Statistics on the British Columbia Impact of National Fiscal and Monetary Policies

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The purpose of this paper is to present a numerical "snapshot" of the state of the British Columbia and Canadian economies. The main emphasis is on the presentation of numbers, both for the description they provide, and as a basis for the discussion by John Helliwell of the impact of various policies on the B.C. economy. Five tables are presented. The first two give a quantitative indication of some of the links between the federal government and the various regions of the country. It is through these links that some federal policies operate. The third and fourth tables present a number of time series in an attempt to compare the cyclical behaviour of the economies of Canada and British Columbia. The final table presents information regarding the fraction of B.C. exports to the United States subject to the recently imposed surcharge.

Federal fiscal policy will affect the regions of the country through taxation of individuals and corporations within them, through the regional distribution of federal government expenditure on goods and services, and through transfers of revenue to governments or individuals within the regions. Information regarding some of these channels is given in Tables I and II. All dollar figures pertain to the fiscal year ended March 31, 1969, the last year for which complete information is available. The dollar and employment figures in Table I are aggregates for the regions, while those in Table II are expressed in per capita terms. Unless noted otherwise, it is those in Table II that will be referred to in discussion. The first six columns in the two tables contain the same information.

The province of Quebec has exercised its right to opt out of several federal spending programmes, and has received extra abatements of federal taxes (to leave scope for provincial taxation) in exchange. The taxation figures for Quebec in Tables I and II reflect assumed *normal* abatements, rather than those actually in effect. The value of abatements in lieu of participation is shown as a transfer to Quebec for those programmes under which the federal government transfers funds to participating provinces for their distribution. Under the Youth Allowance programme the federal government makes payments directly to indi-

viduals outside Quebec. In the absence of an accurate figure for the value of benefits Quebec receives in lieu of participating, payments under this programme have been excluded from the Tables for all regions. Showing these programmes in this manner should result in figures for Quebec which are comparable to those for other regions.

Federal taxation policies affect the various regions of the country primarily through the volume of personal and corporate income taxes collected. Columns 1 and 2 give a regional breakdown of these taxes and Column 3 of their sum. The per capita federal tax collections indicate, not surprisingly, that increases will bear most heavily on B.C. and Ontario. Similarly, tax cuts should be felt most strongly there.

Another source of federal government impact on the regions of the country is through expenditure on goods and services. Unfortunately, regional breakdowns of government expenditure are not available in Canada. While some of the expenditure of some departments can be allocated among regions, the vast majority of it cannot. Since employment costs constitute one of the major elements of government expenditure, federal employment by regions has been noted in Column 4 of these tables. Again, the per capita figures of Table II are the more revealing. The main surprises here are the disproportionately high federal employment in the maritime provinces, and the only slightly greater than average employment in Ontario, in spite of the presence of the national capital. The Ontario figures are even more surprising when it is noted that many of the employees of the federal government who work in Ottawa and live in Quebec will be recorded as Ontario employees.

As well as being spent on goods and services, a considerable fraction of federal government revenue is transferred to provinces, municipalities, and individuals. Transfers to provinces and municipalities are given in Column 5. Since these transfers include the grants designed to equalize regional income levels, it is not surprising that the maritimes rank at the top of the list, and that B.C. and Ontario are at the bottom. The major surprise is the relatively low value for Quebec. The tax abatements in lieu of participation in shared-cost programmes, included as part of the transfer to Quebec, should balance the payments to the other provinces under these programmes. The amount shown by Statistics Canada for this compensation due to withdrawal from joint programmes, however, is so low that it must be viewed as somewhat suspect.[1]

[1] The 1970-71 edition of the *Canada Year Book* shows transfers to Quebec under the Canada Assistance Plan of $149 million or about 80% of the $187 million given as the *total* transfer under all of the programmes Quebec opts out of. Yet the benefits to the other provinces under the Canada Assistance Plan are less than 30% of the

A regional breakdown of all federal transfers to individuals is impossible to obtain. The programmes operated by the Department of Health and Welfare are the most important in terms of funds involved and transfers under the more important of these are given in Column 6. The low figure for Quebec reflects disproportionately low Old Age Security payments due to the age distribution of the provincial population.

