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Economic Performance and Economic Regions in the New Economy: Foundations, Strategy and Governance

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Abstract: Economic performance is an important determinant of the welfare of a jurisdiction. Strong economic performance nurtures innovation and encourages investment, creating wealth and economic growth. With recent innovations in communication and transportation technologies, combined with fewer trade barriers and increased capital/financial mobility, economic forces are increasingly becoming regional in nature. As such, local governments are playing an increased role in influencing regional economic performance. From a public policy perspective, strategies designed to enhance regional economic performance should contemplate both the value of economic production and the economic well-being of entities within the region. This paper explores the challenges in seeking to enhance regional economic performance and potential strategies for achieving this objective.

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EXECUTIVE SUMMARY

Economic performance is an important determinant of the welfare of a jurisdiction. Strong economic performance nurtures innovation and encourages investment, creating wealth and economic growth. With recent innovations in communication and transportation technologies, combined with fewer trade barriers and increased capital/ financial mobility, economic forces are increasingly becoming regional in nature. As such, local governments are playing an increased role in influencing regional economic performance. From a public policy perspective, strategies designed to enhance regional economic performance should contemplate both the value of economic production and the economic well-being of entities within the region.

One of the challenges in seeking to enhance regional economic performance arises through differences in the boundaries of administrative and economic regions. Economic regions are fluid and flexible entities often delineated via trade linkages and/or commodity and people flows, while administrative regions are geographically constrained entities designed to deliver public services to constituents. Consequently, economic regions often transcend administrative regional boundaries and economic development policies need to be coordinated across local administrative regions spanning economic regions. Uncoordinated, internally oriented economic development strategies can potentially lead to unhealthy competition among local governments, resulting in a zero sum “race to the bottom.”

The integrated nature of economic regions creates challenges in understanding how to influence regional economic performance. Entities within functional economic regions are mutually dependent and exhibit a high degree of interaction, and it can be difficult to isolate the impact of specific shocks or activities on regional economic performance. While historical patterns of regional economic development influence the nature of economic activity, it is in realizing economies of agglomeration that economic performance can be best enhanced.

Economies of agglomeration arise from three factors: deep labour pools, integrated local supply chain linkages and localized knowledge spillovers. Deep labour pools are concentrated, quality local labour markets that draw economic activity because of potential specialization opportunities and economies of scale benefits associated with tapping into existing pools of human capital. Integrated supply chain linkages occur through the co-location of firms to realize economic benefits associated with accessing upstream or downstream supply chains. Knowledge spillovers arise when cost-saving information is diffused among firms through local innovation networks. Social capital theory suggests that knowledge spillovers occur largely through formal and informal networks of interaction that exist in agglomeration economies.

In developing strategies to enhance regional economic performance, jurisdictions should adopt a multi-faceted approach involving complimentary strategies and multiple stakeholders. These strategies include: developing a unique activity system to promote jurisdictional advantage through differentiation; encouraging stability and economic diversification to avoid path dependence and mitigate the impacts of cyclical downturns; facilitating human capital formation to attract firms and increase productivity; undertaking research and development through academic-private sector partnerships to encourage knowledge generation; facilitating entrepreneurial activity to encourage innovation; and nurturing social capital at the community level to develop community ties and facilitate local involvement in economic development issues.

Coordinating, implementing and operationalizing these strategies in the province of British Columbia requires participation from a broad range of stakeholders, including local governments, the private sector, academic institutions, economic development agencies, and local community organizations. Of these stakeholder groups, local governments have the greatest ability to influence economic development within their jurisdictions.

In developing a governance arrangement to mobilize local governments to work together to improve regional economic performance in British Columbia, the regional district model appears to be an appropriate vehicle for bringing local governments together – as both municipal and electoral district members are represented on regional district boards, and the regional district model encourages local governments to cooperate rather than compete in delivering services within their boundaries. Ideally, an economic development governance arrangement could be structured to include all regional districts within functional economic regions. Given the permissive nature of the local government system in the province, regional district participation in a regional economic governance arrangement would likely occur on a voluntary basis. Such a governance arrangement would also require representation from the local business and academic sectors, and would need to encourage social capital development through some form of meaningful community participation. However, efforts to encourage British Columbia local governments to work together to enhance regional economic performance have proven to be difficult to develop and sustain in the past. Additional incentives may be required to encourage local governments to form and maintain a regional governance approach to enhancing economic performance.

1. INTRODUCTION

Economic performance is an important determinant of the welfare of a jurisdiction. Strong economic performance nurtures innovation and encourages investment, creating wealth and economic growth. With recent communications and transportation innovations, combined with trade barrier reductions and increased capital/ financial mobility, economic forces are increasingly becoming regional in nature. As such, local governments are playing an increased role in influencing regional economic performance.

Economic regions are fluid and flexible entities often delineated via trade linkages and/or commodity and people flows, and tend to span multiple local administrative regions, which are geographically constrained entities designed to deliver public services to constituents. In order to optimize regional economic performance, economic development policies need to be coordinated across local administrative regions spanning functional economic regions and, in developing strategies to enhance economic performance at the regional level, it is important to understand the nature of both economic and administrative regions, as well as factors that influence regional economic development.

This paper seeks to understand what factors influence regional economic development, and identify strategies and governance approaches to enhancing regional economic performance in the context of British Columbia. Section 2 of this paper discusses the nature of economic and administrative regions and seeks to define economic performance from a public policy perspective; section 3 discusses the economic and social foundations of regional economic development; section 4 presents strategies for enhancing regional economic performance in economic regions; and section 5 discusses governance arrangements for economic regions in the context of British Columbia.

