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**Environment, Equity and Economic Development Goals:
Understanding Differences in Local Economic Development Strategies**

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Abstract

What role do local governments play in promoting sustainable economic development? This article uses a 2014 national survey to analyze the relationship between local environment and social equity motivations and the kinds of economic development strategies local governments pursue (business incentives or community economic development policies). Municipalities that pay more attention to environmental sustainability and social equity use higher levels of community economic development tools and lower levels of business incentives. These places are also more likely to have written economic development plans, and involve more participants in the economic development process. By contrast, communities that employ higher levels of business incentives have lower income and are more dependent on manufacturing development. Other capacity measures do not differentiate types of economic development strategies. This suggests sustainable economic development strategies can be pursued by a broader array of communities, especially if they broaden the motivations driving their economic development policy.

Keywords: Business incentives, community economic development strategies, sustainable development, planning

Introduction

The triple bottom line, in industry and government, recognizes the need to balance economy, environment and equity to ensure sustainable development (Kucukvar & Tatari, 2013; Portney, 2013; Campbell, 1996). For local governments, especially those facing fiscal stress, economic development is often the primary goal, with environment and equity taking second stage. Bringing the three pillars into balance is a key challenge of sustainability. However, within economic development policy itself we are seeing a shift as concern for sustainable development seeks to enhance attention to environmental and social issues as part of a community's economic development strategy (Portney, 2013). Economic developers recognize the growth potential in green jobs and the need to manage natural resources for long term sustainable development (Harper-Anderson, 2012; Osgood, et al., 2012; Roberts & Cohen, 2002). Inequality is increasingly recognized as a challenge to growth (Reich, 2015; Piketty 2014) and has led innovative policy groups to argue that "equity is the superior growth model" (Policy Link, 2014). As the triple bottom line ethos becomes integrated in local economic development policy, we are seeing a shift from primary reliance on business attraction and incentives to outside firms, to a broader set of community economic development policies focused on strengthening local and smaller firms, and addressing environmental challenges and social issues (Zheng and Warner, 2010; Grodach 2011; Reese 2012). This article explores the factors that drive local governments to pursue these broader community economic development strategies, using the latest available national survey data from the International City/County Management Association (2014) on local government economic development policy actions.

In economic development, business incentives are the most common and traditional strategy utilized by local governments (Osgood, Opp, & Bernotsky, 2012; Reese, 2014a; Reese,

2014b). Research generally finds a link between business incentives and economic development (Bartik & Erickcek, 2014; Lowe, 2012; Lynch 2004; Bartik, 1991). However, business incentives are often products of intergovernmental competition (Zheng & Warner, 2010; Bartik, 2005), which can create a negative-sum game and harm long term sustainable development (Partridge, 2011). Community economic development strategies focus on a broader range of issues – from small business development (McFarland & McConnell, 2012), to workforce supports and quality of life (Warner & Zheng, 2013; Florida, 2004), to environmental and social issues (Koven & Lyons 2010; Osgood, Opp, & Bernotsky, 2012).

In recent years, local governments have increased the use of broader community economic development strategies while still relying on traditional business incentive strategies (Bennett & Giloth, 2008; Reese, 1998; Zheng & Warner, 2010). This policy shift implies that local governments have broadened their focus to include supporting local firms and pursuing more inclusive community economic development, instead of just focusing on attracting firms or external investments. The ICMA economic development surveys show that from 1994 to 2004, local governments increased the use of community economic development strategies, which focus on local firms and community development (Zheng & Warner, 2010). While the percentage of local governments using at least one business incentive decreased from 88% in 1994 to 68% in 2004, in 2009 the use of business incentives jumped to 90 percent of municipalities in the wake of the Great Recession (Warner & Zheng, 2013). The 2014 ICMA survey data indicate that 98% of local governments use at least one business incentive and 98% use at least one community economic development strategy, but they differ in the level of strategies used.

In this article, we explore the 2014 ICMA survey of local government economic development policy to see if we can differentiate the drivers of business incentives from the drivers of community economic development strategies. We are especially interested in determining what role triple bottom line motivations play in determining the mix of economic development strategies a community employs. Using a national survey, we are able to assess if broader community economic development strategies are possible for a wide range of communities.

Literature Review

Environmental protection, social equity and economic development compose three pillars of the triple bottom line (TBL) for sustainable development. The TBL approach is widely used to assess performance of sustainability in the private sector regarding aspects of supply chains (Ahi & Searcy, 2015), and various industries (Kucukvar & Tatari, 2013; Tyrrell, Paris, & Biaett, 2012; Milne, 2012; Taylor & Fletcher, 2006). By contrast, for local governments seeking to enhance their triple bottom line, the challenge is to build their tax base and promote job creation, while also ensuring environmental protection and social equity (Osuji, 2011). Campbell (1996) recognized that sustainability is only achieved through repeated efforts to solve the tensions between each of sustainability's three dimensions. Recent research seems to indicate that local governments may navigate the tension between environment and economy, but the social equity dimension often gets left out (Homsy & Warner, 2015). Local governments facing greater fiscal and economic challenges are less likely to pursue broader economic development strategies, which may promote sustainability (Betz, Partridge, Kraybill, & Lobao, 2012; Lubell, Feiock, & Handy, 2009). Kettl (2002) argues that the traditional silos that define many government

practices tend to inhibit the broader thinking required by communities seeking to promote sustainability.

Local governments facing the challenge of sustainable economic development, not only concentrate on increasing tax base and job creation, but also comprehensively consider environmental protection and social equity (Blakely & Leigh, 2010; Nowak, 1997). In a study of Dallas-Fort Worth, Grodach (2011) found that conventional economic development aims to attract external firms and increase median income, but often pays little attention to environmental protection or social equity. In comparison, community economic development concentrates on diversifying the economy (e.g. business cluster, technology zones), narrowing gaps of skills and social services among regions (e.g. management training, affordable housing), and developing environmental friendly and green industries (e.g. energy efficiency program, green building incentives) (Grodach, 2011).

Local governments use business incentives as the primary strategy to stimulate the local economy (Osgood. et al., 2012; Reese, 2014 a; Reese, 2014 b; Kim, 2009). These traditional economic development strategies focus on increasing the tax base and employment (Bartik, 1991; Bartik, 2005; Grodach, 2011). Since the Great Recession, local governments have increased the use of traditional business attraction to offset losses (Warner and Zheng, 2013; Osgood et. al., 2012). Business incentives, including tax abatements, infrastructure improvement and local enterprise development zones, are designed to attract large outside firms (Lynch, 2004; Peter & Fisher, 2004), but are typically not targeted to small businesses and local firms (Grodach, 2011). Business incentives often are driven by competition among municipalities (Bartik, 2005; Grodach, 2011), and may undermine the local economy by spending public money on attracting external firms which may not be suitable for local conditions (Partridge, 2011).

