

Is the Metropolitan Vancouver Economy Uncoupling from the Rest of the Province?¹

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Over the one-year period 1990-1991, average annual employment in metropolitan Vancouver expanded by 24,000 while employment in the rest of the province decreased by 4,000 (Statistics Canada, 1990; 1991). By January 1991, 55 per cent of the jobs in the province were in the metropolitan Vancouver economy, up from 53 per cent from the previous year. This trend has been relatively steady since 1984, when Vancouver's share of provincial employment was 48 per cent (Greater Vancouver Regional District, 1991). The stream of migrants from the rest of the province (and from other provinces) looking for work in the Vancouver region is likely to continue, perhaps intermittently, throughout the future (McRae, 1992).

Growth of the Vancouver economy can be attributed in part to exports to the rapidly expanding economies of the Asia Pacific. Studies of the export propensities of Vancouver firms have pointed to the increase in export activity, both relative to total sales and in absolute terms. For example, Hayter and Barnes (1990) conducted an examination of export performance of Vancouver manufacturing and service firms in a period characterized by the serious recession of the early 1980s. From their analysis of a sample of 129 producer service firms, they observed that "exports were noticeably more important in 1986 than they were in 1981; in the case of the service sector, the export ratio almost doubled" (Hayter and Barnes, 1991:165). Successive surveys over the period 1971-1990 of producer services in the metropolitan economy have shown a marked shift in the destination of sales from the local market and the rest of the province to the United States and, progressively, to nations of the Asia Pacific (Davis, 1976; Ley and Hutton, 1987; Davis and Hutton, 1991).² Over the last two decades, the Vancouver economy has continually evolved from its

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² The rapid growth of a number of countries on the Asian side of the Pacific Rim has resulted in a significant shift in Canadian exports. Exports to Japan, for example, now rank second only to those to the U.S. and exceed in value our combined exports

traditional status as a provincial higher order service centre to an urban node in the network of increasingly interdependent cities of the Pacific Rim.

Along with an economic reorientation of its primary export markets, Vancouver has experienced a significant economic restructuring (a shift of employment from goods production to service activities). For the past several decades, restructuring has occurred throughout the Canadian economy, primarily in the metropolitan areas (Coffey and Polèse, 1987; 1989). This process has been particularly prominent in the Vancouver economy in recent years, as has been well documented (Davis and Hutton, 1981; Hutton and Davis, 1990; Hutton and Ley, 1991).

The expanding economic links between Vancouver and the Asia Pacific, combined with the continuing development of structural differences with the rest of the provincial economy, have led to concerns regarding the divergence of the Vancouver economy from the remainder of the province. For example, in their consideration of the ongoing development of Vancouver's complex of corporate services, Ley and Hutton (1987: 423) point to the "loosening of the bonds between core and periphery in a staple led [provincial] economy." In a report prepared for the Greater Vancouver Regional District, Stevenson et al. (1988:8) report that "Greater Vancouver's relationship with the province's resource-dominated economy is changing . . . Greater Vancouver has progressed towards an economic structure less dependent on the provincial economy." Similarly, Davis and Hutton (1991:14) observe that "the continued expansion of export-oriented producer services and their locational bias toward metropolitan areas has resulted in an increasing divergence of the Vancouver metropolitan area . . . from the remainder of the province." In recognition of these increasing ties to offshore international economies, another report (Government of Canada, 1991b:3) observes that the "dual economy" in B.C. has increased dramatically over the 1989-1991 period, with the result that the metropolitan Vancouver economy "does not depend exclusively on resources any more." A recent survey article on the provincial economy declares that "British Columbia's economic future depends on two separate economies" (Burnham, 1992).

In terms of the distribution of employment among the various economic

to the United Kingdom, France and Germany, historically our second largest regional market. From 1981 to 1990 Canadian exports to Western Europe increased from \$10.4 billion to \$14.4 billion, while over the same period exports to the Asia Pacific grew from less than \$8 billion to more than \$16 billion (Royal Bank of Canada, 1991). At the provincial level, exports from British Columbia to the Pacific Rim began to exceed those to the U.S. in 1984. (For a political perspective on the implications of this shift in provincial trade, see Resnick (1985)).

activities, the provincial economy may be readily divided into three regional economies: Vancouver, Victoria, and the Interior. Each of these three regional economies differs distinctly from the other two. The metropolitan Vancouver economy encompasses a diversity of activities but is distinguished by its complex of interdependent producer or "corporate" services such as engineering, computer services, management consultants, accounting, financial, and legal services. In contrast, the metropolitan Victoria economy is based primarily on the public-sector activities of education, health and social services, and public administration. The Interior region is distinguished principally by its dependence on the resource-based primary industries of forestry, mining, agriculture, and fishing.

