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Services and the New Economic Landscape[1]

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Abstract The growth of the service economy in advanced and developing economies has created new economic landscapes. These landscapes are not only built forms, they are job generators and new sources of economic power for the regions that house them. This service economy is variegated, with differing sources of demand, and varying geographies of supply. A dynamic sector in this milieu is the evolving producer service complex, composed of financial, business, legal and professional services, which have had rapid expansion in most parts of the global economy. We present evidence in this paper on the growing division of labor within the producer services, and the simultaneous expansion of the geographic markets of these enterprises. Moreover, we document the expanding role of producer services and other services in the economic base of regional economies and argue that this expanding level of trade in services is now a powerful determinant of growth in smaller rural communities, medium sized cities, suburban components of major metropolitan areas, as well as in global cities. Recognition of these structural trends forces a reconsideration of the role of services in regional development theory.

I. Introduction

Service industries are leading the global economy into the new millennium, accounting for a growing share of jobs, income, and industrial output in advanced and newly industrializing economies. The New Economy that is being created is increasingly complex, and to a growing extent is dominated by the trade of information and knowledge which occurs on a new economic landscape. The phrase New Economy has been used by many scholars recently, to denote the ascent of industries and types of work in which trade is based on information, knowledge, culture and leisure, travel, nonearnings income, entrepreneurship, and other characteristics that differ markedly from a mass production, manufacturing-oriented economy.[2] In this paper we first document briefly the current dominance of services in economic growth, and we then review arguments put forward to explain current economic trends. We document the changing division of labor within the services, and we demonstrate that their growth in the United States is occurring not just in the largest metropolitan areas but also in places across the settlement hierarchy. We then present evidence documenting the growing contribution of services to the economic base of communities, which leads us to argue that regional development theory must now accord services industries a key position in the evolution of regions in the New Economy.

Global services growth. In the 1990s, services have assumed the center-place in the growth of industrial output in the increasingly interdependent world economy. Table 1 documents the replacement of manufacturing by services as the sector with the most rapid growth in contribution to GDP globally in the 1990s. This growth in gross

domestic product has been accompanied by a huge increase in the share of GDP entering international trade, rising from 25% of GDP in 1970 to 43% of GDP in 1996.[3] This rapid expansion in the level of trade has been fueled by growth of trade in services and other invisibles, including the returns from international aid and lending, direct foreign investment, and flows of corporate profits. At the same time, there has been a significant increase in the level of trade in merchandise, which induces trade in services related to the shipment of goods across the globe.

Table 1 Global Trends in Gross Domestic Product (average annual growth)

	1980-1990	1990-1996
Agriculture	2.8%	1.7%
Industry	3.3%	1.6%
Manufacturing	3.6%	1.4%
Services	3.3%	2.3%
GDP	3.1%	2.2%

Source: The World Bank, World Development Indicators, 1998.

The growth of trade in services in the New Economy is to a growing extent dominated by the movement of people and information, a reflection of the need for business travel, communications, and information transmission related to production of advanced services, as well as pleasure travel related to rising levels of wealth. Table 2 provides indicators of these changing shares of trade in services and supplies evidence on the changing structure of global trade in services. While these data clearly document the growing importance of trade in services that are at the center of the New Economy, it should be emphasized that production of services for domestic or localized consumption by households, governments, and businesses remains the dominant market for service industries.

Table 2. Composition of Global Service Exports ($ billions)

	1980	1996	% Change
Transportation	$123.8	$276.5	123%
Travel	92.3	463.5	402%
Communications, computers, information & other services	184.6	557.0	202%
Insurance & Financial	13.2	58.3	340%
Total	$414.0	$1,355.2	227%

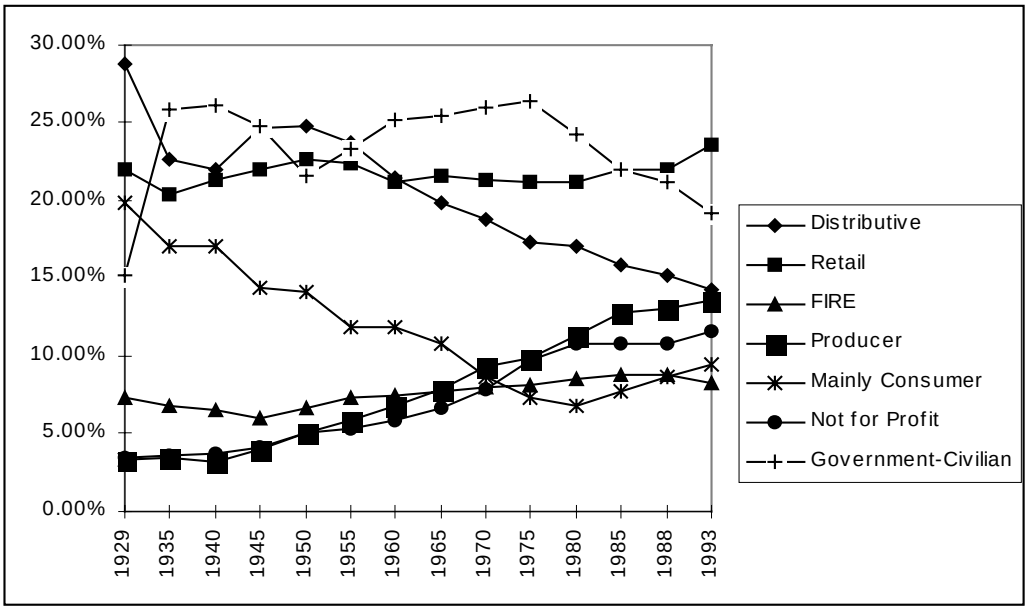
Source: The World Bank, World Development Indicators, 1998,

U.S. Services Development. Turning to the United States, the evolution of the New Economy has been dramatic over the past seven decades, with a rise in service employment from 21 million persons to over 100 million in the mid-1990s. Since around 1970, the level of employment in the United States in primary, manufacturing, and construction industries has remained *stable* at about 27 million jobs. Over the same time period the level of employment in services has risen from 55 to over 100 million jobs:

services have accounted for *all* job creation in the United States over the past 30 years. Figure 1 documents the changing mix of employment in this growing service economy. This figure clearly documents the changing division of labor among service industries, with rising shares associated with the information-oriented finance, insurance, & real estate (FIRE), producer services, and not-for-profit sectors (which includes health care) which are among the leading sectors in the New Economy.

How can we explain this pattern of development? To what extent does it reflect a shift in the composition of the economic base of communities? What are basic forces accounting for this aggregate pattern of growth, and what are the implications for regions on the new economic landscape? To begin answering these questions, we start by summarizing recent perspectives on bases for the *differential* growth of the service economy, with a particular focus on producer services. This review is followed by the presentation of survey results and analyses of secondary data which help sharpen our understanding of the recent rapid growth of service industries.

Figure 1 United States Service Industry Employment Percentages, 1929-1993



Source: U.S. Bureau of Economic Analysis & U.S. County Business Patterns

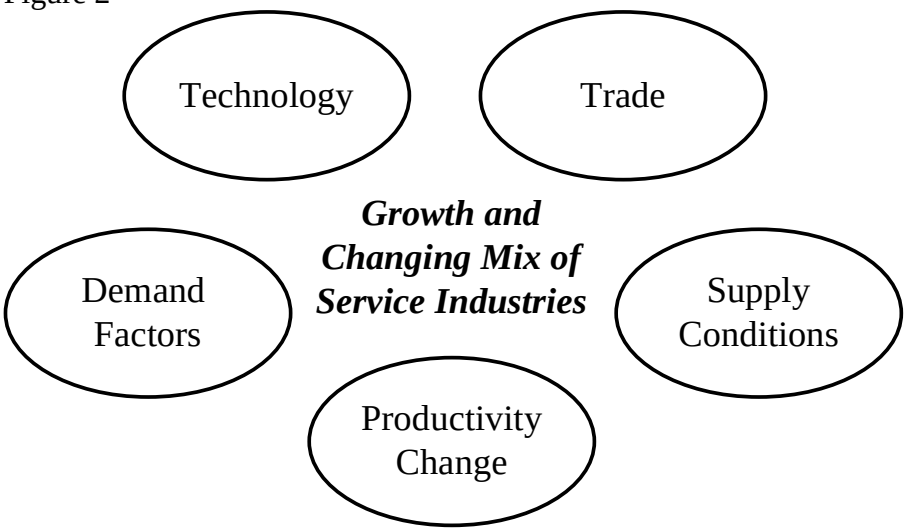
II. Explaining the Growth of the Service Economy

The rapid growth of services in regions, nations, and in the global economy has been the subject of many inquiries of a theoretical as well as an empirical nature. We cannot review the entire literature on this subject in this paper. However, we can briefly review arguments put forward in recent years to explain the rapid growth of the services and changes in the composition of service industries. We have grouped explanations for the growth of services into five broad categories (see Figure 2), which overlap to varying degrees: (1) productivity-related explanations; (2) demand factors; (3) supply side considerations including externalization processes and the formation of industrial

districts; (4) technology related explanations including the role of information technologies; and (5) trade in services. We present evidence related to many of these points in section III of this paper, and consider implications for regional development theory in section IV.

The forces identified in Figure 2 are linked in their impact upon the composition of employment and output in various service industries. The shifting sectoral proportions illustrated for the U.S. in Figure 1 are a product of how these forces play out over time; yet, there is no reason to expect these trajectories will be steady in their magnitude and relative importance. Moreover, within the industrial compartments defined in our ever-changing Standard Industrial Classification codes, we can anticipate industries dying, like buggy-whip dealers or household ice refrigeration suppliers, and new sectors emerging such as cable-TV or prepackaged software.