The incomplete nature of the information presented in these tables reflects in large part the distressing lack of information in Canada on a regional basis. The lack is surprising in view of the importance accorded in federal policy to the reduction of regional disparities.

Tables III and IV present four pairs of series which can be used to compare the cyclical behaviour of the Canadian and British Columbia economies. The first pair of series gives the unemployment rates, the ratios of the number of persons unemployed to the number in the labour force. The second gives changes in the number of employed persons, where the numbers employed are obtained from the same household survey as the unemployment rate. The third pair gives changes in total wages and salaries paid. The final pair of series shows changes in consumer price indexes, designed to measure the change in the cost of a basket of goods typical of those purchased by a low to middle income family in 1957. The B.C. representative in this pair is the index for Vancouver, since a provincial index is not available.

Table III gives annual averages or changes in annnual averages for several years to indicate the relative movements of the Canadian and B.C. series over entire business cycles. Table IV presents the same averages and changes obtained from quarterly data to indicate recent movements in these series in more detail. With the exception of the price indexes, where the weights are varied over the year in an attempt to eliminate seasonal variation, the series on which Table IV is based are all seasonally adjusted.

Table III shows the national unemployment rate rising sharply from 1957 to 1958, falling slightly in 1959 to the 6% range, and then rising again to the 7% range for 1960 and 1961. After 1961, the unemployment rate falls slowly during the long upsurge of the mid 1960's, reaching the 3½% level by the middle of the decade. As Table IV shows more clearly, the rate then climbed to its current levels with slight reversals in the early

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total under these shared-cost programmes. The $187 million transfer to Quebec is about *half* the number of (equalized) tax points worth of benefits other provinces derive from these programmes. If the transfer to Quebec is doubled the figures in Column 5 of Tables I and II become $837,858 and $140.93 respectively.

parts of 1969 and 1971. Throughout this entire period, the B.C. rate remained consistently above the national rate with the gap widest in periods when the national rate was high. The past year has provided the only exception to this pattern with the provincial rate falling and little net change in the national rate, until they are now approximately the same.

The provincial and national employment changes show broadly similar movements in most periods, with greater average growth for B.C. reflecting the faster growth of the provincial economy. While changes in the unemployment rate come about from changes in the number employed and changes in the size of the labour force, the movement of the unemployment rate cannot be linked to changes in the number employed alone. There is considerable variation in the labour force due to changes in the participation rate, the fraction of the population who are working or looking for work. An unexpected increase in the participation rate was the explanation given by federal authorities for the deterioration in the unemployment rate at the same time that the number of persons employed was rising in the fall of 1971.

Changes in wages and salaries reflect changes in both the number of persons employed, and their rates of pay. Provincial and national changes in this variable are broadly similar as well. Not surprisingly, the patterns of price increase shown by the Canadian and Vancouver consumer price indexes are also similar to one another. These indexes are so constructed that changes in one index can be compared with changes in the other, but their levels cannot be compared. Thus, while we can note that the average increase in consumer prices has been smaller in Vancouver than nationally, we cannot infer anything about relative price levels.

The monthly fluctuations in the unemployment rate are followed widely, yet most people have little idea of how dependable a measure of unemployment it really is. For this reason a few comments on the construction of the unemployment rate seem in order.