Lobao, Adua, and Hooks (2014) found that business attraction is higher in counties with a proportionally larger manufacturing workforce.

Community economic development strategies promote the linkage between firms and local community development (Bradshaw & Blakely, 1999; Clavel et al., 1997). These strategies include small business development, business expansion and retention, and community activities, such as market assistance and management training for small businesses, business clusters and industrial districts which expand local firms' development, and investments in high quality of life for workers. Community economic development strategies pay attention to environmental protection and social equity (Osgood et al., 2012, Saha and Paterson, 2008), and comprehensively develop the triple bottom line. Community economic development strategies can be driven by green economic development goals of local governments, and these strategies simultaneously make progress on economy and social well-being (Harper-Anderson, 2012). Such strategies often address both environmental sustainability (e.g. energy efficiency program, green building incentives) and social issues (e.g. promote age-friendly businesses). Osgood et al. (2012) reviewed local economic development policies in the last decade and found that community economic development strategies concentrate on environmental sustainability and human investment. Portney (2013) analyzed twenty-four cities in the U.S., and found that energy efficiency programs and green building incentives in community development strategies contribute to environmental protection. Saha and Paterson (2008) surveyed more than 200 large cities in the U.S., and found that affordable housing was one of the most common economic development activities adopted to support social equity.

Community economic development strategies have been found to involve a broader array of participants and community cooperation (Brodhag & Taliere, 2006, Flint, 2010), while the

primary participants in business incentives are more narrowly limited to firms and local economic development offices (Grodach, 2011). At the municipal level, when governments have economic development plans developed through a public process, a broader array of policies are adopted (Stokan, 2013) including those focused more on local businesses (McFarland & McConnell, 2012). Local comprehensive plans combined with community development policies can promote smart growth of small communities (Edwards & Haines, 2007). Community development strategies, such as zoning ordinances (Jepson & Haines, 2014), and affordable housing (Talen, 2010) are enhanced by sustainable development goals.

Local governments are being challenged to increase the accountability of economic development policies (LeRoy, 2005). Local governments have increased performance measurement to assess the effectiveness of business incentives (Zheng and Warner, 2010), but in a study of tax incentives in Kansas, Matkin (2010) found that although procedural requirements of tax abatements increase accountability, measurements did not improve the impacts of tax abatements on economic growth. Accountability measures for community economic development policies are harder to design, as the objectives behind these strategies extend beyond direct measures of jobs, income or tax base. Bartik (2011) reviews the evidence and concludes that investment in both business incentives and community economic development can have positive impacts on long term economic growth, but investments in human capital are especially important.

Community economic development strategies and traditional business incentives are not substitutes, but are used simultaneously by local governments (Bradshaw & Blakely, 1999; Blakely & Leigh, 2010). For example, business incentives are often combined with local business expansion and retention strategies to enhance economic development (Blakely & Leigh,

2010; Koven & Lyons, 2010). Lowe (2012) found when business incentives are combined with job training they can have a more sustainable economic development impact.

In this study, we are interested in the drivers that differentiate communities which rely more on business incentives from those which use a higher level of community development strategies. We give specific attention to the level of business incentives and of community economic development strategies used, and the relation between economic development strategies and environment and equity goals. While most localities use at least one business incentive and at least one community economic development strategy, we find that places vary in the levels of strategies used. Some rely more heavily on business incentives, while others rely more heavily on community economic development strategies. Our analysis explores what factors drive the use of different economic development approaches, and if the drivers for community economic development strategies differ from those for business incentives. We classify economic development according to the triple bottom line: economic development, environmental sustainability, and social equity, and assess if local governments' use of economic development strategies varies in response to different goals.

Data

Study data were obtained from a local economic development survey we conducted with the International City/County Management Association (ICMA) in 2014. Surveys were sent to municipal officers in municipalities and counties across the U.S. 5,237 local governments were surveyed, and 1,201 responded for a 23% response rate. After dropping respondents who failed to answer all questions, the final sample included 1,151 respondents of which 230 are principal cities, 706 are suburban municipalities and 215 are rural places. Respondents were from four regions: South (380), Northeast (149), North central (350), and West (272). We used the Two-

sample Kolmogorov-Smirnov test to measure the equality of the population distribution between the universe and the sample data. The results show the sample captures slightly more larger communities than found in the universe, because places with population below 10,000 had a lower response rate (See Appendix Table 1A for detail).

The survey contained over 100 questions about local governments' economic development strategies, planning, goals, motivations and barriers. The survey also measured accountability, participants in the economic development process and funding sources. Responses regarding the level of use of business incentives and community economic development tools, as well as motivations and economic development barriers were on a 4-degree scale (none, low, medium, high). Questions regarding existence of an economic development plan, development goals, presence of a college or junior college in the jurisdiction, and use of accountability measures were dichotomous.

According to the 2014 ICMA survey, almost all local governments use at least one business incentive and at least one community economic development policy. We measured the level of business incentives (BI) and the level of community economic development (CED) strategies by aggregating the level of use (no use=0, low=1, medium=2 and high=3) for each strategy employed by local government as shown in the equations below.

Where, i represents each strategy. The maximum level of business incentives used is 40, and the average level is 16. The maximum level of community economic development strategies is 90, and the average level is 32. While local governments use both strategies simultaneously, some use higher levels of incentives while others use higher levels of community economic development strategies. Both the level of business incentives and the level of community economic development strategies are normally distributed (Figure 1).

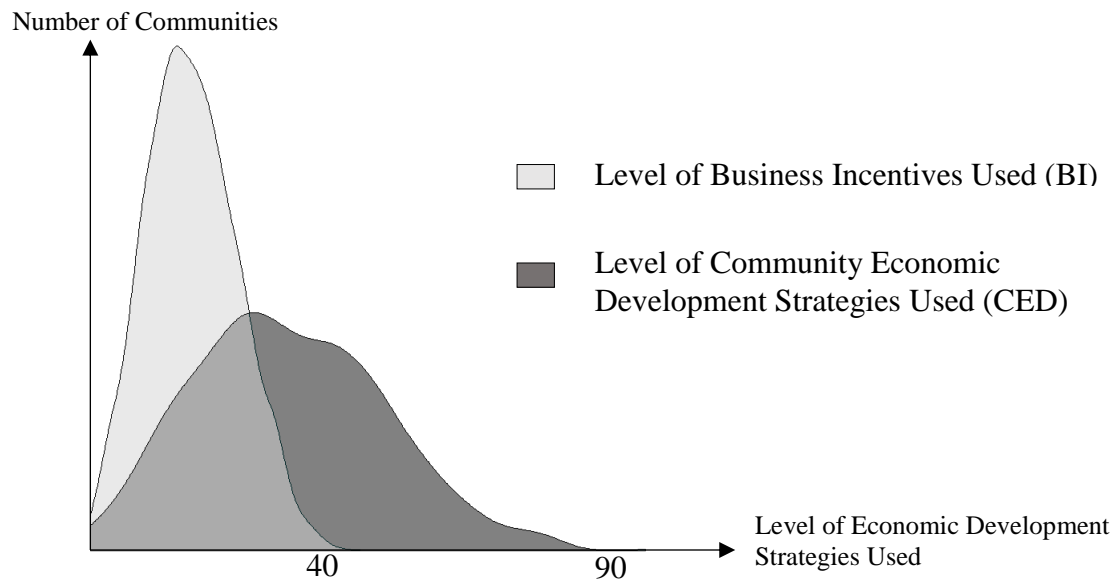


Figure 1 Distribution of business incentives and community economic development strategies

Source: ICMA 2014 Economic Development Survey, N=1151 local governments.