Figure 2



Productivity-related explanations. One of the reasons why the share of employment found in service sectors has risen over time is due to their relatively slow rate of productivity improvement, compared to goods producing sectors (Glasmeier and Howland 1995, p. 29); (Glasmeier and Howland 1994, p.204); (Marshall and Wood 1995, p. 41); (Illeris 1996, p. 68); (Ochel and Wegner 1987); (Capron and deBande 1997). Although the measurement of productivity in services is complex, and there is agreement that most efforts at measurement are in some way flawed, there is also agreement that different service sectors are being affected by changes in production processes in an uneven fashion. Some, such as telecommunications, have had enormous capital deepening which has dramatically improved labor productivity (Quinn 1992). Others, such as producer services, even in the face of massive investment in computers and other information technologies, have been resistant to productivity gains, although some are arguing that this may have turned around in recent years in the United States (Cairncross 1997); (Madrick 1998). The measurement of productivity in many services is complicated by the unstandardized nature of the "product," making it difficult to measure the quantity and quality of factor inputs being used at different points in time to produce a

comparable service "product." Thus, there remains considerable disagreement over the magnitude of the productivity gap within the services (Quinn 1992).

Demand-related explanations. From the demand side, there are four relatively distinct forces related to the growth of services: (1) growth simply because the entire economy has expanded, (2) growth due to demographic shifts, (3) growth due to changes in per capita income levels, and (4) growth in the demand for services used as inputs in the production process by private and public organizations.

The first point is simple: some growth comes about just because of the general expansion of population and employment (Glasmeier and Howland 1995, p. 29); (Illeris 1996, p. 68). Analyses by the Bureau of Labor Statistics have found these effects to account for 40 % of output growth in the producer services (Tschetter 1987), while research by Israilevich and Mahidhara find three-quarters of services employment growth in the Chicago economy to be related to 'final demand effects' (Israilevich and Mahidhara).[4]

Regarding growth due to demographic shifts, Harrington and Warf observe the growing relative demand for health care in the United States simply because of an aging of our population structure (Harrington and Warf 1995, p. 57). This cannot be the entire explanation for the growth of the health care sector, as much of the growth can be related to advances in medical knowledge and the development of procedures applying that knowledge to the care of people. Other sectors may be substantially affected by demographic shifts, including the scale of the education system, local government, construction and the related finance-real estate complex, and retailing.

Early research on the growth of service industries highlighted the importance of rising real income levels on consumer demand, including the classic work of Clark and Fisher. This factor remains important today—with expanding demand for services such as air travel, security brokerages, hotels and entertainment—as real incomes rise (Salant and Marx 1995, p. 62); (Capron and deBande 1997); (Marshall and Wood 1995, pp. 40-41); (Harrington and Warf 1995, p. 57). However, the work of Gershuny and Miles provides good counter-evidence to the simple Clark-Fisher thesis driven by consumer demand, for he documents the growing use of goods by middle-income households to produce services at home in the "self-service" economy (Gershuny and Miles 1983). Gershuny and Miles now somewhat dated studies should be repeated as we approach the millennium, in a broader variety of geographic locations, as pioneered several years ago by Randall (Randall). In section III we present evidence on the changing mix of consumer demand.

The fourth of these demand-related forces (the growth in the demand for intermediate services—primarily producer services) has spawned a large literature (e.g., (Salant and Marx 1995, p. 63); (Beyers and Lindahl 1996), (Illeris 1996, pp. 69-73); (Marshall and Wood 1995, p. 71); (Ochel and Wegner 1987); (Harrington and Warf 1995, pp. 57-58). This literature inevitably overlaps with supply side perspectives. Elsewhere

we have documented reasons for this demand and its growth (Beyers and Lindahl 1996). The literature on this topic may be usefully divided into two perspectives—explanations related to narrow cost-based economic factors, and explanations related to a host of what we have called "non-cost" or "quasi-cost" factors. The preponderance of evidence appears to favor increasing use of purchased producer services because of lack of internal capabilities by those demanding these services—not because purchasers consider themselves to be at a cost disadvantage in supplying the service (Illeris 1996); (Beyers and Lindahl 1996); (Coffey and Shearmur 1996). Coffey and Shearmur have recently cataloged a comprehensive list of explanations for such demands, which parallel those we have documented for a sample of American producer service businesses (Coffey and Shearmur 1996).

The collective impact of these demand factors has resulted in the expansion of service employment and output, particularly the increasing specialization of services, as discussed in section I of this paper. At the same time, this growth in demand has occurred in a dynamic supply-side environment, influenced strongly by ongoing technological changes in service "products" and processes.

Supply-related explanations. The increasingly complex social division of labor in the services, especially the producer services, has come about in the United States through a vast proliferation of business establishments—most of whom are small enterprises.[5] Two key issues are associated with the supply side: (a) the growth in service enterprises (and most particularly producer services) as primarily the result of externalization of functions previously endogenous to other businesses, and (b) the geographic location of new producers relative to their markets and input-factors. These topics quickly lead to engagement of 'the new industrial geography,' the 'flexibility' literature, and the consideration of 'new industrial spaces' or the 'industrial districts' literature. We cannot and will not traverse the huge literature which has emerged on these topics in this paper; rather the reader is referred to scholars such as Gertler, Storper & Christopherson, and Markusen (Gertler 1988), (Gertler 1992), (Storper and Christopherson 1987), (Markusen 1998). Rather, we will make some summary comments that capture the essence of findings related to the services, and particularly producer services.

Is the relatively rapid growth of producer services primarily the result of cost-driven externalization processes? The popular "California school" suggests that it is (Scott 1988), but chinks are evident in the armor by the admissions of even one of the most well-cited members of this contingent--Michael Storper. Pollard and Storper have recently questioned the ascent of service employment in a sample of U.S. cities, and they have questioned the role of externalization processes (Pollard and Storper 1996). Storper has also reconsidered the strength of this argument (Storper 1997, pp. 242-244). A Berkeley perspective also suggests that vertical disintegration accounts for most producer services growth (Castells 1996, p. 212), but a careful review of empirical work on this topic by Illeris comes to just the reverse conclusion (Illeris 1996). We argue that much of the confusion here stems from different empirical bases, analytical perspectives, and

comprehensiveness of analyses—issues that Markusen addressed in a recent paper (Markusen 1998). And, we have argued elsewhere that the growth of this part of the economy has not come about primarily because of vertical disintegration, but rather due to the combination of evolving technological possibilities, the complex of demand factors not linked to cost considerations, and the construction of market place competitive advantage by producer service enterprises (Beyers and Lindahl 1996), (Lindahl and Beyers 1999). Our conclusions in this regard have been supported by Illeris' recent review of the externalization issue, and are also supported by research in the U.K. by O'Farrell and colleagues (Illeris 1996); (O'Farrell, Moffat et al. 1993).

Many scholars have fallen for this appealing notion that the growth of the producer services is a simple matter of externalization. The extensive literature on downsizing, outsourcing, and reengineering fuels this perception, but it generally not been accompanied by careful empirical research on the bases of demand experienced by individual enterprises (Harmon 1996); (Harrison 1994, p. 41); (Harrington and Warf 1995, p. 59-60); (Illeris 1996, pp. 73-74); (Castells 1996, p 212). The easy analytical extension of this externalization argument is that when it occurs production will "agglomerate", presumably because demand is localized and it makes sense for the externalized functions to be procured from nearby suppliers--see a scenario painted by Coffey and Shearmur on this point (Coffey and Shearmur 1996). This immediately brings the argument into conjunction with the industrial districts perspective, a view implicitly embedded in several recent papers by Ann Markusen (Markusen 1996), (Markusen 1998). Markusen tackles the veracity of the industrial districts/new industrial spaces perspective, including in her text and tables references to the services, but she never completely explores their meaning in the context of her case studies of American cities, nor in her critique of the new industrial districts perspective. In contrast, Pollard and Storper construct an eclectic analysis of twelve American cities in which they isolate the growth of information-oriented services as leading agents in these cities, but struggle to find structural explanations for the generically robust growth of these services (Pollard and Storper 1996). To their credit, they do conclude that these services could be traded—and form a new basis for the growth of regions—a matter we address shortly. And as with work published by Beyers, they note the slow growth of services in cities whose manufacturing sectors have struggled or declined, compared to those which rapid growth (Beyers 1992). Pollard and Storper's analysis provides a critique of the industrial districts and flexible specialization perspective and raised in Storper's view the prospect of bases for development in these industries that were not based on the cost-minimization calculus at the heart of the vertical disintegration model (Storper 1997, pp. 242-244).

At present, while there are examples of service-based industrial districts in the literature, such as Storper and Christopherson's account of the development of the motion picture industry (Storper and Christopherson 1987), we lack precise case studies documenting the Marshallian form of the expansion of such complexes where narrowly-defined cost considerations are the driving force in the reconfiguration of the scope of enterprises. Markusen has recently made this point forcefully (Markusen 1998). We also observe that the widely-cited paper of Storper and Christopherson on the motion picture

industry was an analysis built around changes in technology and industrial organization, not static comparative-cost considerations at the heart of the model developed by Scott (Scott 1988).

This brief detour into the supply side leaves wanting yet another key piece of the puzzle explaining the relative growth of services—changes in technology impacting the services. Let us now turn to this matter.

