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Business retention and expansion and business clusters – A comprehensive approach to community development

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ABSTRACT

This article explores trends in business retention and expansion (BRE) and business clusters over the last two decades (1994–2014). Using national surveys of local governments, this article finds that BRE has evolved from a focus on strengthening branch plants and their competitive links to parent firms to a broader emphasis on building local business cluster networks. BRE strategies have diffused across the nation, but business clusters are more common in metro core cities. Municipalities that have written economic development plans and use local funding are more likely to use BRE. This article finds cluster strategies are embedded in a broader set of community economic development strategies that strengthen quality of life and the foundation for community wellbeing. Unlike Michael Porter's emphasis on business clusters and competitiveness alone, this article finds economic developers recognize the need to focus not only on business clusters and competitiveness, but also on local services.

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Business retention and expansion; business clusters; community development; local services; quality of life

Introduction

Economic development policy is shifting from a primary focus on industrial recruitment and business attraction to a more comprehensive community development approach focused on the service sector and quality of life (Kay, Pratt, & Warner, 2007; Lynch, 2004; Reese, 2012; Zhang, Warner, & Homsy, 2017; Zheng & Warner, 2010). One strategy that links business support with community based development is business retention and expansion (BRE), which focuses on helping local firms, preventing their relocation, and strengthening their competitiveness in the broader regional economy (Gallardo & Stich, 2013; IEDC, n.d., Porter, 2000). Business clusters are the leading edge of BRE strategies and give attention to the economic competitiveness of locational clusters of firms.

Business clusters are a key strategy being promoted in the US (Martin & Sunley, 2003), especially for inner city redevelopment (Porter, 1997). However, cities suffer development challenges due to high tax and utility costs, planning and regulation requirements, environmental pollution, high poverty, and high unemployment (Porter, 1997). Revitalizing industrial development can help address city development challenges (Bronstein, 2009; Leigh &

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Table 1. Use of business retention and expansion, 1994 to 2014, US cities and counties.

BRE strategies	1994	1999	2004	2009	2014
	(% yes)				
Surveys of local business	48	49	46	52	50
Ombudsman program	16	18	17	23	27
Local business publicity program (community-wide)	23	26	26	26	38
Replacing imports with locally supplied goods	4	2	2	5	11
Export development assistance	11	9	9	8	15
Business clusters/industrial districts	–	–	20	28	41
Technology zones	–	–	20	19	20
Energy efficiency programs	–	–	–	–	27
Business improvement districts	–	–	–	–	35
Main street program	–	–	–	–	39
Business roundtable	30	34	36	36	–
Revolving loan fund program	33	29	24	20	–
Partnering with Chamber, others	–	64	62	71	–
Partnering with other local governments	–	34	40	47	–
Local government representative calls on local company	59	61	60	–	–
Local government representative calls on national company headquarters	14	18	19	–	–
Achievement awards	16	20	20	–	–
Percent using at least one BRE strategy	75	81	77	85	85
Percent using at least one of the top seven common BRE strategies (2004–2014)	–	–	65	72	77
Regions (percent using at least one BRE strategy)					
Northeast	67	69	72	70	84
Northcentral	81	86	79	87	82
South	72	82	78	89	86
West	74	84	77	87	87
Metro status (percent using at least one BRE strategy)					
Metro core	86	88	79	88	93
Suburban	73	79	78	84	81
Rural	71	82	72	88	87
N	961	1042	682	843	1174

Note: The 2014 survey measured the use of BRE on a 4-degree scale (none, low, medium, high). To match trends from prior survey years where only yes/no options were given, we code none and low as no (0), and medium and high as yes (1). Northeast includes VT, RI, ME, NH, CT, NY, NJ, MA, PA. Northcentral includes ND, SD, NE, IN, IA, KS, WI, MO, MN, MI, OH, IL. South includes DE, LA, WV, MS, AR, AL, MD, KY, OK, SC, TN, GA, VA, NC, TX, FL. West includes HI, MT, WY, AK, ID, NV, NM, UT, AZ, OR, WA, CO, CA.
Source: ICMA Economic Development Surveys.

Hoelzel, 2012). Local governments seek to implement BRE strategies, especially business cluster/industrial districts programs, to assist existing firms and promote business clusters of local firms. BRE strategies are not used alone; they are typically embedded in a broader set of community development policies (Canada, 2003). While Porter (1995, 1997) argues primacy should be given to business cluster development over social programs or support to workers, others argue that a broader community development approach is needed, especially a focus on local services and labor as these are increasingly what define city economies (Markusen, 2004). Compared to BRE, which primarily focuses on business development, broader community development approaches pay more attention to equity and environmental sustainability (Zhang et al., 2017) and improving local services and quality of life, such as job training and child care (Warner & Zheng, 2013). Local services have been shown to have higher multipliers than many so-called export-serving industries (Kay et al., 2007), and in addition they serve as a critical foundation for broader economic development (Reese, 2012; Warner & Liu, 2005, 2006). This article uses International City/County Management Association (ICMA) economic development national survey data over the last decade to

explore the factors driving US local governments to use BRE strategies and business cluster approaches and their links to broader community development strategies.

