sources of job rationing in those markets which have an excess supply of labor. Unions in such markets will have established a pattern of wage rate increases which sets a minimum for particular firms. Thus, while particular employers might find it profitable to take on additional workers at a lower wage, they are not free to do so. The same result can follow from the existence of legal minimum wages. If the minimum wages that employers in a particular labor market are permitted to offer are higher than the value to these firms of some of the workers available, there will be job rationing within that labor market and hence some involuntary unemployment.

It should not be inferred that an unemployed person is unemployed for only one of the reasons set forth above. For example, he may at one and the same time be barred from work by one or more of the different forms of job rationing described above, but also unprepared to accept a job which pays less than he is accustomed to receiving or unwilling to accept the economic and non-economic costs of moving to another location. The terms "search", "job rationing", and "reservation price" unemployment are only labels helping to clarify and classify the various mechanisms which give rise to the level of unemployment recorded under the overall demand conditions we have defined as those of "full employment".

How Unemployment Responds to Changes in Demand

Having analysed the various forces which generate a certain level of unemployment under aggregate demand conditions consistent with stable rates of increase in wages and prices, we now turn to what happens when—starting from such a position—the rate of demand expansion accelerates. It will be argued that such an acceleration of demand growth will produce a trade-off between less unemployment and higher rates of increase of wages and prices, but that in principle this trade-off should be only a transitory phenomenon. Eventually, the rates at which wages and prices are rising should tend to stabilize at some new, higher level with no lasting reduction in the original level of unemployment. If, on the other hand, the starting situation were one of less than "full employment", then an expansion of demand could lead to a rise in employment which would not be eroded by consequential effects on wage and price trends.[1]

[1] The analysis which follows focuses on the wage and employment responses in the labor market to an increase in the rate of growth of demand for output. The process of adjustment in the labor market is, of course, merely one aspect of the economy's total response to a disturbance of this kind. The nature of the parallel process of adjustment occurring in the product market is described and analyzed in Chapters I and III. Briefly, the initial response in the product market is a speeding up of output and productivity growth which slows the rise in unit labor costs and enlarges profit margins. The increased demand for labor is of course derived from the increased demand for output. In time the surge of output and employment growth raises operating rates to unusually high levels in relation to capacity and reduces unemployment to unusually low levels. This means that the rates of growth of output and productivity must necessarily slacken, while the rate of increase of prices will speed up in response both to the tightening of product markets and to the upward surge in unit labor costs. The latter phenomenon, of course, results from the combination of larger increases in wage rates and smaller productivity gains, and its normal consequence at this stage of the economic expansion is a progressive contraction of profit margins in spite of sharply rising prices.

This can be seen by considering the effects on a "fully employed" economy of a speeding up of demand expansion from a rate consistent with steady growth in money wages at, say, five per cent a year to a rate which would be consistent with steady growth in wages at eight per cent a year. In those labor markets which are in balance or in which there is excess demand, existing rates of wage increase will tend to rise. This will lead to some reduction in both search and reservation price unemployment, since potential employees will not immediately foresee that these stepped-up increases in their money wages are merely a reflection of a more rapid inflation of costs and prices generally and hence will not mean correspondingly larger increases in their real wages.

Since all employers in the tight labor markets will be stepping up their wage offers at the same time, they will not succeed in attracting as many new employees as they had expected. They will, therefore, tend to raise their wage offers even higher, and this may further reduce the amount of search and reservation price unemployment. In time, however, those who are searching for employment will come to realize that the level of nominal demand throughout the labor market is increasing at a faster rate. They will raise their acceptance wage, and the level of search unemployment will rise. If this more rapid rate of demand expansion were maintained, the average acceptance wage should eventually rise by the additional three per cent a year which employers could now afford to pay under these demand conditions. Search unemployment would thus rise again to the same level that existed before the growth of demand accelerated.

On the other hand, in those labor markets characterized by involuntary unemployment due to job rationing, a somewhat different result seems likely. With demand increasing more rapidly, jobs will emerge for many of those who would have taken work had it been available when money wages were rising at their original rate. As markets move from excess supply and job rationing to conditions of excess demand, wage increases in these markets will become larger. Some markets, however, may remain in excess supply even when overall demand is growing more rapidly. Others may move into an excess supply situation due to adverse shifts in the demand for their output which run counter to the general forces of expansion. The speed of the process of wage and employment adjustment in these slack labor markets depends on the reaction of employers, unions and governments. To the extent that employers facing depressed demand conditions follow a policy of offering their existing employees something like the going wage increase even when this may not be necessary in terms of their own immediate staffing requirements, their wage increases will tend to move up in line with those in the excess demand markets. To the extent that unions operating in these slack labor markets also manage to keep the wages of their members rising more or less in line with average wages elsewhere, and to the extent that governments also take steps to keep minimum wages in line with the faster average rates of increase in wages and prices, then the degree of job rationing in the economy will in time be restored to its original level.

Some of those who are continuously or intermittently unemployed because their reservation price is above the wage levels currently being offered will be drawn into employment when the rate of demand expansion rises, since some employers will be prepared to make offers at or above their reservation price. But to the extent that larger price increases cut back the increase in real wages, and to the extent that increases in unemployment insurance benefits, welfare payments or the support provided from private sources also rise in line with price and wage increases, these reservation prices will tend to be raised correspondingly. Thus the amount of reservation price unemployment will tend to move back up to its original level.

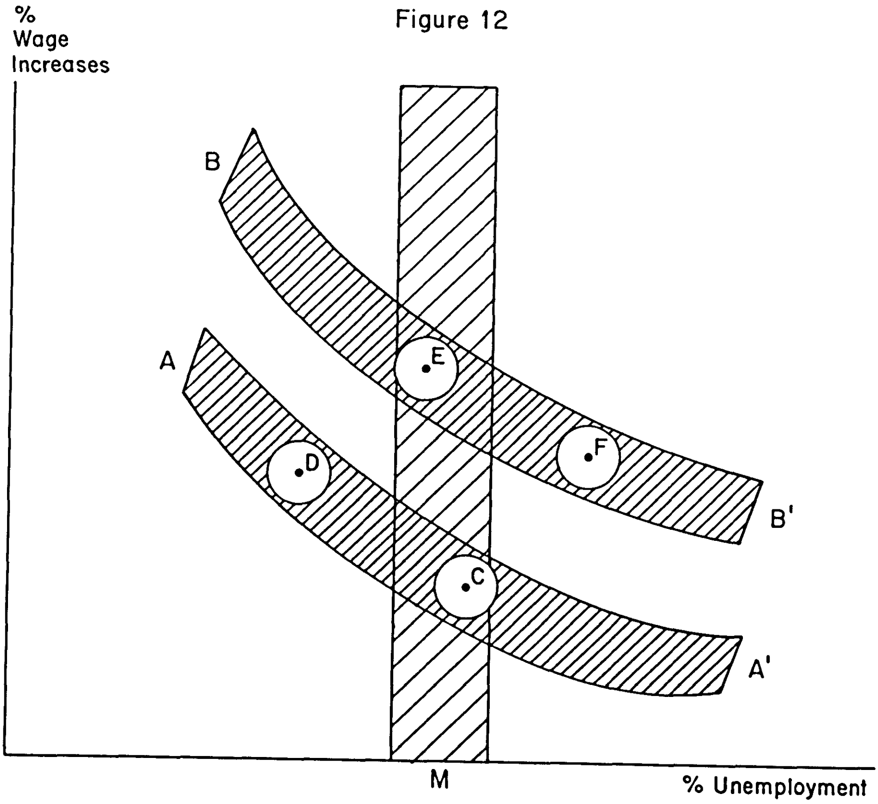
A View of the Trade-off

This analysis is illustrated in Figure 12, in which percentage unemployment of the labor force is measured along the horizontal axis and percentage wage increases on the vertical axis. The trade-off zone A–A′ shows the short-run reaction to a change in the rate of demand growth starting from point C, within the "full employment" zone, with a stable rate of increase in money wages and a range of unemployment around point M. B–B′ shows a new trade-off relationship when the economy has fully adjusted to an increased rate of demand expansion and the resulting higher rate of inflation.

Our analysis suggests that any particular trade-off zone is essentially ephemeral except at points around the "full employment" rate—the zone referred to earlier as the "critical range" of unemployment. Thus the point D represents the initial reaction of wage increases and unemployment to a speeding up of demand growth starting from an initial point around C. Thus, if faster demand growth reduces unemployment to a level such as D, the average rate of wage increase will begin to rise, and it will continue rising so long as unemployment remains below the critical range. Once adjustment to these more rapid rates of demand growth and inflation has occurred, the economy will tend to move to a point such as E, with roughly the same level of unemployment as at C, but with more rapidly rising wage and price levels.

There will, of course, be differences of view about how closely, in the real world, the unemployment rate at point E will approximate that at point C, and about the probable length of the time period involved in arriving at point E. Recent experience in North America appears to have had the predictable consequence of making people sufficiently alert to the prospects of inflation to make it likely that the movement to a point such as E would occur fairly rapidly. Different opinions continue to be held on this issue and the evidence is not clear enough to justify a dogmatic position. Unless, however, a strong case could be made that under present-day

Figure 12



circumstances point E could be expected to remain significantly to the left of C for a substantial period of time, the basic conclusions of the analysis presented here would be essentially the same.

If now an attempt were made to restore the rates of wage and price increase experienced at point C by reducing the rate of demand expansion, the short-run reaction would be to carry the economy to a point such as F, with substantially higher unemployment but only a limited reduction in rates of price and wage increase. If this slower rate of demand expansion were maintained for long enough, further adjustments could be expected to take place and the economy would be brought back to the neighborhood of point C with a trade-off zone somewhat similar to that in the original situation. The extent and duration of the unemployment which might result from attempting to bring about a change of this kind through demand policies alone is what led us to the view that in certain circumstances temporary price and wage controls could play a useful role as a supplement to demand management.

It will be evident to professional readers that the analysis we have made of the trade-off has much in common with what is frequently called the Friedman-Phelps view of the process. On the other hand, it will also be evident that in trying to relate the observed response of the economy to the behavior of individual economic units we have profitted from a variety of other analyses of the processes involved, including those of Abba Lerner and others, and the views put forward by James Tobin in his presidential address to the American Economic Association in 1971. Indeed, we are very conscious of the fact that we have been working in an area in which economic experience is continually providing fresh evidence, and in which professional economists in a number of countries are continuing to alter the way in which this and earlier evidence is interpreted.

In our view it seems doubtful that it is possible to achieve any significant long-run output or employment gains by attempting to run an economy below its critical range of unemployment through techniques of demand expansion. Indeed, as we shall be arguing below, subsequent attempts to check the inflation by restraining the growth of demand are almost certain to result in larger losses of output and employment than were gained initially. If, on the other hand, effective steps are never taken to check progressively mounting inflation, it is difficult to see what is to prevent the whole process from becoming cumulative and, in the end, explosive. Nevertheless, the notion of a trade-off between the cost of inflation and the cost of unemployment is still so widely discussed that a brief commentary on possible gains and losses may be useful.

The Possible Output Gains Bought by Inflation

One of the main arguments advanced on behalf of a policy of rapid demand expansion in pursuit of unemployment targets which are incompatible with price stability is that a less stimulative demand strategy would involve operating the economy well below its "potential" level of real output and longer-term growth. The magnitude of any such foregone output and growth, however, appears to be much smaller than it is often alleged to be.

Any calculation of the economy's "potential" output is bound to be rather arbitrary. Historically, output statistics have shown substantial fluctuations only partly related to the quantity of inputs employed[2]. Substantial ambiguity is introduced into the calculation because of the need to make rather arbitrary assumptions about the levels of resource utilization at which the economy can operate on a sustained basis. How serious these problems are depends on the use made of the "potential" series.

It is clearly useful to be able to compare the rate of output growth actually being experienced with an estimate of the maximum long-run or "potential" rate of output growth that the economy seems able to sustain at a constant level of utilization of its growing productive resources. This allows one to judge whether the intensity of use of the economy's manpower and other resources implied by its current rate of output is above or below what might be feasible over the longer term. For establishing the trend rate of growth of capacity output, it matters little what method of calculating potential is used or what unemployment rate is taken to represent a sustain-

[2] Output data are not completely reliable, and input data even less so.

able level of manpower utilization, since the calculated trend is not sensitive to these bench-marks.

For many purposes, however, reliable estimates of the *level* of potential output are needed as well as estimates of its trend rate of growth over time. This is particularly the case when the size of the "gap" or short-fall between actual and potential output is the focus of attention. It is also the case when estimates of potential output are used in calculating "full-employment" budgets for fiscal policy evaluation.

It might appear fairly simple to determine what difference a change in assumptions would make to the level of potential output. For example, if potential output were calculated at a four per cent level of unemployment rather than a five per cent level, it would seem fairly obvious that the additional workers drawn into employment would, in general, be less well-educated, less skilled and less productive than the labor force as a whole. The difference in potential output arising from this change in assumptions could thus be expected to be something less than one per cent.

From the very large numbers which are advanced as representing the short-fall from "potential" output at levels of unemployment above four or five per cent, it will be obvious that this is not the way in which such calculations are made. From the analysis in Chapter I it will be recalled that short-run fluctuations in demand lead to significant short-run changes in output and productivity. In addition, a substantial increase in the rate of demand expansion is normally accompanied by an increase in inputs of labor considerably greater than the reduction in measured unemployment, including a higher proportion of the working age population in the labor force and increased overtime working.

The variations in average productivity that accompany fluctuations in economic activity arise primarily from variations in the intensity of work being performed. When output falls off from a high level, not only does unemployment rise but substantial under-employment of the existing work force also develops throughout industry. In addition to lay-offs of workers and failure to hire replacements for those who leave voluntarily, many workers who remain on the payroll work less intensively than usual. In many cases it does not pay to let employees go when times are slack if it is expected that they will be needed again before too long, or if this will seriously affect the continuing relationship between the employer and his employees. Hiring is far from costless, and there are advantages in retaining employees who are familiar with their jobs and whose abilities and limitations are known to the employer. It is often the case that to cut down staff in response to a temporary decline in demand would require a reorganization of the workload which is neither costless nor easy. Thus when output declines, employment does not decline in proportion. When output picks up again, much of the increased demand for labor is met through more intense working of existing staff whose services were not being utilized fully during the period of slack demand.

This mechanism, however, is unlikely to work more than temporarily, especially when output surges ahead from levels which are already high. Any organization has some scope for achieving unusually high levels of utilization of its productive resources and manpower for short periods. On a temporary basis, employees may be willing to work harder than usual and for longer hours, and jobs of a routine or maintenance nature can be put off for a time until the pressure eases. In consequence, a relatively large increase in output may be achieved temporarily with little increase in employment. It is very unlikely, however, that this can be maintained for long. While people will put unusual exertion into their jobs for a while to meet unusual circumstances, they cannot be expected to do so indefinitely. The tasks which have been postponed will pile up and become pressing. These considerations suggest that the short-run relationship between changes in output and changes in employment may be very misleading as a guide to the longer-term possibilities for productivity improvement in the economy.

It is less obvious what longer-term effects an unusually low unemployment rate will have on the size of the labor force and on the average number of hours worked per week. The argument made earlier about the effects of stepped-up demand growth on reservation price unemployment is relevant here. Some of those outside the labor force will be prepared to enter the market if increased demand makes it possible for employers to meet their reservation price, while others will be prepared, at least for a period, to work overtime. This too may turn out to be only a temporary source of increased output as the balance between work and leisure comes to be decided on the basis of longer-term considerations[3].

While it has long been recognized that relatively large short-run output gains can be realized by increasing the rate of demand expansion, much of the attention given to this phenomenon stems from some work done by Arthur Okun a few years ago as a staff member of the Council of Economic Advisers, of which he was later the Chairman. The short-run relationship found to have held true in the past for the U.S. economy, sometimes referred to as "Okun's law", is that an output change amounting to a little more than three per cent has typically been associated with a change in employment of one per cent. Over half of such an increase in output comes from increased participation rates and hours of work, and a bit less than half from the changes in work intensity discussed above.

Okun has recognized, however, that the kind of multiple output gain he measured is a short-term one, and that the longer-term difference in output levels resulting from operating the economy at one level of unemployment rather than another will not reflect the special factors at work in the short run. As indicated above, economic logic suggests that over the longer term a difference of one per cent in the unemployment rate should make a dif-

[3] If it were to turn out that some increase in participation rates and hours of work persisted over a number of years as a result of lower unemployment rates, any gain in output would have to be weighed against the real costs of additional work.

ference of less than one per cent in output. Some econometric work done by the Commission produced results which, though far from conclusive evidence that this hypothesis is the correct one, were nevertheless consistent with it. Thus, in terms of foregone output, the cost of avoiding accelerating inflation may well be proportionately less than the cost in terms of foregone employment, not more.

The Costs of Inflation

Turning now to the costs of inflation, it has been our view that the principal and often overlooked cost which results from allowing inflation to take hold is the cost of bringing it under control again[4]. In discussing the other costs of inflation we have found it useful to make a distinction between anticipated and unanticipated inflation.