In the immediately following section, empirical evidence is presented regarding the extent to which the Vancouver economy differs structurally from the province's other two regional economies. Attention is then centred on the perceived "uncoupling" or disengagement of the metropolitan Vancouver economy from the rest of British Columbia. Recent research at both the national and provincial levels is reviewed in regard to this issue. The paper concludes with suggestions concerning future research endeavours, particularly in regard to provincial economic modelling efforts.

Structural Differences among B.C.'s Three Regional Economies

The employment data in table 1 show the extent to which the Vancouver economy is oriented to the "dynamic" service activities — the intermediate, high value-added services that include both producer services (finance, insurance and real estate; business services) and distributive services (transportation and storage; utilities and communications; wholesale trade).³ It is these service activities that are critical to Vancouver's growth in exports in that they are being increasingly directly exported and are important contributors to the competitiveness of the products of the metropolitan region's (and the province's) goods sector. Although employment in the Vancouver CMA is roughly equal to the combined employment of the Victoria and Interior regions, Vancouver contains about two-thirds of the total provincial employment in these particular service activities. The dynamic services account for 30 per cent of the labour force within the Vancouver economy but less than 20 per cent in each of the other two regions.

The metropolitan Victoria region clearly stands out among the three regions with respect to the non-market services. Education, health and

³ This typology of service activities was developed by the Economic Council of Canada (1991).

TABLE 1
Labour Force Distribution: Vancouver, Victoria, Interior, 1986

	<i>Vancouver</i>		<i>Victoria</i>		<i>Interior</i>	
	<i>L.F.</i>	%	<i>L.F.</i>	%	<i>L.F.</i>	%
<i>The Goods Sector</i>						
<i>Primary</i>						
Agriculture	9987	1.4	1513	1.2	28054	4.7*
Fishing & trap.	2659	0.4	809	0.7	5241	0.9*
Forestry	3803	0.5	1600	1.3	35407	5.9*
Mining	2860	0.4	283	0.2	16218	2.7*
<i>Man. & Construct.</i>						
Manufacturing	89835	12.6	7175	5.9	81820	13.6*
Construction	43705	6.1	7315	6.0	36175	6.5*
<i>The Service Sector</i>						
<i>Dynamic Services</i>						
F.I.R.E.	51855	7.3*	6235	5.1	23605	3.9
Bus. services	50605	7.1*	6800	5.6	13585	2.3
Transport & storage	48780	6.8*	4870	4.0	28855	4.8
Comm. & utilities	23840	3.3*	2845	2.3	18720	3.1
Wholesale trade	40220	5.6*	3280	2.7	19930	3.3
<i>Traditional Services</i>						
Retail trade	89720	12.6	16155	13.3*	80970	13.5*
Accom., food & bev.	57025	8.0	10445	8.6*	51185	8.5
Amuse. & rec.	11835	1.7*	1690	1.4	7825	1.3
Personal services	16925	2.4	3490	2.9*	12700	2.1
Misc. Services	29065	4.2*	3650	3.0	22500	3.7
<i>Non-market Services</i>						
Education	41585	5.8	8795	7.2*	35165	5.8
Health & welfare	58380	8.2	12880	10.6*	43440	7.2
Pub. admin.	39510	5.5	21765	17.9*	37550	6.2
Total	712735	100.0	121595	100.0	601635	100.0

F.I.R.E. = Finance, insurance and real estate.

* Denotes value among the three economies.

SOURCE: Statistics Canada, 1980; 1987; 1989a. Labour force figures for the primary or extractive industries were taken from Statistics Canada (1987) and were then prorated so the total would conform to that reported in Statistics Canada (1989b). All other labour force data in the table were taken from this latter source.

welfare, and public administration services account for over a third of the region's labour force, approximately twice the corresponding percentages for the Vancouver and Interior regions.