Business retention and expansion programs were first implemented in 1960s and became popular in 1980s (Morse, 1990). BRE programs aim to retain and expand jobs, income, and business investment (Smith, Morse, & Lobao, 1992) and increase the efficiency and competitiveness of local firms (Fortunato & Alter, 2015; Markley & McNamara, 1995; Phillips, 1996). BRE strategies usually assist firms through periodic surveys, partnerships with private/public sectors, publicity programs, zoning and regulatory support, and business cluster strategies (IEDC, n.d.). The ICMA economic development surveys measure the main BRE strategies and show that the North Central region was an early leader in BRE in 1994, while all regions of the country reached similar levels of BRE use by 2014. By contrast, suburban and rural communities use BRE at levels slightly below that in urban areas in 2014. See Table 1.

Among the various BRE strategies employed, the ICMA surveys show that use of business clusters increased from 20% of all responding municipalities in 2004 to 41% in 2014 (Table 1). Business clusters and industrial districts contribute to the survival of new firms and increase new establishments of existing firms (Delgado, Porter, & Stern, 2010). While business clusters are an important feature of a leading economy (Porter, 2000), Barkley and Henry (1997) review industrial cluster strategies in rural areas and find that rural communities are less suitable for cluster strategies because of a less developed agglomeration economy. Martin and Sunley (2003) also argue that the development of business clusters in regions without agglomeration economy potential is limited.

This article analyzes the ICMA economic development surveys from 2004, 2009, and 2014 to address some key questions. What differentiates local governments that use BRE from those that do not, and what differentiates business cluster users from other BRE users? This article also assesses if BRE strategies are broadening their focus from an external oriented competitiveness approach, to a locally focused community development approach that includes attention to services. Results show that communities that use BRE strategies are more likely to have economic development plans and face more economic development barriers, while those that use business clusters as part of their BRE strategy are more likely to be core cities and have more manufacturing and service sector employment. For both groups, we find BRE is part of a broader set of community economic development policies that link quality of life investments with BRE support.

Literature review

Business development is an essential element of local economic development in the US (Minniti, 2008). The manufacturing industry plays an important role in the development of cities, because it is the largest export sector and is highly related to increase in income (Leigh & Hoelzel, 2012). Reindustrialization of American cities could "foster social equity, support the service economy, support innovation, and build economic resilience" (Bronstein, 2009, p. 28).

But manufacturing faces a number of limitations as the primary focus for a community's economic development strategy. First, residential and commercial activities have been privileged over industrial ones with the rise of the consumer city and the focus on mixed land use (Daniels, 2001; Leigh & Hoelzel, 2012). Second, service sectors have played an increasingly important role in revitalizing the US economy since the 1970s (van Biema & Greenwald,

1997), and local services are especially important for local economic growth (Kay et al., 2007; Markusen, 2004). Third, services such as child care, affordable housing, and job training are needed to improve quality of life (Reese, 2012; Reese & Ye, 2011; Warner & Liu, 2005, 2006; Warner & Zheng, 2013).

Porter (1995, 1997) claims industry can lead and social supports follow, challenging the view that community development strategies are foundational to broader economic development. By contrast, Florida (2002) argues that quality of life investments and services are foundational to a creative economy. Markusen and Schrock (2006) note that labor is the primary competitive ingredient that distinguishes local economies. Manufacturing strategies focused on clusters and linked closely to job training have been shown to be more successful than other business attraction strategies (Lowe, 2007). For example, Liu, Kolenda, Fitzpatrick, and Todd (2010) suggest that developing industry clusters as well as improving quality of life were two important policy implications to redevelop the economy in post-Katrina New Orleans.

After the Great Recession, many local governments increased their focus on business attraction (Warner & Zheng, 2013), while others shifted their focus from attracting large firms to developing local firms (Fortunato & Alter, 2015). Bartik (2003) reviews local government policies in the US and finds that most jobs are created by existing firms, and local firms are more likely to use local labor and resources. Business retention and expansion strategies (e.g. business clusters/industrial districts and business improvement districts) are used to assist existing firms and help develop local firms (Grant, Wallace, & Pitney, 1995). BRE strategies focus on the local marketplace, in contrast to conventional development strategies that primarily focus on attracting external firms (Bradshaw & Blakely, 1999). However, local governments often simultaneously use BRE and business incentives to develop the economy (Koven & Lyons, 2010; Leigh & Blakely, 2013). BRE programs can foster innovation, such as energy efficiency programs and technology zones, provide networks (Phillips, 1996), and publicize businesses (Morse & Ha, 1997). Based on a survey of BRE coordinators in six states in the US, Loveridge (1991) found that BRE strategies could improve the business climate, deal with firms' problems, meet firms' informational needs, and become an alternative strategy to business attraction.