Many of those who argue that inflation is relatively harmless have in mind an inflation which is largely or wholly anticipated. In this type of inflation, wage and salary increases, pensions, interest rates and all other money payments would soon come to be fully adjusted to the expected rate of inflation, and the economy would perform much as it would under conditions of reasonable price stability. Even in this highly abstract world there are a few costs. Unless the anticipated (and actual) rate of inflation in country A is exactly the same as that in the rest of the world, a flexible exchange rate which smoothly adjusts to any such differences is required if misallocation of resources is to be avoided. Similarly, certain costs are necessarily involved in making upward adjustments in all prices as required. Finally, if demand deposits and currency bear no interest, there will be an incentive to economize on money holdings and this will involve a cost to society[5]. All of these

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[4] This point is discussed at some length in the Summary Report.

[5] In our view the question of the costs to society of the reduction in money holdings resulting from a fully anticipated inflation is of interest only to those with a fascination for theoretical niceties. We have suggested elsewhere that with a little institutional change and a bit of ingenuity most of such costs could be avoided. Not only could interest be paid on demand deposits, but it might also be possible to provide a form of interest payment on currency holdings. Once a year (or more often) there could be a revaluation day (set by the authorities without prior public notice) at which last year's currency was declared to have a value "x" per cent higher than this year's currency and could be exchanged on these terms. A different colored currency could then be issued and the whole process begun again. Thus at any point of time there might be two types of currency outstanding, the older one carrying a premium in terms of current purchasing power. Canadian cashiers who regularly have to deal in both U.S. and Canadian dollars at changing rates of exchange should be able to adapt to such a system without undue difficulty. Since there are some students of inflation who continue to regard this as a serious problem, it might be pointed out that a correction should be made in Professor Grant L. Reuber's widely used estimate of this cost for the Canadian economy published in his article, "The Objectives of Canadian Monetary Policy...", *Journal of Political Economy*, 72:109-132, April 1964. In the course of reviewing the literature on this subject, Professor Donald Gordon was struck by the inordinate size of Reuber's estimate, and when a recalculation was made it appeared that a decimal point had been displaced. Thus, the estimate of an efficiency cost of 2.3 per cent of national income for a rate of correctly anticipated inflation of four per cent should read 0.23 per cent of national income, and a similar adjustment should be made to all the other estimates shown in Table 7. Professor Reuber has agreed that an error of this kind was apparently made.

costs are relatively minor, and a case can be made that a fully anticipated inflation at some rate "x" would produce virtually identical results in terms of real income and its distribution regardless of the size of "x". Since a steady 50 per cent rate of inflation would seem as difficult to maintain as a two per cent rate, virtually all countries of the world which have shown some ability to control their rate of inflation have in fact opted for a low figure.

As a practical matter, therefore, the choice seems to be between reasonable price stability and varying rates of unanticipated inflation. This is the kind of inflation which most people have in mind when they talk of the advantages of seizing any short-term gains in output and employment from a rise in demand which leads to unanticipated increases in prices and money incomes. It is generally conceded that any gains of this kind should be balanced off against the arbitrary redistribution of income and wealth which results, as well as such losses as arise from the disruption of financial markets, the effects of increased uncertainty on the allocation of resources, the time and effort required to hedge against inflationary developments and, more generally, the social unrest which results from the struggle to avoid falling behind in the process.

This way of looking at the trade-off, however, ignores the costs of restoring the situation as it was prior to the inflationary outbreak. In effect, it assumes that changes in the rate of inflation will all be in one direction. Such an assumption raises problems which are frequently disregarded. We have argued earlier that people are able to learn from their experience of more rapid inflation and to adjust their expectations and behavior accordingly. If rates of change in the price level moved in only one direction, however, it is difficult to see why the public would not soon form expectations about the future rate of change in these rates of change. Experience suggests that there would be lags in the adjustment process, and the game might go on for some time before it developed an explosive character. Over the longer run, however, a policy of this kind would seem to involve increasingly intractable problems.

What has happened in the past in Canada is that on occasions when unanticipated inflation has been allowed to develop from an overshoot of demand, a subsequent attempt has always been made to bring the price level back under control by moderating the growth of demand. Our analysis of the response of the economy to demand changes of this kind it that any short-run output and employment gains achieved when more rapid inflation takes people by surprise are likely to be more than offset by the losses of output and employment required to reverse the process. When to the direct output losses of changes of this kind in both directions are added the disruptive effects on income distribution and the allocation of resources, a strong case can be made for avoiding the entire process.

This concludes our discussion of the causes, processes and consequences of inflation. On numerous occasions in the course of this study we have pointed out that reliable knowledge about many important aspects of the inflationary process must await the availability of more adequate statistical information. A number of recommendations to help in meeting this need will be found in Appendix A. Our view of the role of demand management and of the available policy choices which emerge from our analysis of recent inflation will be found in the Summary Report, which is reproduced as Appendix B of this volume.

Appendix A

DATA NEEDED FOR THE STUDY OF INFLATION

It is tempting to compile a long list of recommendations for expanding or improving the available supply of economic data in many areas relevant to our work. We are, however, very much aware that attempts to satisfy the demand for more and better data involve costs as well as benefits, and that in a world of scarce resources those who see particular needs for data improvement are under some obligation to consider the feasibility of their proposals and to order their priorities accordingly. Thus the discussion which follows is focused almost exclusively on the supply of information for analyzing and interpreting changes in unemployment, related aspects of labor market conditions such as job turnover and vacancies, and rates of employee compensation. In view of the central role played by the processes of wages and salary determination in the labor market in the preceding analysis of inflation, the reasons for our concentration on this particular area of data requirements will be readily apparent.

Few aggregate numbers have as great an influence on economic policy or attract as much public attention as the national average unemployment rate. The experience of recent years suggests that attempts in the past to reduce the unemployment rate much below some critical range by stimulating the growth of aggregate demand have produced tighter product and labor markets than were compatible with the maintenance of stable rates of increase in average price and cost levels. At what levels of unemployment this critical range was encountered can only be inferred from indirect evidence, and the critical range may well have altered in recent years in response to changing rates of external inflation and changes in the economy. Thus, for example, more generous unemployment insurance benefits may have tended to raise it while other policies, such as manpower training and regional economic expansion, have probably tended to lower it.

Nevertheless, in the formulation of economic policy it is clearly important to have a realistic view, based on reliable evidence, of the approximate degree of tightness in product and labor markets likely to be compatible with reasonably stable rates of change in prices and costs. The level of the national unemployment rate is far from being the best possible indicator of the overall degree of tightness in these markets, but to the extent that it is used for this purpose, reliable inferences are unlikely to be drawn without an extensive and detailed knowledge of the composition of this aggregate number and of the variety of changing influences that it may reflect. There can be little doubt that from this point of view the existing supply of information is far from adequate for reliable interpretation of the meaning of any particular national unemployment rate.

It is also clear that the kinds of unemployment experience which are lumped together in an aggregate measure of this kind differ widely both in terms of the degree of hardship they involve for the individuals concerned and in terms of how these particular individuals came to be counted as unemployed. At the one extreme, for example, some proportion of measured unemployment is accounted for by mature individuals with families to support whose periods of unemployment are frequent or of long duration, and who have little in the way of savings or alternative sources of income on which they can draw. We know very little about how large a group this is, or about the prior or subsequent employment experience of its members, or about the personal and sociological aspects of their predicament and its possible solution.

At the other extreme are those for whom becoming classified as unemployed for relatively brief periods is, in some degree, a matter of choice involving little serious hardship. Many examples come to mind—those whose occupations traditionally involve seasonal or intermittent lay-offs, those with a weak or intermittent interest in employment who have other sources of income and other activities to pursue, those who leave their jobs voluntarily to look for more congenial employment, and those who feel they are better off to remain unemployed rather than take currently available employment at going rates of pay.

Between these two extremes, of course, there are other and different types of unemployment. In general, however, our knowledge of the various categories of unemployment which make up the total in particular regions of Canada and in the country as a whole is far from adequate for an understanding in any depth of the degree of hardship involved or of the direction in which efforts to deal with the problem are required.

As things stand at present, the available statistics on national unemployment not only invite public misunderstanding but add to the difficulties of conducting economic policy on a longer and more realistic view of our problems than is typically reflected in today's headlines.

In the Commission's view, therefore, a high priority should be given to efforts to improve the supply of information about the many different influences reflected in the national unemployment rate and about the many different kinds of unemployment experience concealed within this aggregate measure.

Statistics Canada has already recommended a substantial increase in the sample size of the existing Labor Force Survey and a considerable extension of the range of information sought from respondents. There are a number of additional techniques for obtaining such information which deserve consideration. One might be to undertake a limited number of in-depth cross-section studies of the differing backgrounds, immediate problems and subsequent experiences of a representative sample of those recorded as unemployed as of particular survey dates. Considerably more information along these lines might be obtainable through such channels as the Canada Manpower Centres and the Unemployment Insurance Commission. Obviously, these suggestions do not exhaust the list of possibilities. A study by a small temporary task force of qualified persons with professional training in a number of relevant areas might help to provide a better public understanding of the nature of the unemployment problem in Canada.

Closely related to the need for better information about unemployment is the need for better direct measures of the degree of tightness in labor markets. The respective levels of unemployment and of job vacancies are at present measured on the basis of very different criteria. Reliable measurement of job vacancies requires that a vacancy meet very stringent conditions in order to be counted as such. The result is that direct comparisons of the number of vacancies and the number recorded as unemployed are quite misleading. Interpretation of the vacancy data is also rendered unnecessarily difficult by the absence of related data on job turnover. More detailed information on unemployment together with the data now available from the Job Vacancy Survey might usefully be supplemented by data on quits, separations for other reasons, new hires, and related indicators of labor market conditions.

A third area in which better information would be extremely useful is that of statistics on rates of employee compensation throughout the full range of occupational levels. At present we lack indexes of the price of labor services comparable in scope and quality with existing price indexes of various kinds. Thus, for example, it would be most helpful to have indexes of straight-time earnings corrected for interindustry shifts covering major sectors and regions of the economy. Much of the information necessary for compiling such indexes may already be collected from existing surveys, though perhaps not in precisely the form required.

The data presently available does not readily lend itself to meaningful comparison of levels of employee compensation as between union members and unorganized workers in comparable occupational, industrial or skill categories. Useable data for this purpose would be of considerable analytical value as well as of interest to the general public. The classification of wage rate data along these lines should present no insurmountable problems. Data permitting similar comparisons with regard to some of the more important types of fringe benefits might also be feasible to compile, though the difficulties involved would obviously be greater.

In this connection, it should be noted that at present the responsibility for producing statistics with respect to rates of employee compensation is shared by Statistics Canada and the Canada Department of Labour. While a strong case could be made for assigning the primary responsibility for the production of wage and earnings statistics—like other basic economic data—to Statistics Canada, there are obviously a number of important considerations which argue against such a change. As a practical matter, the main difficulties posed by the present division of responsibility would seem to be capable of satisfactory solution if the activities of the two agencies in this important area of economic statistics could be coordinated more closely than at present.

In addition to the need for better wage and salary data is the related need for more reliable measures of gross and net profits. Statistics Canada has already provided the Commission with consistently defined data for the calculation of income shares in the non-farm commercial sector of the economy. These estimates might usefully be continued on a regular basis and extended to other sectors as the necessary resources become available.

One specific area in which the Commission has been active in urging the development of better information is that of planned construction outlays classified by geographical area and by type of construction. Proposals along these lines developed in cooperation with other bodies are outlined elsewhere[1].

[1] "Construction and Inflation", Special Commission Report by G. V. Haythorne.

APPENDIX B

SUMMARY REPORT

CONTENTS

PREFACE

The terms of reference set forth in the Order-in-Council under which we were appointed in June 1969 were "to inquire into and report upon the causes, processes and consequences of inflation and to inform those making current price and income decisions, the general public and the Government on how price stability may best be achieved".

To complete this assignment we decided some time ago to make available a summary version of our report intended for wide distribution, and a fuller account directed to a smaller audience containing a more comprehensive and technical analysis of the issues.

It was our intention to issue both the summary and the more detailed analysis at the same time, but the task of putting the various documents into final form for publication has turned out to be a more difficult and time-consuming process than we had anticipated. To avoid delay, we are releasing the Summary Report prior to the publication of the supporting material and the research studies prepared in the course of the Commission's investigations.

When the Commission held its first meeting on July 2, 1969, we were temporarily housed in the noise and the dust of the old Union Station then in the process of being reconstructed as a conference centre. Since then we have found ourselves fairly continuously in the noise and the dust of controversy, first, with the attempt to get general agreement on a price and income restraint program; second, with the National Conference on Price Stability and the resulting price restraint program; third, with the announcement and application of the six-per-cent wage and salary target; and fourth, with the planning and discussion of the possible use of mandatory controls.

The life of those concerned with incomes policy in other countries has never been an easy one and we have been neither surprised nor embittered by the events of the last three years. What has been particularly heartening is the help we have received from a variety of sources. Throughout there has been a band of interested people who have felt that some form of incomes policy may be needed and they have always been ready to lend support. This is particularly true of our own staff and former colleagues who, when things looked at their worst, always showed at their best.

INTRODUCTION
AND SUMMARY OF CONCLUSIONS

How to avoid drifting into increasingly severe and chronic inflation in the pursuit of high levels of employment and income is one of the central questions of economic policy of our time.

Throughout the post-war period, virtually every country in the western world has found that as strongly rising demand carries output and employment to progressively higher levels, a stage is reached where substantially larger and more widespread price and cost increases are encountered. Once a marked escalation of price and cost increases has occurred, it has rarely subsided in response to a subsequent easing of demand pressures without a pronounced – or prolonged – interruption of the rising trend of output and employment.

In his presidential address to the American Economic Association in December 1971, Professor James Tobin remarked:

> "Unemployment and inflation still preoccupy and perplex economists, statesmen, journalists, housewives and everyone else. The connection between them is the principal domestic economic burden of presidents and prime ministers, and the major area of controversy and ignorance in macro-economics."

Our instructions "to inquire into . . . the causes, processes and consequences of inflation" could thus be taken to be very broad indeed. Given the circumstances which led to the establishment of the Commission, however, we have interpreted our central task much more narrowly. The Government appointed a Prices and Incomes Commission because it had concluded in the White Paper, Policies for Price Stability, issued in 1968 that the means available to it for influencing the operation of the Canadian economy were not sufficient "to resolve the very real conflict which exists at the present time between the objectives of maintaining high-level employment and restoring the price stability that is necessary for sustained economic growth".

In this context it has seemed to us that our two main tasks were, first, to explain why in recent years inflation has persisted under conditions ordinarily thought to indicate an absence of strong demand pressure on the economy and, second, to consider what form of prices and incomes policy – if any – might be helpful in attempting to deal with the problem.

The bare bones of the analysis of recent inflation and of the discussion of policy alternatives outlined in this Summary Report are as follows:

1. The main factor which initiated the relatively rapid inflation of prices and costs in Canada in the mid-1960s was a build-up of unusually strong demand pressure on the economy's productive capacity and manpower resources. Strong demand pressures emerged earlier in Canada than in the United States – perhaps as early as 1964 – and for some time the rise in Canadian prices and costs was sharper. We do not attach any great significance to the fact that this surge of demand was led by exports, business investment, housing and other private outlays, while the main weight of sharply rising government expenditure came later. Much of the demand stimulus resulted from the re-pegging of the Canadian dollar exchange rate in 1962 at a substantially reduced level, and from expansionary fiscal and monetary policies in Canada. In modern societies national governments are responsible for the overall management of the economy. In this sense, if an overshoot of demand is allowed to occur, the responsibility must lie with the government. This remains true even though in their conduct of economic policy governments cannot ignore the public mood and social pressures of the time, and their freedom of action is limited by a wide variety of practical constraints.

2. Although demand pressure on the Canadian economy moderated significantly in 1966-67, the inflationary boom in the United States associated with rapidly rising military expenditure helped to keep costs and prices in Canada under strong upward pressure both directly and through demand channels until the end of the decade. By late 1968, when inflation had already become deeply entrenched, no conceivable way of managing demand remained open to the authorities for which public understanding or approval could be expected. An attempt to protect employment levels would have meant passively accepting as a new minimum the escalated rate of inflation which had emerged since 1966. Moderating the growth of demand in an attempt to restore a greater degree of price stability meant risking a period of uncomfortably high unemployment.

It was not until 1970 that demand pressure clearly ceased to be a factor in the more buoyant regions of the country and unemployment rose to relatively high levels. The slowdown in economic activity in Canada was, however, somewhat less severe than in the recessions of 1957-58 and 1960-61. This is true not only of the adverse impact on real output growth but also in terms of unemployment. Thus, for example, the national unemployment rate for males 25 years of age and over averaged 6.8 per cent in 1958 and 7.2 per cent in 1961. The corresponding rates for 1970 and 1971 were 4.9 and 5.2 per cent respectively.

For a time Canada's price performance, particularly as reflected by the Consumer Price Index, showed striking improvement. Much of this improvement, however, was due to a sharp temporary decline in food prices, a substantial appreciation of Canada's exchange rate and the 1970 price restraint program. Moreover, the average size of wage and salary increases has shown little decline, while average profit margins, which contracted over the period 1964-70, have since widened. Thus more recently prices have again been rising at a substantial rate.

3. In our view, the degree to which inflation has persisted under recent conditions of slack demand pressure and abnormally high unemployment can be explained largely in terms of lags in the response of costs and prices to short-run changes in demand, together with the existence of strongly held "inflationary expectations" formed on the basis of experience during the prolonged inflationary expansion of the 1960s.