Technology-related explanations. We can see and feel the result of changes in technology in goods production, just as we can see changes in products made with a given technology. Automobile manufacturers can redesign their cars for the new model year and use essentially the same production lines, but of course they always change somewhat the process by which they make cars. Contrast this with the way a lawyer produces a legal brief. If made for a court proceeding, it must conform to standards of the circuit—which let us assume is on paper in a certain format typed on legal-sized paper. Behind the means of getting this document to the court, the production process may no longer employ legal research staff with book-libraries, but could instead rely on enormous electronic systems, such as Lexis, for case searches and the construction of arguments. Would the court or the client know which method was used to make the brief? Not likely. It is very difficult to perceive let alone measure technological change in the production of some services. In other sectors, such as computer software, revolutions of concepts and applications appear and disappear almost daily. This has led us on the one hand into the conundrum of measuring productivity improvement in services, as we have already discussed. On the other hand, it produces difficulties for evaluating the downsizing and outsourcing issue, because what a company may have been procuring today in the way of a service may differ radically from what it chooses to procure tomorrow.

Quinn argues that changes in technologies used in the production of services, especially information-related technologies such as telecommunications and computing, lead to new opportunities for specialized services to develop to exploit new economies of scale and scope (Quinn, p. 23). The result is a new division of labor, with generally greater complexity, which leads to disintermediation (the establishment of new enterprises or industries—or the disappearance of old ones) to exploit these new opportunities (Quinn 1992, p. 26). The spread of these new organizations will likely filter down to communities, decentralizing supply (Quinn 1992, p. 27). He argues that while this process of differentiation may create opportunities for monopoly, in general it has proceeded in a deregulated environment, creating the supply of expertise which we and others have argued are the most robust basis for demand for intermediate services (Beyers and Lindahl 1996); (Illeris 1996, pp. 67-68); (Marshall and Wood 1995, p. 72).

The consequences of these processes of technological change are viewed as opportunities which will continue to fuel the growth of advanced economies by some (such as Quinn), as a source of turbulence by others, and as the basis for crisis by yet another group of scholars. Thurow struggles with the growth and development of

services: “Services is simply too heterogeneous to be an interesting category.” (Thurow 1996, p. 71) “The real issue is not the growth of services but whether the economy is making a successful transition from low-wage low-skill industries…to high-wage high-skill industries.” (Thurow 1996, p.72). In this respect he argues that in our current era—marked by the ascent of “man-made brainpower industries”--that skills of the labor force are the key to the development of new competitive industries. “Technology is making skills and knowledge the only sources of sustainable competitive advantage.” (Thurow 1996, p. 326). He presents both optimistic and pessimistic perspectives on whether the U.S. and other countries are making the investments necessary to make the transitions in the New Economy which will lead to dominance of the high-wage high-skill industries. For Rifkin the outcome of this process is the dehumanization of work, and the displacement of jobs creating “the end of work,” including in the services (Rifkin 1995, pp. 141-162). While technological change creates uncertainties, thus far we do not observe rising levels of unemployment associated with technical change, but rather as Quinn argues: “Far from being the peripheral outputs of a society, services are the essence of that output. These are the truly endless horizons of a modern society. Services are not be feared but embraced, nurtured, and managed as the economic engine of future progress.” (Quinn 1992, p. 438).

The result of this fast-paced process of technological change has been manifested in the ongoing social division of labor within the services—the shifting mix observed in Figure 1. It has also created spatial markets which vary from local to global, a matter to which we turn next. And, in section III we present evidence on the changing division of labor in the services, linked *inter alia* to changing business opportunities related to changing technologies.

Trade-related explanations. Regions may experience growth in the share of employment found in the services through the production of these services for local consumption or by producing them for clients located in other regions. Although there is considerable evidence of the magnitude of international and interregional trade in services, there remains a nagging skepticism about the ability of services trade to sustain economic growth in regional or national economies. Coffey and Shearmur put it this way:

> “In general, one can identify two diametrically opposed schools of thought concerning the ‘real’ economic base of urban communities. The first, based upon what many would now consider an antiquated view of the nature of production systems, holds that the production of goods is the driving force of a local (or regional or national) economy.”… “The second view of thought, often termed a ‘postindustrial’ perspective, takes an inverse view, stressing the increasing insignificance of manufacturing in most urban economies, and the rising importance of service activities, particularly high-order knowledge-related services.” “Of the two schools of thought, the view that manufacturing is solid and genuine, whereas service industries are parasitic and ephemeral, is the most firmly entrenched.” (Coffey and Shearmur 1996, p. 123).

The types of skepticism referred to by Coffey and Shearmur is evident in the following quotes. Howe and Markusen write:

> "A special note on services trade is in order here. Much hope has been placed in the ability of service exports to replace local economic activity lost in manufacturing. Certainly, since services have been growing rapidly, it is reasonable to expect that they might account for a disproportionate share of export growth. However, this evidence, albeit difficult to marshal because of poor data, is not encouraging. The transformation of domestic and international economies from manufacturing to services, particularly to "producer services," has clearly benefited some cities at the expense of others. But although service industries have contributed to economic development in the form of net job creation, the extent to which their output is exported internationally versus to their hinterlands and other regions is not clear. Recent work by Beyers (Beyers 1989) shows that services are more provincially oriented than is manufacturing, on average. Cohen and Zysman (Cohen and Zysman 1987) argue that services have limited potential in correcting balance of payments problems." (Howe and Markusen 1993)

> Malecki notes: "... services may be possible as an economic base only in large urban regions such as Toronto where head offices and control are concentrated. The prominence of services as an employer has perhaps caused an ill-advised de-emphasis on manufacturing as the core of a prosperous economy." (Malecki 1991, p. 69).

Much research has documented the role of service exports in smaller communities, reporting results contrary to flavor of the conclusions of Howe and Markusen, and Malecki. This research indicates that services, especially producer services, trade from places which span the settlement hierarchy (Beyers and Lindahl 1996); (Porterfield and Pulver 1991, p. 47); (Illeris 1996, p. 69). Research reliant on secondary sources has been cautionary about the role of service exports from rural areas (Glasmeier and Howland 1994, p. 204). Further, research has found differences in export-market emphasis by firms in different regions within countries (O'Farrell and Wood 1996); (O'Farrell and Wood 1998); (O'Farrell, Wood et al. 1996), with firms in major urban cores more likely to be engaged in foreign market activity than those located in peripheral areas. There is a growing body of evidence on the diversity of service export trade, including tourist trade, services induced through the movement of goods and people, and specialized health care (Williams 1997). Juan Cuarado-Roura and Luis Rubalcaba-Bermejo have called to our attention the growing importance of exhibitions and fairs in the economic base of European cities (Cuarado-Roura and Rubalcaba-Bermejo 1998).

Harrington, MacPherson & Lombard summarized research on this topic in the producer services seven years ago and emphasized the tendencies for trade to be associated with highly specialized enterprises located in major urban areas (Harrington,

MacPherson et al. 1991). Yet, our more recent research concludes that the grip of the largest places may have diminished with the diffusion of telecommunications, commuter airlines, and small package courier service to small communities (Beyers and Lindahl 1996); (Nelson and Beyers 1998). The growing body of research on small community trade in services is recent (Richards 1994); (Power 1996); (Johnson and Rasker 1995). Illeris has summarized the forces related to the location of these specialists, and he concludes:

> "….though accessibility is important, it does not seem to a decisive factor of location…." "Improved transport and telecommunications have meant that while service activities were located in such a way as to minimize distances to customers (and, for information services, distances to sources of information), for some of them this constraint has now been relaxed" (Illeris 1996, p. 127).

In effect, this statement implies the ability of export-oriented services to locate in smaller less "central" places.

The combination of explanations producing the New Economy and new economic landscapes. Each of the factors considered above help explain the growth of the relative importance of services in regional economies—and are associated with the development of the New Economy and its related new economic landscapes. As Coffey and Shearmur have argued, it is the conjunction of these forces which is producing the patterns of structural change and regional growth which we observe today (Coffey and Shearmur 1996); (Coffey and Shearmur 1997); (Coffey and Shearmur 1998). The evolution of technologies has helped to create new service business concepts, which have been supplied by innovative enterprises in an ever richer social division of labor, at the same time as clients have recognized a need to purchases these services. This evolving service industry complex is embedded in the space economy, with both localized and externalized backward and forward linkages. As we will document in the next section of this paper, the result is a tendency for firms to have expanding geographic markets, and for regions to have their economic base more dependent upon trade in services.

III. Services and the New Economic Landscape - Empirical Evidence

In the preceding section, we provided insights into forces considered important by various scholars aimed at explaining the growth of the New Economy, and the evolution of the new economic landscape. In this section we present selected evidence to further our understanding of the ways in which these factors are playing out at the level of cities and towns, at the level of firms, and at the level of regions. In particular, we document four key attributes of the evolution occurring in the New Economy: (1) firm-level motivations for the changing division of labor, (2) geographic outcomes related to the current trend in the evolving division of labor, (3) the geography of markets related to businesses in the New Economy, and (4) regional economic impacts associated with the emerging structure of the New Economy.

The changing division of labor in services. The ongoing division of labor within this increasingly complex service economy has altered the geography of trade, and rewarded those who innovate in this evolving production system. We document this relationship with evidence from surveys we have conducted of producer service businesses.[6] We present two types of evidence from our research regarding this changing division of labor : (1) information on reasons why people found producer service businesses, and (2) the prevalence of changes in services which are supplied in the market place. Note that we have reported this information in other work within a moderately different context (Beyers and Lindahl 1996), (Beyers and Lindahl 1997).