BRE strategies are widely used in communities focused on manufacturing development. Morse and Ha (1997) analyzed surveys of local BRE coordinators in four states and found that half of BRE programs focused only on the manufacturing sector. Allanach and Loveridge (1998) also found that BRE was originally designed to help manufacturing firms, and successful use of BRE in the manufacturing sector could have a positive spillover effect on other sectors. Markley and McNamara (1995) examined industrial extension programs in Indiana and found that programs mainly provided services to manufacturing industries and were more efficient in urban areas compared to rural areas. Allanach and Loveridge (1998), in their study of 95 counties in four states implementing BRE, found these places were more likely to have a higher unemployment rate as well as a higher per capita income.

Business cluster approaches have become more popular in recent years. Porter (2000) introduced a competitive city framework to illustrate the role of business clusters in economic development. Porter (2000) defines business clusters as "geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions" (p. 15). Fowler and Kleit (2014) used county-level data in the US and found that a higher share of employment in clusters is related to a lower poverty rate.

Business clusters can reduce the cost of operating firms, improve networks, create jobs, and improve income in communities (Markley & McNamara, 1995). For example, Morgan (2012) analyzed three industry clusters in the US and found that clusters could provide jobs for low skilled labor in inner cities. Firms in business clusters could increase competitiveness by reducing cost through agglomeration economies, and increase innovation and productivity because of knowledge spillover effects (Wolman & Hincapie, 2015). Business cluster approaches focus on providing services to firms, building connections between firms and other agencies, and improving collective marketing (Martin & Sunley, 2003). JPMorgan Chase & Co (2014) analyzed the growth of clusters in 10 large cities in the US and found that local governments drive cluster development by including cluster approaches in economic development plans. For example, San Diego assisted the development of biotech clusters by facilitating regulations (United States Studies Centre [USSC], 2010). Los Angeles connects economic, networking, and physical assets, provides technical assistance, and modifies regulations to support export-oriented industry clusters (Los Angeles County Economic Development Corporation [LAEDC], 2016). New York City provides public data to improve innovation and assist high technology clusters (Kirchherr, Scherf, & Suder, 2014). Although clusters are more commonly developed in cities rather than in rural areas (Barkley & Henry, 1997; Loveridge, Smith, & Morse, 1991), business attraction policy can be linked to building business clusters in rural areas with state level support (Lowe 2007; Lowe & Freyer, 2015). Business cluster strategies need engagement from a variety of actors such as state and federal government, utilities, colleges, and universities (Gallardo & Stich, 2013), and these networks can be facilitated by BRE processes.

BRE can be implemented by both rural and urban communities (Allanach & Loveridge, 1998). Abatekassa and Moser (2002) assessed BRE used in rural areas in Michigan and found that the use of BRE is related to economic development participants, business development concerns, economic development plans, and socioeconomic conditions. While business clusters are an important feature of a leading economy (Porter, 2000), rural areas often do not have enough resources to support business cluster development (Barkley & Henry, 1997; Loveridge et al., 1991). Cluster-based policy can increase productivity, employment, wages, and innovation (Porter, 2007), but the impacts of cluster strategies on economic development vary by region (Wolman & Hincapie, 2015).

The analysis that follows explores what factors drive the use of BRE and business cluster approaches, and if the drivers for BRE differ from those for business clusters specifically. Results show BRE strategies are common across all communities, but cities in the metro core are more likely to use business cluster approaches. This article also finds that BRE and business cluster strategies are not tightly linked to traditional business attraction strategies but rather are embedded in a broader community development framework.

Data

Study data were obtained from the ICMA Economic Development Surveys in 2004, 2009, and 2014. These surveys measured the use of local economic development policies, funding sources, participating entities in the economic development process, and economic development barriers. Surveys were sent to municipal officers in cities and counties with population above 10,000 across the US. The universe included 3703 municipalities and counties in 2004, 3839 in 2009, and 5273 in 2014. The response rate was 19.6% in 2004, 22% in 2009,

and 23% in 2014. After dropping respondents who did not answer any question, the final sample included 682 respondents (82 counties, 600 municipalities) in 2004, 834 respondents (107 counties, 727 municipalities) in 2009, and 1174 respondents (212 counties, 962 municipalities) in 2014. *T* tests of the mean differences in population between the universe and the sample data for each year show the sample is representative for municipalities, while the sample captures counties with slightly larger population.