The extent to which employment in the Interior economy is oriented toward the goods sector, relative to Vancouver and Victoria, is shown in table 1. More than a third of the labour force in the region is in the goods sector, compared with a fifth of the Vancouver economy and less than a sixth of the Victoria economy. It is the primary industries, however, that particularly distinguish the Interior economy, accounting for 14.2 per cent of the region's labour force. This compares with 2.7 per cent for the Vancouver region and 3.4 per cent for metropolitan Victoria.

An alternative approach to reveal the differences in economic structures between the three regions is to construct location quotients for each of the activities listed in table 1. The location quotient for sector *i* is defined here as

$$LQ_i = \frac{R_i / R}{(P_i - R_i) / (P - R)}$$

where R_i is regional labour force in sector *i*, R is total regional labour force, P_i is provincial labour force in sector *i*, and P is total provincial labour force. The location quotient for a particular sector is thus the ratio of the proportion of the region's labour force in the sector to the proportion of the province's labour force in the sector. It reveals the extent to which a region specializes in a particular activity in comparison with the base economy. (If the location quotient for a sector exceeds 1.0, the region has a greater share of its total employment in that sector than does the base.) In order to accentuate the differences among the three economies, each of the location quotients shown in table 2 was "adjusted" by excluding the region from the base (provincial) economy in calculating the latter's proportion of labour force in sector *i*.⁴

Table 2 clearly reveals the previously discussed economic orientations among the three regions. For the Vancouver region, the largest location quotients are in the producer service sectors of business services (2.5), finance, insurance and real estate (1.8), and wholesale trade (1.8). For metropolitan Victoria the largest location quotient is, as would be expected, for the public administration sector. The sector's quotient of 3.1 is more than twice that of any other sector in the region. The Interior region's

⁴ This adjustment is commonly undertaken in the calculation of location quotients in cases in which the region is a significant portion of the base economy. It is done to remove the region's influence on the employment distribution of the base economy, and serves here to amplify the distinctiveness of each region from the other two.

TABLE 2
Regional Economic Specialization in B.C., 1986

	<i>Location Quotients</i>		
	<i>Vancouver</i>	<i>Victoria</i>	<i>Interior</i>
<i>The Goods Sector</i>			
Primary			
Agriculture	.3	.4	3.4*
Fishing & trap.	.4	1.1	2.1*
Forestry	.1	.4	9.1*
Mining	.2	.2	7.2*
Man. & Construct.			
Manufacturing	1.0	.5	1.2*
Construction	1.0	1.0	1.1*
<i>The Service Sector</i>			
Dynamic Services			
F.I.R.E.	1.8*	.9	.6
Bus. services	2.5*	1.1	.3
Transport & storage	1.5*	.7	.7
Comm. & utilities	1.1*	.7	1.0
Wholesale trade	1.8*	.6	.6
Traditional Services			
Retail trade	.9	1.0	1.1*
Accom., food & bev.	.9	1.0	1.1*
Amuse. & rec.	1.3*	.9	.8
Personal services	1.1	1.3*	.9
Misc. services	1.1*	.8	.9
Non-market Services			
Education	1.0	1.2*	1.0
Health & welfare	1.0	1.4*	.8
Public admin.	.7	3.1*	.8

* Denotes highest value among the three economies.

large location quotients in forestry (9.1), mining (7.2), agriculture (3.4) and fishing & trapping (2.1) reflect the region's relative specialization in resource based industries.⁵

⁵ From table 2, it can be seen that the metropolitan Vancouver economy is substantially more diversified compared to the other two regional economies. A summary indicator of the degree which each of the three regions is economically specialized, the concentration index, can be defined as

$$CI = 100 \frac{(R_i/R - N_i/N)^2}{N_i/N}$$

In recent years it has been thoroughly documented that service activities, as opposed to goods-producing activities, are the prime employment generators in the developed economies throughout the world (see, e.g., Gershuny and Miles, 1983; Price and Blair, 1989). Over the last two decades, service activities in Canada have accounted for more than 75 per cent of the growth in employment. These activities, particularly the dynamic services, are expected to continue to be the primary source of employment creation throughout the remainder of the century (Picot, 1986; Economic Council, 1990; 1991).

With its emphasis on the dynamic services, Vancouver possesses a relatively favourable mix of economic activities in comparison with the other two regions of the province.⁶ Precisely because the Vancouver regional economy is characterized by the rapidly growing dynamic services, its share of employment in the province is continuing to increase. Furthermore, the region has generally had lower unemployment rates than the other two regions, particularly the Interior (see table 3), and has shown a greater measure of cyclical economic stability (Davis and Hutton, 1989).⁷

Is the Vancouver Economy "Uncoupling" from the Rest of the Province?