2. REGIONAL ECONOMIC PERFORMANCE

A clear understanding of economic regions and economic performance is necessary to identify factors and develop strategies for improving regional economic performance. Economic regions contemplate the nature of economic relationships and activities among entities in space, and economic performance provides a measure of the economic activity within an area. This section seeks to develop an understanding of economic regions and economic performance from a public policy perspective.

2.1. Understanding Economic Regions

The construct of a region may refer to a variety of concepts, structures, areas, activities and/or relationships among individuals, stakeholders, entities and/or units of analysis. Gunnarsson (2000:185) defines a region from a relational perspective as "an interplay between actors and institutions within a given geographical area", where the geographical area may be clearly defined or fluid depending on the nature of the interplay between actors and institutions.

One of the challenges with Gunnarsson's definition is the connection to a geographic area. While regions are often defined geographically or in relation to a natural resource, they may also be defined functionally or conceptually. As such, it is important that a regional definition be able to accommodate these more elusive constructs. This can be achieved by applying a spatial approach (i.e. pertaining to the unlimited expanse in which everything is located) rather than a geographic approach (i.e. pertaining to the earth and its features and the distribution of life) to defining a region.

This idea is illustrated by Dawkins (2003:134) who defines a region as a "spatially contiguous population (of human beings) that is bound either by historical necessity or by choice to a particular geographic location. The dependence on location may arise from a shared attraction to local culture, local employment centers, local natural resources, or other location-specific amenities."

Dawkins' definition is useful in that it considers historical and social elements in defining a region, in addition to geographic, economic and spatial factors. This is important because, as the author notes, the historical patterns of regional formation influence the evolution of modern regions, regardless of technological advancements (Dawkins 2003:134).

Hoover and Giarratani (1985: 9.5) present a definition of a region that captures all of the above listed considerations. The authors define a region as "a [spatial] area that is usefully considered as an entity for purposes of description, analysis, administration, planning, or policy" of which a normal attribute is "general consciousness of a common regional interest…[which]…makes possible some rational collective efforts to improve regional welfare" (Hoover *et al* 1985:9.1).

Common regional interests, as defined by Hoover *et al* (1985:9.1), may be manifested in terms of the areas of a region or through the interests of entities within a region, and this distinction allows for all regions to be broadly classified based on either **internal homogeneity** or **functional integration**.

Homogeneous regions are identified through some characteristic of internal uniformity (Hoover *et al* 1985:9.1, Dawkins 2003:134). A homogeneous region may be delineated based on geography, socio-economic characteristics, ethnicity, income, industrial structure, principal economic activity (or lack thereof), neighbourhood, land use, labour force, units of political or administrative control, culture, natural resource endowments, and/or the environment (Hoover *et al*, 1985, Dawkins, 2003). A key attribute of internally homogeneous regions is that their various components resemble one another more than they resemble areas outside the region (Hoover *et al* 1985:9.1). Classifying regions in terms of their homogeneity relative to other regions is a useful approach for comparative purposes.

Functional regions are internally integrated with respect to some characteristic or interest. By definition, the various components of functional regions "exhibit more interaction with one another than with outside areas" (Hoover *et al* 1985:9.1). Noronha and Goodchild (1992:88) identify a functional region as "an aggregation of elementary spatial units (ESUs) that maximizes the ratio of within-region to between-region interaction" and note that functional regions "do not need to be composed of continuous, contiguous ESUs."

The notion of functional regions may apply to a variety of integrated activities, including ecosystems, communications networks and social, cultural and political relationships. From an economic perspective, functional regions arise when factors of production (i.e. land, labour and capital) and/or commodity flows are more highly integrated internally than externally (Hoover *et al* 1985:9.1), and are often identified through internal trade linkages, commodity/ money flows, the movement of people, and/or the frequency of telephone calls (Hoover *et al* 1985:9.2).

A common functional economic region is the *nodal region*, in which economic activities are oriented towards a central dominant point or node (Dawkins 2003:134, Hoover *et al* 1985:9.1). An example of this is a city region with a central business district and a surrounding residential commuting or trading area. Functional economic regions may also be multi-nodal, whereby two or more separate nodes and peripheries exist, but none of which of which is dominant (Bailey and Turok 2001:698, Dawkins 2003: 134). Nodal economic regions are useful in analyzing worker dependence on adjacent employment centres, as well as business location, investment and trade activities.

Ultimately, it is the integrated nature of functional economic regions that provides a useful framework for analyzing regional economic performance, as an in depth understanding of the interrelationships between economic factors, entities and actors within functional economic regions provides the greatest assistance in developing strategies to enhance regional economic performance. The definition of a region put forward by Hoover *et al* (1985) (as discussed above) is the most useful from an economic policy perspective, as it contemplates the integrated nature of economic activities within regions, and is capable of accommodating a broad range of relationships among economic factors, actors and entities.

2.2. Administrative Versus Functional Economic Regions

One of the challenges in developing strategies to enhance regional economic performance arises through differences in the boundaries of administrative and functional economic regions. Functional economic regions are characterized by their degree of internal integration such as commodity, money, and commuter flows. However, administrative regions are delineated based largely on geographic boundaries and are established to represent and provide services to their constituents. Economic regions also tend to transcend administrative boundaries, particularly those of neighbouring local municipal and regional governments.