The ICMA surveys measured the use of BRE and business clusters across the three survey years. While ICMA measured use of BRE in its 1994 and 1999 surveys, this analysis does not include observations from 1994 to 1999 in the regression models, because neither year measured the use of business clusters. Table 1 shows that the percentage of local governments using BRE increased from 75% in 1994 to 85% in 2014. Of the seven common BRE elements measured over time, "surveys of local business" was the most common element, used by almost 50% of local governments in each survey year. ICMA added measures for "business clusters/industrial district" and "technology zones" in 2004. Compared to other BR&E strategies, the percentage using business clusters doubled in the last decade, which implies diffusion of cluster strategies.

The surveys tell an interesting story of a broadened BRE focus from branch plants to strategies focused on local business networks. From 1994 to 2004, "local government representative calls on local company" was commonly used by local governments, while "local government representative calls on national company headquarters" increased from 14% to 19%. From 2004, ICMA stopped measuring several BRE strategies (Table 1), which may imply that those strategies were not deemed as important as others over time. From 2004 to 2014, the use of "business clusters/industrial districts" increased dramatically from 20% to 41% and became the second most common strategy among all BRE strategies measured. Also, "business improvement districts" and "main street programs" were widely used. This implies that local governments broadened the focus of BRE policies from branch plants to local business networks over time.

The North Central region was an early leader in BRE. In 1994, 81% of local governments used at least one BRE strategy in the North Central region, compared to only 67% governments in the Northeast. However, all regions of the country reached similar levels of BRE use by 2014. Rural usage of BRE increased from 71% in 1994 to 87% in 2014, and suburban usage of BRE increased from 73% in 1994 to 81% in 2014. However, the percentage of municipalities using at least one BRE strategy in rural and suburban areas remains below that in urban areas (Table 1).

Model

Models compare places using BRE with places not using BRE. Among BRE users, models compare places using business clusters with those that do not.[1] The surveys measure seven common elements of BRE from 2004 to 2014, which include surveys of local business, ombudsman program, local business publicity program (community-wide), replacing imports with locally supplied goods, export development assistance, business clusters/industrial districts, and technology zones (see Table 1).

Independent variables are shown in Table 2. These include if a place is a principal city, if it has an economic development plan, the number of funding sources (local funding, external funding), number of participating entities involved, economic development barriers, and

Table 2. Descriptive statistics.

	Full sample	BRE users	Business cluster users
Use BRE[a]	0.72	1	1
Use business cluster[a]	0.32	0.44	1
Principal city (yes = 1, %)	0.27[2]	0.29[2]	0.36[1]
Economic development plan[a] (yes = 1, %)	0.50[2]	0.57[1]	0.61[1]
Local funding[a] (yes = 1, %)	0.80[2]	0.87[1]	0.85[1]
External funding[a]	0.54[3]	0.61[2]	0.69[1]
Participating entities[a]	4.96[3]	5.35[2]	5.82[1]
Barriers[a]	4.94[2]	5.33[1]	5.53[1]
Per capita income[b] (log)	10.16[1]	10.16[1]	10.15[1]
Manufacturing employment[b] (%)	12.33[1]	12.28[1]	12.39[1]
Service employment[b] (%)	53.50[1]	53.80[1]	53.73[1]
Manufacturing establishments[c] (%)	5.41[1]	5.38[1]	5.45[1]
Service sector establishments[c] (%)	62.29[1]	62.34[1]	61.56[2]
Traditional business attraction policy[a]	3.96[3]	4.67[2]	5.36[1]
Community economic development policy[a]	3.85[3]	4.64[2]	5.60[1]
N	2690	1943	853

Notes: The Scheffe test measures if there are significant differences among groups. Table shows the mean values for each group, and the superscripts show Scheffe test differences by group. Superscript (1,2,3) is the rank of each group. 1 is the 1st rank with highest value, 2 is the 2nd rank, and 3 is the 3rd rank. Values that share the same superscript have the same rank (statistically similar), while values with different superscripts belong to statistically different ranks.

[a]ICMA Economic development survey 2004, 2009, 2014.

[b]American Community Survey 2010–2014, 2005–2009, Census 2010.

[c]Economic Census 2002, 2007, 2012.

whether a place also uses other policies (traditional business attraction policy or broader community economic development policies).

Data from the ICMA economic development survey in 2004, 2009, and 2014 are combined with the American Community Survey (2010–2014, 2005–2009 rolling averages), Census 2010, and the Economic Census (2002, 2007, and 2012) to measure socioeconomic development conditions, which include per capita income, percent manufacturing and service establishments (to get at the potential for clusters), and percent employment in manufacturing and services (to get at labor concentration). Interaction terms between service and manufacturing sector employment, other economic development policies, and survey year were used to measure the effects of different years on the use of BRE strategies and business cluster approaches.

