The Two Economies of British Columbia

H. CRAIG DAVIS and THOMAS A. HUTTON

In recent years metropolitan or Greater Vancouver has continued to shift its economic base from manufacturing to service activities. In particular, the economy has considerably strengthened its interdependent complex of advanced or producer services, which consist of business management services (e.g., accounting, engineering, legal and management consulting) and those services rendered by finance, insurance, and real estate agencies. While a shift in employment from goods-producing activities to the service activities has also occurred in the Rest of the Province (hereafter ROP) economy, the increase has not been as marked, nor has it been so focused on the producer services.

Increasingly, the economy of British Columbia is becoming divided between two distinct segments: the service-oriented urban economy of metropolitan Vancouver and the resource-based hinterland economy of the remainder of the province, particularly the interior of B.C. (i.e., the rest of the province excluding Vancouver Island, which is dominated by the public-sector oriented economy of Greater Victoria). Further, as Ley and Hutton have observed (1987, p. 414), this difference in economic structures between the two regions gives rise to "the possibility of incipient divergence in the economic evolution of the metropolitan region and the peripheral regions of the province."

The objective of this paper is twofold. First, an effort is made to document the difference between the economic structures of the two regional economies and to examine their recent performances with respect to growth and stability. It is hypothesized that the service-orientation of the Greater Vancouver economy results in a greater measure of economic stability as well as a significantly greater growth potential. The second objective of the paper is to outline the principal components of what we believe to be an appropriate policy response to the potential of a growing divergence between the economies of the two B.C. regions.

Distinctions Between the Two Economies

1. Economic Structure

Over the past three decades, production of both goods and services has expanded throughout the developed world. Primarily because of varying rates of productivity increases between the two types of commodities, however, there has been a substantial shift of employment from the extractive and manufacturing sectors into the service activities. This trend has been particularly evident in Greater Vancouver compared with the ROP.

TABLE 1

Labour Force by Industry:

Greater Vancouver and Rest of Province, 1986

Industry	LM	%	ROP	%
Agriculture	10,220	1.4	29,335	4.2
Fishing & Trapping	2,725	0.4	5,980	0.9
Forestry	3,890	0.5	36,9 25	5.3
Mining	2,920	0.4	16,435	2.3
Manufacturing	91,065	12.4	87,760	12.5
Construction	46,155	6.3	43,730	6.2
Transportation & Storage	45,995	6.3	36,515	5.2
Communication & Other Utility	27,010	3.7	18,405	2.6
Wholesale Trade	41,515	5.7	21,915	3.1
Retail Trade	95,300	13.0	91,515	13.0
Finance & Insurance	33,715	4.6	16,135	2.3
Real Estate & Insurance Agencies	19,845	2.7	12,005	1.7
Business Services	49,885	6.8	21,110	3.0
Government Services	39,350	5.4	59,475	8.5
Education	41,940	5.7	43,605	6.2
Health & Welfare	60,925	8.3	53,780	7.7
Accommodation & Food	58,725	8.0	59,930	8.5
Other Service	63,115	8.6	47,110	6.7
Total	734,295	100.0	701,695	100.0

Source: Census Canada, 1986. Summary Tabulations of Labour Force, Mobility and Schooling.

With regard to their current respective distributions of employment, the economies of the Vancouver region and the ROP differ significantly. As can be seen from table 1, the metropolitan Vancouver economy is relatively service-oriented while the rest of the province shows a much greater dependence on extractive and manufacturing activities.

As demonstrated by table 1, the two economies are equally dependent on manufacturing, construction, and retail trade. The ROP economy, however, is considerably more oriented toward the extractive or resource industries (agriculture, fishing, forestry, and mining), with 12.5 per cent of its labour force in these industries as opposed to 2.7 per cent for Greater Vancouver. The latter economy, however, is markedly more oriented toward the producer services (finance, insurance, real estate, and business services) with 10.1 per cent of its labour force in these activities as compared with 7.0 per cent for the ROP. If, as is frequently done, the definition of producer services is broadened to include transportation, communication, utilities, and wholesale trade, the proportions are 25.2 per cent for Greater Vancouver and 17.9 per cent for the ROP. As a final note from table 1, the proportion of government employment in the ROP is a third greater than that in Greater Vancouver.¹

2. Economic Stability

Cyclical Stability. To compare the recent performances of the two regional economies with respect to cyclical stability, a simple measure of economic instability was constructed for each. First, a trend equation for employment growth was estimated through regression analysis for the metropolitan Vancouver and ROP economies for the period 1975-87.² Once the trend estimates of employment were constructed, the average annual per cent deviation from this trend was calculated as an indicator of cyclical instability. Thus the higher is the value of the indicator, the less stable is the economy. The results are shown in table 2.