Table 3 documents reasons cited by entrepreneurs for founding producer service businesses. This table is based on information from 598 founders in 540 different businesses (it was possible for respondents to cite more than one reason for starting their business).[7] The entrepreneurs indicating they were responding to a market opportunity were frequently starting businesses that were highly specialized, as indicated in Table 4. Many of those citing "other" in Table 3 were also involved in innovative new businesses in sectors such as computer services, or were associated with a startup related to a change in organizational structure. The entrepreneurial spirit is evident in the responses in Table 3, with a large proportion of the founders of companies wishing to be in business for themselves (See Beyers and Lindahl 1996). Note the low importance of unemployment as a motivating factor behind firm formation, even during a period of white-collar recession just prior to when this survey was conducted. These data document the abundance of new businesses where the business concept is not simply a replication of an already existing business, but in some way represents a change in the division of labor.

Table 3 Reasons for Starting Business

		# of citations
Desire to be own boss	32.6%	309
Market opportunity identified	25.8%	245
To increase personal income	12.2%	116
As an alternative to unemployment	6.3%	60
Less Travel	0.7%	7
Other	22.3%	211
total	100.00%	948

N=598

Table 4 identifies some examples of the business concepts described by those founders who said a primary reason for starting a business was because a market opportunity was identified. None of these respondents considered the market to be highly competitive for their service[8]; two-thirds of them had geographic markets almost entirely outside their local area, reflecting the specialization and the broad geographic range needed for business success. Each of the descriptions of the business niches in Table 4 provides a more nuanced description of the type of services being rendered than the general industry description in the service description. The examples selected here are typical of the degree of specialization we have found in most lines of producer service

business, and, as will be documented below, these business concepts are not fixed in time, but are themselves subject to evolution and development.

Table 4 Examples of types of businesses in which the founder wished to pursue a market opportunity

Industry	Service description	Niche
Misc. Business Services	Fire equipment sales companies	Consulting to fire equipment industry including management seminars for fire equipment management companies
Architecture & Engineering as well as Management Consulting	Engineering and scientific consulting	Development of non-destructive method of constructing engineering component. Expert witness.
Management Consulting	Environmental dispute resolution	Facilitation and mediation of policy disputes.
Temporary Help	Temporary help company, specialist in labor relations	Specialization in electric utilities.
Management Consulting	Public Relations	Agriculture and natural resources; partners have expertise in agriculture. Main competition are large ad agencies.
Computer Services	Applications software for college/university and nonprofit organizations.	Nonprofit foundation software and higher education software

Table 5 documents within a sample of producer service businesses the tendency to change the services that are being produced—essentially restructuring the firm in this rapidly evolving service economy. Slightly more than half of the businesses we interviewed had changed their services within the previous five years, or since the start-up of the business. Some of these industries were particularly dynamic, such as management consulting and public relations, while others appear more conservative in their approach to change—such as nondepository financial institutions.

Table 5 Percentage of Establishments Changing Their Services Over the Past Five Years

Industry	% Changing Services Offered
Management Consulting & Public Relations	78.80%
Research and Testing	61.90%

Computer Services	60.90%
Accounting and Bookkeeping	57.90%
Architecture and Engineering	50.70%
Security brokerages	48.10%
Insurance agents and carriers	47.40%
Legal Services	46.60%
Miscellaneous Business Services	42.00%
Nondepository financial institutions	33.30%
Temporary Help	25.00%
Entire Sample	54.40%

The reasons why companies have changed their services are documented in Table 6. This table makes it clear that the forces of change affecting most producer service firms stem from both the demand side as well as from the supply side, with information technologies and employee skills playing an important role alongside changing market conditions.

Table 6 Percentage of establishments considering factor highly important as a reason for changing their services.

Why Types of Services Have Changed:	Total	Percent of Establishments Citing One Factor	Percent of Establishments Citing Multiple Factors
Change in Market	44.5%	28.3%	52.7%
Change in Client Expectations	36.1%	15.2%	45.2%
Use of Computers and IT	31.1%	26.1%	31.5%
Change in Government Regulations	23.9%	19.6%	21.9%
Change in Employee Skills	18.9%	10.9%	20.5%
(Sample size)	n=238	n=92	n=146

Firms not only change the type of services they offer but will also orient themselves towards different types of clients and geographic markets (Beyers and Lindahl 1996), (Beyers and Lindahl 1997). In a previous paper, we have documented changes of this type for 297 producer service establishments. Of these 297 establishments, 157 changed the services they offered (Beyers and Lindahl 1997). As a group firms changing their services grew more rapidly than those that did not change their services. Of the 157 establishments changing their services, 31 experienced an increase in their export market share -- this group of firms also had the fastest rate of growth. In contrast, eight businesses that changed the services they offer had decreased export market shares, and experienced a very low rate of sales growth. While we evaluated these findings in much greater detail in our earlier research, the main point here is that adaptive behavior, whether it be in the type of services, clients, or geographic markets, correlates with increased sales growth.

The first point to be made in this paper is that the explosion of producer service establishments onto the new economic landscape is frequently associated with new business concepts, which in turn represent new forms of the social division of labor. These changes in services can lead to changes in markets, and our evidence leads us to conclude that dynamism in markets -- as evidenced by shifts in their geography, industrial composition, and what is being sold -- is associated with relatively strong rates of business sales growth.

Location on the new economic landscape. The second issue we address is the emerging geography of production for producer services—a key sector emerging on the new economic landscape—as well as for other sectors. The historic concentration of producer services in the largest metropolitan areas is now well-documented (Noyelle and Stanback 1983); (Beyers 1992); (Ó Huallacháin 1992); (Coffey and Shearmur 1996), (Coffey and Shearmur 1997), (Coffey and Shearmur 1998). In an analysis for the U.S. over the 1974 to 1985 time period Beyers concluded that there was no real dispersal of employment from metropolitan areas, as measured by indices such as location quotients (Beyers 1992). However, lack of evidence indicating dispersal should not be equated with a lack of growth in services, and especially producer services, in smaller communities. Table 7 documents employment growth rates for metropolitan and nonmetropolitan areas in the United States for two recent decades.[9] In the 1974-1985 time period, employment growth in metropolitan areas outpaced that of nonmetropolitan areas. As this table makes it clear, services were the primary reason for this growth, as manufacturing declined *more* in metropolitan areas than it did in nonmetropolitan areas. Moreover, producer services growth rates were equal in both metropolitan and nonmetropolitan areas, leading to an increase in the overall share of producer services employment in nonmetropolitan regions.

In the more recent 1985-1993 time period, a somewhat different picture emerges. Nonmetropolitan growth rates now outpace metropolitan, a trend which has been strengthened in the 1990s (Fuguitt and Beale 1996). Nonmetropolitan areas continue to gain manufacturing employment, while metropolitan areas continue to exhibit sharp declines. Producer service growth rates remain almost identical in urban and rural areas, outpacing aggregate growth, and well above the growth rates for other sectors in the American economy. At this level of aggregation, we do not observe dispersal of employment in producer services, but growth does appear strong outside metropolitan centers.

Table 7 Employment Growth Rates Among Regions

	1974-1985	1985-1993
Total		
Metro	29.6%	16.4%
Nonmetro	23.7%	20.9%
Manufacturing		
Metro	-5.2%	-10.5%

Nonmetro	-1.7%	6.8%
Producer Services		
Metro	60.0%	35.1%
Nonmetro	59.0%	34.0%
Other Employment		
Metro	38.0%	21.6%
Nonmetro	36.0%	26.5%

Source: U.S. County Business Patterns (authors' estimates)

With the development of advanced telecommunications, developments in our interstate highway system, and the growth of small package courier systems and commuter air travel, there has been growing interest in the geography of growth in the information oriented producer services. One perspective on these growth patterns is presented in Table 8, which divides metropolitan regions into four county types, and nonmetropolitan regions into six types. Large core urban counties (those with populations over 1,000,000) exhibit relatively slow aggregate growth, sharp declines in manufacturing employment, and sluggish growth in producer services. In contrast, their suburban counties experienced the most rapid growth of any county type, strong growth in producer services, and slow expansion of manufacturing. Smaller metropolitan areas and nonmetropolitan areas exhibit very similar aggregate and producer services growth rates, well above growth rates in the large metro core counties. Manufacturing growth appears strongest in the least urbanized places, possibly responding to low-cost labor supplies (Henry and Jenssen 1996).

The geographic pattern of growth documented here represents a shift of employment growth away from the biggest urban cores—even in the information-oriented producer service sector. It implies places other than the "global cities" are sharing in the growth of the New Economy, including smaller communities and mid-sized metropolitan regions. While we do not explore locational determinants for enterprises in the New Economy in this paper, we have reported on these factors for rural producer services firms elsewhere (Beyers and Lindahl 1996), and have explored this topic in detail.[10] Rather, in this paper we now address the question of where the markets are located for the rapidly expanding producer service sector.