The sample on which the rate is based includes approximately 30,000 households each month, necessitating a "blow-up" factor of about 200 to obtain the national or provincial totals for numbers employed, unemployed, etc. With any sampling procedure there is some error in the estimates obtained since estimates from different samples will vary about the value that would be obtained if the entire population were surveyed. That is, two different samples of the same size, both equally representative of the area being considered, would almost certainly yield slightly different values for the number of persons unemployed, and both would almost certainly be slightly different from the number of unemployed that would

be discovered if all households in the area were surveyed. This "sampling error" is greater (as a per cent of the number obtained) for a feature such as unemployment which is reported by only a small fraction of respondents, than for a feature such as employment reported by a much larger number. It is also greater for unemployment, employment, or any other feature in a smaller sample such as that for a province than in a larger sample such as that for the entire country. This greater sampling error for provinces is part of the reason that quarterly unemployment rates and quarterly changes in employment for B.C. (in Table IV) vary much more from quarter to quarter, than do their national counterparts. Statistics Canada is, of course, well aware of this feature of these numbers, and a section of the monthly publication, *The Labour Force*, in which the unemployment rate is published, is devoted to warning the reader. In spite of this warning, voters and politicians alike seem to place great store in the exact value reported.

A second matter that deserves comment is the seasonal adjustment of the unemployment rate. Since seasonally adjusted rates give a much better picture of underlying economic conditions they are the ones most frequently considered. The seasonal adjustment of any series requires estimating the regular variation due to seasonal factors, and removing this variation from the raw or unadjusted data. For the unemployment rate, as with most series to be seasonally adjusted, the seasonal pattern is estimated from the series itself, with the pattern used for any year being estimated from the values for that year and a few years before and after. For the latest values in a series this is clearly not possible, since the later values are not yet available. The seasonal pattern applicable to 1971 values would be estimated from the last few years and the estimate of this pattern *would be modified* as observations for the rest of 1971 and later were available. While the seasonally adjusted value reported for a current unemployment rate is the best estimate now available, it will almost certainly be modified when later information on the seasonal pattern is employed. This feature too, should be kept in mind in the clamour over the latest monthly values.

The latest values at any time are useful in trying to discern trends and general underlying movement in a series such as the unemployment rate, but it is important not to lean too heavily on a single value lest we be misled by a bit of sampling error or some quirk in a seasonal adjustment programme.

The United States actions to discourage imports, announced on August 15, 1971, will have effects whose regional and national impact differ con-

siderably. We will consider briefly the impact of one aspect of that policy, the surcharge on imports.

An indication of the nature and magnitude of Canadian exports expected to be subject to the surcharge is presented in a recent study by the federal Department of Industry, Trade and Commerce.[2] They conclude that approximately 25% of Canadian exports to the U.S. will be affected with major impact on Animal and Vegetable Products, Wood and Paper Products, and Metals and Metal Products. Similar analysis for British Columbia is difficult due to lack of detailed data on provincial exports to the U.S. However, tariff changes applicable to a number of commodities making up 71% of the province's exports to the U.S. in 1970 are given in Table V. It appears that the main impact will be on lumber and metal ingots, while some major exports suffer no effect at all from the surcharge.

The exact percentage of provincial exports to the United States subject to the surcharge cannot be determined, but it is possible to establish upper and lower limits. Making the *least favourable* assumptions — including in the exports subject to the surcharge all those where there is some uncertainty — a figure of 70% is obtained. Making the *most favourable* assumptions and excluding from possible coverage all those exports where there is some uncertainty the resulting figure is 33%, still considerably higher than the 25% national estimate. A *reasonable estimate* between these limits would be the one obtained assuming that the fractions of commodity groups covered are the same as for those groups nationally in cases where the coverage for B.C. exports is not known. The estimate of B.C. exports to the U.S. subject to the surcharge obtained in this case is 45%, and this is the figure that will be used in subsequent calculations.

An alternative measure of the volume of exports subject to the surcharge is that obtained by expressing these exports as a fraction of national or provincial product. This yields the results that approximately 3¼% of Canadian Gross National Product, and 5% of the Gross Provincial Product consist of exports subject to the surcharge. Again the figure for B.C. is significantly higher than its national counterpart. The actual impact of the policies on economic activity in Canada will depend on both the sensitivity of demand for these exports to the resulting changes in their U.S. prices, and the other aspects of the policy measures. Discussion of the total effect of the U.S. actions will be left to John Helliwell.

[2] *A Statistical Summary of Canadian Exports Subject to United States Surcharge* (Department of Industry, Trade, and Commerce, Ottawa August 1971).