Data regarding economic linkages between intra-provincial regions are not collected by any public agency. No data are readily available pertaining to the flows of investment, migrants or even commodities. Data on trade between provinces are scarce; data on trade between regions within

where N_i and N represent the labour force in sector i and total labour force, respectively, in the national economy (Hodes et al., 1988). The higher the index, the greater the degree of concentration of the labour force in the economy, i.e., the less diversified is the economy. The results are the Interior: 33.8; Victoria: 28.0; and Vancouver: 9.0.

⁶ A shift-share analysis of the Vancouver, Victoria, and Interior economies found that over the period 1981-86 Vancouver had both positive industrial mix and regional shift components. Victoria had a positive mix component but a negative shift component. Both components for the Interior were negative. The study concluded that "relative to the other two regions of the province, Vancouver possesses both a favourable industrial mix and a set of sectoral comparative advantages that bode well for future economic performance" (Hutton and Davis 1991: 92).

⁷ It is admitted that, for purposes of discussion in this paper, the nature of each of the three B.C. regional economies has been oversimplified to emphasize its dominant sectors. Each of the regional economies is in fact more complex, containing a range of economic activities which makes linkages with the other two regions (as well as its intra-regional linkages) considerably more intricate than what is considered here. For a good overview of the economic diversity among the thirteen sub-basins of the Fraser River Basin, for example, see Boeckh et al. (1991).

TABLE 3
Average Annual Unemployment Rates, 1975-1990

	<i>Vancouver</i>	<i>Victoria</i>	<i>Interior</i>
1975	7.1*	8.2	10.6
1976	8.2	7.4*	9.6
1977	7.7*	8.6	9.5
1978	7.5*	8.4	9.2
1979	6.9*	8.3	8.4
1980	5.3*	8.2	8.3
1981	4.9*	6.9	8.7
1982	9.8*	11.1	15.1
1983	12.2*	14.0	15.6
1984	13.6*	14.5	16.1
1985	13.2	13.0*	15.5
1986	10.7*	12.1	14.9
1987	11.4	10.9*	13.0
1988	9.4*	10.2	11.6
1989	7.4*	8.8	11.4
1990	7.1*	7.4	10.0
1991 ^a	7.7*	8.7	11.3

* Denotes lowest rate among the three economies.

^a Figures for 1991 are for the three-month average ending in June.

SOURCE: Constructed from Statistics Canada, 1984; 1989b; 1989-1991.

provinces are non-existent.⁸ To provide any kind of answer to the uncoupling question, inferences must be drawn from studies based on data other than those directly pertaining to inter-regional economic linkages.

One such study is the recent investigation by the Economic Council of Canada (1991) into the interrelationships between goods and services activities within the national economy. The question of Vancouver's increasing economic independence of the rest of the province is to a degree reflective of the debate regarding the relative roles of goods and services in an economy. In the first phase of the Council's study, an econometric model was constructed which consisted of three interrelated sectors: a goods-producing sector (primary activities, manufacturing and construction); a commercial service sector (dynamic and traditional services);

⁸ See, for example, the discussion of the paucity of data regarding inter-provincial trade flows in Government of Canada (1991a).

and a non-market service sector. The model was based on quarterly, seasonally adjusted data for the period 1967-86 from the National Income and Product Accounts and Statistics Canada.

The Council used the model to conduct a number of simulation analyses of policy interventions into the economy. One particular simulation is directly relevant to our concern with the regional uncoupling issue. The simulated policy intervention consisted of a combination of measures designed to stimulate demand for goods production at the expense of demand for services.⁹ The results of the simulation are instructive. Total output, employment and personal income increased, and the unemployment rate fell. As would be expected, the output of goods increased, but so did the output of commercial services. (The levels of output and employment in the non-market service sector remained the same, as they are determined in the model by the level of total government expenditure, which was unaltered.) One aspect of the results of the simulation is of particular significance: the increase in the goods sector's share of both output and employment was very small. The marginality of the gain in share of the goods sector is explained by the strong dependence of goods production on inputs from the commercial service sector.¹⁰