Table 8 Percent Employment Growth in Urban and Rural Counties, 1985-1993

County Type	Total Employment	Manufacturing	Producer Services including FIRE	Producer Services excluding FIRE
Metro Core, Over 1,000,000	13.2%	-14.7%	30.2%	18.0%
Suburban Counties in MSA's with core county population over 1,000,000	34.4%	7.0%	72.7%	42.0%
Metro Areas population 250,000 to 1,000,000	20.1%	-7.8%	46.6%	26.0%
Metro Areas, population up to 250,000	22.8%	1.5%	45.5	26.9%
Counties Adjacent to Metro Areas:				
With more than 20,000 urban population	19.4%	-1.1%	44.0%	26.8%
With up to 20,000 urban population	20.6%	6.5%	33.0%	28.1%
With no urban population	26.1%	22.1%	23.6%	28.4%
Counties Not Adjacent to Metro Areas				
With more than 20,000 urban population	23.6%	4.9%	40.9%	27.6%
With up to 20,000 urban population	20.8%	12.0%	26.5%	24.1%
With no urban population	22.0%	19.0%	14.6%	24.0%

Source: U.S. County Business Patterns (authors' estimates)

Geographic Markets of Producer Services. We now address an issue of critical importance to understanding the evolution of the New Economy: the evolving geography of markets of service industry businesses. In this section, we present further evidence from our surveys of producer service establishments. We start with cross-sectional information on aggregate market patterns by industry, then turn to analyses of firm-level differences in market orientation. Then we document changes in geographic markets over time. Next we consider the geographic market orientation of other services, and address the general role of service industries in the economic base of communities. While this information applies only to the producer services, we recognize the need to conduct similar inquiries in other service industries.

The firms we interviewed were asked for the volume of their current sales and the percentage of those sales to the geographic regions listed in Tables 9 and 10. Table 9 is based on a sample of firms located in the Seattle WA, Chicago IL, and Spokane WA metropolitan areas, while Table 10 is based on a nationally distributed sample of rural producer service businesses.[11]

Table 9 presents two estimates of markets served by the urban establishments; the weighted average was calculated using both sales and percentages of markets served, while the unweighted estimate is simply the average value for the sales percentage by region. The clear difference in these two estimates lies in the volume of sales locally and in the national market outside the state and region. Which distribution is more "accurate?" The reason the weighted average has a much lower local sales percentage stems from the inclusion in our sample of a relatively small number of very large service organizations, whose sales are strongly externalized. We did not undertake a reconciliation of the differences between the geographic markets of the firms by size or industry which we interviewed with what might be regarded to be the "true" mix of firms by size and industry.[12] The "true" value is likely somewhere between the two estimates presented in Table 9, as the sample upon which these estimates are based did not include

Table 9 Geographic Markets for Producer Service Establishments, Urban-Oriented Sample

Market Location:	Weighted Average	Unweighted Average
Local	44.55%	66.81%
Elsewhere in State	8.14%	10.31%
Elsewhere in Region	10.34%	7.65%
Elsewhere in U.S.	31.00%	12.58%
Canada	3.48%	0.63%
Mexico	0.32%	0.23%
Other Foreign	2.17%	1.79%
	n=249	n=350

Aggregate sales - $1.5 billion for weighted estimate

service industry giants in the Seattle area such as Microsoft, whose sales are almost entirely outside the region, and predominantly international.[13] However, the sample was weighted in the direction of larger establishments and does not include in the unweighted percentages a true population of small enterprises.

The same issue which surrounds the difference in weighted and unweighted sales distributions is also evident in Table 10, which documents the geographic markets of the sample of rural producer service establishments. While their weighted and un-weighted local market percentage is very similar to that of urban establishments, their nonlocal market percentages are tied to nearby markets compared to urban firms, based on either the weighted or un-weighted market percentage. While the urban and rural producer service establishments in these two samples have somewhat different nonlocal markets, they are remarkably similar in their degree of export market orientation, if exports are defined as nonlocal sales. The common perception that rural producer service enterprises are serving only localized demands must be replaced by a vision of businesses connected to nonlocal markets, although the volume of business which is at a continental or international distance appears less than for urban-based firms.

Table 10 Geographic Markets, Rural Producer Service Establishments

Market Location:	Weighted Average	Un-weighted Average
Local	41.31%	64.29%
Elsewhere in State	38.54%	21.60%
Elsewhere in Region	16.12%	7.83%
Elsewhere in U.S.	3.58%	4.61%
Canada	0.02%	0.06%
Mexico	0.35%	1.19%
Other Foreign	0.07%	0.41%

Rural Sample, N=191 Aggregate Sales =$171 million

Tables 9 and 10 have presented information on the geography of markets for all establishments included in our survey. There are differences in the geography of markets by industry, and Table 11 presents information on the average market shares of industries (not weighted by sales volumes of firms). Table 11 makes it clear that (1) local markets are the largest market share for every industry, (2) foreign markets are of minor importance in the aggregate, and (3) domestic markets outside the local area are important in most industries.[14] Beyond these generalizations, individual industries have their tendencies for either stronger local markets (as in accounting), or more spatially dispersed markets (as in research and testing or management consulting and public relations services).

The most important overall point here is that somewhere between 35 and 55 percent of producer service business is derived outside local communities. This finding means that producer services contribute a significant share of their business volume to the

Table 11 Geographic Distribution of Sales (%) by Industry (not weighted by $ sales volume)*

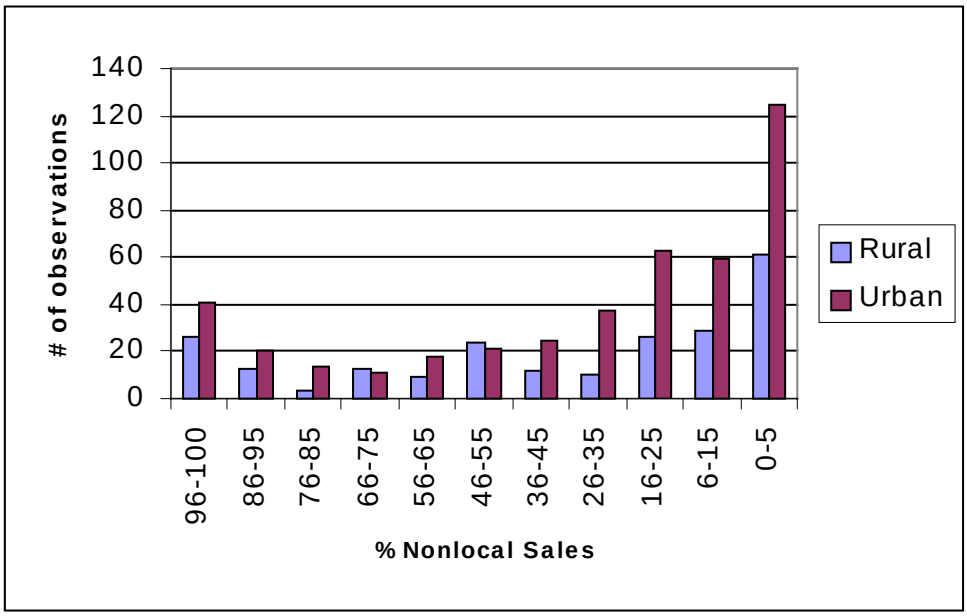
Industry	Local	Elsewhere in State	Elsewhere in Region	Elsewhere in U.S.	Canada	Mexico	Other Foreign	Total
Nondepository Financial Institutions	55.33	22.06	16.17	6.39	0.06	0.00	0.00	100.0%
Security Brokerages	65.78	11.22	8.11	11.59	2.63	0.04	0.63	100.0%
Insurance Agents & Carriers	66.00	12.33	10.11	10.72	0.28	0.00	0.56	100.0%
Temporary Help Agencies	73.75	1.44	3.56	20.94	0.00	0.00	0.31	100.0%
Computer Services	67.07	10.37	5.59	15.61	0.48	0.04	0.85	100.0%
Misc. Business Services	61.46	12.00	7.40	17.00	0.21	0.42	1.52	100.0%
Legal Services	76.73	10.76	1.98	7.25	0.22	0.09	2.96	100.0%
Architecture & Engineering Services	63.66	12.45	9.94	10.57	0.49	0.31	2.58	100.0%
Accounting & Auditing Services	86.58	8.12	2.37	2.75	0.00	0.00	0.18	100.0%
Research & Testing Services	42.15	17.60	13.00	25.25	0.75	0.00	1.25	100.0%
Management Consulting and Public Relations Services	52.98	10.47	14.67	16.82	1.63	0.61	2.82	100.0%

* Again, this sample of 446 establishments includes 71 rural-based establishments.

economic base of the communities in which they are located, including businesses located in urban as well as rural areas. The export-market percentages we have recently documented are above those documented some years ago by Beyers and Alvine (Beyers and Alvine 1985); this increase in the share of export business reported in our 1993-1994 surveys is consistent with data gathered by Beyers, Tofflemire, Stranahan, and Johnsen, which also documented rising shares of export markets (Beyers, Tofflemire et al. 1986).

The bifurcated geographic nature of markets. The sales percentages presented in the preceding tables were based on aggregations of individual firm data and mask an important discovery that we have made in our research on the market structure of producer service businesses. The markets of these enterprises are bifurcated between those strongly tied to local markets, and those engaged to a much larger degree than average in nonlocal markets. Pulver and Porterfield allude to a similar difference in the market orientation of their sample (Porterfield and Pulver 1991). Figure 3 documents this distribution for our samples of urban and rural producer service enterprises. Both samples display a similar pattern of market orientation. We can therefore divide the sample of establishments into a locally-oriented subgroup, and an export-oriented subgroup. We have used a figure of 40% export sales as this cut-point, which results in an (unweighted) average of 74% for the export oriented subgroup, while the average (unweighted) nonlocal sales percentage of the locally oriented establishments are 12%.[15] We have in an earlier paper referred to export-oriented proprietors as "Lone Eagles," and export-oriented firms with employees as "High Fliers," to call attention to their export market orientation, and we use the same terminology here.[16] Some 42% of establishments in the rural sample have at least 40% exports, while 35% of the urban sample fall into this category.