TABLE I

REGIONAL IMPACT OF FEDERAL TAXATION AND EXPENDITURE POLICIES

Region	(1) Federal Gov't Share of Personal Income Tax[b, c]	(2) Federal Gov't Share of Corp. Income Tax[d]	(3) Sum Of Columns 1 and 2	(4) Federal Gov't Employment October 1968	(5) Transfers To Provinces And Municipalities	(6) Selected Transfers To Individuals[f]
	(,000)	(,000)	(,000)		(,000)	(,000)
Maritimes	$ 223,461	$ 92,013	$ 315,474	51,921	$ 516,695	$ 226,158
Quebec	1,108,616	458,036	1,566,652	73,438	650,933	528,181
Ontario	2,074,039	887,653	2,961,692	141,409	663,891	741,674
Prairies	642,973	283,053	926,026	60,187	411,704	375,082
B.C.	528,776	238,691	767,467	30,131	178,582	231,112
CANADA[a]	4,611,506	1,985,600	6,597,106	373,270[e]	2,437,600	2,104,973

SOURCES: Col. (1) *Taxation Statistics*, Department of National Revenue. 1970 and 1971 editions which cover 1968 and 1969 taxation years.

Col. (2) *Corporation Taxation Statistics*, 1968 (61-208), Statistics Canada.

Col. (4) *Federal Government Employment*, October-December 1968 (72-004), Statistics Canada.

Col. (5) *Federal Government Finance, Revenue and Expenditure and Direct and Indirect Debt, 1968* (68-211), Statistics Canada.

Col. (6) *Public Accounts of Canada For the Fiscal Year Ended March 31, 1969*, Vol. II. Receiver General of Canada, Ottawa, 1969.

NOTES:

a National figures include Yukon and N.W. Territories and other data not classified by region.

b Personal Income tax data are a 3:1 weighted average of 1968 and 1969 taxation years.

c Federal taxes include Old Age Pension and Social Development taxes and exclude abatements of 28% of personal income tax and 10% of taxable corporation income.

d Net Federal Taxes have been allocated across regions in proportion to the taxable income reported by region by corporations.

e Federal government employees outside Canada, numbering 12,933, are included in national but not regional figures.

f Includes transfers under the Family Allowance, Family Assistance, and Old Age Security programmes.

TABLE II

REGIONAL IMPACT OF FEDERAL TAXATION AND EXPENDITURE POLICIES: PER CAPITA DATA

Region	*(1)* *Federal Gov't Share of Personal Income Tax*[b, c]	*(2)* *Federal Gov't Share of Corp. Income Tax*[d]	*(3)* *Sum Of Columns 1 and 2*	*(4)* *Federal Gov't Employment October 1968*	*(5)* *Transfers To Provinces And Municipalities*	*(6)* *Selected Transfers To Individuals*[f]	*(7)* *Population October 1968*
			(Per ,000 Population)				(,000)
Maritimes	$111.23	$ 45.80	$157.03	25.84	$257.19	$112.57	2,009
Quebec	186.48	77.05	263.53	12.35	109.49	88.84	5,945
Ontario	281.99	120.69	402.68	19.23	90.26	100.84	7,355
Prairies	185.08	81.48	266.56	17.32	118.51	107.97	3,474
B.C.	260.74	117.70	378.44	14.86	88.06	113.96	2,028
CANADA[a]	221.10	95.20	316.30	17.90[g]	116.87	100.92	20,857

SOURCES: Col. (1) - (6) Same as cited in Table 1.

Col. (7) *Canadian Statistical Review*, June 1970 (11-003), Statistics Canada.

NOTES: Notes a, b, c, d, and f same as cited in Table I.

g Federal government employees outside Canada, numbering 0.62 per thousand of population are included in national but not regional figures.