Two logistic regression models were run on survey panel data from 2004, 2009, and 2014. In the full model, all observations were used to differentiate communities that use BRE from those that do not. The business cluster model only included those respondents that use BRE strategies. The models are given below.

BRE (or business cluster) = f {principal city, economic development plan, funding sources, number of participating entities, barriers, socio-economic conditions, other economic development policies, interaction terms with years}

Principal city

To define metro core cities, this article used the 2010 US Census place definitions according to the Office of Management and Budget 2000 standards (No. 08-01 Bulletin) and 2010 standards (No. 13-01 Bulletin). Principal cities and counties within metropolitan statistical areas are coded as cities (metro core) and the remainder of the metropolitan statistical areas as suburban. All other places are coded as rural. Table 2 shows that the percentage of

Table 3. Trends over time in US local government economic development policy, 2004–2014.

	Full sample			BRE users			Business cluster users		
	2004	2009	2014	2004	2009	2014	2004	2009	2014
Use BRE[a]	0.65[3]	0.72[2]	0.77[1]	1	1	1	1	1	1
Use business cluster[a]	0.20[3]	0.28[2]	0.41[1]	0.31[3]	0.39[2]	0.53[1]	1	1	1
Principal city	0.30[1]	0.27[1]	0.24[1]	0.33[1]	0.29[1]	0.27[1]	0.46[1]	0.34[2]	0.34[1]
Economic development plan[a]	0.46[2]	0.55[1]	0.49[2]	0.56[1,2]	0.62[1]	0.54[2]	0.62[1,2]	0.71[1]	0.57[2]
Local funding[a]	0.71[3]	0.80[2]	0.85[1]	0.86[1,2]	0.84[2]	0.89[1]	0.86[1,2]	0.80[2]	0.87[1]
External funding[a]	0.39[2]	0.46[2]	0.69[1]	0.50[2]	0.49[2]	0.74[1]	0.59[2]	0.53[2]	0.80[1]
Participating entities[a]	5.01[1]	5.13[1]	4.80[1]	5.87[1]	5.44[1]	5.05[2]	6.97[1]	6.08[2]	5.36[3]
Barriers[a]	3.57[3]	4.09[2]	6.34[1]	4.34[2]	4.31[2]	6.51[1]	4.57[2]	4.23[2]	6.44[1]
Per capita income (ln)[b]	10.00[2]	10.22[1]	10.22[1]	10.00[2]	10.21[1]	10.22[1]	9.95[2]	10.19[1]	10.18[1]
Manufacturing employment (%)[b]	14.45[1]	12.01[2]	11.33[3]	14.45[1]	12.02[2]	11.39[2]	14.83[1]	12.53[2]	11.63[2]
Service sector employment (%)[b]	50.00[3]	53.66[2]	55.43[1]	50.06[3]	53.82[2]	55.61[1]	49.23[3]	53.38[2]	55.20[1]
Manufacturing establishments (%)[c]	5.16[2]	6.01[1]	5.13[2]	4.96[2]	6.02[1]	5.15[2]	5.23[2]	6.23[1]	5.13[2]
Service sector establishments (%)[c]	63.50[2]	65.78[1]	59.10[3]	63.92[2]	65.93[1]	59.18[3]	63.59[2]	65.63[1]	58.99[3]
Traditional business attraction policy[a]	3.11[2]	4.14[1]	4.32[1]	4.18[2]	4.74[1]	4.86[1]	5.32[1]	5.36[1]	5.38[1]
Community economic development policy[a]	3.20[2]	3.54[2]	4.45[1]	4.33[2]	4.17[2]	5.11[1]	5.85[1]	5.05[2]	5.80[1]
N	682	834	1174	440	600	903	138	234	481

Notes: The Scheffe test measures if there are significant differences among groups. Table shows the mean values for each group, and the superscripts show Scheffe test differences by group. Superscript (1,2,3) is the rank of each group. 1 is the 1st rank with highest value, 2 is the 2nd rank, and 3 is the 3rd (lowest) rank. Values that share the same superscript have the same rank (statistically similar), while values with different superscripts belong to statistically different ranks.

[a]ICMA Economic development survey of US Cities and Counties, 2004, 2009, 2014.

[b]American Community Survey 2010–2014, 2005–2009, Census 2010.

[c]Economic Census 2002, 2007, 2012.

principal cities is significantly larger among the business cluster users. This article hypothesizes that principal cities are more likely to use a business cluster approach, compared to rural and suburban areas.

Economic development plan

Surveys asked respondents if the community has a written economic development plan. Table 2 shows that places using BRE strategies or business clusters are more likely to have an economic development plan. Table 3 shows that the existence of a written economic development plan increased from 2004 to 2009, but then fell in the 2014 survey. If a local government has an economic development plan, it is more likely to focus on local business

growth (McFarland & McConnell, 2012) and use BRE (Abatekassa & Moser, 2002). This article hypothesizes that having an economic development plan is positively related to the use of BRE.