As demonstrated by table 2, the Greater Vancouver economy exhibits a marginally lower measure of instability (2.99) compared with the index of 3.05 calculated for the ROP. It must be noted, however, that the employment figures in the table for the ROP include metropolitan Victoria,

- ¹ If metropolitan Victoria is excluded from the ROP, the difference in proportions of labour force in government services between Greater Vancouver and the ROP is decreased, but the gaps between the two economies widen with respect to the extractive industries and to producer services.
- ² 1975 was chosen as the base year since it was the first year in which Statistics Canada adopted the 1971 definition of the Vancouver Census Metropolitan Area as the basis for its data collection.

6

with its relatively stable public-sector employment. When Greater Victoria (the Victoria Census Metropolitan Area) is excluded from the ROP, the employment instability index for the ROP is markedly higher at 3.54.

Seasonal Stability. Similar to the measure of cyclical economic instability, a measure of seasonal instability was calculated for each of the two economies over the period 1975-1987, using monthly employment data. In this case the mean monthly per cent deviation from annual average employment was calculated for each of the thirteen years. The measure of seasonal instability was then taken to be the average of the mean monthly deviations. The results in table 3 show that the Greater Vancouver economy is less subject to seasonal fluctuations than is the resource-based ROP

TABLE 2

Deviations from Trend Employment Estimates, 1975-1987

	B.C.	Van- couver	Van- couver	Dev.	ROP	ROP	Dev.	
Year	Employ- ment	Employ- ment	Trend Estimate	Trend	Employ- ment	Trend Estimate	Trend	
1975	995	538	542	0.76	457	488	6.34	
1976	1021	532	552	3.70	489	501	2.38	
1977	1050	551	563	2.09	499	514	2.90	
1978	1103	568	573	0.88	53 5	527	1.54	
1979	1144	591	583	1.31	553	540	2.43	
1980	1213	643	594	8.32	570	55 3	3.10	
1981	1270	643	604	6.47	627	566	10.81	
1982	1204	617	614	0.45	587	579	1.41	
1983	1197	604	625	3.29	593	592	0.20	
1984	1202	596	635	6.11	606	605	0.20	
1985	1228	628	645	2.65	600	618	2.88	
1986	1274	670	655	2.23	604	631	4.24	
1987	1306	670	666	0.65	636	644	1.20	
Average				2.99			3.05	

VAN Trend Eqn.: 531.85 + 10.30t ROP Trend Eqn.: 474.76 + 12.98t

Source: Constructed from average annual employment figures provided by the Vancouver Office of Statistics Canada and from Statistics Canada, 1975-1987. "Employment and Earnings." Catalogue No. 72-001.

economy. Average per cent monthly deviation from the annual trend for Greater Vancouver over the last thirteen years is 2.71, while that for the ROP is 3.92. As was the case with cyclical instability, when metropolitan Victoria is excluded from the ROP, the latter is shown to be more unstable; the average per cent deviation increases slightly to 4.15.

In sum, the empirical evidence presented above shows the Greater Vancouver regional economy to be both cyclically and seasonally more stable than that of the ROP. The differences between the two economies in each case are accentuated if metropolitan Victoria is excluded from the latter.³

Economic Growth

Comparisons of the economic growth records of the two regional economies obviously depend not only on the units of measurement in which growth is defined but also upon the period over which measurement is made. From the average annual employment data contained in table 2, it can be seen that the Vancouver regional economy has made the stronger recovery from the 1981-83 provincial recession, expanding at an average rate of 2.6 per cent over the 1983-87 period, compared with 1.8 per cent for the ROP economy. If the last three years, 1984-1987, are examined, the differential is increased. For this period, the average annual rates of growth for Greater Vancouver and the ROP are 4.1 per cent and 1.7 per cent respectively.

