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Mildred E. Warner¹ and Lingwen Zheng¹

Abstract

Business incentive use rose dramatically among U.S. municipalities after the Great Recession. This article seeks to explain that rise using national surveys of local government economic development practice for 2004 and 2009. The authors differentiate business incentive use by three types (tax abatements, labor support, and planning) and by new and experienced users. We find that higher business incentive use is a response to lower property tax and higher unemployment. We also find that higher business incentive use is associated with greater attention to accountability, even among the new business incentive users. Governments that rely more heavily on tax incentives to firms face more competition and lower tax revenue than governments that use more incentives focused on labor and planning. We also find broadening attention to accountability measures and a widening of community development investment to arenas that target improved quality of life.

Keywords

state and local economic development, business incentives, accountability, tax abatement, labor, planning

Introduction

Although business incentives have received criticism for being ineffective, they remain one of the most common economic development tools for local governments (Bartik, 2005; Bennett & Giloth, 2008; Lynch, 2004). The International City County Management Association (ICMA) has tracked local government use of business incentives in national surveys every 5 years since 1994, and a review of the 1994–2004 decade found a significant drop in the use of business incentives (Zheng & Warner, 2010). This shift from primary reliance on business incentives targeted to specific firms to a broader set of strategies that includes business retention and small business support has been noted in the economic development literature (Clarke & Gaile, 1998; Elisinger, 1995; Reese, 1998).

Although the literature has raised concerns with accountability since the late 1990s (LeRoy, 2005; Reese, 1997a, 1997b; Sullivan, 2002; Sullivan & Green, 1999), more recent studies have shown a policy learning process with cities giving more attention to accountability in their economic development policies (Elisinger, 1995; Lindblad, 2006; Lowe, 2007; Zheng & Warner, 2010). There is also evidence of a policy learning process with respect to the focus of business incentive policy, using incentives as embedded tools to fill gaps in development, marketing, or value chains (Greenstone, Hornbeck, & Moretti, 2008; Lowe, 2007, 2012). Local governments have become more sophisticated in their use of economic development policy over time, shifting from growth-oriented strategies—which are focused on business

incentives—to redistribution-oriented strategies—including business retention, small business development, and human capital strategies that give more attention to labor and benefits to local residents (Bennett & Giloth, 2008; Christopherson & Clark, 2007; Clarke & Gaile, 1998; Elisinger, 1995; Reese, 1998).

Despite such general trends, the 2009 ICMA survey shows a shift back toward more reliance on business incentives. Since the recession hit the United States in 2007, the 2009 ICMA survey shows a dramatic rise in the use of business incentives (Figure 1). In this article, we explore this shift by addressing some key questions. What explains the increase? Has policy learning regarding the importance of accountability and monitoring accompanied this increase in business incentive use? Are economic development tools being used for new targets such as child care and other quality of life investments that might help increase their positive local redistributive impact? Can we differentiate new users of business incentives from experienced ones? Can we distinguish those municipalities that use incentives focused primarily on capital and tax costs to firms (tax breaks, free land, or infrastructure) from those that use incentives focused more on transaction costs regarding labor (job training,

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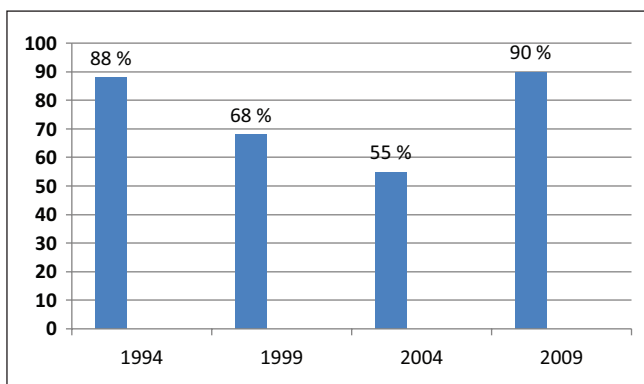


Figure 1. Business incentive use, U.S. municipalities, 1994-2009

Note. Percent municipalities using at least one business incentive. Sample size: 1994, 960; 1999, 1,042; 2004, 726; 2009, 844.

Source. ICMA Economic Development Surveys, 1994-2009, U.S. municipalities.

employee screening) and government (permit assistance, regulatory flexibility)?