Lags in the response to changes in economic conditions have long been apparent in the process of wage and salary adjustment and, to a lesser degree, in certain areas of pricing behavior. There is considerable scope for the exercise of discretionary judgment in the setting of wages and prices in the short run. There is also uncertainty about how to use this element of discretion to best advantage, and a variety of delays in implementing decisions. Institutional developments in recent years, such as the lengthening of union contracts and the increasing use of comparative pay surveys as a part of formal systems of personnel and pay administration, may well have increased these response lags.

More importantly, the length and vigor of this latest round of inflation, following as it did on an extended period of economic expansion and an even longer period of upward creeping prices, seem very likely to have established patterns of wage and price setting behavior adapted to a substantial rate of continuing inflation. In effect an "inflation factor" appears to be incorporated, implicitly if not explicitly, in the setting of wages and prices and in the level of interest rates.

Finally, the widely-held view that the dampening of the economic climate was the result of deliberate policy actions rather than impersonal market forces, and that adverse public reaction would probably lead to their early reversal, provided reasonable grounds for continuing to base wage and price decisions on inflationary beliefs and patterns of behavior.

4. An important role in Canadian inflation is often attributed to the importation of inflation from the United States. It is easy to see the basis for this belief. If—as has been the case over much of our history—the rate of exchange between the currencies of the United States and Canada is maintained at some fixed level, or a flexible rate is kept within narrow bounds, then over the longer run the rate of inflation in Canada cannot differ greatly from that of the United States. In the short run, however, the direct effects of rising costs and prices in the United States are only one of a number of influences affecting the movement of overall cost and price levels in Canada.

Our reading of the evidence is that the broadly parallel movement of U.S. and Canadian costs and prices in recent years arises less from direct, rigid wage and price links than from broadly parallel variations in the degree of demand pressure on capacity in both countries. Both of these channels of influence are related in turn to the pervasive impact on Canadian attitudes, behavior and public policies of the vast array of information and opinion flows coming from the United States. It is clear, however, that the degree to which Canada imported inflation during the 1960s either directly through price and wage links, or indirectly through demand, was more a consequence of Canada's exchange rate policy than of foreign inflation as such.

5. The "market power" of corporations, unions and other private groups is often thought to be an independent source of price and cost inflation. The term "market power" is an ambiguous one often combining elements of three related notions: first, the existence of some degree of short-run discretion in wage and price setting; second, monopoly power; and third, the capacity of influential interest groups to bring pressure to bear on governments.

We have already noted the importance of the scope that exists for discretion in wage and price setting in our treatment of response lags and expections. We would emphasize the fact, however, that discretionary behavior is by no means confined to markets dominated by large firms or unions.

A second use of the term "market power" refers to monopoly power, i.e., the power to obtain a wage or charge a price higher than would prevail under competitive conditions. It is not always recognized that monopoly power can contribute to inflation only to the extent that it increases or is exercised more effectively during the relevant period. The existence of a certain degree of monopoly power can explain high prices at a given level of demand, but not rising prices.

We have found some examples of an increase in the extent and use of union power in certain areas of the economy in recent years, notably in the public sector and construction. It is also evident that medical practitioners have obtained large relative income gains associated with the spread of private medical insurance plans and the subsequent introduction of publicly financed medical programs. Opinions differ concerning the effect of the 1967 Bank Act revision on the position of the chartered banks and the extent of competition in financial markets. The related question of whether the present degree of competition found in Canadian financial markets can be regarded as adequate is a different issue. Many members of the public are convinced that it is not, just as others are equally certain that some unions are too powerful, or that there is inadequate control over the incomes of physicians and surgeons under existing medical schemes. These questions, however, have more to do with whether certain prices or incomes are already too high than with the rate at which they are rising.

It is sometimes thought that data on income shares provide support for the belief that unions have been the root cause of recent inflation. It is true that employee compensation accounts for a considerably higher proportion of net national income today than it did in the early 1950s, but this seems to be largely accounted for by the relative expansion of government and non-commercial services and the relative decline in the number of self-employed proprietors of farms and other unincorporated businesses. Indeed, it appears that over the period as a whole since 1953, there has been little change in the respective shares of employee compensation and returns to capital in that part of the non-farm economy which is organized on a commercial, profit-making basis. This, in itself, proves little one way or the other about the validity of theories of cost-push in which union power or corporate power plays a leading role. What is more difficult for such theories to explain is the fact that over this period the income shares of labor and capital respectively have gone through successive periods of contraction as well as expansion in response to changes in the rate of growth of demand. Thus, although labor's income share was on a rising trend from 1964 to 1970, over the previous seven years it had been trending downward in the face of a strong and sustained rise in the share claimed by profits and other returns to capital.

Finally, the term "market power" is sometimes broadened to include the capacity of influential interest groups to bring strong pressure to bear on governments. The possibility cannot be ruled out that major changes in social and political attitudes and in the balance of power among competing interest groups are already occurring and may become increasingly important in this country. Many informed observers argue that changes of this character in a number of European countries have made possible the successful confrontation of governments by powerful groups and led to intense pressure on the authorities to use demand expansion to maintain employment and output in the face of large cost and price increases. This has resulted in a much stronger inflationary bias in public policies than in the past. At least as yet, recent Canadian experience does not seem to us to provide conclusive evidence that pressures of this kind on the conduct of public policy have become nearly as strong as they are said to be in Europe.

6. It is a disturbing observation that in the course of the expansion of the 1960s the Canadian economy seems to have come under sufficient demand pressure to generate serious cost and price problems when the national unemployment rate was still as high as 4½ to five per cent of the labor force. Several characteristics of Canada's economic structure and labor markets may help to account for this phenomenon. By comparison with most other countries, Canada has an unusually large flow of young people joining the labor force who encounter special difficulties in finding suitable permanent jobs, as well as a high proportion of employees compared with the self-employed. High job turnover rates and seasonality of employment are also found in Canadian labor markets. It appears, however, that the most important and baffling dimension of the problem has been the persistently uneven regional distribution of unemployment in Canada.

7. Given the above analysis of the twin problems of inflation and unemployment, there are several policy choices open to Canada for the longer run and the immediate future. One possibility is to accept a certain amount of inflation—perhaps even a degree of inflation which becomes more severe and chronic over time—as the necessary price for holding the level of unemployment to a minimum. If successive escalations leading to progressively higher rates of

inflation are rejected, then any short-run employment and output gains associated with an inflationary outbreak must be balanced not only against the redistributive and other adverse effects of unanticipated inflation, but also against the losses of output and employment and the associated distortions entailed in reversing the process. Thus it seems clear that episodes of this kind yield a net loss to the community.

There is a comment in the Economic Report of the President of the United States for 1971 which helps make the point:

> "We have now come to see more vividly than ever before how long and painful is the effort to halt the inflationary process once it has been let loose. The avoidance of inflation is always, of course, an objective of national policy, and was an objective in 1965-66 when the present episode began. But this objective may not get its proper weight because of failure to foresee the losses of output and employment that will later be entailed in ending the inflation. Remembering the experience of 1969-71 should help to correct this error."

8. We conclude that learning to live with inflation cannot be counted on to enable the Canadian economy to operate on a sustainable basis at average rates of national unemployment much lower than those experienced since the mid-1950s. There remains the possibility of reducing the critical range of unemployment at which cost and price increases tend to accelerate by using other means, such as manpower, regional economic expansion, selective demand, tariff and competition policies. By improving the adaptation of supply, re-channeling the flow of demand or bringing more domestic or foreign competition to bear, such policies can, in principle, be expected to lower this critical range of unemployment. Experimentation with some of these policies is in an early stage and it is too early to judge with certainty what can be accomplished. It is, however, easy to under-estimate the difficulties and to fail to recognize the practical constraints on government efforts along these lines.

Some economic policies and institutional influences, moreover, work in the direction of increasing the range of unemployment at which cost and price increases tend to accelerate. The strong political and institutional forces which resist any widening of regional wage differentials operate in this direction, as do more generous unemployment benefits and welfare payments, the rapid increase of legal minimum wages, and the growing skepticism which has developed about the work ethic with the continued rise of private affluence.

In summary, given the intractability of the problem—particularly that part arising from Canada's regional unemployment differentials—a realistic appraisal of all the factors at work suggests one should be cautious in assuming that it will be at all easy to reduce the critical range of national unemployment at which cost and price increases have tended to accelerate. Moreover, the possibility of increasingly severe inflation will remain if the public and their elected representatives take an over-optimistic view of the extent to which this critical range of unemployment has been reduced.

9. If we reject more rapid inflation as only a temporary postponement of our difficulties and recognize that supply and selective demand policies have considerable limitations, we are left with two policy instruments for dealing with the problem, general demand management and incomes policy. Demand management must play the central role, but can it do the job alone? A case can be made that if the growth of demand could be kept sufficiently steady, this would go a long way toward meeting the problem. This is more easily said than done. There are many sources of economic instability and there are serious difficulties both of a technical and political nature which make it unlikely that periodic undershoots or overshoots of demand can be avoided.

10. Throughout we have stressed the need for realism in assessing what particular policies might accomplish, and a similar attitude is clearly required in considering the possible usefulness of some form of incomes policy. For this reason we concentrate on a full-fledged control system as the only form of intervention likely to be effective enough to be worth attempting in the near future. The control program undertaken in the United States during the last year illustrates the general nature of such a system, and with certain exceptions is broadly similar in its general approach to the kind of program which the Commission was exploring with management, labor and government representatives in 1969. With the recent practical experience gained in both countries in conducting an incomes policy, the prospects for a measure of cooperation among private groups and governments in fashioning an effective control system in Canada may now be more promising than on that occasion. In our view the negative conclusion on the use of controls reached in 1971 by the Senate Committee on National Finance resulted from a failure to recognize how narrow the choices may have become.

The Commission's view that a temporary program of direct controls over prices, wages and other incomes could be helpful in certain circumstances does not arise from a belief that the root of the inflation-unemployment dilemma lies in the ability of powerful unions and corporations to continue to push up costs and prices regardless of demand conditions. We do see serious difficulties, however, in trying to extricate the economy from a major inflationary outbreak originally generated by an overshoot of demand but persisting stubbornly because of widely held inflationary expectations and response lags.

In conjunction with policies aimed at creating and maintaining a more stable demand environment, temporary resort to controls offers a means of bringing cost and price increases more promptly and reliably into line with the change in demand conditions. This can speed up the process of adjustment and reduce the transitional loss of jobs and output in bringing inflation under control. Even so, the process is unlikely to be quick or easy, and the results will not be lasting unless inflationary expectations can be changed.

It may be that before long the march of events will bring Canadians to the view that serious consideration should be given to a temporary program of controls. With this in mind, it has been the Commission's view that a group should be retained within the government to continue work on these issues. On

April 27, 1972, the Prime Minister announced the establishment of such a group to carry on the work of contingency planning, to complete the editing and publishing of the Commission's studies and to continue research on the role of prices and incomes policy in dealing with inflation.

Two essential conditions must be satisfied for a temporary control program to work effectively and then to be phased out with minimum risk of a renewed outbreak of inflation. First, the public must be convinced that such measures are necessary and that there exists on the part of governments a strong determination to make them operate as effectively and equitably as possible. Second, governments must be prepared to demonstrate a resolve and capacity to maintain relatively stable prices and costs over a sufficiently long time span, embracing not only the control period but also its aftermath, to convince the public that inflationary expectations and patterns of behavior are no longer justified.

Unless demand is maintained at levels consistent with these objectives, then either the control system will prove unworkable or its removal will lead to renewed inflation. Given the uncertainties and lags in the response of market demand to changes in demand management, this will not be easy to do. European experience suggests, however, that if the control system breaks down or wages and prices rise rapidly following the end of the program, it will become difficult or impossible to enlist support for the use of incomes policy in the future.

It is our view, therefore, that temporary price and income controls should only be used as part of a longer-run policy aimed at maintaining underlying demand conditions both during and after the control period consistent with the target rates of increase in average price and income levels.

ORIGINS OF RECENT CANADIAN INFLATION

There is substantial agreement that the relatively rapid inflation of prices and costs in Canada which began in the mid-1960s was initiated by a build-up of unusually strong demand pressure on the economy's existing productive capacity and manpower resources.

The degree of tightness which developed in product and labor markets was, of course, much more pronounced in some areas of the economy than in others, and the demand pressures which caused this tightness were by no means entirely of domestic origin. The effects of expansionary fiscal and monetary policies in Canada in encouraging the growth of demand were reinforced, in areas such as exports and capital spending, by the spill-over effects of rising demand in the United States where the pace of economic recovery was also acquiring increasing momentum.

This stimulus from abroad was considerably amplified by the fact that the exchange rate for the Canadian dollar had been re-pegged in May 1962 at a level more than 10 per cent below its external value at the beginning of the decade. To a limited extent this reduction in the exchange rate, superimposed on the gradually rising trend of U.S. prices, generated immediate upward pressure on overall price and cost levels in Canada even under the depressed market conditions prevailing at the time. In addition to these effects, however, the devaluation of the Canadian dollar opened up a wide range of profitable opportunities for Canadian suppliers of export and import-competing goods to expand their share of domestic and foreign markets over subsequent years. Thus Canadian exchange rate policy and economic developments abroad helped to initiate the burst of inflation which eventually occurred both through direct price effects and by adding to the build-up of demand pressures on Canadian productive capacity.

We do not attach any great significance to the fact that this surge of demand was led by exports, capital investment and consumer spending on new housing and durable goods, while the main weight of sharply rising government expenditures occurred later. Since governments are responsible for the overall management of the economy, it is clear that they must bear the responsability for permitting any overshoot of demand to occur regardless of the direct role of government expenditure as such. We leave aside for the moment the question of how and to what extent this overshoot of demand might have been avoided.

For the purposes of this report, it has seemed to us that a broad perspective was called for in considering the past performance and future role of demand management in relation to the problem of inflation. We have not attempted to catalogue in detail the long chain of interrelated policy decisions taken over recent years in the various areas of demand management – government expenditure, taxation, the management of the public debt, monetary policy and external financial policy. Such comments as we have to offer are concerned with demand policy as a whole rather than with the detailed application of these individual policy instruments. In this connection we shall have something to say about the extent to which prevailing public attitudes and practical constraints on the freedom of action of governments may have influenced policy decisions during the 1960s.

Before discussing these broader matters, however, we concentrate our analysis on the technical issues which have led to conflicting interpretations of the nature of recent Canadian inflation.

The Canadian economy had begun its long climb out of severe recession in the spring of 1961. The subsequent rise in output and employment was sufficiently vigorous to bring about a progressive reduction in the substantial margin of slack which had developed in the economy at the turn of the decade. By the end of 1963 the seasonally-adjusted national unemployment rate was back down to five per cent of the labor force and still declining, profit margins had risen sharply, exports were expanding rapidly and a strong upswing in capital investment spending was under way.

Over the next three years the level of aggregate money expenditure in the economy surged ahead at an average rate of more than 10 per cent annually. Propelled by this stepped-up rate of demand expansion, exceptionally large gains in output and employment were experienced, carrying the seasonally-adjusted national unemployment rate down to the unusually low level of 3½ per cent of the labor force by the autumn of 1965.

Up to this point price and wage levels had been rising at relatively low, though gradually accelerating, rates. By the second half of 1965 this accelerating trend was becoming quite pronounced. A marked escalation of interest rate levels was also under way. In retrospect it seems clear that the pace of recovery in Canada had failed to moderate in time to permit the economy to settle on a sustainable growth path compatible with reasonable stability of the price level. Instead, the country found itself caught up in a relatively severe outbreak of inflation. By 1966 prices and wages in Canada were rising about twice as rapidly as they had been rising only three years earlier.

Relatively rapid inflation continued to prevail in Canada from 1966 through to the end of the decade. For a time during the second half of 1966 and the year 1967, national expenditure in money terms rose at a distinctly more moderate rate. In due course this moderation of demand, together with a rise in immigration and labor force participation, was reflected in a somewhat higher national level of unemployment. Towards the end of 1967 the seasonally-adjusted unemployment rate moved back up to four per cent of the labor force, and during the next two years it fluctuated narrowly within the four to five per cent range.

In the meantime, however, demand expansion in Canada was showing renewed vigor. In part this reflected the spilling over of demand pressures generated in the booming U.S. economy. Sharply rising prices in the United States during this period also contributed directly to the continued rapid rise of costs and prices in Canada. The fact that Canada's exchange rate continued to be maintained at the fixed level established early in the decade was, of course, a crucial element in the transmission of these demand and price pressures from abroad.

In both countries, increasing concern about the intensity and momentum of this prolonged outbreak of rapid inflation came to a head towards the end of 1968 and led to determined efforts in the course of the following year to come to grips with the problem by moderating the growth of demand. In Canada, as in the United States, the initial effect of these measures was a gradual slowing of the rate of output growth, followed in the early months of 1970 by a marked rise in the level of unemployment.

Although the rate of increase in the Canadian price level moderated in 1970 to a much greater degree than that of the United States, this was partly due to temporary factors, including a price war among major retail food chains, a significant appreciation of the exchange rate and the price restraint program in effect at the time. In recent months most of the broad measures of price change in Canada have again been indicating annual rates of increase of more than four per cent. The persistence of inflation in both countries has been particularly apparent in the trend of wage rates and salaries. In Canada, average hourly rates in major collective agreements covering unionized employees in industries other than construction continued to rise in 1971 by 7.8 per cent annually over the life of these contracts – not much below the average rate of increase experienced since 1966.