The higher growth rates were recorded by the Vancouver region despite the fact that the most recent statistics show a zero growth rate for the region for the 1986-87 period. If the recessionary period is included in the calculations, the metropolitan Vancouver region grew at a rate of 4 per cent over the 1981-87 period, compared with 1 per cent for the ROP. (In each of the above periods, the growth rate of the ROP is marginally lower if metropolitan Victoria is excluded from the region.)

There is strong reason to believe that in the foreseeable future the developing orientation in Greater Vancouver toward the advanced or producer services will give the region a decided advantage over the ROP with respect to economic growth (Goldberg and Davis 1988). The service sector is the most rapidly growing sector both nationally and regionally. In Canada, as in most other developed countries, the service activities have pro-

³ A complementary analysis using unemployment rates rather than employment produced similar results. Greater Vancouver, in addition to having a consistently lower unemployment rate, displayed greater degrees of cyclical and seasonal stability. Further, the difference between the two economies increased when Greater Victoria was omitted from the ROP.

Vancouver Employment											S.D.				
	J	F	M	\boldsymbol{A}	M	J	J	A	S	0	N	D	Avg.	S.D.	Avg.
1975	536	533	535	548	547	548	546	538	527	535	529	536	538	7.4	1.37
1976	502	504	509	522	528	538	561	564	544	544	539	530	532	20.4	3.83
1977	514	525	530	531	557	557	576	576	572	562	552	558	551	20.9	3.80
1978	545	552	555	569	581	593	59 3	585	571	557	550	560	568	17.0	3.00
1979	540	557	568	574	595	595	608	621	605	603	608	614	591	25.1	4.26
1980	608	623	628	642	657	666	659	659	639	652	646	640	643	17.1	2.65
1981	641	653	628	626	635	652	654	655	639	644	646	639	643	9.9	1.53
1982	625	618	631	608	619	619	621	620	605	611	611	614	617	7.4	1.20
1983	600	605	605	609	605	622	621	608	602	594	587	588	604	11.0	1.82
1984	586	582	582	581	588	593	602	611	601	606	610	605	596	11.5	1.93
1985	601	610	613	615	639	632	648	649	638	636	618	636	628	15.8	2.52
1986	646	646	652	657	679	699	700	704	686	675	652	642	670	23.4	3.49
1987	620	627	646	659	6 80	695	688	688	685	686	676	694	670	26.1	3.90
Average	e Season	al Devi	ation											16.4	2.71

Rest of Province Employment											S.D.				
	J	F	M	A	M	J	J	A	S	0	N	D	Avg.	S.D.	\overline{Avg} .
1975	452	465	477	471	522	535	556	560	549	524	518	513	512	37.1	7.25
1976	455	473	487	467	485	500	508	510	495	503	494	485	489	16.8	3.44
1977	474	473	482	488	512	526	526	522	504	497	495	491	499	19.0	3.81
1978	485	498	516	511	531	546	560	566	557	563	55 3	537	535	27.2	5.08
1979	536	529	54 3	535	555	573	580	574	556	567	552	546	554	16.8	3.04
1980	534	538	543	544	559	573	589	601	587	590	594	583	570	24.5	4.30
1981	582	585	618	6 24	643	656	661	656	636	638	623	607	627	26.3	4.19
1982	590	593	586	587	606	609	60 6	607	581	580	556	544	587	20.3	3.46
1983	541	558	575	587	606	616	625	627	605	597	586	593	593	25.9	4.37
1984	570	573	582	593	605	626	643	643	625	613	606	596	606	24.8	4.09
1985	567	574	591	588	601	611	622	624	611	609	607	595	600	17.7	2.95
1986	582	588	605	604	609	615	628	621	601	603	592	606	605	13.2	2.18
1987	601	618	620	634	646	656	656	658	637	646	632	627	636	17.6	2.76
Average	e Season	al Devi	ation											22.1	3.92

SOURCE: Constructed from employment data provided by the Vancouver Office of Statistics Canada and Statistics Canada, 1987. "Historical Labour Force Statistics: Actual Data, Seasonal Factors, Seasonally Adjusted Data." Catalogue No. 71-201.

vided more than 75 per cent of the increase in employment over the past two decades.