Level is number of strategies times level of use ($Level\ of\ BI\ used = \sum_{i=1}^{15} BI_i * level\ of\ use_i$;

$Level\ of\ CED\ used = \sum_{i=1}^{33} CED_i * level\ of\ use_i$).

Business incentives included 15 items and Table 1 shows the percentage of municipalities using each policy, and the level of use of each policy. Business incentives are used to attract external firms and reduce the cost of relocation, so we included elements related to business attraction and cost reduction in this category. The alpha coefficient is 0.79, which suggests that items have relatively high internal consistency. Both business attraction and community level infrastructure investments are the most common business incentives used by US local governments with over 85% reporting using these strategies, most at the medium and high levels. Strategies focused on cost reductions to the firms such as grants (70%) and tax abatement (60%) were also common, but mostly at low and medium levels of use.

Business Incentives (percent)	% Using Strategy	Level of Use		
		Low	Medium	High
Business Attraction				
Promotional and advertising activities	86	33	34	19
Local government representative calls on prospective companies	85	26	34	25
Infrastructure improvements	85	25	38	22
High quality physical infrastructure	86	24	38	24
Tourism promotion	82	23	31	28
Cost reduction				
Grants	70	29	25	16
Tax abatements	60	21	20	19
Tax increment financing	59	21	21	17
Tax credits	53	26	19	8
Free land or land write downs	43	20	16	7
Special assessment districts	41	23	13	5
Locally designated enterprise zones	41	16	16	9
Subsidized buildings	34	22	10	2
Relocation assistance	32	21	8	3
Utility rate reduction	32	21	8	3

Note: Numbers represent percent governments which used this policy. Alpha coefficient is 0.79.

Source: ICMA economic development survey 2014, N=1151 local governments.

Community economic development strategies are used to help small business and existing local firms, and address planning, training, technology development, environmental protection, and community development concerns. The ICMA surveys measure a broad array of community economic development strategies and our index of community economic development strategies includes eight small business strategies, eight business expansion and retention strategies, three technology and environment policies, eight community development strategies, and six planning and training strategies (Table 2). The alpha coefficient is 0.91, which implies that items are highly related to each other. Surveys of local businesses (85%), investments in high quality of life (89%), public private partnerships (86%) and zoning/permit assistance (87%) were the most commonly used strategies. Other strategies focused on social inequity by improving quality of human capital (job training for low skilled workers, 71%; training support, 53%), increasing social welfare (affordable workforce housing, 67%; business

assistance, 68%; promote age-friendly businesses, 49%), and stimulating factor mobility (promote commuting, 55%). Small business development centers and strategies that encourage businesses to work together such as business clusters, business improvement districts, and main street programs are often adopted to decrease barriers faced by small firms, and facilitate interactions between firms and local governments (Reese & Ye, 2015; Morse and Ha, 1997).

Table 2 Community economic development strategies

Community economic development strategy (percent)	% Using Strategy	Level of Use		
		Low	Medium	High
Small business				
Marketing assistance	68	36	28	4
Small business development center	66	26	28	12
Matching improvement grants (physical upgrades to business properties)	61	24	25	12
Management training	55	34	19	2
Revolving loan fund	50	24	18	8
Vendor/supplier matching	38	27	10	1
Microenterprise program	35	21	11	3
Executive on loan/mentor	31	23	7	1
Business retention and expansion				
Surveys of local business	85	34	37	14
Local business publicity program (community-wide)	74	35	31	8
Business clusters/industrial districts	69	28	29	12
Business improvement districts	60	20	21	19
Main Street Program	59	23	24	12
Ombudsman program	51	23	16	12
Replacing imports with locally supplied goods	43	31	10	2
Export development assistance	43	28	13	2
Technology and environment				
Energy Efficiency Programs	61	34	22	5
Technology Zones	47	28	14	5
Environmental sustainability- energy audits/green building incentives	52	30	17	5
Community development				
Investments in high quality of life (good education, recreation, and arts/culture)	89	18	37	34
Public/private partnerships	86	26	36	24
Affordable workforce housing	67	36	25	6
Transit to promote commuting	55	30	18	7
Programs to promote age-friendly businesses for seniors	49	37	10	2
Community development corporation	47	20	17	10
Community development loan fund	39	20	13	6
Business assistance, loans and grants to support child care	29	22	5	2
Planning and training				
Zoning/permit assistance	87	19	35	33
One-stop permit assistance (H)	75	17	27	31
Job training for low skilled workers	71	30	29	12
Regulatory flexibility	58	31	20	7
Training Support	53	21	21	11
Employee screening	30	16	11	3

Note: Numbers represent percent governments which used this policy. Alpha coefficient is 0.91. Source: ICMA economic development survey, 2014, N=1151 local governments.

Model

We test two dependent variables: the level of business incentives (BI) (as shown in Table 1) and the level of community economic development (CED) strategies (as shown in Table 2) on or independent variables as shown in the following model:

$$\text{Level of BI (or CED)} = f \{ \text{triple bottom line motivations, planning, barriers, participants, funding, accountability, economic conditions} \}.$$

Our independent variables, described in Table 3 and below, measure triple bottom line motivations as well as planning, participants in the economic development policy process, funding, level of accountability and economic development barriers. Data for all these variables come from the 2014 ICMA national survey. We used American Community Survey (2009-2013) and 2010 Census of Population data to control for socio-economic conditions (income, percent manufacturing employment, poverty rate, percent white population, diploma higher than high school, and population).