Funding

Local funding and external funding sources were measured separately. Use of local funding was higher in subsamples of BRE users and business cluster users than in the full sample (Table 2). External funding sources include federal grants-in-aid and state grants-in-aid. There was a dramatic increase in the percent of municipalities reporting access to external funding from 2009 to 2014, after the Great Recession.

Economic development participating entities

Engagement plays an important role in the decision process of policy makers (Matarrita-Cascante & Brennan, 2012; Monroe et al., 2016). ICMA measured 15 possible participating entities in the local government's economic development strategies across the three survey years (see online appendix).[2] City, chamber of commerce, and county were the most common participating entities, reported by more than 50% of respondents from 2004 to 2014. More than one third of respondents reported that economic development corporation, regional organizations, private business/industry, public/private partnership, and state government participated in local government's economic development strategies. Other participating entities include citizen advisory board/commission, college/university, utility, planning consortia, ad hoc citizen group, private or community economic development foundation, and federal government. Places using BRE or business cluster exhibited a decrease in the number of participating entities over the last decade (Table 3), however, among the BRE and business cluster users, the number of participating entities is significantly higher than in the overall sample (Table 2). This article expects that municipalities with a higher number of participating entities are more likely to use BRE and business clusters as these approaches may be more responsive to the articulation of local business needs and interests.

Economic development barriers

The ICMA surveys asked respondents to indicate economic development barriers faced by their community (18 barriers were measured, see online Appendix) (see endnote 2). Cost and availability of production factors, including availability of land, cost of land, lack of capital/funding, and lack of building availability, were the most common economic development barriers, reported by around 50% of respondents. Other barriers were inadequate infrastructure (e.g. no fiber optic cable, water, or wastewater extensions), reported by a quarter to a third of respondents, and community characteristics included: lack of skilled labor, environmental regulations, taxes, citizen opposition, high cost of housing, traffic congestion, distance from major markets, high cost of labor, lengthy permit process, lack of political support, declining market due to loss of population, and poor quality of life (inadequate education, recreation, and arts/cultural programs). The percentage of local governments reporting these economic development barriers increased dramatically in 2014 (Table 3). Places using BRE or business clusters report a higher number of economic barriers (Table 2). This article hypothesizes that places facing more economic development barriers will be more likely to use BRE.

Socioeconomic conditions

Local socioeconomic variables include per capita income, percent manufacturing employment and establishments, and percent service sector employment and establishments. Table 3 shows a significant decrease in manufacturing employment and a clear increase in service sector employment from 2004 to 2009 in the overall sample and two subsamples. Compared to the full sample, municipalities using BRE or business clusters do not show a significant decrease of manufacturing employment from 2009 to 2014 even though they show a decrease in manufacturing establishments (Table 3). This article hypothesizes that communities are more likely to use BRE if they have a higher percent of manufacturing establishments or employment. The models also test if concentration in service sector employment or establishments is related to use of BRE and business clusters.

Other economic development policies

The ICMA surveys also measured other economic development policies. Other policies were divided into two groups: 14 traditional business attraction strategies and 16 community economic development strategies (see online appendix) (see endnote 2). Traditional business attraction policies are used to attract external firms by reducing relocation costs. After the Great Recession, the use of traditional business attraction policy increased (Warner & Zheng, 2013). Economic development strategies focused on large firms still predominate (Bee, 2004). The most commonly used strategies, used by over half of all survey respondents, were promotional and advertising activities, local government representative calls on prospective companies, and infrastructure improvements. Tax increment financing and tax abatements were used by more than one-third of local governments in 2004, rose to around 50% in 2009, and then dropped to under 40% in 2014. Other traditional business attraction policies surveyed included grants, free land or land write downs, tax credits, special assessment districts, locally designated enterprise zones, regulatory flexibility, relocation assistance, subsidized buildings, and utility rate reduction.

Community economic development policies focus on developing small firms and promoting community development and quality of life (Koven & Lyons, 2010; Leigh & Blakely, 2013; Osgood, Opp, & Bernotsky, 2012). Community economic development policies measured by the ICMA surveys include planning (zoning/permit assistance, one-stop permit issuance), small business development strategies (small business development center, revolving loan fund, training support, matching improvement grants (physical upgrades to business properties), marketing assistance, management training, business assistance, employee screening, microenterprise program, vendor/supplier matching, and executive on loan/mentor), and community development activities (community development corporation, community development loan fund, loans and grants to support child care, and job training for low skilled workers). See online appendix (see endnote 2). Reese and Ye (2011) reviewed the use of economic development policies in the past decade and argue that community economic development activities, which are closely linked to quality of life, are more related to economic growth than traditional business attraction policies. Table 3 shows an increase in number of community economic development strategies used from 2004 to 2014 (full sample). While the percent of community economic development strategies used

increased from 20 to 28% from 2004 to 2014, the percentage of business attraction strategies used remains higher (22% in 2004, 31% in 2014).[3]

Local governments tend to simultaneously use both types of economic development policies (Koven & Lyons, 2010; Leigh & Blakely, 2013; Zheng & Warner, 2010). The models include interaction terms between these two types of economic development policies and year to capture the effect of changes in number of economic development policies used over time on the decision to use BRE and business cluster approaches. Local governments employing a broader set of economic development policies are expected to be more likely to use BRE and business clusters. A positive interaction term would demonstrate an increase in the strength of the linkage between BRE and broader community development strategies.