TABLE III

CANADA-BRITISH COLUMBIA CYCLICAL COMPARISON:
ANNUAL TIME SERIES[a]

	(1) Unemployment Rate		(2) Employment Change		(3) Change in Wages And Salaries		(4) Change in Consumer Price Index	
Years	*Can.*	*B.C.*	*Can.*	*B.C.*	*Can.*	*B.C.*	*Can.*	*Van.*
	%		%		%		%	
1957	4.6	5.1	2.6	4.1			3.2	
1958	7.0	8.7	—.4	—1.6			2.7	
1959	6.0	6.4	2.9	4.0			1.1	
1960	7.0	8.6	1.6	—1.0	5.2	4.3	1.2	
1961	7.1	8.5	1.5	2.1	4.4	1.7	0.9	
1962	5.9	6.7	2.8	4.6	7.3	6.7	1.2	0.3
1963	5.5	6.5	2.4	3.6	6.7	7.3	1.8	1.6
1964	4.7	5.4	3.7	6.0	9.4	10.4	1.7	0.7
1965	3.9	4.2	3.8	5.6	11.7	14.5	2.5	1.9
1966	3.6	4.6	4.2	6.1	12.1	13.9	3.7	2.4
1967	4.1	5.2	3.2	6.6	10.7	10.4	3.6	3.7
1968	4.8	6.0	2.1	3.6	9.0	7.2	4.1	3.7
1969	4.7	5.0	3.2	6.1	12.4	14.7	4.5	3.4
1970	5.9	7.7	1.3	2.0	8.9	9.9	3.3	3.4
1961-1970[b]	5.0	6.0	3.0	4.9	9.8	10.5	2.9	2.3

SOURCES: Col. (1) *The Labour Force* (71-001), Statistics Canada.
Col. (2) *The Labour Force* (71-001), Statistics Canada.
Col. (3) *Estimates of Labour Income* (72-005), Statistics Canada.
Col. (4) *Prices and Price Indexes* (62-002), Statistics Canada.

NOTES: a Unemployment rates given are annual averages. For all other series the figure given for each year is the percentage increase (or decrease) in the annual average compared with that for the previous year.

b Unemployment rates are averages over the decade. All others are the rates of increase which, if compounded, would cause the 1961 value to grow to the 1970 value after nine years.

TABLE IV

CANADA-BRITISH COLUMBIA CYCLICAL COMPARISON: QUARTERLY TIME SERIES

(Seasonally Adjusted)[a]

		(1) Unemployment Rate		(2) Employment Change		(3) Changes In Wages And Salaries		(4) Change In Consumer Price Index	
Year	*Quarter*	*Can.*	*B.C.*	*Can.*	*B.C.*	*Can.*	*B.C.*	*Can.*	*B.C.*
1968	1	4.8	5.8	0.1	0.0	2.0	1.3	0.9	0.8
	2	4.9	6.4	.9	—.3	2.9	2.0	.9	.4
	3	4.9	6.2	1.1	1.9	2.4	2.6	1.2	1.2
	4	4.8	5.6	1.2	2.0	3.4	5.0	1.0	.7
1969	1	4.4	5.0	1.4	.9	3.7	2.7	.7	.7
	2	4.7	4.6	.4	3.9	2.3	3.9	2.2	2.0
	3	4.8	4.9	.5	—1.5	2.6	3.2	.6	—.3
	4	4.9	5.4	.2	2.0	2.5	4.8	1.0	1.3
1970	1	5.0	5.8	.8	1.0	3.0	4.1	.8	.7
	2	6.0	8.1	.5	—.4	.6	—3.4	.8	1.6
	3	6.7	9.0	0.0	—1.1	1.7	.7	.2	—.2
	4	6.5	8.3	.5	.7	2.4	6.9	—.3	.5
1971	1	6.1	7.3	1.2	2.2	1.9	.8	1.2	1.3
	2	6.5	7.2	—.2	1.0	3.2	2.8	1.3	.9

SOURCES: Same as Table III.

NOTES: a With the exception of the Consumer Price Indexes, all data used in construction of this table were *seasonally adjusted.* Unemployment rates are averages of the monthly rates for the quarter. For all other series the figure given for each quarter is the percentage increase (or decrease) in the quarterly average compared with that for the previous quarter.