Table 3 Descriptive statistics

	Mean	Std. Dev	Min	Max
<i>Dependent Variables</i>				
<i>Business Incentive Strategies (# * Level of use) ^a</i>	16.37	7.37	0	40
<i>Community Economic Development Strategies (# * Level of use) ^a</i>	32.26	15.5	0	90
<i>Triple bottom line motivations</i>				
<i>Environmental protection and social equity ^a (Factor score)</i>	0	1	-1.84	2.83
<i>Willinaneess to Change ^a (Factor score)</i>	0	1	-2.91	2.80
<i>Economic Development Variables</i>				
<i>Economic development plan ^a (yes=1,%)</i>	0.50	0.50	0	1
<i>Barriers ^a (Number of barriers=21, level is from 0 to 3)</i>	25.08	8.65	0	59
<i>Number of participants ^a (Number of participants=16)</i>	4.86	2.93	0	16
<i>Level of accountability ^a (Number of measurements=12)</i>	5.7	3.45	0	12
<i>Number of funds ^a (Number of funds=9)</i>	3.41	2.08	0	9
<i>Socioeconomic Characteristics</i>				
<i>Per capita income ^c (log)</i>	10.21	0.34	9.12	11.52
<i>Poverty rate ^c (%)</i>	14.55	8.30	0.76	50.20
<i>Percent white population (%)^c</i>	76.93	17.19	4.29	98.23
<i>Diploma higher than high school (%) ^c</i>	87.64	7.93	45.31	99.52
<i>College or junior college in jurisdiction (yes=1)</i>	0.64	0.48	0	1
<i>Percent manufacturing employment (%) ^c</i>	11.33	5.87	0.2	40.79
<i>Population ^b (log)</i>	10.49	1.05	6.69	14.48
<i>Geographic Characteristics</i>				
<i>South ^a (yes=1)</i>	0.33	0.47	0	1
<i>Northeast ^a (yes=1)</i>	0.13	0.34	0	1
<i>North central ^a (yes=1)</i>	0.30	0.46	0	1
<i>West ^a (yes=1)</i>	0.24	0.43	0	1
<i>Metro Status</i>				
<i>Metro core ^a (yes=1)</i>	0.20	0.40	0	1
<i>Suburban ^a (yes=1)</i>	0.61	0.49	0	1
<i>Rural ^a (yes=1)</i>	0.19	0.39	0	1

Source: ^a ICMA Economic Development Survey 2014; ^b 2010 Census of Population; ^c American Community Survey 2009-2013, N=1151.

Triple Bottom Line Motivations

The survey asked respondents to indicate which goals drive their local economic development policy, and what motivates their economic development priorities. Five goals were listed: jobs, tax base, quality of life, environmental sustainability and social equity. Almost all respondents listed economic development goals as priorities: jobs (89%), tax base (91%) and quality of life (84%), so these could not be used to differentiate our sample. But less than half (45%) of responding communities listed environmental sustainability as a goal, and only a quarter (26%) listed social equity. We are interested primarily in testing if those governments that give attention to environment and equity – elements of the triple bottom line – have broader economic development policies.

In addition to goals, a question on motivations for community economic development priorities included ten elements, shown in Table 4. Each element was measured at four levels (no motivation=0, minimal motivation=1, moderate motivation=2, and significant motivation=3). We used factor analysis and found that goals and motivations differentiate into two factors: environmental and social equity motivations, and willingness to change. Environmental and social equity motivations include environmental sustainability and social equity goals as well as motivations regarding ‘growth in aging population’, ‘income inequality’, and ‘concern about environmental sustainability’. Our second factor, willingness to change, includes motivations that include a change in the economy, in leadership or in economic development strategy. We hypothesize that communities which rank higher on these two factors will exhibit higher use of community economic development strategies, and lower use of business incentives.

Table 4 Factor Analysis of Goals and Motivations

<i>Triple bottom line motivations</i>	<i>Environmental sustainability and social equity</i>	<i>Willingness to Change</i>
<i>Environmental sustainability and social equity</i>		
<i>Environmental Sustainability Goal (45%)</i>	0.70	-0.13
<i>Social Equity Goal (26%)</i>	0.69	-0.08
<i>Growth in aging population (63%)</i>	0.55	0.21
<i>Income inequality (58%)</i>	0.68	0.22
<i>Concern about environmental sustainability (67%)</i>	0.80	0.08
<i>Willingness to Change</i>		
<i>Change in local economy (94%)</i>	0.15	0.43
<i>Increased competition (87%)</i>	0.13	0.40
<i>Change in economic development leadership (70%)</i>	0.01	0.74
<i>Change in political leadership (73%)</i>	0.00	0.72
<i>Past activities not successful (71%)</i>	0.09	0.61
<i>Past activities successful/time for new initiatives (76%)</i>	0.35	0.36
<i>Heard about new development tools (66%)</i>	0.49	0.39

Note: Bolded numbers show elements which primarily load on that factor. Factor loading after Varimax rotation. Percent responding yes at any level (low, medium or high) is listed next to each variable name.

Source: ICMA Economic Development Survey 2014, N=1151 local governments.

Planning

The survey asked if the community has a written economic development plan (yes=1, otherwise=0). Overall, 50% of respondents reported their communities had an economic plan. When local governments have a written development plan, they are more likely to diversify development strategies (Stokan, 2013; Osgood et. al, 2012), so community development strategies are more likely to be considered. Having an economic plan also increases attention to small business endogenous growth (McFarland & McConnell, 2012), which is promoted by community development strategies. Therefore, we hypothesize that local governments with an economic development plan will use higher levels of community economic development strategies.

Barriers

Respondents were asked to indicate which development barriers they faced and their importance. Economic development barriers included 21 elements (Table 5), and the measurement of importance consisted of 4 degrees (0=none, 1=low, 2=medium and 3=high). More than half of respondents identified every element as a barrier to economic development. Primary barriers were on the supply-side of economic development: cost of land (90%), lack of capital/funding (90%), and lack of buildings (89%), followed by taxes (86%) and skilled labor (84%). Eighty-three percent of local governments reported that environmental regulation was an economic development barrier, which implies environmental protection could impede economic growth. Factor analysis showed barriers were relatively independent, so we created an additive index of the number of barriers reported by the local government. We hypothesize that communities with higher level of barriers would have a higher level of community economic development strategies, because those strategies focus on a broader range of economic development issues.

<i>Barriers (percent)</i>	<i>% indicating barrier</i>	<i>Level of use</i>		
		<i>Low</i>	<i>Medium</i>	<i>High</i>
<i>Cost of land</i>	90	33	33	24
<i>Lack of capital/funding</i>	90	25	39	26
<i>Lack of buildings (due to space/costs)</i>	89	25	36	28
<i>Taxes</i>	86	51	26	9
<i>Limited number of major employers</i>	85	32	31	22
<i>Lack of skilled labor</i>	84	37	33	14
<i>Environmental regulations</i>	83	46	27	10
<i>Lack of land available</i>	82	27	28	27
<i>High cost of labor</i>	79	56	20	3
<i>Inadequate infrastructure (e.g., no fiber optic cable, water, wastewater)</i>	75	43	24	8
<i>Poor public transit</i>	75	39	23	13
<i>High cost of housing</i>	73	44	21	8
<i>Citizen opposition</i>	72	49	18	5
<i>Lengthy permit process</i>	70	50	16	4
<i>Distance from major markets</i>	69	42	21	6
<i>Lack of affordable, quality child care</i>	68	53	14	1
<i>Traffic congestion</i>	64	42	16	6
<i>Lack of political support</i>	61	44	15	2
<i>Income Inequality</i>	61	45	13	3
<i>Poor quality of life (inadequate education, recreation, and arts/cultural)</i>	56	39	13	4
<i>Declining market due to population</i>	48	31	12	5

Table 5 Economic Development Barriers

Note: Numbers represent percent of municipalities facing this economic development barrier overall and those reporting the barrier at low, medium and high levels.