A second simulation of a policy intervention into the economy was designed to reverse the focus of the first. In the second, the demand for services was increased at the expense of demand for goods. (This was accomplished by shifting a portion of consumer expenditures in the model from goods to services.) The results of the simulation were lower overall output, employment, and personal disposable income in the economy. Employment in the commercial services sector showed a slight gain, but goods production fell. The gain in the services sector's share of total employment in the economy was accomplished primarily by the decrease in goods sector employment. Overall, the results are in sharp contrast to the results of the first simulation in which a stimulation of the goods sector stimulated the output of commercial services. A shift in demand for services from demand for goods production did not stimulate growth in the

⁹ The policy introduced consisted of three complementary components. First, personal income taxes in the model were lowered (the marginal propensity to consume (mpc) of goods in the model is significantly higher than the mpc of services). Second, a portion of government current expenditures, which are overwhelmingly on services, was reallocated to capital expenditures. Third, the interest rate was lowered, an initiative designed to stimulate expenditures on capital investment goods and consumer durables.

¹⁰ A second simulation, a subset of the first, involved only the transfer of a portion of government current expenditures to government capital expenditures. The results of this simulation were "strikingly similar" to the results of the first.

economy. The gain in service employment was more than offset by the decrease in goods employment.

In sum, direct stimulation of goods production at the expense of service activity in the model resulted in positive gains for both goods and service employment and a marginal gain for the goods sector's share of total employment. Direct stimulation of service activity at the expense of goods production resulted in an increase in service employment but a larger decrease in employment in the goods sector.

Two principal points may be drawn from the Council's exercise. First, there exist strong linkages (i.e., trade or sales/purchase relationships) between goods production and commercial services. It is unfortunate for our purposes that the Council did not distinguish between the dynamic and traditional services within the commercial service sector of its model. If this distinction had been made, these linkages would have been seen to exist primarily between goods and the dynamic services, as will be more evident from later discussion. Second, in this relationship between goods and services, it is the demand for goods that plays the direct stimulative role in the overall economy, although the critical role that services play in shaping the quality and competitiveness of goods in the marketplace is not to be undervalued. Nor is the role that service exports play (an increase in the demand for services, *without* a corresponding decrease in the demand for goods) in stimulating the economy to be ignored. Still the primary inferences one may draw from the Council study are that significant ties between the goods-oriented Interior economy and the services-oriented Vancouver economy are likely, and that production and sales of the resource-based commodities of the Interior have a substantial stimulative effect on the commercial services of the Vancouver economy.

Because the economic model used to conduct the simulation analyses contained only three sectors, the Economic Council undertook a second phase of study in which it employed an input-output (I-O) model of the national economy containing 50 industries and 100 commodities.¹¹ With the use of this model, the Council conducted a number of analyses to determine the linkages among the various industries. In regard to our concerns with linkages between the resource-based Interior regional economy and the services-based economy of the Vancouver region, two questions may be immediately raised: among the goods sectors, which are the most power-

¹¹ The input-output model is a representation of the economy in tabular form designed to focus on the interrelationships among the various producing sectors of the economy. For a non-technical description of the model, see Davis (1990).

ful in stimulating service activities; and among the service activities, which are the most sensitive to goods sector outputs?

The answers to these questions drawn from the Council's analyses lend further support to the inference that the general health of the Vancouver economy is dependent on the level of activity in the Interior region. The analyses show that resource-based activities in general have a greater stimulative effect on services than do manufacturing activities. In particular, when all goods producing sectors are ranked in accordance with their stimulative power on service outputs, the logging and forestry sector is second only to the crude petroleum and gas sector. Further, the wood products and the paper and allied products sectors place fifth and sixth on the list.¹² The forestry sector thus makes up half of the top six industries.¹³

With regard to our second question, the top five service activities ranked in order of their sensitivity to goods sector outputs are: finance and real estate, wholesale trade, utilities, business services, and transportation. From tables 1 and 2, it can be seen that these activities are the very services — the dynamic services — in which the Vancouver economy is specialized.

On the one hand, the Interior economy, dominated by the forest industry, is oriented toward those resource-based sectors that are the most powerful in stimulating service activities. On the other hand, the Vancouver regional economy is dominated by the service activities that are the most sensitive to changes in goods production. Again, one may infer from the Council's study that, although the Vancouver regional economy has indeed found markets for its services outside the province, particularly in the rapidly expanding economies of the Asia Pacific, it likely retains a significant degree of dependence on the resource harvesting activities of the Interior.