As such, economic development policies designed to attract firms and investment in a single administrative region may not sufficiently extend over an entire functional economic region, creating spillover effects and/ or inefficient economic development policies. Uncoordinated, internally oriented economic strategies developed by one administrative region comprising only a portion of a larger economic region can potentially lead to unnecessary amenity duplication across neighbouring jurisdictions in some instances, amenity under-provision in others, issues of free-ridership (i.e. where neighbouring jurisdictions receive benefits without incurring costs) and/or unhealthy competition among local governments for firms and investment.

For instance, economic policies that provide tax, cash or amenity incentives to firms willing to locate in a particular jurisdiction are not likely to be successful in the long run, as they can be easily replicated (Feldman and Martin 2004:23) and engage neighbouring jurisdictions in a zero-sum "race to the bottom." In a study of strategic interactions among U.S. states for the competition for firms and jobs, Fredriksson, List and Millimet (2003:2) test whether localities trade off tax incentives, infrastructure spending and pollution control standards to attract firms and jobs into their jurisdictions, and conclude that "states respond to increased governmental expenditure levels of neighbours by lowering their own pollution standards" (Fredriksson *et al* 2003:19). Such behaviour can be extremely short-sighted and is not conducive to long-term prosperity. Firms that choose to locate in a particular jurisdiction based on such incentives are not likely to be the best suited to the jurisdiction, and may not have a sustainable long-term business strategy: if such incentive arrangements between the jurisdiction and the firm become unsustainable, the long-term economic viability of the region becomes jeopardized. Rather, neighbouring jurisdictions need to cooperate and coordinate their efforts in developing strategies to enhance regional economic performance.

2.3. Understanding Economic Performance

Regional economic performance relates to the economic activities of entities, agents and/or organizations in a region over a given period. A common measure of economic performance is the value of economic production, which refers to the use of factors of production (i.e. land, labour and capital) in the creation of goods and services.

Economic production is often measured in aggregate as Gross Domestic Product (GDP) (i.e. the unduplicated value of all goods and services produced in an economy over a specified time period), but it can also be expressed in per capita terms and/or as output per production factor (productivity). Conceptually, economic production may be enhanced by expanding the factors of production (e.g. developing untapped resources), putting idle factors to work (e.g. employing the unemployed, revitalizing brownfield properties) and increasing the productivity of existing factors (e.g. developing innovations and applying new technologies to realize production efficiencies). Identifying opportunities to enhance economic production provides an indication of the unrealized production potential of an economy.

Production and productivity traditionally serve as reliable measures of economic performance from administrative benchmarking and private sector investment perspectives. However, from a public-policy perspective, the value of production as a measure of economic performance may not be sufficient in and of itself. This is because production does not necessarily contemplate the well-being of individuals within a jurisdiction; rather, it measures the value of goods and services produced. If government is a vehicle by which individuals may further their shared interests by acting in common (Locke 1967, as cited in Feldman and Martin 2004:8), then in seeking to enhance economic performance, governments need to consider the impact of economic policies on their constituents. Indeed, the primary economic interest held in common by all individuals is the accumulation of wealth (Feldman and Martin 2004:8) which is a measure of individual welfare and a key determinant of quality of life.

Wealth is best defined as a combination of income and investments. Income is measured as the sum of real wages, dividends and transfer payments. Real wages comprise the majority of individuals' income. Economic sectors in British Columbia displaying relatively high average 2005 real wages include goods producing industries such as forestry, mining, oil & gas, and construction, as well as service industries such as wholesale/ retail trade, professional, technical and educational services, and finance and real estate services (BCSTATS 2006).

Investments, particularly at the individual or household level, are best measured through residential property values. This is because the single largest investment made by individuals and families is residential housing, the price of which tends to reflect the value of local amenities and the local quality of life (Feldman and Martin 2004:8).

In seeking to enhance regional economic performance, governments should not only contemplate increasing regional production and productivity, but also increasing the wealth of constituents within a region. In applying this concept of economic performance, to the concept of a functional economic region as presented by Hoover *et al* (1985) (as listed above), a useful definition of regional economic performance can be identified. For the purposes of this paper, **regional economic performance** is best defined as *the analysis of functionally integrated economic regions with respect to the economic production and economic well-being of entities within the region*. This definition provides a useful framework for understanding regional economic development and in identifying strategies to improve regional economic performance in British Columbia.

3. FOUNDATIONS OF REGIONAL ECONOMIES

The integrated nature of economic regions creates challenges in understanding how to develop strategies to influence regional economic performance. Individuals, entities and economic factors within functional economic regions are mutually dependent, and exhibit a high degree of interaction. It can be difficult to isolate the impact of specific shocks or activities on regional economic performance and, therefore, it is important to understand how economic regions form and develop. This section draws upon the theoretical foundations of regional economic activity to develop an understanding of the factors that influence regional economic performance.

Hoover *et al* (1985:1.2) identify three phenomena that underlie the patterns of location of economic activity. These include: [1] differential natural resource endowments which create comparative advantages (i.e. imperfect mobility of land and other productive factors); [2] transportation and communication costs (i.e. imperfect mobility of goods and services); and [3] economies of agglomeration (i.e. imperfect divisibility of production factors and goods/ services).

The presence of differential, particularly immobile, natural resource endowments such as rich energy and mineral deposits, forests, fisheries and/or favourable growing climates influences the location decisions of both firms and individuals. An example of economic activity developed around immobile resource endowments in British Columbia is the creation of the resource municipality of Tumbler Ridge in 1981, which was developed by the province to tap into rich coal mining deposits.