There is room for differences of view about the approximate duration and magnitude of the demand overshoot which resulted in the severe inflation of the late 1960s. Since costs and prices in Canada did not begin to spurt ahead until the national unemployment rate had fallen to around 3½ per cent in late 1965, and since the unemployment rate remained at this unusually low level only until the end of 1966, some observers have concluded that the period of excess demand was relatively brief and mild.

This seems a doubtful proposition. It is a well-established fact that the response of costs and prices to changes in the degree of demand pressure is normally subject to substantial time lags. These arise both from the time it takes for people to recognize that market demand conditions have diverged in a major way from what they had expected, and because of a variety of institutional practices, such as the existence of long-term contracts, which prevent rapid wage and price adjustment.

Thus it can be argued that the accelerating rise of costs and prices which was in evidence during the course of 1965 must have been a delayed response to spreading excess demand conditions in product and labor markets which had begun to build up a good deal earlier, quite possibly as early as the first half of 1964, when the decline in the national unemployment rate had still barely carried it below the five-per-cent level.

It should be noted in this connection that unemployment in some of the most populous and heavily industrialized parts of the country had already fallen close to minimal levels by the early autumn of 1964. In Ontario, for example, average unemployment in 1964 and 1965 was 3.2 per cent and 2.6 per cent of the labor force respectively, and was even lower during the summer and fall months.

On this view of the matter, the build-up of excess demand pressures in the industrial heartland of the economy may already have reached major proportions by late 1965, when the upward surge of costs and prices was just gaining momentum.

While it is generally agreed that for some time now excess demand conditions have been absent from Canada's labor and product markets, it is similarly an open question for how long a period during the late 1960s costs and prices in Canada continued to be exposed to appreciable demand pressure.

Those who find it difficult to believe that the Canadian economy can still be subject to significant strain of this kind when the national level of unemployment rises much above four per cent of the labor force, take the view that demand pressure cannot have been a factor in the situation since early 1967. As late as 1969, however, the monthly average unemployment rate in Ontario was still only 3.1 per cent. Thus it is by no means implausible that it was not until early in 1970, when the national unemployment rate rose well above five per cent, that demand pressure on costs and prices had unquestionably been eliminated in the more buoyant regions of the country.

If this reading of events is the correct one, the implications are both puzzling and disturbing. Why was the Canadian economy unable to operate for long at a level of national unemployment much below five per cent of the labor force without encountering a significant escalation of the pace of inflation? What regional, institutional or other characteristics of our product and labor markets could account for significant upward demand pressure on costs and prices at such high national levels of unemployment and under-utilized productive capacity?

We shall return to these questions later in this discussion. The point we wish to emphasize at this stage is that, at least since 1969, it is generally agreed that the degree to which inflation has persisted in this country cannot be explained by the current pressure of demand on productive capacity or manpower resources.

WHY HAS INFLATION PERSISTED?

If the persistence of inflation is not due to the current pressure of demand on the economy's productive capacity and manpower resources, what is the explanation?

We have already referred to the substantial time lags which normally occur in the adjustment of wages and prices to changing demand conditions, whether the rate of demand expansion is accelerating or decelerating. Particularly in past business recessions, such as that of 1957-58, it has been widely noted that wage and price-setting behavior is often slow to respond to changing market forces.

In part this stickiness arises from the fact that in modern economies few prices and even fewer wage rates fluctuate continuously in response to short-run variations in the immediate balance between supply and demand in product or labor markets. Instead, most adjustments in wage and price levels occur only intermittently and by discrete steps, with the interval between successive adjustments a rather lengthy one in many cases. This results in substantial timing discrepancies between changes in market demand conditions and their eventual impact on wage and price levels.

Underlying this readily apparent feature of wage and price behavior in modern economies is the existence of considerable scope for the exercise of discretionary judgment in the setting of wages and prices in the short run, together with considerable uncertainty about how to use this element of discretion to the best advantage. This helps to account for another and perhaps even more important source of stickiness in the observed wage and price response to recent changes in demand conditions – the phenomenon referred to, for want of a better term, as the persistence of "inflationary expectations". We return to this topic later in this section.

There are not many markets in a modern economy where the timing and magnitude of particular price and wage changes are entirely determined by impersonal market forces with no role for individual judgment or customary practices. The prices of some agricultural and other commodities are set in organized competitive markets in which there are minute-to-minute or day-to-day fluctuations in response to the impersonal forces of supply and demand. Most prices, however, are not set in this way. The Commission's research has found a little evidence that larger firms respond more slowly than smaller ones to changes in the rate of demand expansion and that firms in concentrated industries appear more likely to be unresponsive to slackening demand conditions. This evidence, however, is weak and inconclusive. Even in areas of the economy where it would be difficult to argue that the sellers possess any significant measure of monopoly power, there are clearly important elements of discretion in price-setting.

It is hard to think of cases in modern labor markets where wages are established through a continuous auction process. Such a labor market would be one in which an unemployed person could turn up and by under-cutting the offers of others obtain employment for an hour, day or week. It is particularly obvious that where workers are unionized and collective agreements remain in force over a period of years this is not the way the process works. The fact that elements both of discretion and of monopoly power normally play a role in establishing wage levels under collective agreements leads to the idea that discretion and some degree of monopoly power are invariably found together. With only about a third of the non-farm labor force members of recognized unions, however, and relatively few markets for casual labor in which wages are set by something like a continuous auction process, it is evident that a wide range of wage and salary levels is determined under conditions where discretion exists but employees have little if any monopoly power to push up wages.

There is, however, some indication that the timing of the response to changes in economic conditions varies somewhat between union and non-union workers. Given the existence of long-term union contracts it could be expected that the prevailing wage rates of union members generally would respond rather more slowly both to increases and to decreases in the rate of demand expansion than those of non-union workers. Such evidence as is available in Canada is not inconsistent with this hypothesis.

In recent years these response lags may well have lengthened appreciably as a result of certain institutional developments, including the lengthening of collective bargaining agreements, and the increased use of comparative wage surveys associated with the spread of formal systems of personnel and pay administration in both the union and non-union sectors.

In our view these response lags and the persistence of beliefs and patterns of behavior formed on the basis of experience during the prolonged inflationary expansion of the 1960s are almost certainly the dominant factors in explaining recent wage and price trends.

Why should the current economic behavior of Canadians appear to be so strongly influenced by a continuing belief that a substantial rate of inflation now is a normal feature of economic life, and that any slackening of the pace of wage and price increases is unlikely to amount to very much or last for very long?

Presumably the answer lies in past Canadian experience of inflation and of the demand conditions which generated it. Canadians have witnessed an almost uninterrupted rise in the price level since 1933, associated with a persistent tendency for average wage and salary levels to rise more rapidly than the underlying trend of productivity growth. Having experienced a persistent decline in the value of money over such an extended period, it should not be surprising that the public has come to expect it to continue. Some allowance for an "inflation factor" now seems to be incorporated, implicitly if not explicitly, in the trend of wages and prices and in the level of interest rates whatever the balance between demand and supply in markets for labor, goods and services, or credit.

Thus what is now observed when demand and supply appear to be in reasonable overall balance in the economy is a fairly steady positive rate of change in the price level rather than a zero rate of change. Similarly, fluctuations in the degree of demand pressure on capacity within the range of variation experienced in recent years have merely led to faster or slower rates of increase in wages and prices. An absolute year-to-year decline in the price level has rarely been recorded in recent memory, even in prolonged periods of slack demand and abnormally high unemployment.

There is reason to believe that the magnitude of the "inflation factor" built into economic behavior patterns in Canada has increased significantly in recent years. During the 1960s Canadians experienced almost a decade of unbroken economic expansion, culminating in an unusually protracted and severe inflation. Over a period of several years during the 1960s, rates of increase in wages and prices substantially higher than in the past gradually came to be regarded as normal and perhaps inevitable. A similar pattern of escalation can be seen in rents, professional fees, property values and interest rates.

In the market conditions created by a sustained surge of rapid demand expansion, those who risk pricing themselves out of their markets learn that the normal economic penalties attached to such behavior rarely come into play at all severely or for very long. The usual consequences of an overly-rapid escalation of costs and prices for the firm or industry concerned are to depress its sales volume, squeeze profit margins, and force cutbacks of production, employment and capital expansion programs. So long as market demand is kept expanding rapidly enough, however, the operation of these mechanisms is, in large measure, short-circuited.

Not only the unions, but also the firms that employ them, learn that unusually large wage increases can in fact be afforded under such conditions. The course of events proves to the union membership that aggressiveness in wage matters pays off, and discredits those union leaders who take a more cautious and moderate approach in bargaining. Executives who expose their company to a costly strike rather than accept an "unreasonably high" settlement discover, in retrospect, that the settlement was not greatly out of line after all. Similarly, it is not merely that firms push up their prices rapidly, but also that their customers – while complaining bitterly – prove by maintaining their scale of purchases that the market can support price increases of this magnitude.

It should not be regarded as surprising, therefore, that the lessons learned and patterns of behavior established over this lengthy period of buoyant demand and severe inflation, have turned out to be highly resistant to the slackening of demand pressure which occurred in 1969-70. The public's unwillingness to believe that inflation was on the way out was reinforced, in this instance, by the widely-held view that the dampening of the economic climate was the result of deliberate policy actions rather than impersonal market forces. It was reasonable to believe, therefore, that adverse public reaction might well lead to an early reversal of these efforts to restrain the growth of demand.

Although a learning process of the kind outlined above, based largely on experience of demand conditions during the 1960s, would seem to go a long way towards explaining current wage and price behavior, such a view is by no means universally accepted as the only – or even the main – factor involved.

One popular explanation of contemporary inflation is the imported inflation hypothesis. It is frequently argued that foreign inflation – especially inflation in the United States – is bound to exert a dominant influence over the trend of prices in Canada at all times, and that the persistence of inflation in this country in recent years simply reflects the fact that the United States has continued to experience rapid inflation.

Those who argue that the trend of prices and costs in Canada is largely dependent on the trend of prices and costs in the United States base their case mainly on the historical record of broadly parallel movements in the domestic price levels of the two countries. This record is often interpreted as evidence that U.S. price and cost changes exert a direct and dominant influence over the behavior of Canadian prices and costs in the area of internationally-traded goods, with strong indirect "spill-over" effects on price and cost levels in other areas of the Canadian economy.

It is pointed out that the rising prices of imported materials and components enter directly into Canadian production costs, while Canadian suppliers of import-competing goods and of export commodities may typically base their own price increases on those of their foreign competitors. If such price increases raise profit margins in export and import-competing industries in Canada, it is argued that wage levels in these industries will come under upward pressure, with indirect "spill-over" effects on wage and price levels elsewhere in the economy.

There are grounds for skepticism that this is in fact the principal mechanism through which, in the short run, inflationary conditions in the United States exert their impact on the trend of costs and prices in Canada.

Even in the limited area of internationally-traded goods, it is clear that Canadian producers do not necessarily, or automatically, raise their prices in direct proportion to foreign price increases. In many instances they have instead taken the opportunity to increase their market share at the expense of foreign suppliers as, for example, Canadian steel producers appear to have done during the 1960s.

Moreover, it is obvious that changes in the exchange rate for the Canadian dollar must, in principle, greatly alter the impact of foreign price trends on

Canadian price movements. So far as its direct upward impact on the Canadian price level is concerned, a sharp fall in the exchange rate should have much the same effect as a sharp jump in the U.S. price level. Yet when allowance is made for the major reduction in the level of the exchange rate which occurred in the period 1960-62, considerable difficulties arise in explaining why this did not lead to a sharper divergence than actually occurred between the overall price level in Canada and that of the United States. Close direct links between the Canadian and foreign prices of many internationally-traded goods certainly do exist, but the overall price levels of the two countries are not so rigidly linked. It is clear that prices and costs in large areas of the Canadian economy such as construction and services, which do not compete directly either in export markets or with imports, respond only weakly and with long lags to the indirect influence of changes in foreign prices, foreign wages or the exchange rate.

The Commission's reading of the evidence is that the broadly parallel historical movement of prices in the two countries is not simply a matter of direct price links, but perhaps even more a reflection of broadly parallel variations over time in the degree of demand pressure on capacity in the two countries. Growing demand pressure in the United States spurs Canadian exports and capital investment and thus generates intensified pressure on Canadian productive resources. If, at the same time, it is regarded as an important object of Canadian policy to resist upward or downward pressure on the existing level of the exchange rate, the pursuit of an expansionary monetary policy in the United States in such circumstances may make it difficult for the Canadian monetary authorities to follow a substantially less expansionary policy in this country.

Thus, the emergence of strong demand pressures in the United States leads to intensified demand pressures in Canada, with the result that domestic cost and price levels in both countries tend to rise for this reason alone, quite apart from the influence of direct price links in the area of international trade.

The extent to which cost and price trends in Canada are exposed to inflationary influences from abroad through one or other of the channels mentioned above, is obviously related to the pervasive impact on Canadian attitudes, behavior and public policies of the vast array of information and opinion flows coming from the United States. Even so, however, Canadian exchange rate policy has clearly played a crucial role in the process. The extent to which Canada imported foreign inflation during the 1960s followed in large measure from the magnitude of the decline in the exchange rate at the beginning of the decade and from the importance attached to maintaining it at the new fixed level of U.S. $0.925 over the next eight years.

Although it is easy to exaggerate the extent to which short-run price and cost trends in Canada are determined by those in other countries under a fixed exchange rate regime, it is nevertheless broadly the case that reasonable price stability in any one country cannot be maintained over any extended period in the face of substantial inflation abroad, without the insulation provided by a progressive upward adjustment of its exchange rate. In this sense, the degree to which Canada imported inflation during the 1960s was more a consequence of Canadian exchange rate policy than of foreign inflation as such.

Another explanation for the persistence of inflation in the face of slack demand focuses on the "market power" of unions, corporations and other groups as an independent source of upward pressure on costs and prices. In attempting to come to grips with this position, it is apparent that many who argue along these lines in fact hold rather different views about the nature of the mechanism involved.

Some appear to concentrate on the fact that many economic units are in a position to exercise a degree of short-run discretion in price and wage determination rather than having to take as given a price that fluctuates freely in response to the play of impersonal market forces. We have already examined this aspect of wage and price-setting practices in our discussion of response lags and expectations, and noted that discretionary behavior is by no means confined to markets in which firms or unions exert a significant degree of monopoly power.

Others stress the ability of many private firms or groups to use their monopoly power to obtain higher prices or incomes than would prevail under more competitive conditions.

Still others embrace within the term "market power" the ability of politically influential groups to bring strong pressure to bear on governments. An example is the pressure on governments to expand demand sufficiently to prevent large increases in prices and nominal incomes from adversely affecting levels of employment and economic activity. We consider the monopoly and political pressure interpretations of "market power" in turn.

A common line of argument attributes to large corporations and strong unions a substantial degree of monopoly power which enables them to raise prices and wages with little regard for market conditions.

There can be no doubt that a substantial proportion of price and wage setting is done under conditions which are not purely competitive. Many industries are oligopolies, i.e., dominated by a small number of firms, and decisions on prices take into account the likely reaction of others. Similarly, labor unions and other less formal associations of employees are able to bring pressure to bear on employers which extends beyond that which can be brought to bear by any employee in a competitive situation who refuses to accept a job or leaves to seek work elsewhere. Given this fact there are, however, some basic points to be considered at the outset in any discussion of how these institutional features of the economy's operation might be thought to account for the persistence of inflation under conditions of slack demand.

The first is that in principle, the possession of a certain degree of monopoly power enables those who exercise it to maintain correspondingly higher prices for their output or services at any given level of demand than they could obtain under more competitive market conditions. But this is quite different from having an unlimited power to raise prices regardless of the state of market demand. The existence of a certain degree of monopoly power can explain *high* prices at a given level of demand, but not *rising* prices. Even the most powerful of monopolists knows that the level of demand sets some limit on how high a price he can profitably charge. This is because the more he charges per unit, the fewer units he will be able to sell. Beyond some point, charging an even higher price per unit would merely have the effect of reducing his profits, because of the magnitude of the decline in sales volume that it would entail.

Unions face rather similar limitations in pushing up wage rates. If they try to maintain too high a price for their services, labor costs will be so high and sales volume and profitability so low in their firm or industry that there will not be enough work to keep their members fully employed and take-home pay may be adversely affected through reduced overtime and short-time work.

It is not difficult to see that if the degree of monopoly power possessed by firms and unions had *increased* substantially over recent years, this could have served as an independent source of short-run upward pressure on price and wage levels. If the extent of business and labor monopolies has not been growing very rapidly, however, their role in the inflationary process during recent years becomes much more difficult to understand unless one can believe that they are now making much more effective use of such power as they possess than they were inclined to do a decade ago.

Such a possibility is not easily reconciled with the traditional though no doubt over-simplified assumption that the normal behavior of firms and employee groups taken as a whole, whether they have substantial monopoly power or very little, is to seek to obtain at all times the best price or wage they think market conditions over some relevant period will permit. Even if wage and price behavior typically reflects a much more complex set of objectives than simply trying to get as large an income as possible, it is by no means obvious why the degree to which these groups regard income maximization as an important consideration should vary widely and systematically in response to changing economic conditions.

More generally, it has been suggested that as a result of changing social and political attitudes in recent years, not only labor unions and business oligopolies but indeed organized interest groups of all kinds have become much more aggressive and effective in terms of the pressure they have been able to bring to bear in support of their members' income and job security objectives. This possibility too cannot be dismissed out of hand, although the evidence available for making a strong case along these lines seems to us far from conclusive.