Literature Review

The Great Recession has put severe pressure on local government finances. The majority of local government revenues come from property taxes, and the Great Recession was stimulated primarily by problems in the residential and commercial property markets. As those markets adjust—home prices fall and foreclosures mount—property tax receipts to local governments decline (National League of Cities, 2009; Warner, 2012). Fiscal stress increases pressure on local governments to attract firms to stimulate the economy and rebuild the tax base. One of the most common economic development policies is the use of business incentives, such as tax abatements, free land and infrastructure, and tax increment financing. These incentives have been criticized for their limited effectiveness and high costs, but their popularity remains in part because of intergovernmental competition: If your neighbor offers incentives, then you must do so as well (Bartik, 2005; LeRoy, 2005; Lynch, 2004). Not all business incentives, however, are the same. Bartik (1991, 2005) finds that infrastructure and job training are better uses of public funds than tax abatements. There is also question as to how effective local business incentives can be in reducing factor costs (capital, land) to specific firms. An alternative is to focus business incentives on reducing the costs of business in dealing with government (permitting, zoning, regulation) or in addressing their labor needs (job training, employee screening; Bennett & Giloth, 2008; Markusen, 2007). Labor and planning strategies may have the added advantage of offering spillover benefits to other firms and the broader community (Bennett & Giloth, 2008; Elisinger, 1995; Warner, 1999; Warner & Liu, 2006).

The cost of state and local business incentives is high. Peters and Fisher (2004) estimated that the total value of state and local incentives was \$26.4 billion in 1996. Thomas (2011) updated this estimate to \$46.8 billion for 2005. He argues that local governments are more likely to bid for business than businesses are to bid for location because there are thousands of local governments competing to attract firms. Local governments tend to have asymmetric information about the firm location decision process, and their fiscal autonomy forces them to look for new sources of economic and tax growth (Thomas, 2000). The site selection process itself has become a rent-generating activity for firms, as increasing use of location consultants helps fuel the competitive process (Markusen & Nesse, 2007). Unlike the European Union, Canada, and Australia, which have tried to limit business incentives, the U.S. Supreme Court threw out the challenge to state incentives under the Commerce Clause (Thomas, 2011).

Research on the effectiveness of business incentives is inconclusive. Early studies conducted in the 1950s to the mid-1970s find no significant impact (either positive or negative) of tax incentives (Lynch, 2004). Later studies give mixed results. In a meta-analysis of 75 econometric studies conducted between 1979 and 1990, Bartik (1991) concludes that there is a significant negative impact of taxes on local economic growth, but that investment in infrastructure has a positive impact. As incentives have become more ubiquitous, they are more likely to be associated with economic growth because they have become almost a prerequisite to firm location (Lynch, 2004). In the European Union, where interregional competition in business incentives is not allowed, Thomas (2011) finds that foreign direct investment is higher than in the United States. Typical business incentives are unlikely to have more than 20% of their costs offset by fiscal benefits (Bartik, 2005). An analysis of U.S. local government business incentives from 1994 to 2004 using the ICMA 1994-2004 sample finds evidence of a destructive race to the bottom of lower tax receipts and lower economic growth among municipalities that used more business incentives (Zheng & Warner, 2010).

Business incentive decisions by local governments reflect economic, fiscal, and political costs and benefits (Fisher & Peters, 1998). Business and real estate elites partner with local governments to promote economic growth in a competitive process with other localities (Logan & Molotch, 1987). This can lead to a process of destructive interlocal competition that can harm the local economy (Donahue, 1997). Local governments' choice of economic development programs can be a response to external economic conditions such as high unemployment (Peters & Fisher, 1997) or growing economies (Reese, 1991). The openness of the local economic development process to citizen participation and nonbusiness interest groups also can influence business incentive adoption (Berkowitz, 1988; Wolman & Spitzley, 1996). In addition, expanding the range of participants in the economic

development process and the range of business supports to include workforce and business cluster development can make business incentives more effective and more accountable (Fitzgerald, 2004; Goetz, Deller, & Harris, 2009; Warner, 1999; Weber, 2007). Expanding participants in the economic development process can also lead to broadened targets of economic development policy to include areas such as child care (Warner, 2006; Warner & Prentice, 2012).

Local economic development policy is a product of governments' policy learning process (Elisinger, 1995; Markusen, 2007; Mintzberg, 1973). Policy learning in economic development has led to increased attention to targeting business incentives (Lowe, 2012; Markusen & Schrock, 2006), higher use of performance measures to ensure accountability (LeRoy, 2005; Sullivan, 2002; Zheng & Warner, 2010), and the involvement of a broader range of participants in the economic development process (Warner, 1999; Warner & Prentice, 2012). This process also reflects external economic conditions and citizen opposition (Bartik, 2005; Sullivan, 2002).