Transportation and communication costs also influence the patterns of location of economic activity. The Province's plan to transform Prince George into an inland port to move air, sea and land cargo to Asian and North American markets, and develop Kamloops and Ashcroft as southern interior inland ports as part of *Canada's Pacific*

Gateway project (British Columbia, 2006) will influence the economic makeup and location decisions of firms and households within these municipalities and along strategic trade routes. Similarly, the multiple commuter corridors across municipalities in the Lower Mainland and in the Capital Region are the result of individuals making location decisions based on proximity to centres of economic activity.

Firms will also co-locate to access agglomeration economies, in which firms co-locate to realize external benefits and economies of scale. Manufacturing firms in British Columbia, for instance, are based in the Lower Mainland to access local labour resources and major trade and consumer markets to the south and across the Asia-Pacific, and also seek to be in proximity to intermediate suppliers and producers of manufacturing outputs. It is in realizing agglomeration economies that the productivity of existing factors is enhanced, attracting additional firms and investment, and ultimately enhancing economic performance by developing untapped resources and putting idle factors of production to work.

Geographic concentration is a prerequisite of agglomeration economies because externalities in the process of production have a spatial dimension. Agents are bounded by distance and time (Lopez-Baso, Vaya and Artis 2004:44) and firms must balance natural geographical endowments and cost advantages against scale economies in selecting a location. This explains why cities and regions develop in proximity to transportation hubs, immobile factors of production, or deep labour pools. Ellison and Glaeser (1999:311) estimate that observable resource and labour market natural cost advantages account for one fifth of the concentration of manufacturing firms in the United States and that a large number of other concentrated industries may be explained through intra-industry spillovers.

Economies of agglomeration arise as a result of three observed phenomena: deep labour pools, integrated local supply chain linkages and localized knowledge spillovers (Koo, 2005:106, Dawkins 2003:137, Duranton 2004:5). **Deep labour pools** are concentrated, quality local labour markets that draw economic activity because of potential specialization opportunities and economies of scale benefits associated with tapping into existing pools of human capital. Labour, in general, tends to be less mobile than capital, and workers accumulate human capital through education and workplace skill development over time (i.e. "learning by doing"), which they bring with them as they transfer into new positions throughout their careers. Deep labour pools facilitate the transference of knowledge and ideas among co-locating firms in similar industries or that use similar technologies through the transference of workers that share cost-saving information and stimulate innovation (Koo 2005:108).

Integrated Supply Chain Linkages occur through the co-location of firms to realize economic benefits associated with accessing upstream or downstream supply chains. As Koo (2004:99) notes "well-developed intermediate input supplier networks create market-driven externalities through scale economies". Integrated supply chain linkages lead to agglomeration economies through the co-location of firms involved in different stages of production of similar industries, which allows for increased productivity through specialization and greater local competition, providing incentives for innovation and greater opportunities for knowledge transfer through the complementary nature of firm production activities (Casey 2004:99).

Knowledge spillovers arise when cost-saving information is diffused among firms through formal and informal local innovation networks (Koo 2005:111). Knowledge spillovers arise because knowledge, as a tradable commodity, displays attributes of a public good – it is both non-rival (its use by one entity does not diminish its use for others) and non-excludable (once provided, it cannot be prevented from being consumed).[1] However, like all commodities, knowledge does not diffuse instantaneously across space. Rather, it is developed and implemented over time by firms and acquired by workers throughout their careers. As knowledge is accumulated, a region experiences greater cost advantages through productivity enhancements, which stimulates economic

[1] It should be noted that to some extent, patents protect knowledge and innovations from unauthorized uses, allowing for some degree of excludability.

growth (Dawkins 2003:150) and firms will co-locate to access the external benefits associated with localized knowledge spillovers.

One of the challenges associated with understanding knowledge spillovers lies in framing the mechanism by which knowledge is transferred within agglomeration economies. The economic benefits associated with deep labour pools and supply chain linkages are pecuniary in nature, because they arise through economic market interactions and can be accounted for and modeled through economic constructs such as returns to scale, market power and factor mobility (Koo 2005:109). Knowledge spillovers, however, are non-pecuniary externalities that arise through localized spillovers through formal and informal networks not captured in the market and, as a result, are less well understood and difficult to model and measure (Koo 2005:111).

Recent theories suggest that it is the cooperation, trust, coordination and close working relationships within concentrated groups that facilitate knowledge transfers and the generation of new ideas within economic regions, encouraging innovative activities and enhancing economic performance (Koo 2004:107). **Social capital** theory, in particular, suggests that knowledge spillovers occur largely through formal and informal networks of interaction that exist in agglomeration economies. Savitch and Kantor (2003:1010) frame social capital as "the supporting human relationships that enable people to work together for common purposes", which are built on trust developed through "common patterns of socialization and an acceptance of institutions, rules, norms, identities, and beliefs." Trust "entails the recognition of a common future, a willingness to engage in reciprocal endeavours and invest in one another's enterprise – psychologically and materially" and is at the essence of community relationships (Savitch and Kantor, 2003:1011). Hirsch (2006) recognizes the importance of social capital in noting that the economy in itself is a social manifestation based on "a set of agreements and customs among its agents," suggesting that social capital forms the essence of a market economy.

In rationalizing the role of social capital in economic performance Casey (2004:98) notes that "networks of association developed in civic organizations instil diffuse bonds of trust, cooperation and solidarity, facilitating collective action. Like human and physical capital, social capital increases productivity by reducing transaction costs and disseminating technical and organizational knowledge." Social capital provides greater certainty/ less risk for entrepreneurs in making investment decisions, and contributes to economic growth through information transfer among informal networks (Casey 2004:99).