Figure 3 Frequency of Export Market Percentages



Dynamics in market orientation. The pattern of markets displayed in Figure 3 reflects the current markets at the time these establishments were interviewed. However, another important fact related to the export market orientation of producer service businesses is that this share appears to be rising over time. Figures 4 through 7 document this changing pattern of market orientation. Figure 4 shows the market orientation of establishments considered to be Lone Eagles or High Fliers when they were interviewed (e.g. they had at least 40% of their revenue from external market sources). This scattergram documents the general tendency for there to have been increases in export market shares for establishments already relatively export-oriented. The diagonal line in the figure, as well as in Figures 5 through 7, provides a visual way of documenting establishments whose markets have remained the same, increased, or decreased. The number of symbols in Figures 4-7 are less than the number of establishments, as many establishments which we interviewed had the same estimated export percentages for both time periods in these figures. Symbols above or below these diagonal lines indicate increases or decreases in export shares over time. Some 36 of the 125 establishments included in Figure 4 increased their export share, including 19 who did not meet the Lone Eagle or High Flier export market share criterion five years previously. Thirteen establishments decreased their export market share; thus those increasing export shares outweighed those decreasing by about a 3:1 ratio.

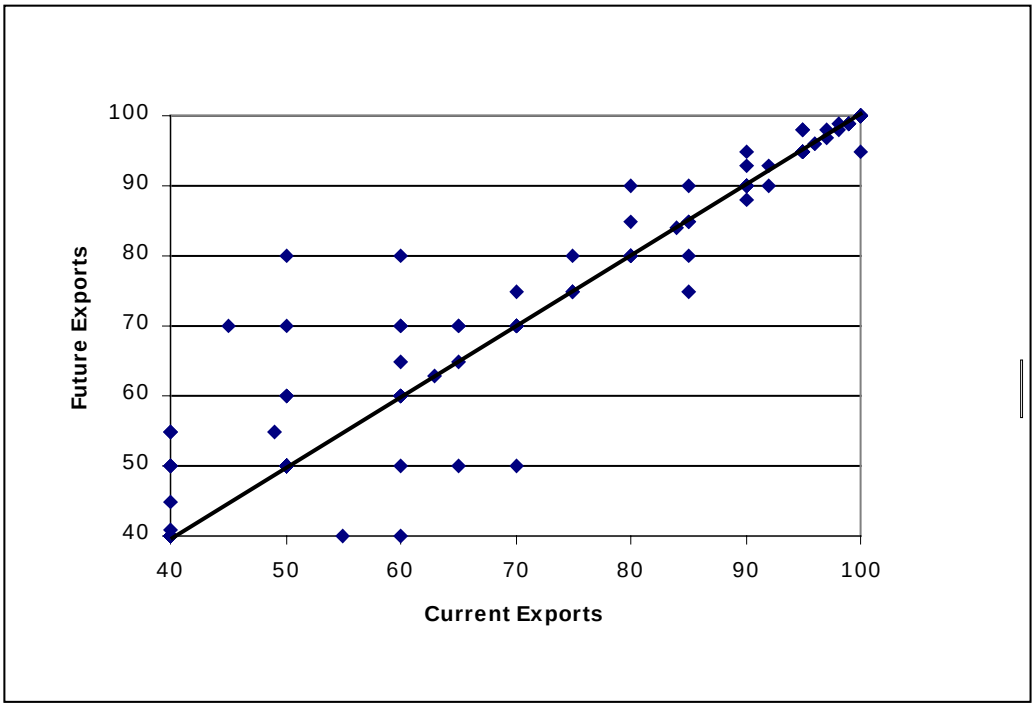
Figure 4 Lone Eagles and High Fliers: Exports Five Years Ago and Exports Today*

N=125

* Urban-oriented sample only. Points off-diagonal reflect establishments which have changed market orientation.

The expected markets five years into the future compared to current markets are shown in Figure 5. The scatter of points above the diagonal from the lower left to upper right of this scattergram are indicative of expected increases in exports, while those below the diagonal are related to decreased export levels. Thirty-two establishments expected increased export shares, while ten expected decreases in their export shares, although none of the decreases

Figure 5 Lone Eagles and High Fliers: Current and Future Exports



N=125

would drop the export share below the 40% Lone Eagle/High Flier threshold. As was the case with recent history, the pattern of expected changes has increases in exports outweighing decreases by about a 3:1 margin.

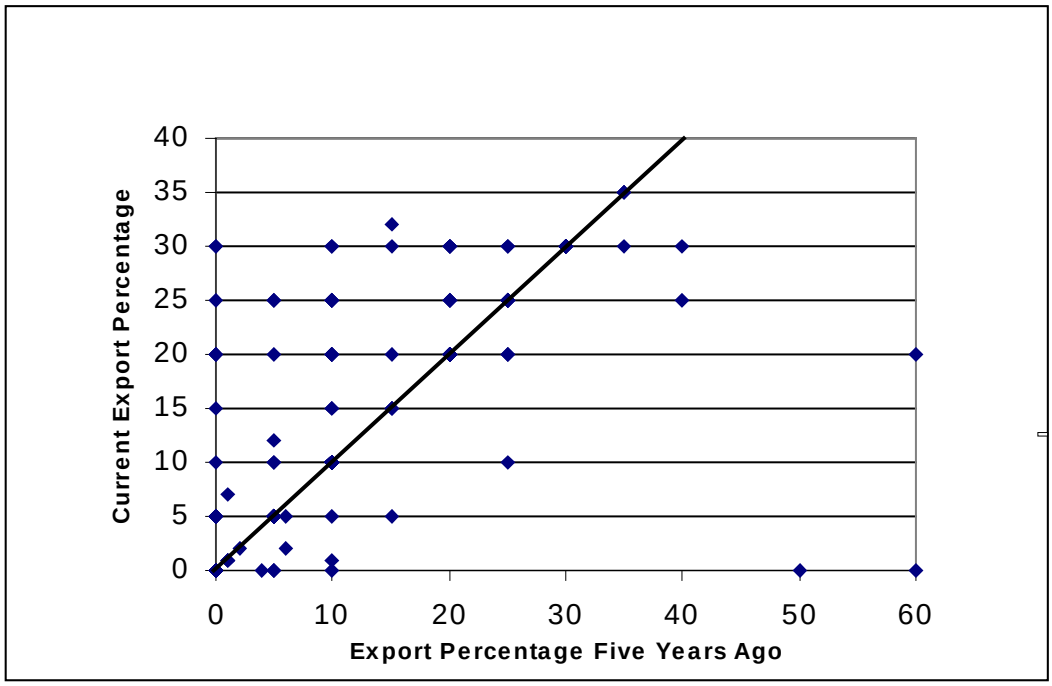
Figure 6 shows the past and current distribution of exports for establishments not considered Lone Eagles or High Fliers (e.g. with current export levels below 40%). For these relatively locally oriented establishments (current export levels are in the aggregate about 11% for this group), a pattern of export market change is similar to that experienced by Lone Eagles and High Fliers. Of the 250 establishments whose export markets are plotted on Figure 6, 46 have experienced increased export levels, while 18 had decreases in export, a ratio of approximately 2.5:1.

Figure 7 documents the expected export market orientation of firms that currently have relatively localized markets. This figure documents the expectation of increased

export markets by about one-fifth of the establishments in this group, as 51 of the 259 establishments expected export markets to grow, while five establishments expected a decrease in export market shares.

Many businesses indicated their export markets were growing in open-ended comments provided in our interviews. The following sampling of these comments complement the scattergrams in Figures 4 through 7, further documenting the expanding

Figure 6 Locally Oriented Firms – Export Percentage Five Years Ago and Current Export Percentage



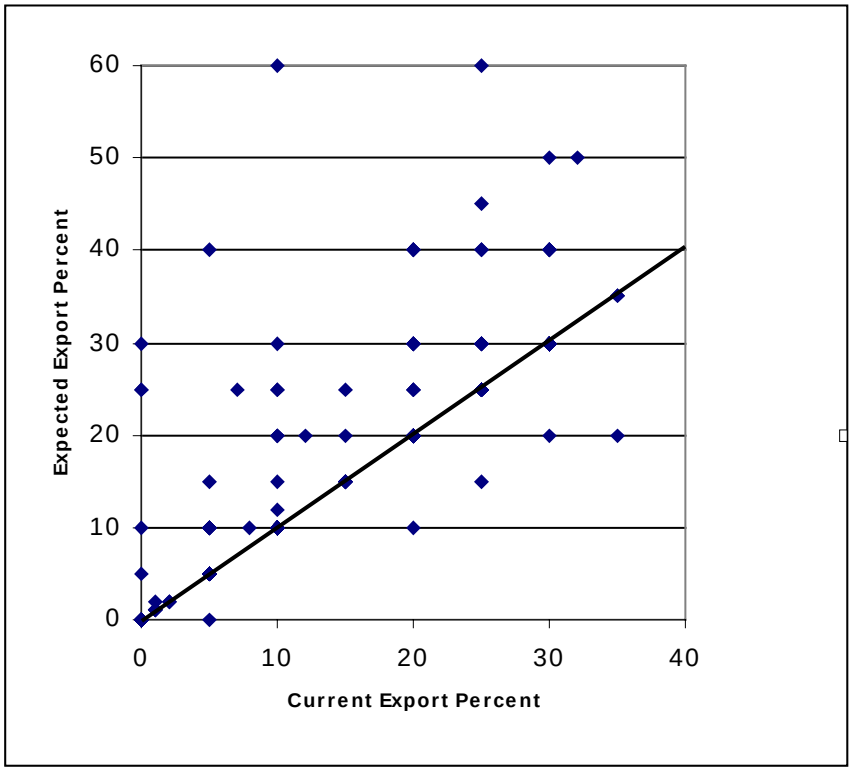
N=250

share of export market business being garnered by many producer service businesses: "Because of specialization and the few number of firms who do this, they work all over country." "Becoming a West Coast firm. Geography is broadening substantially." "Trend is toward nationwide, don't have to be located near clients." "Reputation is gaining and he is serving more clients outside the area (like Chelan Co. and Douglas Co.)." Business "has changed dramatically; much more foreign business."