Performance measurement is especially important if local government is to assess the impact of its economic development policies. Given the high tax costs and concern over political benefits of secretive business incentive agreements, public pressure has mounted for local governments to give attention to performance management and accountability in economic development policy (LeRoy, 2005). Placing conditions and conducting evaluations of tax abatements may promote more effective use of public funds at the local level (Sands, Reese, & Khan, 2006). Many states and localities now give increased attention to accountability controls (LeRoy, 2007). Cities that use a higher number of incentives also give more attention to performance measurements (Lindblad, 2006; Zheng & Warner, 2010). Some local governments require publicly subsidized firms that fail to achieve agreed-upon employment targets to pay back part of the money they received. These "clawback" agreements are gaining popularity (Bartik, 2005; Peters, 1993; Warner & Zheng, 2011; Weber, 2002). Increased attention to accountability is determined in part by local government organizational capacity, structural characteristics of communities, and local political processes, such as a broader set of participants in the economic development process and the effectiveness of citizen opposition (Lindblad, 2006; Reese, 1997a, 1997b; Sullivan, 2002; Sullivan & Green, 1999).

Can the use of old tools, such as business incentives, be applied to new targets, such as emerging industry sectors, local services, affordable housing, and quality of life (Kay, Pratt, & Warner, 2007; Lowe, 2007, 2012; Markusen, 2007)? Economic development policy itself can be broadened from using only business incentives to other supports for local service sectors (Kay et al., 2007) and investments in families and child care (Bartik, 2011; Reese, 2012; Warner, 2006; Warner & Liu, 2006; Warner & Prentice, 2012). Bartik (2011) models

investment in early education against a well-designed business incentive program and finds that returns compare favorably between the two types of programs in the short term, and in the long term, early education investments also increase the education, employment, and occupational attainment of the next generation. Markusen and Schrock (2006) argue that economic development should be focused on activities that make the city distinctive. Part of this distinctiveness may be regional clusters (Porter, 2000), arts and culture (Markusen, 2007; Scott, 2004), or quality of life investments to attract the creative class (Florida, 2002). Increased attention is being given to investments in the social and physical infrastructure, which makes cities attractive to families (Bartik, 2011; Reese, 2012; Warner & Prentice, 2012; Warner & Rukus, 2013) and reduces crime (Rukus & Warner, 2013).

In this article, we look at the use of business incentives since the onset of the Great Recession. Using data from the 2009 ICMA survey of local government economic development practice, we find that the percentage of local governments offering business incentives and the number of incentives offered has risen dramatically, but we also see some evidence of new targets. We ask what drives the use of business incentives in 2009, and if we can distinguish these driving forces across different groups of incentives. We differentiate incentives focused on reducing capital costs to firms through tax abatements from those focused on reducing transaction costs related to labor, zoning, and permitting. We also check for policy learning to see if we can differentiate new from experienced business incentive users. Finally, we explore the extent to which municipalities are giving attention to new targets for economic development policy such as housing, child care, and quality of life investments.

Data

This research is based on analysis of the 2004 and 2009 surveys of local government economic development practice conducted by the ICMA. In both years, surveys were sent to chief municipal administrative officers in cities and counties to identify economic development trends. In 2004 and 2009, ICMA surveyed all municipalities with a population of 10,000 or more. In 2004, 3,703 local governments were surveyed, and 726 municipalities responded for a response rate of 19.6%. In 2009, 3,839 municipalities were surveyed, and 844 responded for a response rate of 22%. Distribution by population size is similar in both model years. In addition, distribution by metro status shows a dominance of suburbs in both years (57% in 2004, 59% in 2009). The response rate was 17% for rural areas in both years and 26% for metro areas in 2004 and 24% in 2009. The survey has maintained consistency that allows comparisons over time.

The most dramatic change between 2004 and 2009 was the stark increase in the percentage of governments offering business incentives during that period. After a steady

downward trend in business incentive use over the prior decade, the 2009 survey shows a sharp increase in municipalities offering business incentives, from 55% to 90%. In this article, we seek to understand that shift.

The ICMA measures current use (in 2009) of 19 different business incentives. We conducted a factor analysis on the business incentive question and found incentives grouped into three factors: those that focus on government efforts to reduce factor costs to businesses (land, building, infrastructure, taxes) and incentives that focus on government efforts to reduce transaction costs regarding labor (screening, training) and planning (permitting, zoning, regulatory flexibility). We used Bartlett's method, which creates factor scores that are unbiased for use as dependent variables in subsequent regression (Bartlett, 1950; Table 1). By reducing transaction costs in planning—which all businesses face—local government broadens the focus from specific firms to the wider business community. The benefits of employee screening and training also accrue to the broader community.