Common measures of social capital include voluntary organizations, chambers of commerce, community groups, social clubs, churches, and civic engagement. In modelling the relationship between social capital and economic prosperity in Britain, Casey (2004:104,110) finds that more prosperous regions exhibit greater rates of participation in civic organizations and higher levels of trust, but that engagement in public affairs and economic associations are not positively correlated with economic prosperity. Indeed, it is thought that not all social capital is productive. Casey distinguishes between bridging (inclusive) and bonding (exclusive) social capital. Ethnic enclaves may be deemed examples of exclusive social capital because they are internally focused and often extend only to a limited group of individuals. Chambers of commerce and voluntary organizations, however, may be viewed as inclusive, because they seek to encourage participation, information sharing and networking. The underlying idea behind productive social capital is to establish connections among different groups across the social hierarchy to build trust, enhance social cohesion and facilitate knowledge transfer (Casey 2004:99).

Economic regions displaying elements of economies of agglomeration are known as "**economic clusters**." Koo (2005:107) defines a cluster as "a geographically concentrated and interdependent network of firms linked through buyer supplier chains or shared factors." Successful clusters are those that attract firms with similar products, production processes and organizational structures. They provide for labour pooling, industry specialization and knowledge spillover opportunities that enhance regional productivity and competitiveness (Almazan 2003:39, Dissart 2003:439). However, successful clusters are also a source of stability, in that they attract firms that are sensitive to different economic shocks, but able to share resources through inter-firm relations.

It is these inter-firm relations that facilitate the knowledge transfer and innovative activity that lead to improved economic performance (Koo 2005:107), as the co-location of firms in and of itself does not lead to a successful cluster. Indeed, when a cluster is dominated by externally owned branches and entities, local linkages are absent and firms are less likely to share information (Koo 2005:107), and when firms in a region outsource, they lose familiarity with production processes and develop fewer linkages with the regional network (Feldman and Martin 2004:21), severing community ties and eroding social capital.

4. STRATEGIES FOR ENHANCING REGIONAL ECONOMIC PERFORMANCE

Given the complex interface of factors, activities and interactions that influence the formation and performance of regional economies, it can be challenging to develop strategies to enhance regional economic performance. In confronting these challenges jurisdictions need to adopt a multi-faceted approach involving complimentary strategies and multiple stakeholders. These include: developing a unique activity system to promote jurisdictional advantage through differentiation; encouraging stability and economic diversification to avoid path dependence and mitigate the impacts of cyclical downturns; facilitating human capital formation to attract firms and increase productivity; undertaking research and development through academic-private sector partnerships to encourage knowledge generation; facilitating entrepreneurial activity to encourage innovation; and nurturing social capital at the community level to develop community ties and facilitate community involvement in economic development issues. These strategies are further discussed below.

4.1. A Unique Activity System

In developing economic performance enhancing strategies, it is important to build on the natural endowments, expertise and comparative advantages of the economic region, as the historical patterns of development and economic makeup of the region will influence the nature of future economic innovations and activities.

Feldman and Martin (2004:14) distinguish the location decisions of firms in terms of production and innovation. Production is based largely on resource endowments and/or transportation costs, and production oriented firms will remain in a particular location until physical investments are no longer viable due to resource depletions or market shifts. Innovation oriented firms tend to locate where knowledge externalities reduce the costs of discovery and innovation through the presence of existing resources and/or evidence of past success. The challenge lies in nurturing innovative activities that compliment existing production and resource endowments.

Developing research, knowledge and innovation that lead to technological breakthroughs requires a “sophisticated understanding of consumer needs, existing markets for product innovation and factor inputs and prevailing production technology” (Feldman and Martin 2004:4). While economic clusters may encourage innovative activity through economies of agglomeration, it is difficult, if not impossible, for governments to identify specific industries, sectors and areas to target economic development initiatives. This is because technological advancements are often characterized by first-mover advantages (i.e. the initial innovator is able to capture significant market share), and once an industry has been identified as a candidate for economic development strategies, it is likely that majority of the benefits will have already been captured by other jurisdictions (Feldman and Martin 2004:4). This is evidenced through the vast number of jurisdictions that have sought but failed to replicate the successes of economic regions such as Silicon Valley in California, which is a highly technologically specialized region.

Feldman and Martin (2004:21) recommend that regions pursue a jurisdictional advantage strategy known as a *unique activity system* consisting of “those activities and capabilities which, in combination, create a uniquely favourable jurisdiction for some set of industries.” The unique activity system would build on existing resources in collaboration with the private sector to provide some level of product differentiation or low cost benefit, creating a competitive advantage over other jurisdictions (Feldman and Martin 2004:5). The involvement of the private sector is critical to the process, as firms have a vested interest in securing the economic success of a region, and possess specialized knowledge of the unique challenges that shape their industries.

4.2. Stability and Economic Diversity

Diversity of activities and competition among relating and supporting industries strengthens regional economies and enhances innovation, particularly when compared to local monopolies (Feldman and Martin 2004:17). While it is important that firms in similar industries locate in proximity to each other to realize the benefits of agglomeration economies, it is also important to encourage healthy competition and create incentives to develop product differentiation and new production technologies.