Although primary data on inter-regional linkages within the province are not collected, there is a limited amount of recent research that bears directly on these linkages. Prominent among this research is a study commissioned by the Vancouver Board of Trade (1991) of the role of the

¹² Additional evidence for the strong linkage between the two forestry sectors and the dynamic services can be found in the metropolitan Vancouver input-output model (Davis 1976). Among the nine manufacturing sectors of the model, the wood products and the paper and allied products sectors rank second and third, respectively, in terms of direct purchases from the dynamic sectors as a percentage of total inputs purchased from other local sectors of the economy. (The chemicals and petroleum sector ranks first because of its heavy purchase of power — 57% of its direct purchases from other metropolitan sectors is from the utilities sector.)

¹³ The third and fourth positions on the list of industries ranked according to their stimulative power on service activities are quarry and sand pits, and refined petroleum, respectively.

provincial forestry sector (forestry and logging, wood industries, and paper and allied products) on the metropolitan Vancouver economy. As a starting point, the study adopted the recent provincial government analysis of the contribution of the forest industry to the provincial economy (Government of B.C., 1990). The task then became one of apportioning this contribution between the regional economies of metropolitan Vancouver and the rest of the province.¹⁴ The results of the study include an estimation of the indirect and induced impacts on the metropolitan Vancouver region of provincial forestry operations outside the region (see table 5).

The indirect impact on the Vancouver economy results from the purchase of intermediate goods and services produced in the Vancouver region. These purchases are made by firms in both Vancouver and the rest of the province whose outputs are stimulated by forestry industry activities in the rest of the province.

To make a product, an industry purchases goods and services from other sectors. For example, to produce paper, a firm needs wood chips, energy, machinery and services. Orders for intermediate goods and services result in economic activity in other sectors and even in the original sector. These are indirect effects attributable to the original industry (Vancouver Board of Trade, 1991: 29).

The induced impact on the Vancouver economy results from the purchases of the region's goods and services from incomes attributable to the direct and indirect economic activity resulting from the forestry industry activities in the rest of the province.

Industries pay employees to produce wood products. The spending of these wages and salaries generates even more economic activity throughout the economy. This spin-off effect of such worker income respending is called the induced effect (Vancouver Board of Trade, 1991: 30).

The estimates shown in table 5 readily show the importance of linkages between the regional economies of metropolitan Vancouver and the rest of the province. In addition, the impacts on the Vancouver regional economy of provincial government expenditures funded by net receipts from the forestry industry were estimated to be 38,000 jobs and a \$1.4 billion contribution to value added or gross domestic product. The study thus provides further, quantitative evidence of the strength of the ties

¹⁴ In general terms this apportionment was estimated, "using existing statistics, an input-output model of the [Vancouver] regional economy and previous research on regional economic interactions in the rest of the province" (Vancouver Board of Trade, 1991: 11). For a detailed discussion of the methodology, see *ibid.*, 19-23.

TABLE 5
*Estimated Economic Impact on Metropolitan Vancouver of
 Provincial Forest Industry Activities Outside the
 Metropolitan Region, 1989*

	<i>Gross Domestic Product (\$billion)</i>	<i>Employment</i>	<i>Wages & Salaries (\$billion)</i>
Indirect Impact from Forestry Industry outside Vancouver	0.9	18,000	0.5
Induced Impact from Forestry Industry outside Vancouver	2.9	48,000	1.2
Total	3.8	66,000	1.7

SOURCE: Vancouver Board of Trade, 1991: 50.

between the goods-oriented Interior region of the province and the services-oriented Vancouver economy. Substantial as the reported empirical estimates are, they are likely conservative with respect to the actual total impact on the Vancouver region as they do not include the indirect effects on the region of capital investments in the forest industry outside the region, or the full effects of transportation of forest product exports and forest-related wholesale activity in the region.¹⁵

Summary and Conclusions

In terms of employment distribution, there are three distinctly different regional economies in B.C. The metropolitan Vancouver economy is characterized by the high growth, high value-added dynamic services. The regional economy of Victoria is distinguished by the prominence of its non-market services. The Interior economy is dominated by the primary industries of forestry, mining, agriculture, and fishing. Among the three economies, the metropolitan Vancouver economy consistently records the highest level of per capita income and the lowest unemployment rate, and is steadily increasing its share of the total provincial labour force.