The largest and fastest-growing sector of the national and provincial economies is the service sector. As such it is a major vehicle of economic growth, for reasons that are neither illogical nor unnatural. Services contribute a substantial part of all growth in living standards and create the great majority of new jobs. (Economic Council 1984)

The service sector was responsible for 77.6 per cent of the jobs created in the Greater Vancouver economy 1961-71. In the succeeding decade, 1971-81, the proportion increased to 85.7 per cent. Service activities, particularly the producer services, are expected to continue to be overwhelmingly the source of job creation for the rest of the century (Picot 1986).

Linkages between the Greater Vancouver and Rest of Province Economies

There is now empirical work that strongly suggests that developmental initiatives in the ROP region of B.C. will result in considerable monetary flows or "leakages" from the region to Greater Vancouver (Acres Consultants 1982). By way of contrast, the results of a survey of firms in the Greater Vancouver region conducted by Ley and Hutton (1987) reveal a surprising lack of leakages from the region's complex of corporate services. There are, however, several important channels through which increased income generated in the metropolitan Vancouver economy translates into increased income for the ROP as well.⁴

First, the Greater Vancouver region constitutes a market for particular commodities produced in the ROP such as agricultural produce, forest products, and specialty manufactures. To this list may be added the tourist services (food and accommodation, entertainment) provided to travellers in the ROP. Economic growth in the Greater Vancouver region stimulates growth in the ROP through increased demand for such commodities.

Further, as economic growth continues in metropolitan Vancouver, land values correspondingly rise, causing some activities, such as land-intensive manufacturing, to relocate. Much of this relocation is from the urban core to the inner and outer suburbs within the metropolitan area. Some relocation occurs, however, from the Greater Vancouver region to the ROP.

An argument can also be made that the Lower Mainland service complex is organized in part to raise and channel capital for ROP resource

⁴ Monetary transfers between the two regions resulting from fiscal policy are here ignored. There is evidence, however, that revenue sharing grants and education funding are presently structured to favour the ROP (see GVRD Finance Department 1988).

development. Plant relocations and individual and corporate direct investments aside, a substantial volume of funds are continuously transferred between the two regions by the operations of the Vancouver Stock Exchange (VSE) of which the primary historical objective has been to raise capital for resource development. The Exchange specializes in venture capital and is widely viewed as the continent's leading venture capital marketplace. Although no data are kept with regard to spatial aspects of capital flows, it is estimated that "three-quarters to eighty percent" of the capital raised by the VSE is directed toward resource exploration and development in the B.C. ROP (information office, VSE).

Yet another channel through which metropolitan Vancouver provides benefits for the remainder of the province is the gateway role that it plays in the context of the B.C. economy. Metropolitan Vancouver impels growth throughout the provincial economy via its economic port functions (sea, air, and rail) and port-related activities (finance, insurance, communications, and trade) which materially assist in moving hinterland products to export markets.

In a recent effort to estimate empirically the comparative economic advantages⁵ of the Vancouver Census Metropolitan Area, Davis and Goldberg (1988) analyzed the region's sector exports and growth rates relative to the two major Canadian cities (Toronto and Montreal) and the primary U.S. west coast metropolitan ports (Seattle, Portland, San Francisco, Los Angeles, and San Diego). Their results indicate that such advantages are centred in the transport functions of the economy. Of primary importance to the regional economy is the Port of Vancouver, Canada's largest port. Within the past five years, export tonnage has increased 19 per cent and import tonnage by 34 per cent. Further, their analysis points to

the likelihood that the metropolitan Vancouver economy is strengthening its comparative advantage in the Air Transportation sector and is developing a comparative advantage in the Services to Business Management sector.

In sum, metropolitan Vancouver is rapidly emerging as an internationally recognized city with strong economic advantages in its transport and transport-related economic activities. The continued evolution of the region as a major port on the Pacific Rim potentially translates into substantially expanded markets for the products of the ROP as well as more efficient means by which to export these products.

⁵ In the traditional two-economy (A and B), two-commodity (x and y) example, economy A is said to have a comparative advantage in the production of commodity x relative to economy B if the opportunity costs (the amount of commodity y forgone in economy A by the production of a unit of x) is lower than the similarly measured opportunity costs of commodity x in economy B.