Changes of some significance have occurred over the last decade in the degree of market power exercised by certain employee groups in Canada. There has been a major extension of collective bargaining throughout the area of public and quasi-public employment, notably in government, education and health services. Moreover, in certain industries where well-established unions have operated for many years, such as construction, the union membership has not only increased significantly as a proportion of the work force but may also have learned increasingly effective ways of bringing bargaining pressure to bear on employers – and through them on the industry's clients. Many observers have noted a more restive attitude on the part of rank-and-file union members in recent years, whether related to the spread of similar attitudes of contestation in other areas of social life or to resentment over the effects on take-home pay of the higher taxes needed to finance the growing share of national income claimed by governments.

On the whole, however, direct evidence of a substantial growth in union power is hard to come by. Union membership in Canada has increased only slightly between 1960 and 1971 as a percentage of non-farm paid workers – from 32.3 per cent to 33.3 per cent. Moreover, since the early 1960s there have been few legislative changes in the field of industrial relations which have greatly strengthened the hand of organized labor in bargaining apart from those affecting public sector employees.

The deficiencies of existing data on rates of employee compensation in Canada do not enable a satisfactory overall comparison to be made between union and non-union wage rate increases over the 1960s as a whole. For what they are worth, however, the wage rate data show no striking difference, although it is clear that there are unorganized groups including some executive and professional categories which have obtained larger percentage increases than those obtained by many unions. Similarly, as far as average earnings data are concerned, no clear-cut systematic difference shows up over the 10-year period between the percentage increases occurring in highly unionized industries and in industries with a relatively large proportion of unorganized workers.

Many of the employee groups whose wage or salary gains during the 1960s were undoubtedly affected by the fact that they had become newly unionized or had significantly increased their union membership also experienced unusually strong public sector demand for their services over much of the period. The rapid expansion of educational, health and government services at all levels, together with the associated high volume of public construction projects, were obviously important factors in the rapid escalation of rates of pay for groups such as teachers, medical personnel, public service employees and many categories of construction workers. Thus the spread of collective bargaining into many non-commercial areas of the economy served to reinforce the upward pressure of expanding public sector demand on the wage and salary levels of the employee groups involved, and this in turn may well have served to escalate the wage demands of unions in the private sector of the economy.

It is sometimes thought that data on income shares provide support for the belief that a persistent levering up of average wage levels, presumably spearheaded by powerful unions, has been the root cause of recent inflation. It is true that the proportion of net national income shown in the National Accounts as wages, salaries and supplementary labor income is considerably higher today than it was in the early 1950s. This would seem to be largely accounted for, however, by the strongly expanding share of national income generated in the government sector and non-commercial services (the great bulk of which takes the form of employee compensation) as against the declining share of national income received by self-employed proprietors of farms and other unincorporated businesses.

The distorted impression created by these structural shifts in the economy is much less serious if attention is focused on the behavior of income shares in that part of the non-farm economy which is organized on a commercial, profit-making basis.

Over the whole period since the early 1950s, the share of employee compensation in total non-farm business income does not seem to have risen greatly. This in itself proves little one way or the other about the validity of theories of cost-push in which the market power of unions plays a leading role, non-union employers have little alternative but to match increases in union wages, and the authorities feel compelled to expand demand enough to maintain employment.

What is more difficult for such theories to explain is the fact that over this period the share of employee compensation in total non-farm business income has gone through successive, and sometimes lengthy, periods of contraction as well as periods of expansion in relation to the share of profits and other returns to capital. The pattern of these share variations is clearly related to cyclical swings in the rate of growth of demand, output and productivity, in conjunction with the short-run stickiness of the trend of wage rates. Thus although labor's income share was on a rising trend from 1964 to 1970, over the previous seven years it had been trending downward in the face of a strong and sustained rise in the share claimed by profits and other returns to capital.

Evidence of a growth of monopoly power on the part of corporations is not easy to find. The Commission's research has failed to find any substantial evidence that prices have been pushed up more rapidly over the last decade in relatively concentrated industries than in industries whose output is much less dominated by a few large firms. Moreover the performance of profits over recent years is difficult to reconcile with a belief in greatly strengthened business monopoly power. After a substantial increase from 1957 to 1964 there was an almost uninterrupted decline in average profit margins from 1964 to 1970 followed by a renewed rise in response to improving economic conditions. Similarly it is not obvious that in general there have been legal, institutional or other structural changes over the years which might be thought to have greatly strengthened business monopoly power.

One apparent exception is the 1967 revision of the Bank Act which, by removing some of the special constraints on the chartered banks, strengthened the relative position of these dominant firms in the financial industry. This and other factors played a part in substantially improving the profit position of the banks in recent years, a development which has attracted a good deal of public attention. It is worth noting, however, that one of the main purposes of the change in the Act was to expose non-bank lending institutions to increased competition from the chartered banks in areas of lending business in which the latter had previously found it difficult or impossible to operate profitably, in spite of their typically lower costs, because of various legal restrictions. This has in fact happened, and a case can be made that as a result borrowers have been able to obtain access to various kinds of credit more readily or at lower cost than would likely have been possible otherwise.

Whether the present degree of competition found in Canadian financial markets can be regarded as adequate is, however, a different issue. Many members of the public are convinced that it is not, just as others are equally certain that some unions are too powerful, or that there is inadequate control over the incomes of physicians and surgeons under existing medical schemes. These questions, however, have more to do with whether certain prices or incomes are already too *high* than with the rate at which they are *rising*.

Although the evidence is not sufficiently clear-cut to support dogmatic conclusions, it seems to us that such changes as appear to have occurred in the degree of monopoly power exercised by organized labor or business have not been a dominant factor in the substantial increase in costs and prices experienced over the period as a whole since the early 1960s.

Finally, the term "market power" is used to embrace the political pressure exercised on governments by influential interest groups. This raises questions on which it is difficult to find firm evidence. One cannot rule out the possibility that major changes in social and political attitudes and in the balance of power among competing economic interest groups are already occurring and may become increasingly important in this country. Many informed observers argue that changes of this character in a number of European countries have fundamentally altered the environment in which demand management must be conducted and have led in various ways to a much stronger inflationary bias in economic policy than in the past. Frequent and successful confrontations of the legal authority of governments by powerful interest groups are one example of this. Another is the intensity of the pressure on governments to use rapid demand expansion as a means of maintaining employment levels in the face of large cost and price increases.

The possibility that developments in North America are leading in the same direction cannot be ruled out, but at least as yet, recent Canadian experience does not seem to us to provide conclusive evidence that pressures of this kind on the conduct of public policy have become nearly as strong as they are said to be in Europe.

WHY HAS AVERAGE UNEMPLOYMENT BEEN SO HIGH?

In the course of the preceding discussion we raised the question of how the Canadian economy could have been subject to significant excess demand pressure when the national unemployment rate was still as high as 4½ to five per cent of the labor force. Our analysis of the contemporary problem of inflation in Canada would be incomplete without some further comment on this important matter.

It is a sobering observation that although the Canadian economy has been exposed to sufficient intermittent demand pressure since the early 1950s to raise the Consumer Price Index by about 50 per cent, the national unemployment rate over the same period has averaged slightly higher than five per cent of the labor force. What could account for such a high average level of unemployment in Canada?

Though far from an ideal measure for this purpose, the national unemployment rate in Canada is a widely-used measure of the degree of tightness in labor markets and, indirectly, of the margin of spare productive capacity in the economy. The definitions of who is in the labor force and who is unemployed are necessarily arbitrary, and in a number of European countries unemployment is measured in widely differing ways. The level of unemployment in the United States, on the other hand, is measured in much the same way as it is in Canada, and on the average it has been only marginally lower than Canada's unemployment rate since the early 1950s. The impression is probably correct, however, that, even if the statistical measures used in various countries could be adjusted to provide a reliable basis for comparison, Canada's average unemployment rate would still turn out to be relatively high by international standards.

A striking feature of Canadian unemployment experience has been the persistence of marked regional differentials in unemployment rates. In the more outlying regions of the country, particularly Eastern Quebec, the Atlantic Provinces and British Columbia, well-above-average unemployment rates are characteristically found whatever the level of the national unemployment rate. In the densely populated and heavily industrialized areas of Southern Ontario, on the other hand, the labor market appears to function with a relatively high degree of efficiency by international standards and at comparatively low average levels of unemployment. Thus when the seasonally adjusted national unemployment rate has been approximately five per cent, the actual level of unemployment of workers over 25 years of age at the seasonal low point in September has typically been about two per cent of the corresponding age group in the Ontario labor force. If labor markets in all parts of the country functioned as efficiently as this, the average Canadian unemployment level would not be greatly out of line with that of most other industrial countries.

The fact of the matter is, however, that at levels of aggregate demand which generate some strain on productive capacity and an unduly tight labor market in the industrial heartland of the country, unemployment remains relatively high in the less buoyant regions.

Why is this? Why is it that the basic economic mechanisms which might be expected to lead to a more even distribution of unemployment among the various regions of Canada do not appear to work effectively enough to produce this result?

It might be expected, for example, that if there were substantial unemployment in one region and a much wider choice of job opportunities available in another, there would be a flow of people from the high to the low unemployment areas. If there were no reluctance to move and no costs involved, the migration of workers might be expected to go far towards evening out differential levels of regional unemployment.

Labor mobility of this kind has in fact been apparent in Canada on a substantial scale over a long period of years, notably from the Atlantic Provinces to the central regions and from the Prairie Provinces to the west coast. In a country as spread out geographically as Canada, however, the information, transportation and relocation costs to be borne in the process of successful job search in other regions pose serious difficulties for job-seekers living in outlying areas. Cultural and linguistic differences pose an even more formidable barrier to the ready movement of workers between Quebec and most other regions of Canada, although in earlier decades there was a considerable flow to New England, Ontario, New Brunswick and other parts of Canada. As is pointed out below, relatively little advantage has been taken of government programs under which grants are available to encourage the exploration of job possibilities in other regions and to assist in financing relocation.

The upshot is that interregional labor mobility in Canada has not been great enough in the past to bring about any marked reduction in differential levels of regional unemployment, nor does the situation seem likely to change dramatically in this respect in the next few years.

The fact that there is limited labor mobility to more buoyant areas from those regions of Canada which typically experience well-above-average levels of unemployment does not, of itself, explain what causes persistently high unemployment in these regions in the first place.

One possibility which is often mentioned is that the economic and social structure of these regions poses special difficulties in matching the particular skills, training and preferences of those seeking work with the particular requirements of the job vacancies that arise. Many of the more obvious structural characteristics of labor markets in these regions which might help to account for their higher-than-average unemployment levels are common in some degree to labor markets generally in Canada, though much less important in other parts of the country. This is true, for example, of the unusually wide range of seasonal variation in job opportunities in these regions, whose employment base is heavily dependent on a narrow range of seasonal industries such as forestry, fishing, agriculture, tourism and construction.

It seems doubtful, however, that special structural difficulties of this kind and the consequent problems of matching job-seekers with available jobs can possibly be the whole explanation for the relatively high unemployment typically found in these regions. The impression is probably correct that even if workers with the required skills and training were readily available locally to fill all the existing vacancies, there would still be a persisting situation of substantially fewer local job opportunities than unemployed workers seeking jobs.

Temporary imbalances of this kind in the labor markets of these regions are not difficult to understand, but a *chronic* imbalance of substantial proportions between the number of workers looking for jobs at going wage levels and the number who can be profitably employed at these wage levels is a distinctly puzzling phenomenon. Basic economic theory suggests that if market forces are allowed to operate, the price of labor should tend to adjust, at least over the longer run, to a wage level at which the number of workers in demand by employers and the supply of workers willing to take these jobs come into approximate balance.

Wage levels in eastern Canada are typically substantially lower than in the central industrialized regions, partly reflecting productivity differentials which in turn arise from differences in resource endowments, locational advantages, and levels of managerial and technological skills. The larger the wage differential between eastern and central Canada, relative to the productivity differential, the broader the scope for the profitable employment of labor in Eastern Quebec and the Atlantic Provinces. Historically, however, it has not proven easy to narrow productivity differentials and there have been strong political and institutional forces at work which have resisted any widening of regional wage differentials and indeed worked to narrow them if possible. General economic analysis would suggest that this contributes to the persistent maladjustment of regional labor markets in Canada.

The fact that even in the industrial heartland of Canada unemployment is normally somewhat higher than in many overseas countries would seem to be partly a reflection of differences in economic and social structure. In many overseas countries the flow of young people entering the labor market has been proportionately much smaller in recent years than in Canada, and institutional arrangements for directing young people into specific training programs or permanent employment are more highly developed. Although such arrangements may well involve a degree of channelling inconsistent with Canadian views on the freedom of occupational choice desired for young people, the question remains why the vast sums spent on secondary and higher education in Canada often leave students so ill-prepared to find a job.

Few overseas countries experience as wide a range of seasonal variation either in job opportunities or in labor force participation as is found in Canada. It may also be the case that frequent job changes by adult workers, the intermittent employment of married women in part-time or temporary jobs, and the holding of secondary jobs as regular hours of work have shortened are more common practices in North America than in most other societies. High job turnover rates appear to be a normal feature of the Canadian labor market. Such statistics as are available for past periods suggest that on the average, separations occur in something like six per cent of existing jobs *each month* and a similar percentage of jobs are newly filled. Job turnover figures for the United States are of much the same general order of magnitude. Although much of this turnover involves no interval of unemployment or only a very brief one, many job changes of this character are undoubtedly reflected in the standard unemployment measures. More generous unemployment insurance benefits, including a reduction in the length of previous employment required for qualification purposes introduced in 1971, may be reflected in more persons changing jobs and also in more people being counted as unemployed rather than as outside the labor force.

In economies which are largely organized on the basis of self-employment on the family farm or in family business, a decline in demand typically results in under-employment and loss of income for the workers involved rather than a rise in measured unemployment. In most parts of Canada other than the Prairie Provinces, a very high proportion of the labor force work as employees, and there has been a relative shrinkage of employment in the farm and unincorporated business sectors of the economy over many years.

There are, of course, obvious reasons why in any country some minimum number of temporarily unemployed persons are likely to be looking for work at any given time, even with efficient labor markets and under normal demand conditions. For example, persons counted as presently unemployed and actively seeking work include many young people looking for their first job; immigrants who have recently arrived in Canada; many workers whose labor force participation is weak or intermittent and who are merely looking for temporary or part-time employment; many who have left their previous employment because of dissatisfaction between themselves and their employers; and many who have been unfortunate enough to be laid off for seasonal reasons or because of work stoppages or shifts in demand between particular firms or industries.

Even when an economy is generating a sufficient number of job vacancies to suit the skills and preferences of those seeking employment, there are various reasons why the process of matching up individual job-seekers with the appropriate job vacancies is bound to take some time. Both employers and employees have to spend time searching in order to find the best employees available for the job and the best jobs available for the job-seekers. Up to some point it pays both employers and job-seekers to accept the costs of undertaking a more thorough and lengthy search rather than accept the first applicant or first job opportunity that comes along.

Although all of the reasons why the normal level of unemployment in Canada is relatively high are not fully understood, it will be apparent from the above discussion that a combination of factors is probably involved, many of them reflecting deep-seated characteristics of Canada's regional economic structure and labor markets. It seems clear that the reason price and wage trends begin to accelerate in Canada at such high levels of national unemployment is closely connected with the fact that the regional distribution of unemployment is typically so uneven.

THE CHOICES FOR POLICY

What are the policy choices which emerge from this view of recent inflation in Canada?

In particular, what policy choices are open to us in situations like that of recent years, where a substantial overshoot of demand in the past has led to a marked escalation of the pace of inflation which still persists and may yet accelerate again?

There is a basic issue to be faced at the outset. Although virtually no one favors inflation for its own sake, there are those who believe there is an inherent conflict between the way demand would have to be managed in order to keep unemployment to a minimum and the way it would have to be managed in order to maintain reasonable price stability. In their view, we have no choice but to put up with a certain amount of inflation–perhaps even with inflation which gradually becomes more severe and chronic over time–if we are to keep the economy under sufficient continuing demand pressure to realize our potential output and hold the level of unemployment to a minimum.

Is this view substantially correct, or is it based on highly questionable assumptions?

It is not difficult to see how the idea developed that we could maintain more rapid economic growth and lower unemployment if only we were prepared to put up with more rapid inflation.

On past occasions when the rate of inflation has fallen to minimal levels, this has usually occurred during periods of slowly rising demand, sluggish output growth and abnormally high unemployment. When a faster rate of demand expansion has subsequently developed, this has led initially to substantial gains in output and employment but also, before long, to sufficient acceleration of the pace of inflation to attract growing public attention and concern.

This has led to the conclusion that it should be possible to maintain enough demand pressure in the economy to keep unemployment down to quite low levels for an indefinite period, provided the public were prepared to live with some degree of more or less continuous inflation. The lower the average level of unemployment that was desired, the higher the average rate of price increase that the public would have to be prepared to tolerate, the approximate terms of these "trade-off" possibilities being revealed by past experience.

In recent years the suspicion has grown that it may be more difficult than appears at first sight to take advantage of this apparent "trade-off". In many countries, inflation has lingered on during recent periods of slack demand and relatively high unemployment at appreciably higher rates than might have been expected on the basis of earlier experience. When demand has revived and unemployment declined, these rates of inflation have escalated even further.