Source. ICMA Economic Development Survey 2014, N=1151 local governments.

Participants

The survey measured the participation of 16 possible parties in the economic development policy process; and the average number participants reported was five. The most common participant was the city (86%), followed by the chamber of commerce (57%). Other potential participants are county (55%), economic development corporation (40%), regional organizations (38%), state government (37%), public/private partnership (33%), private business/industry (32%), citizen advisory board/commission (26%), college/university (25%), utility (21%), private/community economic development foundation (9%), planning consortia (8%), ad hoc citizen group (8%), federal government (6%), and non-profit organization serving the poor (5%). Participatory and multi-stakeholder involvement helps to balance economic, environment and social objectives (Brodhag & Taliere, 2006). Compared to business incentives, community economic development strategies consider more aspects of sustainable economic development. Therefore, we expect that when a higher number of participants engage in economic development, local governments will use higher levels of community economic development strategies, and lower levels of business incentives.

Funding Sources

There are many sources of funding for local economic development policies. Our survey measured the use of nine potential sources of funding. The average number of funding sources used is three. The most common source of funding is local funds (86%). State grants-in-aid (42%), tax increment financing districts (41%), hotel/motel taxes (39%), and sales tax (32%) are the next most common funding sources. Other funding sources include private funding (30%), federal grants-in-aid (28%), general obligation or revenue bonds (22%), and special assessment districts (21%). Our funding variable is a count of the sources employed by each local

government. Since many of these sources were developed to fund business incentives, we expect communities using more funding sources will use more business incentives.

Accountability

Accountability of economic development policies is a concern for local government. The ICMA survey measured accountability with thirteen items, which we include as an additive index in our model. The average number of accountability measurements employed is six (Table 3). The most commonly reported element was a performance agreement as a condition for providing business incentives (79%). Sixty-nine percent of local governments required a cost/benefit analysis before offering business incentives. Effectiveness of business incentives was measured by 72% of local governments. For local governments which measure the effectiveness of business incentives, the most widely used measurements were the number of jobs created by new business (64%), increase in the tax base (60%), and amount of money invested in construction materials and labor (52%). These measures primarily focus on the economic dimension of the triple bottom line. Other performance measurements were cost/benefit analysis (40%), new dollars invested in land (40%), numbers of new businesses relocating or expanding in jurisdiction (35%), and company revenue/sales (25%). Fifty-five percent of local governments reported that they have a claw back agreement in which companies are liable for paying back the value of incentives when they relocate or shut down. Only 17% of local governments require a percentage of new employees to be hired from within the community. Only 34% of respondents reported budget allocation was associated with economic development priorities specified in the plan. Our independent variable for accountability is the number of measures used. Because the primary accountability measurements are related to

business incentives, we expect a higher level of accountability measurement will be related to a higher level of business incentives used.

Socio-economic conditions

We control for socioeconomic conditions in the community. These variables include education (whether there is a college or junior college in the jurisdiction, percentage of population which has a degree higher than high school), demographics (population size, percentage white), and socioeconomic factors (income, poverty rate), and economic structure (manufacturing employment rate) (Table 3). We expect that places that have a higher dependence on manufacturing employment and a lower per capita income will use more business incentives. We want to differentiate whether levels of community economic development strategies are related to education or economic conditions in the community. We also control for metro status¹ and geographic division, and set suburb and South as references respectively. Urban governments have more economic, social and environmental capital to achieve sustainable economic development (Nowak, 1997); thus, we hypothesize that metro core communities will engage in a higher level of community economic development, compared to rural communities and suburbs. Compared to other regions, the ICMA data show that local governments in the South are less motivated by environmental sustainability and social equity concerns. We hypothesize that other regions will use a lower level of business incentives and a higher level of community development strategies compared to the South.

Model Results

We ran two ordinary least squares regressions to understand the differences in factors which explain the level of use of business incentives and of community economic development

strategies. Regression results are shown in Table 6. To assess level of response across variables on a standard scale, we describe results using the standardized beta for continuous variables. For categorical variables, we report the model coefficient. We find that municipalities, which pay attention to environmental sustainability and social equity, use higher levels of community economic development tools. If a community is one standard deviation higher on this factor its level of community economic development strategies will be 3.27 higher. A one standard deviation increase in the willingness to change factor, is related to a 0.66 increase in the level of community development strategies. By contrast, the level of business incentives is negatively related to environmental sustainability and social equity motivations. Communities that rank one standard deviation higher on the environmental and social equity factor have 0.48 lower level of business incentives. The willingness to change factor has no effect on business incentives. Thus, our primary hypothesis regarding the link between triple bottom line motivations and higher use of broader economic development strategies is confirmed.