Model results

Using panel data from 2004 to 2014, the logistic regression models explore factors that differentiate communities that use BRE from those that do not, and, among BRE users, factors that differentiate communities that use the business cluster approach. Regression results are shown in Table 4. Results show that use of BRE is not differentiated by metro status, while principal cities are more likely to use business cluster approaches. This confirms prior research that finds wide use of BRE across community types, but lower use of business clusters in rural communities (Barkley & Henry, 1997; Loveridge et al., 1991; Markley & McNamara, 1995). Communities with economic development plans are more likely to use BRE, but plans do not distinguish places using business clusters. Communities which use local economic development funding are more likely to use BRE, but less likely to use business clusters. External

Table 4. Logistic regression: Differentiating communities that use BRE and business clusters.

	BRE		Business cluster	
	Raw coefficient	Standard error	Raw coefficient	Standard error
Principal city	−0.07	(0.13)	0.35**	(0.11)
Economic development plan[a]	0.35**	(0.11)	0.14	(0.10)
Local funding[a]	0.77**	(0.12)	−0.37*	(0.14)
External funding[a]	0.02	(0.07)	−0.04	(0.07)
Participating entities[a]	0.02	(0.02)	0.06**	(0.02)
Barriers[a]	0.07**	(0.02)	−0.02	(0.02)
Per capita income (ln)[b]	0.57**	(0.18)	−0.17	(0.18)
Manufacturing establishment %[c]	0.02	(0.02)	0.01	(0.02)
Service sectors establishment %[c]	0.05**	(0.01)	0.01	(0.01)
Manufacturing employment % *year[b] (%)	0.00	(0.00)	0.01**	(0.00)
Service employment %*year[b] (%)	0.00	(0.00)	0.01**	(0.00)
Traditional business attraction policy[a]	0.27**	(0.07)	0.08	(0.06)
Community economic development policy[a]	0.29**	(0.08)	0.13*	(0.06)
Traditional business attraction policy *year[a]	−0.03	(0.03)	−0.00	(0.03)
Community economic development policy[a]*year	−0.00	(0.03)	−0.01	(0.02)
Constant	−11.07**	(1.65)	−1.22	(1.69)
N	2690		1943	

*$p \leq .05$; **$p \leq .01$; [a]ICMA Economic development survey of US Cities and Counties, 2004, 2009, 2014.
[b]American Community Survey 2010–2014, 2005–2009, Census 2010.
[c]Economic Census 2002, 2007, 2012.

funding does not differentiate either strategy. BRE has longstanding support as a locally focused strategy and thus may be more linked to local funding. Communities are more likely to use business clusters if they have a wider range of participating entities represented in the economic development process. As a newer strategy, business clusters may be encouraged if a wider range of local economic development voices are engaged in local policy-making.

Regarding barriers, results show that municipalities that face more economic development barriers are more likely to use BRE as expected, but barriers have no effect on business cluster use. This implies that places using BRE face more economic development challenges. BRE strategies were originally developed to help communities address barriers (Abatekassa & Moser, 2002), and they still are a response to that problem. The models also find that communities with higher income are more likely to use BRE, suggesting the importance of capacity to implement economic development policy. But income does not differentiate users of business clusters. While clusters are the newer approach, use is not differentiated by income or economic barriers. These results suggest that business clusters may be an accessible strategy for a broad range of municipalities, regardless of need or capacity.

Measures of economic structure – manufacturing and services concentration by establishments and employment – offer some interesting results. BRE is *not* more common in communities with more manufacturing dependence. Rather, BRE is more likely in communities with more service sector establishments. It could be that BRE strategies have shifted toward service establishments over time, or that communities with limited manufacturing use BRE to maintain or enhance that sector. By contrast, municipalities with more manufacturing and service employment are more likely to use business clusters. Business clusters represent a newer approach to BRE that is more related to both manufacturing and service employment. Recent research finds that manufacturing and service sectors are complementary (Wolman, Stokan, & Wial, 2015), and business clusters may help link services and manufacturing.