Diversification also ensures regions are not overly dependent upon cyclical variations, because regions that specialize in cyclically sensitive activities are vulnerable to cyclical swings. In a review of economic diversification literature, Dissart (2003:425) finds that economic diversity is positively linked to economic stability, and that more economic diversity is correlated with less growth in unemployment and more stable income. Moreover, the author suggests that in seeking to improve economic performance, governments need to adopt a diversified specialization approach to economic development, in which firms with differentiated products that rely on similar knowledge bases and production processes co-locate to access economies of agglomeration, mitigating the risks associated with cyclical downturns (Dissart 2003:438).

One of the challenges in seeking to diversify regional economies and/or create a unique activity system is the “path dependence” of industrial based regions. Path dependencies result from “political lock-ins”, in which institutional tissues (such as political administrations, trade unions, businesses and lobby groups) seek to preserve existing industrial structures by lobbying for sectoral interventions and/or subsidies rather than attracting inward investment and encouraging innovation and creativity (Hassink 2005:522). Path dependence prevents regions from responding to and capitalizing on economic trends in a timely manner, leading to economic stagnation and ultimately industry closure (Feldman and Martin 2004:3, Hassink 2005).

Hassink (2005:525) identifies the concept of a "learning region" as a mechanism to alleviate political lock-ins and avoid path dependencies. A learning region is a "regional innovation strategy in which a broad set of innovation-related regional actors (politicians, policy-makers, chambers of commerce, trade unions, higher education institutes, public research establishments and companies) are strongly, but flexibly connected with each other, and who stick to a certain set of policy principles". A learning region allows for governments to develop regional economic strategies in collaboration with the private sector and other regional stakeholders through ongoing working relationships to avoid path-dependence and situations where jurisdiction-firm interaction begins only when firms threaten to leave (Feldman and Martin 2004:24). Hassink (2005:532) suggests that the concept of a learning region could be combined with the regional cluster concept to form a "learning cluster", in which a region is able to benefit from economies of agglomeration and develop strategies to avoid path dependencies in collaboration with regional stakeholders.

4.3. Knowledge Generation, Transfer and Innovation

Human capital, research and development (R&D) and entrepreneurial activity enhance economic performance by attracting firms, facilitating knowledge spillovers and encouraging innovation (Koo 2005:112, Feldman and Martin 2004:16).

Human capital is defined as the education, training and skills that individuals bring to the labour force. It is positively linked to wages (Glaeser 1994), employment growth and productivity, particularly in urban areas where skill matching, skill development and knowledge transfer enhance human capital productivity (Shapiro 2005:2). Human capital is also less mobile than physical capital, because as individuals develop knowledge and experience, they also develop relationships and economic/ social ties to their communities (Feldman and Martin 2004:16). Firms in knowledge based and labour intensive industries will follow highly skilled individuals to high amenity regions or compensate employees for dis-amenities (Kohler 1997). Human capital adds depth to labour pools and facilitates knowledge generation, retention and diffusion, attracting firms and stimulating innovation within agglomeration economies, ultimately enhancing economic performance (Koo 2005:112). Governments would be well-advised to ensure economic regions possess sufficient levels of human capital to facilitate knowledge transfer, foster innovation, and stimulate economic development.

Research & Development

The non-rival and non-excludable characteristics of knowledge as a commodity facilitate its diffusion across firms within agglomeration economies. However, these spillover effects prevent firms from fully capitalizing on the returns to their R&D investments, creating a disincentive to invest in R&D activities (despite patent protections) leading to its under-provision in the economy (Koo 2005:111). There is, therefore, a role for the public sector in funding R&D activities to facilitate knowledge generation, innovation and knowledge transfer, ultimately enhancing economic performance. Research suggests that this may be best achieved at the university level, as the co-location of university research and industrial R&D firms has been demonstrated to create a vertically integrated "local innovation system" that facilitates knowledge spillovers through the absorption of academic research in the market (Agrawal and Cockburn 2002). The challenge lies in ensuring the academic research produced can be absorbed and utilized by firms within local economies, suggesting the need for university-private sector partnership approach to developing and implementing an academic-private sector R&D agenda.

Entrepreneurialism

Entrepreneurial activity fuels innovation and enhances economic performance. New firms exploit new opportunities, using unique skills and knowledge to bring new technology to the market, and rely on local contacts and familiarity with the local business environment (Feldman and Martin 2004:12, Casey 2004:99). Policy-makers need to ensure that the business environment is conducive to encouraging entrepreneurial activity, by ensuring that new businesses are not unnecessarily burdened by onerous regulatory frameworks and that potential entrepreneurs (including graduates of applied studies and apprenticeship programs) are equipped with the education, training and skills necessary for starting and operating a business. As Hirsch (2006) notes, "even the most level playing field in the world will lie empty if we don't equip our labour force with the creativity and innovation they need to play the game."

To this end, policy-makers should develop strategies to nurture a business friendly environment in the province. In a recently released report, the British Columbia Task Force on Community Opportunities recommends that a multi-stakeholder standing committee be established to develop and promote business-friendly practice guidelines in the province, and that local governments maximize the use of a single access service window to enhance their ability to deliver services to businesses in the province (Task Force on Community Opportunities (TFOCO) 2006:24).

4.5. Community Social Capital

Strong community social capital positively influences regional economic activity. Savitch and Kantor (2003:15), in a study of the economic performance of 10 European and North American cities, identify that the primary difference between healthy and destitute communities lies in the ability of a jurisdiction to "create, circulate and retain wealth." Moreover, the authors observe that jurisdictions exhibiting strong community ties and local business ownership demonstrate the greatest economic performance (Savitch and Kantor 2003:1012).