Alternative Policy Options

There are a number of reasons to expect the Greater Vancouver region to experience a greater volume of economic growth over the next decade and beyond than the ROP. As argued previously, Greater Vancouver is characterized by a more favourable mix of economic activities with respect to growth expectations. In addition, the Greater Vancouver region possesses a larger, more concentrated local market, better access to export markets, and a superior infrastructure characterized by the scale and agglomeration economies associated with metropolitan economies (Economic Council 1984).

One method of reducing the projected disparities would be to adopt a province-wide selective policy of economic incentive for geographic decentralization, involving the relocation of economic activity from Greater Vancouver to one or more centres in the ROP. Indeed, such a policy is currently being considered as part of the provincial government's "regionalization" program. However, the experience of the past twenty years yields little evidence that such an approach is effective in reducing interregional disparities, for reasons which may include the following: 6

- Failure of the private sector to perceive the benefits of public-sector incentives designed to encourage decentralization.
- Lack of compatibility between firms identified by government as candidates for decentralization and the nature of the economic environment within the "receptor" centre of the hinterland.
- Difficulty of inducing firms prepared to relocate from region "a" to locate in a particular region "b."
- Inadequate analysis of growth generation and diffusion within hinterland regions and centres.
- Failure to designate priority centres within the hinterland, leading to a dissipation of efforts with adverse consequences.

A preferable, alternative approach to transmitting economic growth more pervasively throughout the province might be one based more constructively on the previously outlined existing and emerging core-periphery relationships within the province and on the principle of comparative economic advantage. Such an approach is likely to generate more favourable results over the longer term than either the "status quo" or "decentralization" models, and is also less likely to produce adverse effects for the

⁶ For a discussion of the problems associated with policy-impelled decentralization, see Hutton and Davis 1985.

Greater Vancouver region, which is likely to be the growth engine for the provincial economy throughout the rest of the century. This alternative approach might include:

Development of the Greater Vancouver region as a market for ROP production. Greater Vancouver represents the largest consumer market in Canada west of Toronto. This growth and development of metropolitan Vancouver should correspondingly lead to an expansion of Vancouver as a market for both local and ROP producers. In turn, there should be considerable scope for successfully marketing in the metropolitan Vancouver region a greater range and volume of goods and services produced in the ROP. Programs such as the Oregon Market Place which involve computer matching of producers and consumers, encouragement of local entrepreneurship, trade fairs, consumer awareness campaigns, etc., have achieved a degree of success.⁷

Encouragement of the development of a major business service centre within the ROP. As earlier argued, the ROP has frequently failed to benefit fully from local development initiatives because of significant leakages to the core, especially with respect to financial and business services. This is partially attributable to the lack of a major, second-order business centre within the hinterland which can provide specialized commercial services: there is instead a number of third- and fourth-order centres (Prince George, Kamloops, Kelowna). Given the substantial leakages from the ROP to metropolitan Vancouver, particularly in producer services, it would seem reasonable to explore opportunities in the larger centres of the ROP for encouraging the growth of firms providing accounting, corporate legal, consulting, engineering, and other producer services. For example, the provincial government, through its current regional development program, could provide a range of selective inducements (market intelligence, investment in telecommunications infrastructure, etc.) in one or more local hinterland centres. Such measures could be developed in conjunction with local business and civic leaders with support from key business and professional associations.

Identification of opportunities for "spin-off" production. In recent years there has been throughout Canada and the U.S. a shift of production from metropolitan to non-metropolitan areas, following the earlier movement of manufacturing from the inner city to the suburbs. In B.C., for example, there has been a significant shift in forest industry production from metropolitan Vancouver to interior centres. In the case of some forms of stan-

⁷ For discussions of the potential and limitations on import substitution at the local level see Davis 1987; Hutton 1987.

dardized production, production activities which require little in the way of specialized labour, urban agglomeration economies, or local service inputs, firms may be increasingly able to operate in non-metropolitan centres by taking advantage of lower land and labour costs, abundant labour supply, and proximity to resource endowments.