	Level of business incentives			Level of community economic development strategies		
	Coefficient	Standardized Beta Coeff.	Standard Error	Coefficient	Standardized Beta Coeff.	Standard Error
<i>Triple bottom line motivations</i>						
<i>Environmental sustainability and social equity</i> ^a (Factor score)	-0.48**	-0.48**	(0.15)	3.27**	3.27**	(0.30)
<i>Willingness to Change</i> ^a (Factor score)	0.25	0.25	(0.14)	0.66*	0.66*	(0.29)
<i>Economic Development Variables</i>						
<i>Economic development plan</i> ^a (yes=1,%)	0.17	0.08	(0.28)	1.93**	0.97**	(0.56)
<i>Barriers</i> ^a (Number of barriers=21, level is from 0 to 3)	-0.03*	-0.30*	(0.02)	0.09**	0.79**	(0.03)
<i>Number of participants</i> ^a (Number of participants=16)	-0.11*	-0.31*	(0.05)	0.36**	1.07**	(0.10)
<i>Level of accountability</i> ^a (Number of measurements=12)	0.33**	1.15**	(0.05)	0.35**	1.19**	(0.10)
<i>Number of funds</i> ^a (Number of funds=9)	0.46**	0.96**	(0.07)	0.37*	0.76*	(0.15)
<i>Level of community economic development strategies</i>	0.28**	4.35**	(0.01)	-	-	
<i>Level of business incentives</i>	-	-		1.18**	8.69**	(0.05)
<i>Socioeconomic Characteristics</i>						
<i>Per capita income</i> ^c (log)	-1.59*	-0.54*	(0.78)	1.10	0.37	(1.60)
<i>Poverty rate</i> ^c (%)	0.03	0.22	(0.03)	0.10	0.82	(0.06)
<i>Percent white population</i> (%) ^c	0.01	0.13	(0.01)	0.02	0.3	(0.02)
<i>Diploma higher than high school</i> (%) ^c	0.03	0.23	(0.03)	-0.03	-0.22	(0.06)
<i>College or junior college in jurisdiction</i> (yes=1)	0.23	0.11	(0.32)	1.41*	0.68*	(0.66)
<i>Percent manufacturing employment</i> (%) ^c	0.08**	0.5**	(0.03)	0.06	0.35	(0.06)
<i>Population</i> ^b (log)	0.18	0.18	(0.16)	0.97**	1.02**	(0.33)
<i>Geographic Characteristics</i>						
<i>Northeast</i> ^a (yes=1)	-2.12**	-0.71**	(0.48)	4.38**	1.47**	(0.99)
<i>North central</i> ^a (yes=1)	0.12	0.06	(0.39)	-1.27	-0.58	(0.79)
<i>West</i> ^a (yes=1)	-2.94**	-1.25**	(0.37)	5.22**	2.22**	(0.76)
<i>Metro Status</i>						
<i>Metro core</i> ^a (yes=1)	0.66	0.26	(0.40)	1.91*	0.77*	(0.81)
<i>Rural</i> ^a (yes=1)	-0.20	-0.08	(0.41)	1.41	0.55	(0.85)
<i>Constant</i>	15.75*	-	(7.75)	-20.76	-	(15.91)
<i>Adjusted R²</i>		0.64			0.66	

Table 6 OLS Regression results: Level of Development strategies

Note: *Significant at 0.05 level. ** Significant at 0.01 level.

Source: Author Analysis of ICMA Economic Development Survey 2014, American Community Survey 2009-2013, and 2010 Census of Population. N=1151 US cities and counties.

Communities which have a written economic development plan use a higher level of community development strategies as expected. Having a written economic development plan is associated with a 1.93 higher level of community development strategies. By contrast, the relationship between planning and business incentive use is not significant. The positive role of planning on level of community development strategies confirms our expectations.

We also find support for our hypothesis regarding participants in the development process. If a community has one standard deviation more number of participants, then its level of community economic development strategies will be 1.07 higher but its business incentive strategies will be 0.31 lower. Our hypothesis regarding barriers is also supported. Places facing more barriers use more community economic development strategies. A one standard deviation increase in barriers is associated with a 0.79 higher level of community economic development strategies but a 0.30 lower level of business incentives. Broader range of participants and a broader understanding of economic development barriers helps communities see the need for broader economic development strategies, as expected.

Accountability measures are positively associated with higher levels of both business incentives and community economic development strategies with a standard deviation higher level of accountability resulting in a higher level of strategies by about one point in each case. Number of funds shows similar positive results on both types of strategies but the effect is higher on business incentives, 0.96 strategies for a standard deviation higher number of funders, as compared to community economic development where the effect is only 0.76. Pressure to increase accountability in business incentives helps explain the stronger effect.

Regarding our control variables, there is a positive association between use of both community economic development strategies and business incentives as expected. Per capita

income is negatively associated with business incentive strategies, but manufacturing employment has a positive relationship. This suggests that communities with higher income and more diversified economies are less likely to use higher levels of business incentives, as expected. Neither of these variables has an effect on level of community economic development strategies.

Municipalities in the South region use more business incentives and fewer community economic development strategies as expected, compared with the Northeast and West.² Compared to the South, the level of community economic development strategies is 4.38 higher in the Northeast, and the level of business incentives is 2.12 lower. The West is 5.22 higher in average levels of community economic development strategies, and 2.94 lower in level of business incentives, compared to the South. These marginal effects are some of the largest in the model, and reflect the more progressive approach to economic development in the Northeast and the West. However, it is not just regional differences that explain our results.

For example, our models show the level of community economic development strategies is higher in the urban core than in suburbs but there is no difference with rural communities. Level of business incentives does not vary by metro status. Results show no difference in the level of community economic development or business incentive strategies by income, poverty, percent white or educational level. This suggests that both types of strategies can be practiced by a broad array of communities. However, community economic development strategies are higher in communities with a local college, which could be a source of expertise.

Discussion

Our models have shown that environmental and social equity motivations and willingness to change are key factors differentiating the level of community economic development strategies from the level of business incentives. Having a written economic development plan and involving a broader range of participants also differentiates communities using more community economic development strategies. The larger number of participants involved in economic development policymaking in these communities may expose officials to a greater range of strategies, increasing both the number of community economic development efforts and their level of use.

Communities facing more barriers use higher levels of community economic development strategies and lower levels of business incentives. This implies that business incentives may be too narrowly focused to address the broader barriers that communities face. Communities with lower income and with higher manufacturing dependence use higher levels of business incentives. When facing greater range of economic and social challenges, communities find they need to move beyond traditional development practices and adopt a higher level of community economic development strategies. These results support our hypothesis that community economic development strategies are more likely to reflect the three elements of the triple bottom line – economy, environment and social equity – and thus lead to sustainable development.

However, our models also show that economic developers do not live in an either/or world. They use both business incentives and community economic development strategies. Because both strategies are used together, we conducted additional tests to confirm our primary findings. Using natural breaks, we split the sample into low and high business incentives (<16,

>16) and low and high community economic development strategies (< 33, >33). The majority of the sample, 503 municipalities ranked low on both strategies. We set these low performers as our reference group and ran a multinomial regression to see if higher users of community economic development strategies could be distinguished from higher users of business incentives. They can. Our primary result regarding motivations still differentiates high community economic development users. While high business incentive users also show these motivations, this is only the case when community economic development is also high. While the two strategies are practiced together, it is only when the level of community economic development strategies is high that we see the impact of triple bottom line motivations (Table 7).

on. N=1151 US cities and counties.