To encourage economic development through greater community ties and wealth retention at the local level, the authors suggest that cities be rescaled downward to the community organization level, but that the influence of community organizations be rescaled upward to broader levels of government (Savitch and Kantor 2003:1012). This is because community involvement in local development initiatives is often achieved through local community associations/ economic development organizations, which provide opportunities for residents and community members to meaningfully influence how their neighbourhoods grow and develop. However, these types of organizations tend to be inward focused, pursuing objectives that are of greatest benefit to the community (e.g. NIMBY orientations), rather than to the entire jurisdiction (Savitch and Kantor 2003:1013).

That said, it is difficult for local community organizations to influence major economic development decisions on their own, as the nature of democratic institutions is such that local initiatives succeed at higher governance levels only when they become part of a larger base of issues (Savitch and Kantor 2003:1013). This creates challenges for local communities and individuals to meaningfully participate in economic development decisions affecting their communities, potentially creating an environment in which citizens are less engaged and less likely to develop local community ties.

To correct this, Savitch and Kantor (2003:1014) suggest that community development activities be "linked to organizations capable of aggregating these interests to build civic cooperation around broad issues." From a governance perspective, community development activities could potentially be linked to economic development decisions through some form of economic development corporation that represents the collective interests of community organizations at a functional regional governance level. Such an organization would represent the interests of communities affected by economic development strategies, and provide opportunities for local input at a regional economic level. This arrangement could have the effect of meaningfully involving communities in major economic development decisions, encouraging civic participation and forging community ties, while balancing local interests with those of the broader region.

5. REGIONAL ECONOMIC GOVERNANCE IN BRITISH COLUMBIA

Coordinating, implementing and operationalizing strategies for enhancing regional economic performance requires participation from a broad range of stakeholders across the province, including local governments, the private sector, academic institutions, economic development agencies, and local community organizations. Of these stakeholder groups, local governments have the greatest ability to influence economic development within their jurisdictions, as they possess the legislative authority to zone, regulate and tax businesses within their communities. As such, any regional economic development strategy must contemplate the governing structures and functions of the local government system.

Savitch and Kantor (2003:1018) differentiate between government and governance oriented approaches to improving economic performance. Government approaches involve the creation of an umbrella institution or multi-tiered vehicle with region-wide functions, which tend to be hierarchical, inflexible, bureaucratic and layered. Governance refers to the notion that existing institutions and administrative units can be harnessed in new ways on a fluid, voluntary basis. Examples of governance arrangements include the *linked functions approach* (in which higher and lower levels of government reach an agreement over a specified set of objectives), and the *complex networks approach* (in which existing, independent administrative regions "make decisions through multiple, overlapping webs of interlocal agreements") (Savitch and Kantor 2003:1018).

The authors suggest a governance approach is most appropriate for enhancing economic development, because it allows local governments to combine resources and coordinate their bargaining position by capitalizing on their respective strengths, while maintaining flexibility to respond and adapt to shifts in the global market (Savitch and Kantor 2003:1019). Governance approaches allow administrative regions to harmonize regulatory, taxation, zoning and infrastructure placement policies to manage public capital for private purposes, reducing zero-sum competition and broadening the local tax base through increased private investment. Governance approaches provide individual administrative regions with flexibility in pursuing innovation strategies and/or capitalizing on unique individual strengths, and allow for local government to coordinate and undertake research and policy analysis to understand the trends and factors shaping economic regions (Savitch and Kantor 2003:1019).

Bish (2001:1), in a study of local government institutional structures, argues that centralized governance structures are unlikely to meet the need for institutional adaptability, and that large and centralized governance structures have less familiarity with local conditions and are less capable of responding to local needs. Decentralization among local governments, on the other hand, provides for flexibility in choosing the scope and degree of services delivered to residents, allowing local governments to partner with neighbouring jurisdictions or deliver services directly, as situations warrant.

Multiple administrative regions working together to form a complex governance network across a functional economic region through interlocal agreements essentially form a **functional administrative layer** extending across a functional economic region. The key to forming a successful functional administrative layer lies in ensuring local governments are both willing and able to work together to develop strategies for enhancing regional economic performance.

The local government landscape in British Columbia is somewhat conducive to developing functional governance arrangements. British Columbia consists of 157 municipalities, each belonging to one of 27 regional districts that encompass the vast majority of the province (TFOCO 2006:3). Through the provincial legislative framework, local municipal and regional governments in British Columbia are able to work together to coordinate their service delivery activities. At the municipal level, municipalities may provide services outside their municipal boundaries, adopt inter-municipal regulatory/ service delivery schemes, enter into partnering agreements for the delivery of services, and enter into service delivery and regulatory agreements with other public authorities (Statutes of British Columbia, 2003).

At the regional level, regional districts provide regional services and activities to member municipalities and rural electoral areas generally on an as needed basis. Regional district boards are comprised of elected municipal counsellors appointed by their councils and directly elected members from electoral areas. All new activities undertaken by the regional district must be approved by the board members representing the area in which the activity is to be undertaken. However, regional district activities do not need to be undertaken across the entire region. Rather, "any combination of municipalities and electoral areas, or only part of an electoral area, can join together to provide an activity through the regional district structure," providing for flexibility in the design of service areas, based on the choices of the local electorate, who finance regional services provided their areas (Bish 2002:8,17).