While model results show that the cluster approach is concentrated in principal cities, research has shown the potential for cluster strategies in rural communities if regional cooperation and state support are present (Lowe, 2007; Lowe & Freyer, 2015). A *post hoc* analysis of the level of cooperation among survey respondents shows places using business clusters were more likely to report regional cooperation (58%) than places not using business clusters (46%).[4]

BRE has become a common tool in the arsenal of economic development policies used by local governments. Models show that both traditional business attraction policies and community economic development policies are related to a higher likelihood of using BRE. By contrast, users of business clusters are more likely to use broader community economic development policies, but not more business attraction policies. Thus, model results suggest business cluster users may represent the leading edge of BRE practice, as they are more likely to be focused on broader community development interests.

What is concerning in results however, is the negative relationship between local funding and use of business clusters and the lack of connection to economic development planning. This is a surprise, as planning was expected to help communities focus on newer strategies such as business clusters. It would appear that local funding and planning are still focused on more traditional BRE approaches, and communities innovating with

business cluster approaches have not yet been able to integrate this into local plans and funding criteria. Change comes slowly, and clusters, as an economic development strategy that is gaining attention, may show more connections to local funding and planning over time.

Discussion

Traditional business attraction policies focus on the outside – recruiting and attracting firms. Community economic development policies focus on the inside – local firms and quality of life. Early BRE strategies were closely linked to business attraction – by focusing on branch plants of outside firms – but current BRE strategies are more focused on building from local strengths (Canada, 2003). Research finds small firms are positively related to employment growth (Komarek & Loveridge, 2014; Neumark, Wall, & Zhang, 2011) and household income (Shaffer, 2006). Mehta's (2011) research on main street programs finds small firms pay more attention to quality of life than large firms. Compared to BRE, business clusters concentrate on enhancing local uniqueness and business strengths and are closely linked to community development strategies, which focus on quality of life. While model results provide an academic review of the current state of practice based on national surveys, future case study research could capture the nuance of economic practice. For example, in research summarizing the Inner City Economic Summit in 2015, Toussaint-Comeau, Newberger, and Augustine (2016) find business clusters linked to human capital development, such as job training, are effective interventions for stressed inner cities.

Both manufacturing employment and service sector employment are positively related to the use of business clusters, and the impact increases over time (Table 4). While more research needs to be done on business clusters, results imply that local governments in more balanced economies are more likely to employ business cluster strategies. While Porter (1997, 2000) claims that a cluster approach alone is the strategy to help cities grow, model results show a broader story. Porter does not see a role for broader community development strategies, but communities that use business clusters do. They recognize the need to focus on job training, child care, and housing supports – the quality of life investments that are part of broader community development and foundational to a successful business cluster strategy. It is not an either/or world, as Porter paints it. It is a world of combined strategies that support business clusters, but do so with attention to broader community development needs. It is this balance that is so important to economic development policy.

Conclusion

BRE has become a more common economic development strategy over the past two decades. Analysis of the ICMA economic development surveys shows local governments have broadened their BRE focus from branch plants to economic policies focused on local business network development. In the last decade, business clusters have become a more widely used strategy by local governments, especially in cities in the metropolitan core.

This article analyzed ICMA economic development surveys from 2004, 2009, and 2014 to see what differentiates communities that use BRE from those that do not, and what differentiates BRE users that employ the newer business cluster approach. Places using BRE are more likely to have an economic development plan and face more barriers. They also are

likely to have higher income and use local funding. Business clusters, by contrast, are more likely to be used in principal cities and in places with higher manufacturing and service sector employment. Such municipalities involve a wider range of participating entities and are more likely to focus on broader community development policies as well. It is this locally focused, broader approach that points the way forward for economic development policy. BRE led the way in the 1990s, making a link between branch plants and parent firms. It leads the way again in the 2000s with a focus on building networks among local firms and tying BRE strategies to broader community development strategies. Porter had it half right. Clusters matter. But so too, do broader community development strategies that focus on quality of life. Economic development, after all, is for the benefit of local wellbeing. Practitioners of BRE know that only too well.

Notes

1. The two dependent variables are BRE (whether a municipality uses BRE or not) and business cluster (whether a municipality uses business clusters or not). If a community used at least one BRE strategy, BRE is coded as 1. Otherwise, BRE is coded as 0. Both of the dependent variables are dichotomous and logistic regression is used.
2. Online appendix tables detailing participating entities in local economic development strategies, economic development barriers, and economic development policies used in 2004, 2009, and 2014 are available at http://cms.mildredwarner.org/p/267.
3. The percent of traditional business attraction policies (of 14) used or community economic development policies (of 16) used is calculated as the average number of policies used over the total number of policies measured based on the full sample (Tables 2 and 3).
4. The ICMA 2014 survey asked, "How strong is the competition/cooperation for economic development and tax base among local governments in your region?". Percentages are those reporting strong cooperation.

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