These four figures clearly indicate the historical increase in export market percentages of existing producer service establishments, as well as the expectation that export markets will grow in the future. These data were from the urban-based sample of establishments. While we are not presenting the same data for our rural sample, it should be noted that these establishments also reported net increases in historical levels and

expected levels of export activity. Although the share of exports is rising, most firms did not indicate they had experienced or expected to experience a change in market orientation. The conclusion which may be drawn from these survey data is that the export market orientation of an existing cohort of producer service businesses appears to be rising over time, which would imply a growing contribution to the economic base of regional economies by producer service businesses (Beyers, Tofflemire et al. 1986). While we should caveat this trend with the possibility that the combination of new and dying firms may result in an aggregate stability of exports, which would not be reflected in these data, we have little reason to believe that there is not an overall increase in the degree of export orientation within the entire producer services sector of the New Economy.

Figure 7 Locally Oriented Firms—Current Export Percentage and Expected Export Percentage



N=259

Export markets of other services. The data which we have just presented are tied to producer services only. What about trade in other types of service industries? We now turn to another source of data on markets of service industries—the input-output accounts developed for the State of Washington -- to address the question of the aggregate role of services in the shifting economic base of the Washington economy. A key question raised at the outset of this paper was how can we explain the aggregate growth of services in the U.S. economy over the past 30 years, when there has been no growth in the traditional "engines" of regional economies -- job growth in goods production. At the

regional scale, we can rephrase this question to ask what share of total employment growth in a region can be explained by trade in services to other regions? We will now use the Washington input-output data to address this question.

Washington State has developed a unique set of input-output models, in comparison to other states in the United States. These models have been developed for five different years (1963, 1967, 1972, 1982, and 1987) and are based on survey or partial survey data. The original models contained considerable sectoral detail in goods producing sectors and were relatively aggregate with respect to the services. We have aggregated these models and developed estimates of export and local markets to extend the portrait of geographic markets just presented for the producer services to the entire Washington economy. The input-output accounts for Washington State also included employment data, and we have converted dollar value measures to employment for purposes of presentation.

Table 12 and 13 summarize results of this analysis. Table 12 presents estimates of export and local employment by industry in 1963 and 1987, as well as changes between these two years. Aggregate employment in Washington State covered by these accounts increased from 0.73 million in 1963 to 2.04 million in 1987. In contrast to national experience, Washington State has experienced manufacturing employment growth during this time period, making our test of employment change related to services exports cast against a slightly different history than the nation. Table 12 indicates that some 13.5% of export employment in 1963 was estimated to be associated with services exports. This percentage rises to 51% by 1987, a huge increase in the share of the state economic base associated with services, but a result consistent with the trends reported in the previous section of this paper for the producer services. In the case of the Washington economy, some 72.7% of total export employment change was associated with the services—a percentage which would be even higher if manufacturing had not had robust growth in the state. Multiplier effects related to these changes in exports lead to changes in local jobs, and some 93.6% of these jobs were found to be in the services.

Table 13 presents a somewhat different perspective on the same experience, presenting in the first two columns the export employment in 1963 and 1987, and utilizing the matrix of direct, indirect, and induced output along with employment/output ratios, estimating total jobs supported by export jobs. This table shows that the total level of jobs created in the Washington economy supported by trade in services grew from 16.1% in 1963 to 44% by 1987. Viewed from the perspective of change in jobs supported, some 59.6% of the increase in aggregate employment in the Washington economy was related to the increase in trade in services. The last two columns document the share of total employment impacts found within the services; these data indicate an increase in the share of total impacts found within the services.

Table 12 Changes in Washington State Employment Markets, 1963-1987

	Export Employment		Local Employment		Change Export Employment	Change Local Employment
Sector	1963	1987	1963	1987		
Primary	25,809	30,095	46,831	65,902	4,286	19,071
Manufacturing/Construction	197,168	314,511	95,312	131,307	117,343	35,995
Transportation Services	17,881	60,675	22,119	36,229	42,794	14,110
Utilities	729	1,081	7,931	20,578	351	12,648
Communications	806	3,610	10,454	21,039	2,804	10,585
Trade	5,594	145,470	181,281	383,275	139,875	201,995
FIRE	4,070	70,222	37,263	118,758	66,152	81,495
Business Services	1,304	30,399	13,764	95,757	29,095	81,993
Personal Services	4,338	47,467	58,248	463,662	43,129	405,414
Total	257,700	703,529	473,202	1,336,508	445,829	863,306
% Services	*13.5%*	*51.0%*	*70.0%*	*85.2%*	*72.7%*	*93.6%*

Source: (Bourque and Weeks 1967), (Chase, Bourque et al. 1993) Authors' estimates.

Table 13 Changes in Washington State Jobs Supported by Changes in Export Jobs

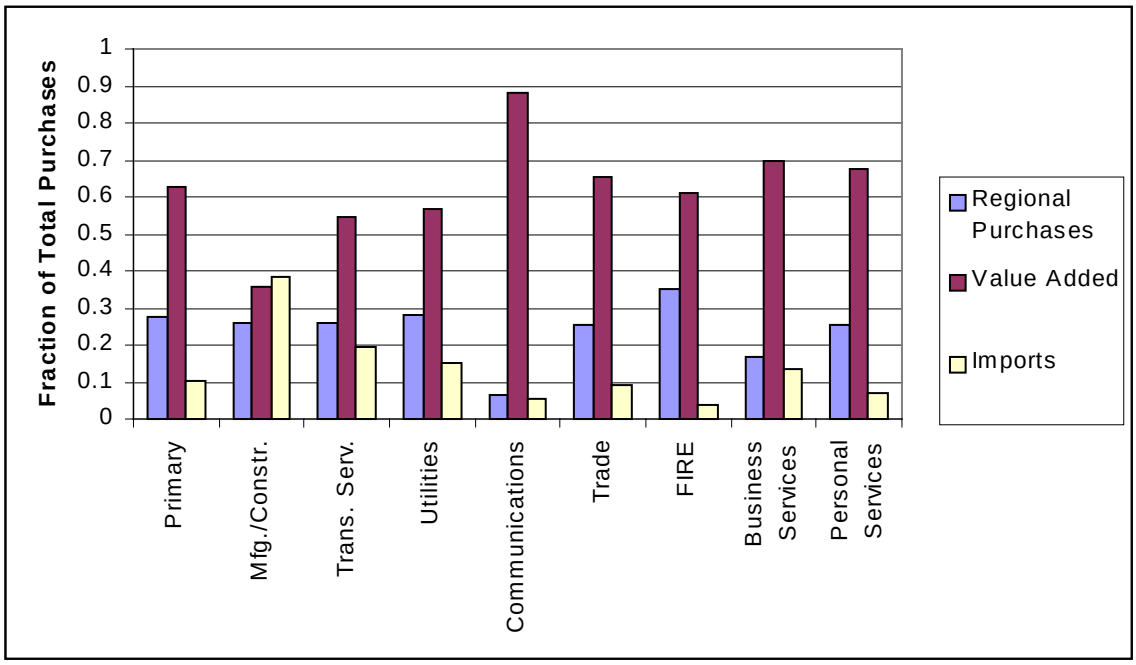
	Export Jobs		Total Jobs Supported by Export Jobs		Change in Export Jobs	Change in Total Jobs	% of Impact in Services	
Sector	1963	1987	1963	1987			1963	1987
Primary	25,809	30,095	48,927	65,941	4,286	17,014	33.76%	43.26%
Manufacturing/Construction	197,168	314,511	564,155	1,075,594	117,343	511,439	44.10%	58.10%
Transport Services	17,881	60,675	38,274	153,589	42,794	115,315	87.62%	92.88%
Utilities	729	1,081	3,488	7,054	351	3,565	83.66%	91.11%
Communications	806	3,610	2,112	13,471	2,804	11,359	87.05%	93.82%
Trade	5,594	145,470	10,497	310,727	139,875	300,229	90.34%	94.55%
FIRE	4,070	70,222	10,194	191,302	66,152	181,108	87.85%	93.65%
Business Services	1,304	30,399	3,013	54,377	29,095	51,364	89.16%	96.21%
Personal Services	4,338	47,467	9,127	89,114	43,129	79,987	89.77%	96.03%
Total	257,700	703,529	730,902	2,040,037	445,829	1,309,135		
% services	13.5%	51.0%	16.1%	44.0%	72.7%	59.6%		

Source: (Bourque and Weeks 1967), (Chase, Bourque et al. 1993) Authors' estimates.

The Washington State input-output data clearly indicate a significant and growing role for service industries in the economic base of the state economy. More recent estimates of export market shares for industries in the Washington economy are not available, so it is not possible to provide estimates of services trade in the 1990s. The shares of trade in business services in the Washington input-output model are considerably below those documented in our survey work—which could be an indication of continuing expansion in export market shares—a result also consistent with our survey data. These data clearly indicate that it is possible for trade in services to be a powerful force in shaping of the economic base of regions in the New Economy. This comment is not meant to imply that trade in goods is unimportant, and that the trade in services documented here is independent of trade in goods. Part of the traded services included in Tables 12 and 13 is related to shipping goods—such as the margins earned in wholesale trade on commodities such as apples, or transportation for moving products such as logs into export markets or consumer electronic goods from Asian production platforms into the American market.