Another important feature of regional districts is that "the same elected officials are responsible for the functions regardless of the level at which the activities are provided or produced." As a result, regional districts do not necessarily create competition and rivalry among elected officials for the delivery of services, rather, cooperation is encouraged where regional benefits can be achieved (Bish 2002:17).

While the BC local government system encourages flexibility and cooperation in delivering services to citizens, from an economic development perspective, local governments are often inward focused and tend to be "challenged to place regional well-being ahead of community self-interest" (TFOCO 2006:13). Efforts to encourage local governments to work together to enhance regional economic performance have proven to be difficult to develop and sustain in the past, due to a number of a number of factors including: regional economic development not being regarded as a function of local government institutions and structures; difficulties in identifying functional economic regions and in developing lasting partnerships at the appropriate scale; short-sighted local governments pursuing individual economic development policies at the expense of regional cooperation; and a lack of direct, tangible financial benefits accruing to local governments as a result of participation in coordinated economic development strategies (TFOCO 2006:26).

As such, local governments may require additional incentives and/or modified governance arrangements in order to facilitate cooperation and coordination in developing regional economic development policies. The issue of local government incentives in regional economic development is particularly important, especially since the empowering legislative framework under which local governments operate has not yet led to any significant sustained efforts by local governments to work together to enhance regional economic performance. The British Columbia Task Force on Community Opportunities (2006:17) suggests that this phenomenon is largely the result of regions being unable to capture the economic rewards associated with their efforts. Broadbent (2006) further analyzes the role incentives in encouraging cooperation among local governments in a complimentary report entitled: *Cooperation and Competition in Region Building: the Role of Incentives*.

In terms of developing a governance arrangement to mobilize local governments to work together to improve regional economic performance, the regional district model appears to be an appropriate vehicle for bringing local governments together – as both municipal and electoral district members are represented on regional district boards, and the regional district model encourages local governments to cooperate rather than compete in delivering services within their boundaries. However, while regional districts can provide services outside their boundaries via a contract or extending a service into neighbouring regional districts, "the current legislative framework is not designed to enable multi-regional service delivery and partnerships without one of these regions acting as the dominant partner" (TFOCO 2006:11). As such, regional districts are constrained in their ability to provide services outside their boundaries, and will need to work together to coordinate their efforts to improve regional economic performance when economic regions span multiple regional districts.

Ideally, an economic development governance arrangement could be structured to include all regional districts within functional economic regions. However, given the permissive nature of the local government system in the province, regional district participation in a regional economic governance arrangement would likely occur on a voluntary basis. Additionally, given the need to adopt a multi-faceted approach to economic development involving a number of complimentary strategies and multiple stakeholders (as discussed in the previous section), such a governance arrangement would require representation from the local business and academic sectors, and would need to encourage social capital development through some form of meaningful community participation. Economic development policies undertaken in other jurisdictions could potentially add insight as to how to structure an effective regional governance arrangement in British Columbia. This issue is further explored by Coe (2006) who, in a complimentary research report entitled *Regional Economic Development: Collaboration and Functional Government*, undertakes a review of regional economic development policies in comparative jurisdictions.

6. CONCLUSION

The complexity and multiplicity of elements and activities influencing economic development creates challenges for governments in selecting and designing successful approaches to enhancing regional economic performance. Economic regions are fluid and flexible entities capable of adapting and responding to market forces, while local governments are geographically constrained entities, established to represent and deliver public services to their constituents. Economic regions often transcend administrative regional boundaries and, as such, economic development policies need to be coordinated across local administrative regions spanning economic regions.

While historical patterns of regional economic development influence the nature of economic activity, it is in realizing economies of agglomeration that economic performance can be enhanced. Agglomeration economies arise from three factors: deep labour pools, integrated local supply chain linkages and localized knowledge spillovers. Of these, knowledge spillovers are the most difficult to develop, and arise when cost-saving information is diffused among firms through local innovation networks. Social capital theory suggests that knowledge spillovers occur largely through formal and informal networks of interaction that exist in agglomeration economies.

In developing strategies to enhance regional economic performance, this paper finds that jurisdictions should adopt a multi-faceted approach involving complimentary strategies and multiple stakeholders, including: developing a unique activity system to promote jurisdictional advantage through differentiation; encouraging stability and economic diversification to avoid path dependence and mitigate the impacts of cyclical downturns; facilitating human capital formation to attract firms and increase productivity; undertaking research and development through academic-private sector partnerships to encourage knowledge generation; facilitating entrepreneurial activity to encourage innovation; and nurturing social capital at the community level to develop community ties and facilitate local involvement in economic development issues. The success of any such approach hinges on how well local linkages among local governments, firms, academic institutions, and local communities can be developed.

In British Columbia, the regional district model appears to be an appropriate vehicle for bringing local governments together to develop and implement strategies for enhancing regional economic performance. Ideally, an economic development governance arrangement could be structured to include all regional districts within functional economic regions. Given the permissive nature of the local government system in the province, regional district participation in a regional economic governance arrangement would likely occur on a voluntary basis.

However, efforts to enhance regional economic performance have proven to be difficult to develop and sustain in the past, and additional incentives may be required to encourage local governments to form and maintain a regional governance approach to enhancing economic performance. Complimentary research on regional governance incentives and policies conducted by Broadbent (2006) and Coe (2006) may further assist governments in understanding and forming regional economic development arrangements and strategies. Further research on functional economic regions, regional stakeholder organizations and governance arrangements in British Columbia should be conducted in order to further apply and implement the strategies and governance approaches discussed in this report in the context of British Columbia.

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