TABLE V

IMPACT OF UNITED STATES SURCHARGE ON BRITISH COLUMBIA EXPORTS

Commodity	*B.C. Exports To United States (1970 Value)*	*Tariff Change*
	($000,000)	
Lumber[a]	347.4	Increased from 7¢-30¢/1000 bd. ft. for various types to $3-$4/1000 bd. ft.
Plywood and Veneer	3.1	Increase of 10% of value of product.
Woodpulp	133.7	No change.
Newsprint Paper	128.7	No change.
Aluminum Ingots	39.2	Increase of 10% of value of product.
Zinc Ingots	20.7	Increased from .7¢/lb. to 1.75¢/lb.
Lead Ingots	16.3	Increased from 1.0625¢/lb. to 2.125¢/lb.
Copper Concentrates	2.8	No change.
Iron-ore Concentrates	1.7	No change.
Natural Gas	41.4	No change.
Others	296.0	Not known.
TOTAL	1031.0	

SOURCES: *British Columbia Financial and Economic Review*, July 1971, Table 37 and *A Statistical Summary of Canadian Exports Subject to United States Surcharge* (Department of Industry, Trade and Commerce, Ottawa August 1971).

NOTES: a The exact fraction of B.C. lumber exports to which the surcharge applies is not known. Since 85% of Canadian exports in the commodity class containing lumber are subject to it, and since B.C. products make up at least 65% of the exports in this group, the fraction of B.C. lumber exports subject to the surcharge cannot be less than 75%.

National Fiscal and Monetary Policies: A Regional Interpretation

JOHN HELLIWELL

Hartley Lewis has provided background information on the links between the B.C. region and the federal government and further information on how major cyclical variables have recently moved in B.C. in comparison to their movements in Canada as a whole. From the information he has provided it is quite clear that B.C. is substantially different from the rest of Canada. There are two obvious implications of this.

1. Aggregate national monetary and fiscal policies, unless carefully tailored with regional balance in mind, will have effects that differ by region, so that even if the economic problems are the same in each region, a standard dose of policy medicine that is right for the country as a whole will be wrong for most of the individual regions.

2. At any given time, each region will have a different balance between aggregate supply and demand, so that even if a standard dose of monetary or fiscal policy had equivalent effects in each region, the use of policies that achieve national targets would not achieve equivalent targets in each of the regions.

There is, of course, the happy but unlikely possibility that the differing effects of the various policy instruments will exactly balance the differing requirements of the regions, so that a set of policies chosen to suit the national averages will also suit the regional situation. Such happy accidents have not occurred in Canada and there is not much chance they will occur in the future. Thus it will continue to be in the interest of people living in the various regions to have an eye to the effects that national policies are having on them, and to consider ways in which national policies could be realigned so as to take better account of special circumstances in particular regions. In the remainder of the paper, I shall try to indicate in principle how various short term government policies might influence the B.C. region. Although I shall illustrate the discussion by reference to recent policy changes, the discussion will be fairly general, partly to provide a better basis for future use of the relevant tools, and partly because it is very difficult to be specific about the regional effects of current policies. Although it is increasingly easy to make quantitative

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judgments about the national effects of national policies, we are at present without the necessary data to permit us to measure and explain the inter-regional flows of people and goods in Canada.

After the discussion of how various national fiscal and monetary policies act on the country as a whole and on B.C. in particular, I shall conclude by considering some of the pros and cons of more regional autonomy in policy making.

This is one of the most complicated measures to analyse in regional terms because it can take so many forms. The first possible split is between government purchase of goods and services provided from outside and wages paid to persons directly employed by government. We do not have information available allowing us to show which region or regions are most influenced by changes in government purchases of goods and services. However, it can be seen from Hartley Lewis' tables that a change in government employment, if applying equally in proportionate terms to all the regions, has its most predominant effects in Ontario and in the Maritimes. If there is a cut-back in direct government employment, or in government purchase of goods produced in a particular area, the immediate effects of that policy are felt in only the area directly concerned.