In the factor cost/tax group, we find that infrastructure improvements were the most common in 2009 and grew dramatically, from 37% to 51% of responding governments over the 2004-2009 period. Tax increment financing was the next most widely used incentive in 2009 and increased from 32% to 49% of all responding governments over the period. Tax abatements were the third most commonly employed business incentive, and their use increased from 31% to 43% over the 5-year period. Among the transaction cost-focused business incentives we see, the greatest increase in the most used incentive was zoning and permit assistance, which rose from 37% to 62% of responding governments. One-stop permit issuance also rose from 23% to 37%. Incentives focused on labor did not increase by much, except for training support, which rose from 16% to 23%. Grants, which loaded equally on the tax and labor factors, increased from 21% to 32%. Transaction cost incentives have two potential benefits. They may be less costly to local government budgets compared with tax incentives and they may have wider spillover benefits to the broader community. Permitting and zoning assistance may benefit all firms, and job training can promote labor mobility within the broader economy. The ICMA asked respondents to indicate any change in the dollar value of the average business incentive package over the last 5 years, and we found that those municipalities indicating an increase in the dollar value of the average business incentive package used more tax incentives relative to those indicating otherwise; this difference was statistically significant. This suggests that the cost of tax-focused incentives is higher than the cost of labor- and planning-related incentives.

Model

We are interested in understanding the dramatic rise in the use of business incentives in 2009. We want to know if the

driving factors of business incentive use differ by type of business incentive, and if new users can be differentiated from experienced users. We conducted regression analysis on the full 2009 sample by level of total use of business incentives. Then we differentiate business incentive use by type (tax, labor, planning) using the factor scores that resulted from our factor analysis. Next, we matched responses for the 2004 and 2009 data set and found 265 municipalities that responded to both surveys. We then conducted regression analysis on two subgroups: new users and experienced users of business incentives. We define experienced users as those municipalities that use business incentives in both 2004 and 2009; the new users are defined as those who do not use business incentives in 2004 but do use incentives in 2009.¹

We assess the level of business incentives used (our dependent variable) with the following independent variables derived from the literature. They include measures of participation, accountability, citizen opposition, intergovernmental competition, perceived economic barriers, and economic conditions (tax base and unemployment). Detailed components of each variable are described below.

Number of Participants

This variable is made up of 16 possible participants. Potential participants in economic development policy listed in the survey include (in order of frequency): city (86.3%), chamber of commerce (63.5%), county (51.1%), economic development corporation (43.1%), private business (39%), regional organization (37.1%), citizen advisory board/commission (35.3%), public/private partnership (35%), state government (33.2%), college/university (28.8%), utility (20.3%), ad hoc citizen group (12.1%), planning consortia (11.1%), private community economic development foundation (8.0%), federal government (7.9%), and other (4.5%). The most common participants are public or civically oriented groups. We expect that when governments engage a higher number of participants, they will be less likely to use tax incentives and more likely to use transaction cost incentives (labor, planning) that benefit a broader segment of the community.

Number of Accountability Measures

Local economic development planners have learned of the importance of accountability in planning, so we expect a positive association between accountability measures and the use of business incentives. The accountability variable is made up of 14 items: performance agreements, cost-benefit analysis, performance measures (5), and business incentive effectiveness measures (7). Table 2 looks more closely at the accountability variable. Not only did the average number of accountability measures used by responding municipalities

Table 1. Local Government Incentive Use and Factor Analysis Results.