This raises the disturbing possibility that the "trade-off" options open to us may have been worsening over time—that in order to hold unemployment down to any given level may now require the acceptance of substantially more rapid inflation than might have been expected only a few years ago.

Economic theory suggests an explanation for this phenomenon. It has long been argued that if everyone were capable of anticipating the future rate of inflation correctly, it should make no difference to their actual economic behavior whether the value of money was declining by "x" per cent a year or twice "x" per cent a year. Over time, the prices at which all economic transactions were conducted would simply be adjusted upward at the appropriate rate.

No one argues, of course, that people are in fact capable of anticipating at all correctly how rapidly inflation will occur. At the same time, however, no one denies that people can learn from past experience and modify their behavior accordingly. It may well be the case that past experience of inflation leads people to revise upward their notions of how rapidly inflation is likely to occur in the future, and that as a result the "trade-off" works only to the extent that the actual rate of inflation continues to outrun the rate the public has learned to expect.

A concrete example of how this might be expected to work may clarify the point. Let us leave aside for the moment the complications which arise from external transactions and foreign influences, and consider the case of a self-sufficient economy which has been operating for some time around a level of capacity utilization at which there has been no strong tendency for the rate of inflation either to speed up or slow down. Suppose that the level of money demand in this economy has been rising fairly steadily at an annual rate of about seven per cent and the level of real output—determined by the basic forces of capital accumulation, labor force growth and underlying productivity improvement—at an annual rate of about five per cent. This will mean that the price level has been rising at a rate of about two per cent a year—a rate of inflation which people might not unreasonably have come to expect to continue indefinitely.

The adoption of more expansionary fiscal and monetary policies in these circumstances would presumably stimulate a more rapid increase in the overall level of money expenditure in the economy—let us say to a new higher rate of 10 per cent a year. With excess demand conditions now becoming dominant in markets for goods and factors of production, this will lead to unusually large gains in production and employment so long as the rise in price and wage levels fails to accelerate correspondingly.

No doubt the public will soon begin to notice that market demand has turned more buoyant, and firms and employees will find that prices and wages can be raised more readily than they had come to expect on the basis of past experience. But it will take time for them to recognize the change in the economic environment and to respond to it fully. The unusually rapid growth of output and employment will push capacity utilization rates up to abnormally high levels and tend to reduce unemployment to abnormally low levels. Increasing strain on productive capacity and growing tightness in the labor market will generate intensified upward pressure on price and wage levels, and in due course the rate of inflation will begin to accelerate substantially.

If the growth in money demand is maintained at its new rate of 10 per cent a year, the extra stimulus to output and employment will become progressively weaker as the rate of increase in the price level moves higher, and it will eventually disappear altogether once price inflation reaches a five per cent annual rate. This will bring the rate of growth in real output back down to the five per cent annual rate from which it originally started, with corresponding effects on the rate of growth of employment.

The above account assumes an adjustment process which may well be unrealistically smooth. If, at some stage, cost and price increases were to overreact to the degree of demand pressure, output and employment levels might be temporarily depressed for a time in the course of the period of adjustment.

In the end, the full adjustment of the economy to the stepped-up rate of demand expansion would merely have raised the inflation rate correspondingly, with no lasting effect on the growth rate of output or employment.

If an attempt were made to continue to run the economy at abnormally high levels of capacity utilization and abnormally low levels of unemployment, the only way this could be done would be by progressively stepping up the rate of expansion in money demand beyond 10 per cent a year in order to offset the effects of the progressively rising rate of inflation of the price level. If at some stage public pressure to call a halt to the process became irresistible, it is difficult to see how this could be done without major disruption of the economy and very serious adverse effects on employment. Nevertheless, on the basis of the oversimplified analysis outlined above, it will be seen that so long as the public were prepared to tolerate an *accelerating* rate of inflation which continued to exceed their expectations, some benefit in terms of output and employment levels could be maintained.

The above analysis leads to the rather obvious conclusion that, if it lasts long enough, unanticipated inflation tends to become transformed into anticipated inflation. Since there are important differences in the consequences of inflation depending on the extent to which it is correctly anticipated, much depends on how long it takes people's price and wage behavior to adjust to changing levels of money demand in product and labor markets.

A decade ago or even a few years ago it was possible to argue that the lags in cost and price adjustment to a stepped-up level of demand pressure were very long. As economic experience under policies based on this assumption has accumulated, however, so have serious doubts about whether the hoped-for employment and output gains which these policies are supposed to make possible are either very large or very lasting. People do learn from their experience of inflation and do adapt their wage and price behavior accordingly.

Although, as we shall see, the notion of a fully anticipated inflation is a theoretical construct rather than a phenomenon likely to be observed in the real world, it is certainly the notion that many people have in mind when they argue that inflation is relatively harmless.

All that one needs to assume in order to regard inflation as relatively harmless is that it is fully and correctly anticipated by almost everyone and that institutional practices have adapted to the point where almost everyone is effectively protected from its effects. Thus, if an annual rate of price increase of "x" per cent became the norm instead of the average rate of a little more than two per cent experienced in Canada between 1953 and 1970, and if it were certain that this average rate would be maintained in the future, adjustments of the following kind could be expected to take place. Average wage and salary levels would tend to rise over time at something like the average rate of productivity growth plus "x" per cent, interest rates on average would tend to be the "real" rate plus "x" per cent, pensions would be escalated by "x" per cent a year and the exchange rate would tend to depreciate or appreciate over time as required in order to accommodate differential rates of inflation between Canada and other countries. In short, life would go on in much the same way* as if everyone believed in reasonable price stability and prices were in fact kept reasonably stable.

Adjustments very similar to those described above do, in fact, take place in countries where relatively high rates of inflation are experienced on a continuing basis. It will be realized, of course, that any government capable of maintaining a steady 10-per-cent or 20-per-cent rate of inflation would be equally capable of maintaining a steady two-per-cent rate. Since nothing would be gained by maintaining a higher rate rather than a lower one once these became fully anticipated, any such government would no doubt choose the lower one. This is perhaps why there are many examples of countries where, over considerable periods of time, people expected and got reasonable price stability, while in countries with chronically high rates of inflation these rates are not steady but change significantly from year to year and sometimes from week to week.

Thus as a practical matter, if we leave aside the possibility of intermittently escalating inflation, the choice appears to be between reasonable price stability or a significant degree of inflation at rates which vary considerably over time.

Economic theorists have pointed out that if currency and demand deposits continued to bear no interest there would be a tendency to economize in the use of money and this would be wasteful. This also could be remedied by appropriate institutional changes.

Inflation of this kind keeps people guessing. At times it will turn out to be more rapid than people had anticipated, and at other times less rapid than they had expected.

Is inflation of this kind worth the candle? It offers the temptation of benefiting from time to time from the short-term gains in output and employment generated by increases in the pressure of demand which give rise to unanticipated inflation. These gains have to be balanced off against the haphazard redistribution of income and wealth which accompanies unexpected price changes and the resulting social unrest, disruption of markets dealing in fixed value assets, and the waste of the time and effort required as people try to devise effective ways of protecting themselves against the process. If action is eventually taken to restore the degree of price stability which existed prior to the outbreak, there will be temporary but significant losses of employment and output which are likely to exceed the previous gains. If, in addition, one takes into consideration the redistribution and other adverse effects of changes of this kind in both directions, it seems clear that episodes of this kind yield a net loss.

There is a comment in the Economic Report of the President of the United States for 1971 which reflects the feelings of those with policy responsibility during a period in which the chickens come home to roost:

> *"We have now come to see more vividly than ever before how long and painful is the effort to halt the inflationary process once it has been let loose. The avoidance of inflation is always, of course, an objective of national policy, and was an objective in 1965-66 when the present episode began. But this objective may not get its proper weight because of failure to foresee the losses of output and employment that will later be entailed in ending the inflation. Remembering the experience of 1969-71 should help to correct this error."*

Those who advocate unanticipated inflation, however, do not do their calculations in this way. They are prepared to balance off the initial gains in output and employment against the degree of redistribution and disruption involved, but they generally fail to make any allowance for the output and employment losses incurred in trying to bring the surge of inflation back under control. In short, they assume a one-way movement in price and cost increases without corrective action. If this relaxed approach were taken to each successive upward ratcheting of the rate of increase of costs and prices, a stage would surely be reached at which the patience of the public would finally be exhausted and an attempt to halt the process would have to be made, even though by then such action would pose very serious problems of adjustment.

The discussion in this section so far has left aside the international aspects of inflation in particular countries. To many this is the central issue, and the problem of inflation in Canada in their view is of little account so long as we keep more or less in step with the pace of inflation experienced by our major trading partners. Indeed, for those who believe the ideal world to be one in which there are no changes in exchange rates, countries like Canada have little choice but to accept much the same average rate of price increase as that occurring in the major economies. Given this reluctance to alter exchange rates, a country which inflates at a faster rate than the outside world will in time generate a balance of payments problem of increasing severity. In time it will be forced to take measures to restrain demand, perhaps accompanied by a devaluation. Thus, when it is argued that inflation must be controlled or the country's international competitive position will deteriorate, this is based on the notion that the exchange rate must be maintained at some fixed level or that there are strong objections to letting it decline enough to offset the effects of a differentially high rate of inflation.

Even though in the short run resort to exchange rate devaluation, depreciation or foreign exchange controls is capable of shoring up a country's competitive position temporarily, the effectiveness of such measures may well decline rapidly with repeated use. The intermittent relief gained in this way may well lead the public to conclude that the relative rise of the country's internal price level is likely to continue or even to accelerate, and to adapt its wage and price behavior accordingly

Before drawing this discussion to a conclusion, there are two general comments which remain to be made. The first is that it is important to avoid exaggeration in referring to the undeniable harm caused by inflation. There have been instances in history where the pace of inflation has been allowed to accelerate so far out of control as to end in hyperinflation and virtually total breakdown of the functioning of the economy. There have been many more instances, however, of countries with varying and sometimes extremely high rates of inflation which have retained enough control of the process, and adapted to it successfully enough, to prevent such a breakdown. It is not necessary to believe that inflation leads inevitably to calamitous consequences in order to believe that it is nevertheless a matter for serious concern.

Similarly, it is clear from what has been said above that phrases such as "inflation robs us all" convey a misleading impression. One reason why inflation is unpopular is that many people regard any increase in their own money incomes simply as a suitable reward for their capacity and effort, while they regard any increase in prices as taking away some of their just deserts. With the obvious exception of those who have to live on fixed amounts, the money incomes of most people are inflated by the same process which raises their living costs, and in many cases the robbery is more apparent than real.

While it is important to maintain a balanced perspective about the consequences of inflation, it is also important to be clear on what is involved. Discussions of inflation often become deeply entangled in questions of morality. One side argues that virtually any degree of unemployment is immoral, especially since it bears heavily on some of the most vulnerable members of the community. Others regard it as immoral to adopt inflationary policies which arbitrarily redistribute income and wealth, especially since some of those who suffer are also among the most vulnerable members of society.

Even if a resolution of these differing views is unlikely, it should at least be recognized that inflationary policies will only succeed in raising output and employment to the extent that people are misled about what is happening to the value of money. If governments were to commit themselves openly to following inflationary policies, they would risk losing the output and employment benefits sought. To obtain the maximum effect governments would have to pursue such policies while denying that they were doing so. There are many who would hold that such behavior is a normal requirement in many areas of public policy. Others take a different view. At the very least those who advocate inflationary policies should recognize that the issue exists.

In our view, there are strong grounds for believing that attempts to keep economic systems operating flat out are likely to encounter increasing difficulty over time in coping with people's ability to learn from their experience of inflation and to adapt their wage and price behavior accordingly. Over a period of years, there may well be little to show from such policies except the amount of inflation they have generated.

In the Commission's view, therefore, a high degree of skepticism is justified with respect to the alleged benefits which are said to be obtainable by learning to live with inflation. The case for accepting inflation sounds to us remarkably like a counsel of despair dressed up as a sophisticated long-term policy prescription. One can conceive of particular situations of such gravity that it might be the lesser of evils to risk making future inflation somewhat worse for a time in order to cope with immediate problems. As continuing policy, however, such an approach strikes the Commission as both short-sighted and futile.

OTHER POLICIES FOR REDUCING UNEMPLOYMENT

We have argued above that attempts to rely on demand policies that generate substantial inflation to achieve and maintain minimum levels of unemployed manpower and other productive resources in Canada are likely to be frustrated in large measure over the longer run by the tendency of the public to adapt its wage and price behavior accordingly. This suggests that if it is to be sustainable, the level of economic activity must not put so much demand pressure on important sectors or regions of the economy as to bring about a significant escalation of increases in cost and price levels. We have already seen, however, that because of regional and other differences in unemployment rates, a decline in the seasonally-adjusted national unemployment rate into the 4½ to five per cent range during the 1960s appears to have set the stage for a subsequent escalation of this kind. This is a high figure by international standards and much attention has understandably been given to policies which might reduce the level of unemployed resources at which rapid increases occur in costs and prices. We now turn to the question of what can be expected from these policies.

When ways and means are being considered for reducing the level of unemployment at which price and cost increases become substantial, pride of place is usually given to manpower policy. This is understandable since dealing directly with specific imbalances in the labor market seems the most obvious way of achieving this objective. It is argued that if there are vacancies in Ontario and significant unemployment in Quebec and the Atlantic Provinces, then migration to Ontario will make possible continued expansion while reducing the unemployment rate in the less buoyant parts of the country. Similarly, if there are vacancies for skilled labor and applicants for employment who lack skills, then manpower training programs can fit the unemployed for the jobs which are available. If economic change renders some skills obsolete and opens up vacancies for those holding other skills, retraining programs can help in adapting the supply of labor more effectively to the new pattern of demand. More generally, the manpower authorities can improve the functioning of labor markets through the provision of information, counselling and the placement services of an employment agency.

There was a time when the notion that the government should subsidize the operation of labor markets on a large scale would have seemed surprising.

Nevertheless, beginning with the national coordination of information and placement services several decades ago, the public has step by step accepted the view that governments should become deeply involved in providing a variety of manpower services including very substantial grants to what is in effect a large-scale adult education program.

What is at issue here is not whether policies of this kind are or are not desirable, but rather what could reasonably be expected from them in raising the sustainable level of utilization of our manpower and other productive resources.

To the extent that Canadian unemployment levels reflect the absence of effective placement services or lack of relevant skills rather than insufficient job opportunities, it should be possible to reduce them by providing improved information, counselling and placement assistance together with well-conceived training programs. We have already seen, however, that when national unemployment is in the critical range at which cost and price increases accelerate, it is typically the case that the level of unemployment in certain parts of the country – notably Ontario – is already low. Thus there would not appear to be great scope for reducing unemployment further in such regions through placement and training programs of this kind. In the less buoyant regions of the country, it appears that in both bad times and good there is a substantial overall surplus of applicants over vacancies for many categories of jobs. In principle more efficient job information and placement services could help reduce this imbalance. Only a limited part of this surplus of job-seekers, however, could be eliminated by training programs designed to impart skills for which there was an unfilled demand within these regions.

Indeed it is difficult to see how substantial reductions in the sustainable national unemployment rate could be achieved without a successful attack on regional unemployment differentials, either through greater mobility of labor out of the less buoyant regions or the use of devices to stimulate the more rapid creations of jobs within these regions. The mobility solution is one with automatic appeal to those who live in the more buoyant parts of the country. Apart from those concerned with problems of over-crowding in such areas, they see it as a way of dealing with the problem which involves less cost to themselves and which is more in line with natural economic forces than attempts to subsidize the creation of jobs in the less buoyant regions. It is not surprising that this solution has much less appeal for those who would have to move, particularly if this involves a different language and cultural environment. Nor is the prospect attractive for those who would be left behind, with their families and friends scattered in other parts of the country and their communities smaller and less vigorous as a result. Thus even though wage differentials have persisted over many decades, the adjustments in manpower and other resources have not gone far enough to achieve more nearly balanced employment levels across the country.

It is clear from the statistics on population movements, of course, that in fact regional migration and immigration have been the principal means by which partial adjustment to the differing rates of employment expansion in the various regions of the country has taken place. It will remain true that many of those faced with poor prospects in their own areas will seek opportunities elsewhere. It is not surprising, however, that those with experience in the manpower field are acutely aware of the many obstacles to the success of any program of assisted migration from the less buoyant regions.

Experience to date with the kinds of manpower policies referred to above is not inconsistent with the view that progress in lowering average unemployment rates by such means is unlikely to be rapid, but as yet one cannot speak with any certainty. While the information, counselling and placement functions have been carried out over an extended period there has been a considerable expansion of these activities in recent years. Given the slack demand conditions of 1970-71, it could be argued that we have not yet had an adequate chance to see what has been accomplished.

Much the same is the case with the training programs. It is true that very large expenditures were made on improved training facilities earlier in the 1960s, but of the $1,300 million of current expenditure on training programs for adults from 1960-61 to 1971-72, $1,150 million have been spent since 1967-68. Moreover, within the last year a major program of on-the-job training has been undertaken, the results of which cannot be evaluated fully at this stage. Here again, the fact that recent unemployment rates have been well above the critical range at which cost and price increases accelerate makes it difficult to assess how far these programs may have contributed to lowering this threshold.