The prominence of the expanding dynamic services in its economy has given the Vancouver metropolitan region a marked edge in the potential

¹⁵ Quantitative estimates of these impacts are provided in the Vancouver Board of Trade Report (1991). As with the impact of government expenditures from revenues derived from the forest industry, however, no attempt was made to allocate that portion of each of the impacts to forest industry operations outside the Vancouver region.

for future economic growth throughout the present decade. In combination with, and partially because of, its continuing process of restructuring, the Vancouver economy has experienced over the past two decades an economic reorientation toward the large and rapidly expanding markets of the Asia Pacific. There is mounting empirical evidence that these markets are steadily gaining in importance for the producer services in the Vancouver economy. The continuing processes of an employment shift to the dynamic services and of a reorientation of exports to markets outside the province have raised the question of Vancouver's uncoupling from the rest of the B.C. economy.

To the extent that Vancouver's producer services continue to respond to demands emanating outside the provincial economy — from the rest of Canada, the Asia Pacific, the U.S., Mexico, etc. — the regional economy is indeed gaining a measure of independence from the rest of the province. However, the empirical evidence reviewed above emphasizes the significant strength of the linkages between the dynamic services of the Vancouver regional economy and the resource-based activities of the B.C. Interior — linkages likely to extend far into the future.

At the national level, analyses of the interrelationships between goods production and service activities have shown that while traditional services are responsive primarily to consumer expenditures, the demands for dynamic services are closely related to the volume of goods production. The dynamic services are inputs to the production processes of the goods sectors, particularly the primary industries, and the quality of these inputs determines in large part the competitiveness in the marketplace of the material end product. The linkage between the Vancouver and Interior regional economies implied from these research results is strongly supported by recent research regarding the impact on the metropolitan economy of Interior forest sector activities.

Data on internal trade flows in Canada are notoriously scarce, even between provinces. No official data are collected at the sub-provincial level. At present very little research has been directed to providing technical assistance in monitoring the evolution of changing linkages between the economic regions of B.C. and to improving the capability of analysts and decision-makers to estimate the impacts of developmental initiatives in one region on the economic health of other regions. Knowledge of the linkages or interdependencies among the province's regional economies is essential to tracing the interregional effects of government spending and initiatives. This knowledge is important to government agencies concerned with the overall economic health of the province. For example, it is an

advantage, from a policy perspective, to understand how initiatives designed to stimulate the relatively weak Interior economy can have spillover effects on the Vancouver and Victoria regions.¹⁶ As well, it is important to understand how economic growth and initiatives in the metropolitan Vancouver economy, which has accounted for the overwhelming share of employment creation in B.C. over the last few years, affect the rest of the province.

Government agencies charged with providing economic information about the province should reallocate some of their efforts on constructing models of the provincial economy that treat the economy as a point in space (such as the British Columbia provincial input-output model¹⁷) to constructing models that explicitly recognize the distinctive regional economies of the province. Reconfiguration of a provincial I-O model into an interregional model distinguishing at least the metropolitan Vancouver economy would be an auspicious start. Such a model would be of substantial benefit in addressing concerns such as the uncoupling issue considered here. Further, such a model could be designed to yield empirical estimates of the inter-regional income, employment, and fiscal impacts¹⁸ of various public- and private-sector initiatives — distribution issues that have long been a source of political friction within the province.

¹⁶ A good illustration of the need for the economic linkages among provincial regions to be better researched is provided by the analysis of a set of five proposed highly capital intensive investment projects in the Prince Rupert region. The projects were designed to promote economic growth in the region. Consultants hired to review the proposal concluded that 80 per cent of the sales dollars in retail trade, construction, and wholesale trade would leak from the region, as would 90 per cent of the expenditures on finance, insurance, and real estate (Acres, 1982). The Vancouver economy would likely be the primary recipient of these leakages.

¹⁷ See Government of B.C., 1990.

¹⁸ For example, a recent government report (Greater Vancouver Regional District, 1988) claims that a uniform mill rate throughout the province discriminates against residential taxpayers in metropolitan Vancouver, where property values are higher than in the rest of the province. It is estimated that this inequity results in additional per household costs of \$69 in revenue-sharing grants for water and sewer facilities and \$227 for school funding. The financial linkages between metropolitan Vancouver and the rest of the province are further discussed in Leckie (1988).

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