Table 7 Multinomial regression results

	Group 1 (Higher BI, Lower CD) Coefficient	Group2 Lower BI, Higher CD Coefficient	Group3 (High BI, High CD) Coefficient
<i>Triple bottom line motivations</i>			
Environmental sustainability and social equity ^a (Factor score)	-0.19	0.60**	0.66**
Willingness to Change ^a (Factor score)	0.11	0.27*	0.25*
<i>Economic Development Variables</i>			
Economic development plan ^a (yes=1, %)	0.56*	0.66**	0.50**
Barriers ^a (Number of barriers=21, level is from 0 to 3)	-0.01	0.00	-0.01
Number of participants ^a (Number of participants=16)	0.04	0.00	0.06
Level of accountability ^a (Number of measurements=12)	0.17**	0.09**	0.27**
Number of funds ^a (Number of funds=9)	0.21**	0.05	0.31**
<i>Socioeconomic Characteristics</i>			
Per capita income ^c (log)	-0.97	-0.16	-1.10
Poverty rate ^c (%)	0.02	0.02	0.05*
Percent white population (%) ^c	0.00	0.00	0.01*
Diploma higher than high school (%) ^c	0.02	0.02	0.03
College or junior college in jurisdiction (yes=1)	-0.05	0.09	0.43
Percent manufacturing employment (%) ^c	0.02	0.03	0.05**
Population ^b (log)	0.05	0.33**	0.42**
<i>Geographic Characteristics</i>			
Northeast ^a (yes=1)	-1.06*	0.60	-0.26
North central ^a (yes=1)	-0.22	-0.40	-0.72**
West ^a (yes=1)	-0.95**	0.81**	-0.47
<i>Metro Status</i>			
Metro core ^a (yes=1)	0.58	1.01**	1.06**
Rural ^a (yes=1)	-0.38	0.51	0.59*
Constant	4.33	-7.33	-2.04
N	130	165	353

Note: *Significant at 0.05 level. ** Significant at 0.01 level.

Reference category is Low BI, Low CD = 503 places.

Source: Author Analysis of ICMA Economic Development Survey 2014, American Community Survey 2009-2013, and 2010 Census of Population

Our results regarding planning show that high users of business incentives also have written plans. Accountability and funds show the same results as in the overall model. Local governments that rely *primarily* on business incentives pay more attention to performance measures and have a wider array of funding sources. This makes sense, as business incentives are an established tool, with traditional funding sources, and have been the subject of a lot of critique regarding accountability (LeRoy 2005).

We see some interesting differences in our control variables. Places that use both strategies at a high level are more likely to have greater manufacturing dependence, higher poverty, and be in the North Central region and in both the metro core and rural areas. This is the region that has faced the most deindustrialization, but also the region where many of the community economic development strategies, such as business retention and expansion, were first tested (Clavel et al. 1997; Morse and Ha, 1997). Thus these additional subsample models support our hypothesis that communities which use high levels of community economic development strategies pursue more sustainable economic development approaches.

Conclusion

In this article, we analyzed the 2014 ICMA survey on local economic development policies to see if we could differentiate motivations leading to higher use of traditional business incentives and higher use of community economic development strategies. While all communities are concerned with job creation, tax base and quality of life, in communities which articulate environment and equity goals, community economic development strategies are more heavily used. These communities also are more likely to engage in a formal economic development planning process with a broader array of participants. This may help them break

out of the traditional silos that define many government practices (Kettl 2002) and inhibit the broader thinking required by communities seeking to promote sustainability.

Higher use of business incentives is negatively related to environmental sustainability and social equity motivations, unless business incentives are used in tandem with a high level of community economic development strategies. Communities that use both strategies at a high level, are likely to be under more economic stress – higher poverty, higher manufacturing dependence and in the North Central region, which has faced deindustrialization. But these communities are also more likely to have formal plans and pay higher attention to accountability in their economic development policy.

Economic developers do not live in an either/or world. They recognize that sustainable economic development policy must involve community economic development strategies to address the broad range of barriers that communities face. Business incentives have a role, but must be balanced with broader attention to community economic development strategies to achieve sustainable development (Lowe 2012). And this requires willingness to change, to test new approaches and to give attention to accountability measures. This is part of what distinguishes communities that pursue sustainable economic development policy, regardless of the constraints and challenges they may face.

These results suggest a promising way forward for sustainable development, as use of community economic development strategies is not limited to privileged communities. Our analysis of drivers of community economic development policy shows that balancing across the three dimensions of the triple bottom line is possible for a broad range of communities.

References

- Ahi, P., & Searcy, C. (2015). Assessing sustainability in the supply chain: A triple bottom line approach. *Applied Mathematical Modelling*, 39(10-11), 2882-2896.
- Bartik, T. J. (1991). *Who benefits from state and local economic development*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Bartik, T. J. (2005). Solving the problems of economic development incentives. *Growth and Change*, 36(2), 139-166.
- Bartik, T. J. (2011). *Investing in kids: Early childhood programs and local economic development*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Bartik, T. J., & Erickcek, G. (2014). Simulating the Effects of the Tax Credit Program of the Michigan Economic Growth Authority on Job Creation and Fiscal Benefits. *Economic Development Quarterly*, 28(4), 314-327.
- Bennett, M., & Giloth, R. P. (2008). *Economic development in American cities: The pursuit of an equity agenda*. Albany: State University of New York Press.
- Betz, M. R., Partridge, M. D., Kraybill, D. S. and Lobao, L. (2012). Why Do Localities Provide Economic Development Incentives? Geographic Competition, Political Constituencies, and Government Capacity. *Growth and Change*, 43 (3), 361–391.
- Birch, D. L. (1981). Who creates jobs? *Public Interest*, 65(3), 3-14.
- Blakely, E. J., & Leigh, N. G. (2010). *Planning local economic development: Theory and practice (4th ed.)*. Thousand Oaks, CA: Sage.
- Bradshaw, T. K., & Blakely, E. J. (1999). What are "third-wave" state economic development efforts? From incentives to industrial policy. *Economic Development Quarterly*, 13(3), 229-244.

-
- Brodhag, C., & Taliere, S. (2006). Sustainable development strategies: Tools for policy coherence. *Natural Resources Forum*, 30(2), 136-145.
- Campbell, S. (1996). Green Cities, Growing Cities, Just Cities?: Urban Planning and the Contradictions of Sustainable Development. *Journal of the American Planning Association*, 62(3), 296–312.
- Clavel, P., Pitt, J., & Yin, J. (1997). The community option in urban policy. *Urban Affairs Review*, 32, 435-458.
- Edwards, M. M., & Haines, A. (2007). Evaluating smart growth - Implications for small communities. *Journal of Planning Education and Research*, 27(1), 49-64.
- Flint, R. W. (2010). Seeking Resiliency in the Development of Sustainable Communities. *Human Ecology Review*, 17(1), 44-57.
- Florida, R. (2004). *The rise of the creative class and how it's transforming work, leisure, community and everyday life* (Paperback Ed.), New York: Basic Books.
- Grodach, C. (2011). Barriers to sustainable economic development: The Dallas–Fort Worth experience. *Cities*, 28(4), 300-309.
- Hawken, P. (1993). *The ecology of commerce: a declaration of sustainability*. New York: HarperCollins.
- Harper-Anderson, E. (2012). Exploring What Greening the Economy Means for African American Workers, Entrepreneurs, and Communities. *Economic Development Quarterly*, 26(2), 162-177.
- Homsy, G. C., & Warner, M. E. (2015). Cities and Sustainability: Polycentric Action and Multilevel Governance. *Urban Affairs Review*, 51(1), 46-73.