Much the same can be said of programs to encourage labor mobility. When the general level of unemployment is high, job opportunities are relatively scarce even in the more buoyant regions and thus offer less encouragement to mobility. It is also evident that very little use has been made of the government grants provided for this purpose under various programs. The first of these is a trainee travel grant designed to help offset the transportation costs facing enrolees in training programs. The second is an exploratory grant, the function of which is to expand the area within which people are able to look for work. Unemployed persons can be authorized by their Canada Manpower counsellors to receive an exploratory grant including a temporary living allowance for the family. The third category of assistance consists of relocation grants available to those who have already found work in other areas and who apply for aid in meeting resettlement expenses. These include transportation and moving expenses for the worker and his family, a re-establishment allowance and a home owner's allowance. In 1971-72 less than 1,500 persons received assistance for relocating in other regions, with around 700 from the Atlantic Provinces and Quebec out of a labor force in these provinces totalling just over 3,000,000.

In summary, some forms of manpower policy such as the training programs have substantial economic and social effects, but it remains questionable whether they can be expected to do a great deal to reduce the critical range of national unemployment at which inflationary problems arise. Others, such as measures to encourage labor mobility, could contribute to a better matching of job vacancies and job-seekers within – and to some extent among – regions, but there are obvious limits to their widespread use by the public.

Another approach for dealing with regional unemployment differentials is the regional economic expansion program, which in general subsidizes the bringing of jobs to workers in the less buoyant parts of the country rather than attempting to subsidize the movement of workers to jobs. As in the case of manpower training, this program has only been operating on a major scale for a limited period and it is too early to reach conclusions on what it might accomplish in reducing these differentials. It is being more widely recognized, however, that the problem is a deep-seated one which will not yield easily to this or other techniques. Moreover, as with all programs involving a transfer of resources from one group or one region to another there are constraints on how far they can be carried.

Similar constraints operate in the area of selective demand policies. This policy approach aims at stimulating demand in particular regions or industries which are operating well short of capacity, while avoiding bringing excess demand pressure to bear on regions or industries where little slack exists. Experimentation along these lines has been a feature of recent budgetary policy in Canada, and also to some extent of government lending programs.

In addition to the regional dimension of the problem there is also obvious scope for a similar approach in stabilizing demand over time in particularly volatile industries. The construction industry is a notable example. Wide variations in the level of activity and employment in this industry have led to frequent suggestions for evening out the flow of construction work. Over the course of the last three years the Commission has been involved in a variety of consultations with employers, employees and clients of the construction industry. Among other steps taken it has helped to initiate action on a program to improve the flow of information on the future construction plans of governments and other clients of the industry. It is evident, of course, that better information is only a first step towards more advanced and coordinated planning of construction activity and employment. Here again the magnitude of the technical and other difficulties to be overcome should not be underrated.

Some economic policies and institutional influences work in the direction of increasing unemployment. Mention has already been made in an earlier section of the strong social and institutional forces which have long resisted any widening of regional wage differentials, and indeed worked to narrow them if possible. Measures which make unemployment less unattractive, such as more generous unemployment insurance benefits and welfare payments for those who are fit and able to work, can also be expected to influence unemployment in an upward direction. The same is true of significant increases in legal minimum wages. The impact of such increases is often assessed solely in terms of the direct employment effects on those currently employed at the minimum wage. What is often not recognized is that if the increases in the minimum wage are large enough to have an effect on a significant part of the wage structure (including the wages of those above the minimum) this will tend to reduce the opening up of new employment opportunities for those in the categories affected.

The policy measures discussed earlier in this section affect the average level of unemployment mainly through their impact on the functioning of the labor market. Suggestions are often forthcoming for changes in supply policies of a much broader nature, such as reductions in tariffs, the removal of governmental price supports, or more generally the application of competition policy to reduce the degree of monopoly in markets for goods and services generally. Similar proposals affecting the labor market include the easing of restrictions on entry into various occupations and legislative changes to reduce the power of unions.

Proposals of this kind can represent either or both of two strands of thought. Those who lean towards a market power explanation of inflation see corporations, unions and other monopolistic groups as playing a crucial role, and look for a long-term solution in attacking the sources of power of these organizations. Others simply maintain that any major reductions in market power achieved through the introduction of more effective domestic or foreign competition in particular sectors of the economy will have a useful once-for-all downward effect on prices in these sectors.

Clearly the expected benefits from changes of this kind appear much greater to those who lean towards a market power interpretation of inflation than to those who do not. If they are substantial enough and well timed, however, such measures can have the effect of holding down or reducing some prices during a period of general price increase. It is hardly necessary to point out that the most powerful resistance can be expected from the groups adversely affected, and for this reason examples have been rare. The advancement of the tariff reductions negotiated in the "Kennedy Round" is one of the few cases in which this policy approach has been used.

We have now mentioned a number of measures which might help reduce the critical range of national unemployment at which cost and price increases have tended to accelerate. A large part of the discussion has been devoted to policies concerned with regional unemployment differentials, since the relatively high unemployment rates typically found in the less buoyant regions of the country are not only in themselves a major source of concern, but largely account for Canada's high national average unemployment rate.

As was pointed out earlier in this report, however, the regional dimensions of unemployment in Canada are not its only aspect. For example, it has frequently been suggested that part of the explanation for regional unemployment differentials lies in varying attitudes to life and work, reflected in some parts of the country in a more casual approach to regular employment and a greater willingness to rely on unemployment insurance or welfare. Such attitudes, however, are not confined to the less buoyant regions. The regularly-employed worker chained to his plant or office has often envied those who live a less directed life. Among many young and not-so-young people today, questioning the virtues of "economic success" has been elevated to the status of a philosophical approach. To the extent that skepticism about the work ethic exists, whether in the less buoyant or in the more buoyant parts of the country, it may be reflected in the unemployment numbers.

Insofar as the regional differentials in unemployment rates are not so much "voluntary" as the result of institutional arrangements and policies, then either the unemployment must be accepted or the institutions and policies changed. Since some of the obstacles to high employment in these regions are very deeply ingrained in the economic and social framework of the nation, changing them is extremely difficult. A fundamental solution may well be impossible without initiatives and strong support from the people of the less buoyant regions themselves. Thus, for example, it used to be thought that it was the help of richer nations which would determine the fate of the less developed countries of the world. As experience has accumulated it has become increasingly evident that in most cases success or failure is largely dependent on the efforts of the population of the less developed countries themselves.

In the last year or so other ways of resolving the unemployment-inflation dilemma have been suggested, some of them of a much more direct and simple character than those discussed above. Training programs reduce unemployment directly, while the Local Initiatives and Opportunities for Youth programs move governments in the direction of becoming society's residual employer. It is true, of course, that the effect of such programs in lowering unemployment is reduced to the extent that additional workers are drawn into the labor force. It will also be apparent that as the general level of employment rises the need for such programs in the more buoyant parts of the country will diminish, and care will be required to avoid adding to the degree of tightness in these labor markets.

In summary, there are many approaches available which could have the effect of reducing the range of national unemployment at which cost and price increases have recently tended to accelerate, but the intractability of some aspects of the problem, particularly that of regional unemployment differentials, is often under-estimated. At the same time other influences, both public and private, tend to maintain or raise the level of unemployment at which inflationary difficulties may arise. A realistic approach which recognizes the difficulties involved and the hard choices which must be made offers the best hope of tangible results. But whatever is accomplished along these lines, it will still remain the case that an over-optimistic view of the extent to which the critical range of unemployment has been reduced will lead to policies which risk increasingly severe inflation.

CAN DEMAND POLICIES ALONE DO THE JOB?

We now have looked at two of the policy choices for resolving the apparent dilemma between low unemployment and reasonable price stability over the longer run. We have concluded that the acceptance of more rapid inflation than in the past would provide at best only a temporary postponement of our difficulties. We have also pointed out some of the obstacles to using supply and selective demand policies to reduce the national average rate of unemployment at which cost and price problems have arisen. Thus we are left with two policy instruments, general demand management and incomes policy, for attempting to achieve on a continuing basis the highest level of economic activity consistent with the avoidance of inflation.

The issue to be settled here is whether or not general demand management needs to be supplemented by incomes policy. There is little disagreement that demand management must continue to play a central role, and that any attempt to use incomes policy without careful coordination with demand policy would lead to failure. There are those who believe, however, that demand policy alone can do the job, providing the authorities adopt the appropriate rules of behavior.

This position is argued along the following lines. First of all, it is denied that there is any significant "trade-off" between unemployment and inflation over the long run. The "trade-off" is seen as essentially a short-run phenomenon which arises in an economic environment of instability in the rate of expansion of money demand. Changes in the degree of demand pressure on productive capacity have an immediate – though temporary – impact on output and employment levels because of the delayed response of costs and prices to such changes. In spite of these short-run delays, however, there is every reason to believe that the trend of costs and prices does in fact adjust eventually to the trend of money demand.

Thus if the growth of money demand is kept reasonably steady, output and employment growth will tend to stabilize around equilibrium rates determined by the basic forces of capital accumulation, labor force growth and underlying productivity improvement. The rate of change in the price level will tend to reflect the difference between the growth rate of money demand and the growth rate of capacity output; it too will tend to stabilize around some reasonably steady rate. This assumes that the effects of a differing rate of inflation in the outside world are offset through accommodating movements in the level of a flexible exchange rate.

According to this argument, the average level of unemployment that emerges will reflect the institutional and other characteristics of labor and product markets, not any deficiency of demand. It can be reduced over time if these markets can be made to function more efficiently, but not by demand policies.

It follows from this view of how the economy works that attempts to use demand management alone to keep the rate of output up to some unrealistically high level of potential output, or the level of unemployment down to some unrealistically low target figure, are doomed to failure over the longer run. In the short run, the economy can be thrown into temporary disequilibrium by speeding up the rate of demand expansion, and this will result in temporary deviations of unemployment below its normal range while costs and prices are adjusting. Unless the rate of demand expansion can be made to outrun the process of cost and price adjustment indefinitely, however, any employment gains achieved in this way will sooner or later be cancelled out by more rapid inflation.

The above analysis suggests that the overriding objective of demand management should be to reduce the instability of demand growth by keeping it at a rate which is not far out of line with the trend rate of growth in productive capacity. Over time, it may be possible to reduce the average level of unemployment consistent with stable demand growth, but this will depend on the scope for structural policies aimed at improving the efficiency with which labor and product markets function.

There is much to be said for this type of analysis and policy prescription, but as a practical matter stabilizing the rate of demand expansion is more easily said than done.

There are both technical and other difficulties in achieving this result. Although demand instability can be seen to arise in part from sudden or substantial changes in the posture of fiscal, monetary or exchange policies, this is by no means the entire story. Major changes in the level of demand abroad or in the international economic policies of our trading partners, sharp or perverse movements in the exchange rate, upsets in financial markets, military conflicts, industrial strife or social disturbances–these and a wide range of similar developments equally difficult to foresee are bound to continue to have an impact–and at times a major impact–on the level of demand.

Thus demand management must be conducted on the basis of economic forecasts, the reliable time horizon of which is uncomfortably short even in the best of circumstances. It must also be based on underlying economic analysis which is inevitably subject to a considerable margin of uncertainty. There are many reasons for this, including not only the inadequacies of existing theory and data but also the difficulty of predicting how the public's learning processes and changing institutional arrangements will affect past patterns of economic behavior. Thus unresolved controversies continue concerning the relative importance of monetary and fiscal measures, the timing and magnitude of their effects, the consequences of alternative exchange rate policies and a host of lesser questions. Additions to our knowledge should permit improvement on the degree of demand instability experienced in the past, but it would be unrealistic to underrate the purely technical difficulties to be overcome.

It should also be obvious that keeping demand growth steady is unlikely to be an entirely tenable policy in the face of public demands for action to deal with pressing short-run problems. Practitioners of demand management are acutely aware of the lags in the response of the economy to changes in general economic policy but this is not yet part of the thinking of the broader public. There is, therefore, continuing pressure to use today's policies to deal with today's difficulties, rather than with the problems which are likely to exist as much as a year or more hence when some of the main effects of today's policies will be felt.

Some historical perspective on the problem may be gained by considering under what conditions it might have been possible for economic policy to have avoided the demand overshoot of the mid-1960s.

It has been argued in this report that it was mainly because the expansion of aggregate demand in the economy was allowed to become too strong for too long that average price and wage levels in Canada began rising at a noticeably faster pace in 1965-66. In retrospect, it looks as though the recovery of output and employment in Canada had reduced the margin of excess capacity and unemployment in the economy close to normal levels by mid-1964. From this point on it would seem to have required an average rate of growth of money demand no higher than, say, seven or eight per cent a year to keep pace with the trend rate of growth of the labor force and national productivity without any significant acceleration of the gradually rising trend of prices. Instead aggregate demand rose by more than 10 per cent annually over the next three years.

It must be recognized, however, that in 1964 when the groundwork was being laid for the subsequent outburst of inflation, it was widely believed that Canada still had a long way to go in emerging from the severe and protracted recession of the previous years and that further strong measures to expand demand continued to be required. In the circumstances of the time there would have been negligible public support for—and widespread opposition to—the view that the time had already come for a more cautious approach to demand expansion. To have assumed that an unemployment rate only a little below five per cent of the labor force was about the lowest under which the economy would be able to operate without generating more rapid price and cost increases would have seemed to many a premature and unduly pessimistic judgment on which to act.

The belief that price, wage and employment trends in Canada could diverge progressively from those in the United States would have been received with considerable skepticism, and many would have regarded such a course of action as undesirable even if it were feasible. In all likelihood an early return would have been required to the floating exchange rate for the Canadian dollar, a system which had only recently been abandoned in favor of a fixed parity. For many firms selling exports in the U.S. market or competing with imports, the marked decline in the exchange rate over the period 1961-62 had sharply improved the profitability of their operations and opened up many possibilities for entry into new market areas. Yet if the Canadian economy were to have been insulated from the strong inflationary pressures which developed later in the United States, this would seem to have required general acceptance of a renewed appreciation of the Canadian dollar at an early stage. It would also have required continuing public support for policies which would have kept Canadian unemployment at normal levels during the period 1966-69, while U.S. unemployment declined temporarily to unusually low levels as the outburst of serious inflation in that country gathered momentum.

By late 1968, when severe inflation had already gripped the economy for some time and had become entrenched in people's expectations and behavior, no conceivable way of managing demand remained open to the authorities for which public understanding or approval could be expected. They could have tried to stabilize the expansion of money demand at a rate high enough to minimize any temporary rise in unemployment, but this would have meant the passive acceptance of the escalated rate of inflation which had emerged since 1966 as a new minimum. The alternative was to try to stabilize the growth of demand at a rate low enough to restore eventually the degree of price stability experienced in the past, even though this meant risking a period of uncomfortably high unemployment. The ensuing slowdown in economic activity in Canada led to much public concern, even though its adverse impact on output growth and on the national unemployment rate (particularly the rate for adult males) was less severe than in the recession of 1960-61.

Keeping a steady hand on the rate of demand expansion is not, in fact, very helpful advice in situations where the economy is in serious disequilibrium rather than already moving along some equilibrium growth track.

On any realistic view of the matter, it would seem unwise to pin great hopes on what might be achieved towards resolving the inflation-unemployment dilemma over the next few years solely through efforts to reduce the instability of demand. This is not to deny that we should be able to improve considerably on our past record of demand instability, or that such improvement offers the best available hope of resolving the problem over the longer run. For some time to come, however, it seems unlikely that we shall be able to avoid occasional overshoots or undershoots of demand, with all the short-run problems they present.

CAN INCOMES POLICY HELP?

Does the above discussion of the main policy options available for dealing with Canadian employment and price stability problems over the longer term suggest the need for some form of incomes policy?

Throughout we have stressed the need for realism about the technical and other obstacles to rapid improvement in the performance of the existing range of economic policies. A corresponding degree of realism is clearly required in assessing the potential usefulness of some form of incomes policy, particularly since many supporters of direct intervention in wage and price decisions under-estimate the difficulties of applying such a policy and over-estimate the results which might be achieved.

Although incomes policies come in all shapes and sizes, their common feature is an attempt to check the pace of inflation directly by influencing decisions to raise prices, wage rates, other costs and profit margins. The means invoked range all the way from attempts at persuasion to agreed arrangements supported by informal governmental pressures to mandatory controls backed by legal sanctions. Such programs may be very comprehensive in scope or highly selective; they may involve a total freeze of prices and compensation levels or mild restraints on increases; they may be temporary or conducted within a framework of continuing institutional arrangements.

If the root of the inflation-unemployment dilemma lay in the ability of powerful unions and corporations to keep pushing up costs and prices indefinitely, regardless of demand conditions, there would seem to be a strong case for permanent wage and price controls. It is sometimes thought that such a belief provides the only possible basis for giving serious consideration to controls.

This is not our view. The Commission's analysis of the causes of recent Canadian inflation identified a number of areas in which changes in the degree or use of monopoly power had had significant effects, but in general we did not find this view of the nature of the basic problem convincing.

We do see serious difficulties, however, in trying to extricate the economy from a major inflationary outbreak originally generated by an overshoot of demand but persisting stubbornly because of widely held inflationary expectations and response lags. To be successful, an attempt to rely on demand restraint alone to restore reasonable price stability in such circumstances may well require the acceptance of abnormally high unemployment over an extended period.

It is in a situation of this kind that our analysis suggests a potentially useful role for a temporary program of controls. In conjunction with demand policies aimed at creating and maintaining a more stable demand environment, temporary resort to controls would seem to offer a means of bringing cost and price increases more promptly and reliably into line with the change in demand conditions, thereby speeding up the process of adjustment and reducing the transitional loss of jobs and output in bringing inflation under control. Even so, the process is unlikely to be quick or easy, and the results will not be lasting unless inflationary expectations can be changed.