Another facet of the shift of production towards the services should be recognized as we consider these input-output data. This is the difference in input requirements of service industries compared to goods production. Figure 8 documents the shares of purchases associated with value added, imports, and regional purchases. Services have much higher value added components than manufacturing/construction, typically low levels of imports, and fractions of regional purchases which are similar in the aggregate to manufacturing/construction. This structural characteristic means that leakages are

Figure 8 Input Requirements



Source: (Chase, Bourque et al. 1993)

more modest for services, leading some to argue that the shift to a service economy may in fact cause regional economies to become more closed (Persky and Wiewel 1994).

Another perspective on change in this section reliant on input-output data is presented in Table 14. This table documents the share of personal consumption expenditures and state and local government outlays originating in various sectors in 1987, and shows the change in percentages between 1963 and 1987. These data indicate a strong decrease in the share of goods from Washington industries purchased by household consumers—and not a corresponding strong increase in the purchase of imports [17]Increased regional purchases are dominated by growth in the consumption of personal services, which in turn is most likely to be primarily increased purchases of health care services. Thus, as incomes have risen in the Washington economy it does appear as though the aggregate consumption of services has also risen, consistent with the Clark-Fisher model. State and local government purchases are also shown in Table 14, and they also indicate an increase in the purchase of services, and a decrease in the purchase of regional goods. If state and local government were externalizing purchases of services, as documented for the U.K. by scholars such as Marshall, we could expect state government related value added to decrease (Marshall 1990). However, the reverse is evident, and we cannot know if this is a result of the strong decrease in estimated imports from the rest of the United States or due to other factors.

Table 14 Changes in Consumption and Government Expenditures

	Personal Consumption Expenditures % 1987	Change in % of Personal Consumption Expenditures	State & Local Government Expenditures % 1987	Change in % of State & Local Government Expenditures
Primary	0.47%	-0.63%	0.18%	0.14%
Mfg./Construction	5.38%	-6.96%	20.43%	-3.62%
Transportation Services	1.40%	-0.34%	1.07%	0.69%
Utilities	2.82%	0.17%	1.29%	0.05%
Communications	2.04%	0.58%	0.84%	0.08%
Trade	23.60%	-0.20%	1.32%	0.18%
FIRE	5.78%	-0.13%	1.97%	0.69%
Business Services	0.18%	-0.41%	3.39%	2.40%
Personal Services	18.80%	8.76%	3.02%	2.64%
Subtotal	*60.48%*	*0.83%*	*33.50%*	*3.26%*
Imports-US	24.74%	-0.29%	11.15%	-9.41%
Imports-For	2.43%	1.10%	0.37%	0.37%
Value Added	12.36%	-1.64%	54.98%	5.79%
Total	*100.00%*	*100.00%*	*100.00%*	*100.00%*

IV. Implications for Regions and Regional Development Theory

The ascent of service industries as sources of employment and income in the global economy is creating a New Economy built around an ever widening set of industries and geographic locations. In this paper we have argued that this New Economy can provide the basis for incomes for regions which supplement (not replace) traditional economic bases rooted in the production of goods. To some extent this New Economy is related to production processes rooted in goods production—the support services linked to goods production, such as transportation, trade, and insurance. However, there is growing evidence that a new set of demands are driving development in the New Economy, linked to the trade in ideas, information, culture, entertainment, knowledge, finance, and emerging applications of human intellect to commerce.

Change is the norm in this New Economy. Equilibrium models of neoclassically based economics, geography, and regional science do not adequately capture forces responsible for creating regional advantage, much less market-place competitive advantage in new firms filling voids created by new technologies and innovative ideas for service-product development. The popular examples are rampant: the ascension of Amazon.com as an enormous force in book selling; the wars between Netscape, Microsoft, and the Justice Department over "browsers"; the waves of mergers and consolidations in banks, accounting, and insurance; and the explosive growth of communities populated by creative software developers (such as Provo, Utah or Kalispell, Montana). The unsung examples are the multitude of proprietors and small specialist firms constituting a growing share of employment and income in the New Economy (Richards 1994); (Beyers and Lindahl 1996). The conjunction of the forces we identified in Figure 2 are playing out on the new economic landscape in ways which are reflected in the summarized by the trends in regional growth reported in Tables 7 and 8. It is not that crisis has beset the New York's, Chicago's and Los Angeles of the United States, touted by the World Cities crowd as THE epicenters of where control of the New Economy would be located (Sassen 1991). Rather, we are in an era which favors a greater diversity of places—large and small—and in which there is a more contingent geographic set of opportunities for business success. Let us return to this theme in a moment.

We have documented the impact of the forces in Figure 2, showing that each have a role in understanding trends in the New Economy. If there is a message between the conjunction of our demand and supply related explanations, and technological factors, it is to underscore this matter of dynamism again. What is being demanded and supplied in the New Economy is changing rapidly, and in the case of the services these adjustments are relatively easier than in the realm of goods production because capital commitments are typically less onerous, and ingenious people can more and more easily communicate their business concepts to a spatially extensive market. A fundamental outcome of these processes of change is evident in the changing role of services in the economic base of regions. While we have illustrated these changes with our survey data and the case of the Washington State economy, we argue that these results are not singular, not isolated, and not likely to be refuted by other case studies. The data presented in this paper further defuse empirically the lingering concern about whether regional economies can

experience growth primarily through trade in services: they can. And, this growth can take place in suburbs, exurbs, central cities of the nation's largest metropolitan areas, and in communities located everywhere else in geographic space.

The dichotomy between strongly traded or export-oriented firms and businesses focused on local markets was made clear in this paper. Equally clear is the expansion of the typical firm's external market over time. We note the tendency for growth in "Lone Eagles" and "High Fliers" traded markets, but also the same extension of markets for other producer service firms. The evolution of the New Economy no doubt involves more trade in services than we went on to document in our treatment of trade in services based on the Washington input-output model. Useful as this rich data source is, it provides only limited information on recent trade in services, and has only a crude classification of services. One of the most important research needs as regional, national, and global economies become more dominated by service industries is for a massive improvement of our understanding of the role of services trade in their development.

We have argued in this paper that the role of services as a basis for regional development has changed fundamentally as we have moved further and further into the New Economy. The result of this had been—and continues to be—the creation of new economic landscapes. These new economic landscapes are not just the Edge Cities and emerging places on the top of the metropolitan hierarchy; they also include smaller communities in which people are able to take advantage of telecommunications technologies, courier services, and commuter air service allowing them also to become significant players in the New Economy. This confers a new flexibility in location, and if we are right about the growing share of Lone Eagles and High Fliers, it makes possible for these businesses to be situated where they want to be in space—they do not have to in an agglomeration in which they have little demand—and in which they buy little. While this paper is not about location principles such businesses, the upshot is that people starting and operating these enterprises have the (growing) flexibility to locate these businesses where <u>they</u> want. And, <u>their</u> labor force can choose where <u>they</u> want to be located.

There is much that we do not know about the New Economy and how it is creating new economic landscapes. Our knowledge base is richer with regard to the producer services than it is with respect to other service industries—but even within the producer services it is partial geographically and sectorally. We have explored only superficially the emergence of new financial services, the evolving conjunction of manufacturing and services in the multimedia sector, and other "hybrids" such as biotechnology, many dimensions of computer-related business, and the evolving nature of wholesale distribution. Many opportunities exist for creative explorations of these as yet uncharted territories in the New Economy. And, at the same time, we need to find ways to link up their contours to new explanations of the growth and development of regional economies as we approach the new millennium.

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[2] See (Carnevalle and Rose 1998); (Cairncross 1997); (Power 1996); (Reich 1992); (Thurow 1996); (Ochel and Wegner 1987), Ch 5.
[3] The World Bank, World Development Indicators, 1998.
[4] It is not clear in Israilevich and Mahidhara's work how export trends are treated in final demand.
[5] See Beyers & Lindahl, Information Merchants, Leaders in the New Economy, forthcoming, Guilford Press, for elaboration of statistics related to this trend.
[6] A statement on our data sources.
[7] Data were obtained on more than one founder in some companies.

[8] We asked respondents to rate the competitiveness of the market for their services on a 5 point scale, with 5 being highly competitive, and 1 not competitive. The respondents referred to here considered their market to be at 2 or 3 on this scale.

[9] We are defining metropolitan as counties classified as Standard Metropolitan Statistical Areas by the U.S. Census Bureau. All other counties are considered nonmetropolitan.

[10] See Beyers & Lindahl, Information Merchants, forthcoming.

[11] Our data base is composed of two samples, one undertaken in the summer of 1993 covers 446 establishments located in Seattle, WA, Chicago IL, Spokane WA, and in rural counties in the Pacific Northwest. 375 of these interviews were conducted in urban areas. A second sample, which we refer to as the rural sample, was undertaken in the summer of 1994. This sample includes 240 establishments distributed around the United States in a variety of types of county economies. See (Beyers and Lindahl 1996), for a description of this sample. A number of establishments refused to reveal their sales; approximately 71% of the urban-oriented and 80% of the rural oriented sample provided information on both variables.

[12] See (Beyers, Alvine et al. 1985) for a discussion of the complexities of undertaking such estimates.

[13] See R.S. Conway Jr., The Microsoft Impact Study.

[14] It should be noted that this table is based on our sample of largely urban producer service businesses.

[15] This percentage for urban firms is, and for rural firms is….

[16] See (Beyers and Lindahl 1996)

[17] The small increase in foreign imports is undoubtedly a mixture of goods and services purchases.