If there is a desire to focus government expenditure in particular regions, as implied by the establishment of the Department of Regional Economic Expansion (D.R.E.E.) and its predecessor agencies, then policies can be made very specific indeed.

General changes in personal or company tax rates have impacts across regions that depend on the distribution of the tax base. The personal tax yields slightly higher proportions of taxable income in the richer regions, and changes in marginal rates have similar effects. The company tax situation is slightly more complicated, with a difference between the average situation and what happens when there are changes in tax rates. The marginal tax rates applicable to corporations do not differ much from region to region, and taxable corporation profits are arbitrarily split among the provinces according to each corporation's regional distribution of wages and salaries. Thus a simple change in the corporation tax rate has the same effects on the various regions. However, there are sharp differences between regions in the average rate of corporation tax paid, primarily because the depletion allowance, and the tax-free period for new-mines, are applicable chiefly in the resource-rich regions. From the point of view of those regions, the incentives permit the use of tax revenues from other provinces to finance new projects in the resource-rich areas. Whether these inter-regional transfers make idealistic sense is another

matter, as they cannot be supported on the usual argument that the richer regions ought to help pay for services in the poorer regions. If the tax incentives for extractive industries had always come directly out of the tax share of the region in which the development takes place, there would probably have been little objection to the reforms originally suggested in Mr. Benson's White Paper. This is because the provincial governments would have seen little reason to continue a scheme in which their tax dollars were used to subsidize developments whose profits were then subject to special provincial taxes and royalty payments. As it is however, there is every reason to use federal dollars to bring developments into the region, so that provincial taxes can be levied on the resulting profits.

Before leaving the subject of direct taxes, there is a useful contrast, from the regional point of view, between the personal and company taxes. A federal change in basic personal income tax rates or exemptions alters provincial and federal income taxes in roughly the same proportion, because the provincial take is a percentage of the basic tax. A federal change in the corporation tax rate, on the other hand, alters only federal revenues, as the provincial share is defined as a certain percentage of taxable income. The federal government has tried to by-pass this difference, from time to time, by imposing or altering Old Age Security taxes, Social Development taxes, or surtaxes, which are not defined to be part of the basic personal income tax. All such schemes have been forsworn in the tax reform bill, however, so we shall have to wait and see whether this leads to more use of corporation tax in preference to the personal income tax as a tool for stabilization policy.

Turning to indirect tax changes, there is nothing special to say, beyond pointing to the limitations posed by crowding when the provincial "direct" sales tax at the retail level is superimposed on the federal "indirect" tax at the manufacturer's level.

Of all the tools used in stabilization policy, monetary policy is perhaps the most difficult to tailor to regional needs. Aside from federal direct or guaranteed lending schemes, which can be, and have been, very specific, the general level of interest rates and the degree of credit availability are bound to be very similar across the country. The Bank of Canada has at times asked the chartered banks to look after the credit demands of their customers in the depressed regions when credit has been generally tight elsewhere, but the ease with which capital moves frustrates almost any such attempt to segment credit markets. Indeed, if there is a fixed exchange rate and there are no impediments to international capital flows, there is little scope for a national monetary policy to establish interest

rates different from those abroad. A floating exchange rate, or prospects of a change in a fixed rate, or of taxes or guidelines influencing capital flows, provide more scope for independent national policies. By the same token, a B.C. currency area, with an exchange rate free to float against the Eastern Canadian dollar, would provide increased scope for regional monetary policies, and for inflation rates to differ between East and West. Whether there is anything to be gained from regional currency areas in Canada is less likely, but I shall return to the general issue below.