Two essential conditions must be satisfied for a temporary control program of this kind to work effectively and then to be phased out with minimum risk of a renewed outbreak of inflation. First, the public must be convinced that such measures are necessary and that there exists on the part of governments a strong determination to make them operate as effectively and equitably as possible. Second, governments must be prepared to demonstrate a resolve and ability to maintain relatively stable prices and costs over a sufficiently long time span, embracing not only the control period but also its aftermath, to convince the public that inflationary expectations and patterns of behavior are no longer justified.

Unless demand is maintained at levels consistent with these objectives, then either the control system will prove unworkable or its removal will lead to renewed inflation. Given the uncertainties and lags in the response of market demand to changes in demand management, this will not be easy to do. European experience suggests, however, that if the control system breaks down or wages and prices rise rapidly following the end of the program, it will become difficult or impossible to enlist support for the use of incomes policy in the future.

It is our view, therefore, that temporary price and income controls should only be used as part of a longer-run policy aimed at maintaining underlying demand conditions both during and after the control period consistent with the target rates of increase in average price and income levels.

We begin by describing in very broad terms the essential characteristics of a full-fledged control system. After examining how difficult it is likely to be to accomplish significant and lasting results even with this most powerful form of restraint program, we turn to the suggestions which have been made for more limited and looser types of incomes policy.

The control program undertaken in the United States during the last year illustrates the general nature of such a system. The underlying rationale for this program appeared in the Economic Report of the President transmitted to the Congress in January 1972:

"The basic premise of the price-wage control system is that the inflation of 1970 and 1971 was the result of expectations, contracts, and patterns of behavior built up during the earlier period, beginning in 1965, when there was an inflationary excess of demand. Since there is no longer an excess of demand, the rate of inflation will subside permanently when this residue of the previous excess is removed. The purpose of the control system is to give the country a period of enforced stability in which expectations, contracts, and behavior will become adapted to the fact that rapid inflation is no longer the prospective condition of American life. When that happens controls can be eliminated."

Given the extent to which the U.S. program has been modified since its inception, any detailed description can quickly become dated. The general nature of the system can, however, be sketched out in the following terms. One central feature is a general 5½ per cent limit on wage and salary increases applicable to all employees on a uniform basis, with certain exceptions provided largely at the discretion of the control authority. There are those who argue that such a uniform limit is too rigid and that flexibility should be permitted to allow for differential rates of productivity growth among industries. There are two reasons for rejecting this approach. First, it conflicts with the basic economic mechanism through which productivity gains tend to be diffused throughout the whole economy rather than being reflected in lasting divergences in relative wage levels between industries with high rates of productivity increase and industries with low ones. Second, it would encounter strong resistance from those employees who justifiably felt that they had been unfairly treated.

While wage and salary control systems which have lacked a uniform rule have encountered serious difficulties, most control schemes provide for certain exceptions. In particular, decisions have to be taken about how to treat future increases already included in existing long-term contracts. Similarly, various special cases have to be dealt with, such as those where employers cannot obtain enough workers at existing wage rates. Thus, certain exceptions are essential, but some programs have been rendered ineffective through the multiplication of provisions for handling special cases.

The parallel price control system adopted by the United States is one of various possible schemes which could be used as part of an overall program. Price control systems of this kind impose limits on the extent to which prices can be raised by requiring that such increases do not raise profit margins. Under the system in force in the United States, a firm cannot increase prices unless it can show that cost increases will lower its margin of profit below the level prevailing at the outset of the program *and* below the level of the base period, i.e., the highest average margin realized in any two of the firm's last three fiscal years. In short, firms must satisfy a double test in order to raise prices. They are allowed to do so only to the extent necessary to maintain the lower of their profit margin immediately prior to controls or their margin in the base period. On the other hand, firms which do not increase prices have their profit margins subjected to control only under special circumstances.

Most control schemes, including that in force in the United States, contain provisions for limiting increases in rents, professional fees, and other kinds of prices and incomes. For example, the American system of rent control sets a limit of 2½ per cent for annual increases in rents over a wide range of residential housing accommodation, and provides that additional increases can be made only if required to meet tax increases or, within limits, to compensate for new major capital improvements. Special arrangements have been made to limit increases in medical fees and other health costs, some interest rates, dividends, and the fees and charges of state and local governments.

The U.S. price and income control system has much in common with programs of the same general character which have been introduced in other countries. Indeed, the kind of price and income restraint program which the Prices and Incomes Commission was discussing with management, labor and government representatives in 1969 was, with certain exceptions, broadly similar in its general approach. The discussions were broken off well before any agreement had been reached even in principle – let alone on details – but all the main elements of such a plan were actively examined, including an upper limit on wage and salary increases, a limit on price increases, control over rents, ways of limiting increases in other incomes, and means of ensuring compliance. When it became necessary to proceed with a much more limited program in early 1970, the National Conference on Price Stability adopted price restraint criteria which required firms to ensure that the revenue gains derived from price increases were limited to amounts clearly less than the increases in costs that the firms were experiencing.

There was, of course, a striking difference between the situation in which the U.S. control program was launched and the conditions under which a similar initiative was attempted in Canada. In the United States not only had efforts to deal with inflation through reliance on demand policy alone proved very discouraging, but the country was faced with an international financial crisis as well. Moreover, the fact that the Congress had earlier passed enabling legislation for the imposition of controls made it possible for the President to act with the full force of the law from the outset. Once a temporary freeze had been imposed it was then possible for the government to initiate concrete and pointed discussions with the major interest groups on the shape of the controls to follow the freeze.

Rightly or wrongly there were very few people in responsible positions in Canada in 1969 who thought that conditions had reached the stage where legislation providing for a mandatory price and wage control system would be justified. On the other hand, those who took part in exploratory discussions of the so-called "voluntary" program in 1969 had few illusions that any effective system of restraint could be devised without the need for substantial backing by governments, whether by way of regulations, fiscal devices or more informal methods of persuasion.

The decision to go ahead on a more limited basis with a price restraint program led to some positive results, including a modest contribution to the very striking price performance of 1970. It was recognized from the outset, however, that unless an effective way could be found for limiting wage and salary increases, any moderation of the rise in the price level was likely to be limited and temporary. A proposed upper limit of six per cent for annual wage and salary increases, with provision for exceptions, was put forward unilaterally in June 1970. This suggestion was strongly opposed by employee groups and did not gain the degree of general support from the public and governments which was necessary if it were to have much impact. After the formal restraint program terminated at the end of 1970, a common view was that although the six per cent upper limit may have had some positive effect in reducing wage and salary increases, any such effect had been quite small.

In retrospect it seems clear that the attempt to arrive at an agreed restraint program acceptable to the major interest groups prior to any legislation for this purpose placed a heavy responsibility on the participants in the discussions. This was particularly the case with the union representatives. As subsequent events in the United States have shown, even when legislation is available to be used if necessary, it is very difficult to develop a control system which is both effective and broadly acceptable to employee groups. In an environment in which supporting governmental action would have had to be forthcoming from a number of governments, and when the absence of any experience with incomes policy left doubts about the effectiveness of commitments from business, the problem was doubly difficult for union members. Under other more favorable conditions, and with the practical experience gained both in Canada and the United States in conducting an incomes policy, the prospects for a measure of cooperation among private groups in fashioning an effective control system may be considerably more promising. It goes without saying, of course, that a recognition of the seriousness of the problem on the part of provincial governments, together with their active support for the measures required to deal with it, would make a major contribution to the chances of success of such a program.

It remains true that the Government of Canada has principal responsibility for the management of the economy, and on May 21, 1971, the Acting Prime Minister, The Honourable Mitchell Sharp, gave the following answer to a question on whether the federal government had the constitutional power to act: "It is our view, and this is why we have been looking at the possible options for enforcing mandatory price and wage controls if it becomes necessary, that under the circumstances then existing we would have that authority." (Hansard p. 6031)

It might be asked why opposition to price and income restraint programs has been so strong in North America and elsewhere. Programs of this kind are designed to curb inflation with less severe and prolonged adverse effects on employment and output than would be possible if reliance were placed on demand management alone. For the community as a whole there are important economic benefits to be had. Why then so much opposition?

One source of resistance is from those who fear that their real income gains will not be as large as they might have been otherwise. For some, this concern is justified. For many others it is not, since they stand to gain from lower living costs what they give up in money income increases. When reinforced by mutual suspicion that others in the community are in a position to "beat the system", however, fears of this kind make it easy for opponents of controls to build a case that the coverage or effectiveness of any particular restraint program is inadequate.

Opposition based on justified or unjustified fears of adverse effects on individual real incomes finds ready support among those who raise objections on grounds of principle.

The first and most general of these objections is that a control program would infringe on individual, social and political freedom. The Commission shares the natural reaction of most people in a liberal democratic society to bureaucratic interference with individual freedom and the use of coercion to make behavior conform to imposed norms. This needs to be taken into account as one of the costs of any temporary program of controls.

A second source of opposition is based on the ideas and interests which have gathered over the last three or four decades around the institutions of free collective bargaining. Any direct interference in this process has the appearance of crude intervention in a complex and delicate network of relations with resulting adverse social and economic effects. It is not surprising that many of those with special knowledge and experience in this area resist any general form of price and income restraint with great vigor, and it is only when the view becomes widespread that the alternatives may be worse that some at least are prepared to accept a substantial interference with the free collective bargaining process.

Finally, there are those who have a strong belief in the virtues of private enterprise. This is partly the reaction of members of a particular economic group to being subjected to governmental interference in their affairs and partly a concern about the economic costs involved. Study of economic theory and analysis of the operation of a wide variety of economies over an extended period leave many with the view that there was much merit in Adam Smith's injunction of two centuries ago:

> *"The statesman, who should attempt to direct private people in what manner they ought to employ their capitals, would not only load himself with a most unnecessary attention, but assume an authority which could safely be trusted, not only to no single person, but to no council or senate whatever, and which would nowhere be so dangerous as in the hands of a man who had folly and presumption enough to fancy himself fit to exercise it."*

Anyone with sympathy for this point of view would have the gravest reservations about a system of controls which had an air of permanence about it. It is less clear that a temporary program which builds on existing market conditions and merely sets limits on the degree of short-run response to market forces is open to so heavy a charge. There are bound to be economic costs arising from some distortion of market processes, the burdens of compliance and in some cases the blunting of incentives. In a temporary program, however, such costs may be fairly low and must be weighed against the alternative costs of continuing inflation and unemployment.

Nevertheless, the use of controls is undoubtedly open to many objections both on ideological and practical grounds. Thus it is not surprising that many people find it hard to accept the possibility that controls may, nevertheless, be the least undesirable of the alternatives open to us.

Since a number of other studies of the problem have avoided being driven to this conclusion, it may be helpful to examine the general position taken in one of them, the recent Report of the Senate Committee on National Finance, entitled *Growth, Employment and Price Stability.* There is much in this Report which parallels the Commission's findings, including the Senate Committee's view that expectations and lags provide most of the explanation for our recent difficulties. How is it then that the Committee was able to reach such a negative conclusion on the use of controls, which in its view should be limited to a situation in which the United States continued to employ "more and more stringent wage and price controls over an extended period of time"?

As already stated, one way of resolving the unemployment-inflation dilemma temporarily is to opt for inflation. Although the Senate Committee was prepared to accept as a target an annual rate of increase in the Consumer Price Index of two to three per cent – a rate somewhat higher than the traditional objective – and although its analysis suggests that some significant long-run gains in employment can be had from continuing inflation, taken as a whole its Report rejects an inflationary solution.

A second alternative considered by the Committee was to accept a less ambitious view than that widely held by the public concerning the level of unemployment which can be maintained without inflation. The Committee adopted this position. While arguing that the Economic Council's objective of a three per cent national unemployment rate was a valid goal for the longer term, the Committee recommended an unemployment rate of four to 4½ per cent as an interim target more appropriate to the present situation of the Canadian economy. This recognition of the need for greater realism about the level of unemployment consistent with economic stability helps to explain how the Committee was able to conclude that resort to controls might be escaped.

It is in connection with the Committee's discussion of the possible contribution of supply policies and demand management that difficult questions arise. Its Report expresses various criticisms of the way in which these policies have been used in the past and makes a number of suggestions for improvement. No doubt debate will continue on how these policies can be made more effective, and opinions will differ on the extent to which the Committee's suggestions are either feasible or would in fact contribute to this end. Whatever the outcome of that debate, a practical question arises as to how enough progress is to be made along such lines in the near future to deal with our emerging problems. It is, of course, part of the Committee's position that the war against inflation is a long one, but it does not explain how the immediate battles are to be fought while longer-term strategies are being worked out and progressively implemented.

When the Prices and Incomes Commission appeared before the Senate Committee, a question was asked about what was to be done if both unemployment and controls were unacceptable methods of controlling inflation. The reply was as follows: "The public of this country are going to have to understand how narrow the choices are and how difficult the problem is". It is our view that the Committee's negative conclusion on the use of controls resulted from a failure to recognize how narrow the choices may have become.

If such a policy is attempted, is it important that it be applied only at a time and in a way which offers a high probability of success? The answer to this appears to be yes. Those who have played a role in the application of prices and incomes policies in other countries sometimes argue that while their attempts may not have been successful, it is possible to learn from one's mistakes and do better next time. This assumes, however, that the public will not respond to repeated failure by rejecting incomes policies entirely.

This possibility does not arise in the case of demand management. Like it or not, governments must tax, spend and manage the supply of money, and therefore cannot avoid having demand policies even if the actions taken are based on inflexible, self-imposed rules. Having an incomes policy, however, is a matter of choice. A case can be made, therefore, that on a longer view it would be self-defeating to put together another prices and incomes restraint program unless it has a high probability of success.

This suggests the need for caution in following suggestions for more limited forms of intervention in prices and incomes decisions. At one stage in the spring of 1970 the Commission went some distance in exploring the possibility of using tax disincentives as a means of limiting increases in money incomes, since the prospects for obtaining effective enforcement of guidelines in this area by other techniques remained in doubt. Means were studied whereby increases beyond stipulated percentages both in annual rates of employment income and in personal incomes derived from other sources would be subject to a graduated special withholding tax refundable only at some future date. The larger the increase in money income beyond this percentage, the larger the amount of this income currently withheld as refundable tax.

If a workable and effective tax device along these lines could have been devised, it offered the hope that the desired scaling down of the size of increases in wages, salaries and other money incomes could be achieved without detailed intervention in the collective bargaining process or in other aspects of income determination. In the end, however, the conclusion was reached that it was extremely difficult to devise a system along these lines which was sufficiently equitable, administratively workable and reasonably certain to produce the desired effects on private behavior.

Other proposals have been made which are much more limited in scope. It is sometimes suggested that particular cases of large and unjustified increases in prices or income levels should be selected for public attention, but it is not clear what standard should be applied to reach decisions on such cases. Similarly, it is not made clear how it would be possible, even if there were such a standard, to defend its use in passing judgment on some cases while ignoring a host of others. Finally, the question arises whether the glare of publicity is really, as some still appear to feel, a sufficiently strong weapon to serve as an effective deterrent in matters of this kind.

The Commission has always held the view that the place of "voluntarism" in a price and income restraint program should be largely restricted to agreement on the criteria to be followed, and that when it comes to applying criteria a means of enforcement is required. When, however, it became apparent that the price restraint program agreed to in February 1970 was unlikely to survive without some action being taken on wages and salaries, and when it became clear that for a variety of reasons it was not possible to use the tax system to provide an enforcement mechanism, resort was had to a unilaterally announced upper limit of six per cent for annual wage and salary increases and efforts were made to enlist the support of governments and the public. The limited success we had in obtaining support rendered this effort largely ineffective but incidentally provided a practical demonstration of what it is like to try to apply criteria unsupported by any effective means of enforcement*.

Repeated attempts to apply an incomes policy without sanctions are unlikely to accomplish much, and indeed may well be counter-productive if they bring the whole policy approach into disrepute. In short, while there may be some case for further experimentation with more limited forms of incomes policy, this is an area where half measures may be worse than no measures at all.

It may be that before long the march of events will bring Canadians to the view that serious consideration should be given to a temporary program of controls. With this in mind, it has been the Commission's view that a group should be retained within the government to continue work on these issues. On April 27, 1972, the Prime Minister announced the establishment of such a group to carry on the work of contingency planning, to complete the publication of the Commission's studies and to continue research on the role of prices and incomes policy in dealing with inflation.

This completes our summary of the analysis we have made of recent Canadian inflation and of the broad policy choices open to us. Our analysis of the causes

**Having been exposed to this demonstration, those who still advocate the use of incomes policy without any sanctions are not unlike the Scottish fisherman who asked his friend Jock to throw over the anchor to stop their boat from drifting on the rocks. "But Angus," said Jock, "don't you remember? The rope is broken." "Aye," said Angus, "but throw it over anyway. It may slow us down a bit."*

and processes of inflation is more optimistic than some. On the other hand, our appraisal of the range of available policy alternatives does not lead to optimistic conclusions. A healthy sense of realism need not, however, lead either to fatalism or cynicism. In spite of the events of recent years, a return to something like the degree of price stability experienced in Canada in the past is still within our reach, and we have more chance than most countries to make some headway against the strong inflationary currents being felt all over the world today. The first step is to reach a measure of consensus on the nature of the problem and on the policy choices open to us.