-
- Jepson, E. J., Jr., & Haines, A. L. (2014). Zoning for Sustainability. *Journal of the American Planning Association*, 80(3), 239-252.
- Kettl, Donald F. (2002). *The Transformation of Governance: Public Administration for Twenty-First Century America*. Baltimore, MD: John Hopkins University Press.
- Kim, T (2009, February 2). Dallas-area cities stick with incentives in bid to create jobs, but downturn hinders efforts. *Dallas Morning News*, p.3.
- Koven, S., & Lyons, T. (2010). *Economic development: Strategies for state and local practice*. Washington, DC: International City/County Management Association.
- Kucukvar, M., & Tatari, O. (2013). Towards a triple bottom-line sustainability assessment of the U.S. construction industry. *The International Journal of Life Cycle Assessment*, 18(5), 958-972.
- LeRoy, G. (2005). *The great American jobs scam: Corporate tax dodging and the myth of job creation*. San Francisco, CA:Berrett-Koehler.
- Lobao, L., Adua, L., & Hooks, G. (2014). Privatization, Business Attraction, and Social Services across the United States: Local Governments' Use of Market-Oriented, Neoliberal Policies in the Post-2000 Period. *Social Problems*, 61(4), 644-672.
- Lowe, N. J. (2012). Beyond the deal: Using industrial recruitment as a strategic tool for manufacturing development. *Economic Development Quarterly*. doi: 10.1177/0891242412467365
- Lynch, R. G. (2004). *Rethinking growth strategies: How state and local taxes and services affect economic development*. Washington, DC: Economic Policy Institute.
- Matkin, D. S. T. (2010). Designing Accountable and Effective Economic Development Tax Incentives. *Public Performance & Management Review*, 34(2), 166-188.

-
- Nowak, J. (1997). Neighborhood initiative and the regional economy. *Economic Development Quarterly*, 11(1), 3-10.
- McFarland, C., & McConnell, J. K. (2012). Small Business Growth During a Recession: Local Policy Implications. *Economic Development Quarterly*, 27(2), 102-113.
- Milne, M. J., & Gray, R. (2012). W(h)ither Ecology? The Triple Bottom Line, the Global Reporting Initiative, and Corporate Sustainability Reporting. *Journal of Business Ethics*, 118(1), 13-29.
- Morse, G. N., & Ha, I. (1997). How successful are business retention and expansion implementation efforts? *Economic Development Review*, 15(1), 8.
- Norman, W., & MacDonald, C. (2004). Getting to the bottom of "Triple Bottom Line". *Business Ethics Quarterly*, 14(2), 243-262.
- Osgood, J. L., Opp, S. M., & Bernotsky, R. L. (2012). Yesterday's Gains Versus Today's Realities: Lessons From 10 Years of Economic Development Practice. *Economic Development Quarterly*, 26(4), 334-350.
- Osuji, O. 2011. Fluidity of regulation-CSR nexus: The multinational corporate corruption example. *Journal of Business Ethics*, 103(1): 31–57.
- Partridge, M. D., & Olfert, M. R. (2011). The Winners' Choice: Sustainable Economic Strategies for Successful 21st-Century Regions. *Applied Economic Perspectives and Policy*, 33(2), 143-178.
- Peters, A., & Fisher, P. (2004). The failures of economic development incentives. *Journal of the American Planning Association*, 70(1), 27-37.
- Piketty, T. (2014). *Capital in the 21st century*. (Trans. Arthur Goldhammer). Cambridge, Massachusetts: Belknap Press of Harvard University Press.

-
- Policy Link (2014). *America's Tomorrow: Equity Is the Superior Growth Model*. Accessed July 12, 2016. <http://www.policylink.org/focus-areas/equitable-economy/at/van-jones-on-yes-we-code>
- Portney, K. E. (2013). *Taking Sustainable Cities Seriously: Economic Development, the Environment, and Quality of Life in American Cities (Second edition)*. Cambridge, MA: The MIT Press.
- Reese, L. A. & Ye, M.. (2015). Trends in Local Economic Development Policies. In *The municipal year book 2015* (pp.3-14). Washington, DC: International City County Management Association.
- Reese, L. A. (1998). Sharing the benefits of economic development: What cities use type II policies? *Urban Affairs Review*, 33, 686-711.
- Reese, L. A. (2014 a). If All You Have Is A Hammer: Finding Economic Development Policies That Matter. *American Review of Public Administration*, 44(6), 627-655.
- Reese, L. A. (2014 b). The Alchemy of Local Economic Development. *Economic Development Quarterly*, 28(3), 206-219.
- Reich, R.B. (2015). *Saving Capitalism, for the Many, not the Few*. New York: Alfred A. Knopf.
- Roberts, B., & Cohen, M. (2002). Enhancing sustainable development by triple value adding to the core business of government. *Economic Development Quarterly*, 16(2), 127-137.
- Saha, D., & Paterson, R. G. (2008). Local government efforts to promote the “Three Es” of sustainable development: survey in medium to large cities in the United States. *Journal of Planning Education and Research*, 28(1), 21-37.

-
- Stokan, E. (2013). Testing Rubin's Model 25 Years Later: A Multilevel Approach to Local Economic Development Incentive Adoption. *Economic Development Quarterly*, 27(4), 301-315.
- Talen, E. (2010). Affordability in New Urbanist Development: Principle, Practice, and Strategy. *Journal of Urban Affairs*, 32(4), 489-510.
- Taylor, A. C., & Fletcher, T. D. (2006). "Triple-bottom-line" assessment of urban stormwater projects. *Water Science and Technology*, 54(6-7), 459-466.
- Tyrrell, T., Paris, C. M., & Biaett, V. (2012). A Quantified Triple Bottom Line for Tourism: Experimental Results. *Journal of Travel Research*, 52(3), 279-293.
- Warner, M. E., & Zheng, L. (2013). Business Incentive Adoption in the Recession. *Economic Development Quarterly*, 27(2), 90-101.
- Zheng, L., & Warner, M. (2010). Business Incentive Use Among U.S. Local Governments: A Story of Accountability and Policy Learning. *Economic Development Quarterly*, 24(4), 325-336.

Endnotes

¹ Using the 2010 US Census place definitions according to the Office of Management and Budget (OMB) 2000 standards (No. 08-01 Bulletin) and 2010 standards (No. 13-01 Bulletin), we coded principal cities and counties within metropolitan statistical areas as metro core and the remainder of the metropolitan statistical areas as suburban. All other places are coded as rural.

² We also ran these models as multilevel models controlling for regions, spatial lag regression, and spatial autoregressive model. The OLS results were robust, and spatial regression models do not contribute much to our understanding in this case. Results tables available upon request.