Devaluation is a time-tested way of attempting to export unemployment, by increasing global demand for home products relative to foreign products. On the other hand, devaluation is also the inevitable result for countries with inflation rates higher than average, with slow productivity growth, or with international trading positions declining for other reasons. Whether the countries on the other side of the exchange rate change regard it as due reward for their hard work (their yen are now worth more abroad), or as a nasty blow to the unemployment rate depends on the circumstances. And, as we have already seen, these circumstances differ across regions in Canada. To the extent that an increase in the value of the Canadian dollar were due, for example, to U.S. demand for Canadian autos and parts, the results in B.C. would have more in them of unemployment than of reward for high productivity in the woods industries. Under the classical adjustment mechanism, of course, the relatively high unemployment rates in B.C. would lead to emigration to Ontario — just in time to encounter the effects of the U.S. New Economic Policy, to which subject we shall turn in a moment. But first note the underlying point — that changes in exchange rates are relatively painless parts of the adjustment process only if the previous rate was equally out of line for all the regions, or if the inter-regional movements of people and activity otherwise required are desirable when viewed as part of the longer haul.

The U.S. measures of August 15, 1971 are national policies to be viewed from a regional point of view. In this case, unlike the ones considered previously, B.C. is not in the nation making the policies, but one foreign example should be useful as well as topical. Alternatively, we can view the U.S. import surcharge as a pair of Canadian policies — a tax on exports to the U.S. coupled with an untied foreign aid grant to the United States of the entire proceeds of the tax. The only quantitative measure we can provide about the likely impact of the surcharge on B.C. is to be found in Hartley Lewis' Table 3, showing the possible coverage of the surtax to B.C. exports.

As for other features of the New Economic Policy, (N.E.P.), the ones most likely to impinge upon Canada are the investment tax credit restricted to U.S.-made machinery, the extension of tax advantages to Domestic International Sales Corporations (D.I.S.C.'s), various measures to expand demand in the United States, and the wage-price freeze. The net effect of the package is uncertain. Some simulations have been run with the basic N.E.P. measures built into a quarterly model of the U.S. economy, and that model jointly solved with a Canadian model and models of several other industrial countries, each of which was assumed to revalue against the U.S. dollar by 4%. All exporters to the U.S. were assumed to absorb the surcharge, so that only the revaluations influenced trade flows. Income and employment were seen to increase in the U.S., and to decrease in most other countries. An exception was Canada, whose output was expected to rise slightly because of increased exports to the U.S. induced by the expansion of activity in that country. Those simulations probably get the direction wrong for Canada, because they do not take account of all the incentives provided to buy from U.S. rather than Canadian sources. However, the experiments do help to show how much Canadian aggregate demand depends upon what is happening in the United States, especially under a regime of fixed exchange rates.

As for a regional assessment of the U.S. measures, an economist can only decry the application of trade restrictions as a supposed means of obtaining freer trade in the future.

Other features, such as the wage-price freeze, ought not to damage Canada's position under a flexible exchange rate — a successful freeze will just make the Canadian revaluation less than it otherwise would have been, and life goes on as before.

From a global point of view, it is natural to criticize the N.E.P. as a misguided search for a trade surplus when the more rational strategy would have been to close the gold window and to ignore the balance of payments altogether; but all that lies beyond this paper.

The material presented above, and in the paper by Hartley Lewis demonstrates how and why national policies cannot, in general, accord with regional interests at all times. This provides reason for debating whether or not the various regions could in general do better for their residents if policies were made closer to home. The issue bristles with complexities, and is laden with emotional content.

I shall venture only to start the hare, and mention a pair of important considerations. On the one side, one can argue that there is a greater community of interests and uniformity of economic structure within a

single region, so that it is easier to choose specific policies that meet agreed local objectives. On the other hand, this uniformity within regions and diversity between regions means that trade and mobility between regions are likely to be of great mutual advantage. Unless there are elaborate ground rules accepted by all the regions (the inter-regional equivalents to the international G.A.T.T.), the unco-ordinated and self-interested policies chosen by the independent regions might soon make everyone worse off by blocking the flows of people and trade between the regions. The international parallels are all too easy to find. And who could guess what would happen to inter-regional aid if it came to be determined like foreign aid?

We live in a constantly changing balance of political pressures making for more or less centralization; and we would do well to consider some of the economic consequences of the alternatives — while we still have at least the illusion of choices open to us.