As the Greater Vancouver industrial economy matures, there should be increasing opportunities for "spinning off" standardized production from manufacturing firms to more outlying regional centres within the ROP. Such spin-offs should not adversely affect the industrial economy of metropolitan Vancouver, which can be expected to specialize increasingly in more advanced-technology manufacturing, as well as certain more labour-intensive industries (such as garment production) which are well suited to urban areas.

Improve business communication linkages between Greater Vancouver and the ROP. It has become widely accepted that in the contemporary economy, information has emerged as a leading growth determinant. Development in the ROP could thus be limited, given the distance ROP regions are from the provincial centre of Vancouver. Consequently, efforts should be made to upgrade the telecommunications infrastructure and systems of ROP business centres.

Acceleration of the diffusion of innovation and entrepreneurship. Consideration might be given to forming bodies along the lines of the Vancouver Enterprise Forum (VEF), which has recently been established to promote higher levels of entrepreneurship and business in Greater Vancouver, primarily among technology-oriented firms. In addition to forming such bodies in certain ROP centres, links should also be forged between the VEF and regional centres to accelerate the diffusion of innovation.

Summary and Conclusions

The economy of British Columbia can be conceptually divided into two economic regions: Greater Vancouver and the Rest of the Province.⁸ Although currently they are of roughly the same size with respect to total employment, it is here argued that they differ significantly with respect to economic structure, cyclical and seasonal stability, past growth rates, and future growth potential.

Primarily because of differences in the evolution of their respective economic structures, it is reasonable to expect the Greater Vancouver economy

⁸ As earlier mentioned, an argument can readily be made for further conceptual division of the province into three economic regions by separating either Greater Victoria or Vancouver Island from the Rest of the Province.

to be the principal employment generator in the foreseeable future. Under this assumption, there exists considerable impetus to formulate policy in response to the potentially increasing disparities between the regional economies of Greater Vancouver and the ROP. Such efforts should not be directed, however, to relocating economic activities that are induced by market forces to settle in the metropolitan Vancouver region. The focus should rather be on measures to accelerate and intensify particular forces contributing to greater economic development in the ROP.

WORKS CITED

- Acres Consultants. 1982. "Prince Rupert Sub-Regional Growth Management Plan." Vancouver, B.C.
- Davis, H. C. 1987. "Buy Local Programs: Import Substitution at the Regional Level," Working paper, Canadian Planning Issues #25, School of Community and Regional Planning, UBC.
- Davis, H. C. and M. A. Goldberg. 1988. "An Empirical Estimation of Vancouver's Comparative Advantages," Working paper, Comparative Urban and Regional Studies # 16, School of Community and Regional Planning, UBC.
- Economic Council of Canada. 1984. Western Transition. Ottawa: Canadian Publishing Centre. Catalogue No. EC 22-123/1984E.
- Economic Development Office. 1985. "Vancouver: An Analysis of Economic Structure, Growth and Change." Vancouver, B.C.
- Goldberg, M. A. and H. C. Davis. 1988. "Global Cities and Public Policy: The Case of Vancouver, British Columbia," Working paper, Comparative Urban and Regional Studies #17, School of Community and Regional Planning, UBC.
- Hutton, T. A. 1987. "Economic Development in a Large Urban Centre: Linkages between Vancouver and the Rest of British Columbia." Paper presented to the Conference on Import Replacement, University of Victoria, October 28.
- Hutton, T. A. and H. C. Davis. 1985. Multinucleation and Regional Town Centre Planning: The Case of Vancouver," Canadian Journal of Regional Science, 8:1:17-34.
- Ley, D. and T. Hutton. 1987. "Vancouver's Corporate Complex and Producer Services Sector: Linkages and Divergence within a Provincial Staples Economy," mimeo. Vancouver: Department of Geography, University of British Columbia.
- Picot, W. G. 1986. Canada's Industries: Growth in Jobs over Three Decades. Ottawa: Minister of Supply and Services. Catalogue No. 89-507E.
- Statistics Canada. 1975-1987. "Employment and Earnings." Ottawa: Canadian Publishing Centre. Catalogue No. 72-001.
- Statistics Canada. 1987. "Historical Labour Force Statistics: Actual Data, Seasonal Factors, Seasonally Adjusted Data." Ottawa: Canadian Publishing Centre. Catalogue No. 71-201. Annual.