Business Incentives	Percentage		Factor loading ^a		
	2004	2009	Factor 1 (Tax)	Factor 2 (Labor)	Factor 3 (Planning)
Tax abatements	31.1	42.5	0.4463	0.1149	0.0979
Tax credits	12.9	19.4	0.3481	0.1673	0.0303
Tax increment financing	31.8	49.1	0.4425	0.0060	0.0505
Locally designated enterprise zones	13.2	23.6	0.4146	0.1978	0.0813
Federal/state designated enterprise zones	18.0	23.9	0.3069	0.1775	0.0860
Special assessment districts	12.9	23.9	0.3504	0.0159	0.1538
Free land or land write downs	16.8	25.5	0.3530	0.1740	0.2665
Infrastructure improvements	36.5	51.4	0.3866	0.2278	0.2967
Subsidized buildings	5.0	8.1	0.3486	0.2141	0.0829
Low-cost loans	18.3	24.3	0.3307	0.2636	0.0668
Zoning/permit assistance	37.3	61.7	0.1183	0.2075	0.5167
One-stop permit issuance	22.6	36.8	0.0836	0.0955	0.4369
Regulatory flexibility	6.7	12.9	0.0260	-0.0278	0.3401
Relocation assistance	9.5	12.8	0.2410	0.3276	0.0634
Employee screening	8.1	10.1	0.0025	0.5966	0.0655
Training support	16.0	22.7	0.1639	0.6579	0.1430
Grants	20.8	32.0	0.3301	0.3495	0.0739
Utility rate reduction	6.9	7.3	0.1422	0.1788	0.1355
Other	6.7	7.1	-0.1219	0.0807	0.0120
	2004	2009			
Total respondents	726	844			
Mean (SD)	3.31 (3.71)	4.95 (3.31)			

Note. Bolded numbers show elements which primarily load on that factor.

a. Factor analysis using Bartlett's method and Varimax rotation.

Source. ICMA Economic Development Surveys, 2004 and 2009.

increase (from 3 to 4 on average between 2004 and 2009), the sophistication of those measures increased as well. Use of performance agreements increased dramatically, from less than half of the sample in 2004 (48%) to almost three quarters (72%) in 2009. Local governments also became more sophisticated in what they measured. Use of cost-benefit analysis increased from 40% to 61%. Use of performance measures increased from 25% to 40% overall and clawback agreements, which appeared for the first time as a question on the 2009 survey, were used by 23% of respondents. The most widely applied business effectiveness measures included number of jobs created and amount of money invested in construction materials and labor. As use of business incentives increased, so too did local governments' sophistication in their use of performance measures to track and evaluate their business incentive efforts.

Economic Conditions

Economic development policy is designed to promote job creation and build the tax base. We would expect places with lower per capita property tax revenue and higher unemployment to be heavier users of business incentives. We are

especially interested in differentiating how these variables relate to business incentive across the three groups of business incentives. To avoid concerns with endogeneity, we use property tax for 2007, 2 years prior to the 2009 survey (and the most recent year for which census of government finance data is available). For unemployment, we use the 2005 to 2009 rolling average from the American Community Survey, as there is not a point estimate available for our sample of municipalities. For respondents with missing values, we substituted the series mean.²

Competition

Earlier work has shown increasing competition between states and among localities in attracting business investment. We hypothesize that the increased use of business incentives from 2004 to 2009 is stimulated in part by such state and local competition. We construct a competition variable that measures the number of levels where local governments report facing competition in attracting business investment. The variable is coded 0 to 6 based on whether municipalities report facing competition from nearby local governments (71.8%), other local governments within the state (63.4%),

Table 2. Use of Accountability Measures, 2004 and 2009.

Accountability measures	2004	2009
Mean (SD)	2.78 (3.15)	4.03 (3.27)
	Percentage	
Performance agreement	47.8	72.3
Cost–benefit analysis	39.9	60.8
Performance measures	24.5	39.7
Input measures	7.3	11.0
Output measures	16.4	20.5
Efficiency measures	11.3	16.0
Clawback agreement	—	23.1
Other	4.8	3.3
Business incentive effectiveness measures	44.9	60.4
Amount of jobs created by the new business	40.5	54.4
Amount of money invested in construction materials and labor	28.2	37.0
New dollars invested in land	21.6	25.4
Company revenue/sales	14.2	18.8
Cost–benefit analysis	20.4	30.7
Number of new businesses relocating or expanding in jurisdiction	21.0	24.1
Other	4.8	5.3

Source. ICMA Economic Development Surveys, 2004 ($N = 726$) and 2009 ($N = 844$).

local governments in surrounding states (46.9%), competition with other states (49.3%), foreign countries (20.9%), and other locations (0.8%).

Citizen Opposition

Citizen opposition can lead to lower use of business incentives. The ICMA survey asks if citizen opposition is a barrier to economic development. About one fifth of the respondents report citizen opposition (1 = opposition). Because this is a yes or no question, we cannot assess if the level of opposition within a jurisdiction has changed over time.

Economic Development Barriers

We expect governments that report more barriers to economic development will use more business incentives. The ICMA survey asks local governments to report whether they face 20 barriers. The percentage of respondents reporting that they face these barriers are as follows: cost of land (50.4%), availability of land (49.4%), lack of capital (47.3%), lack of building availability (35.2%), limited number of major employers (32.1%), inadequate infrastructure (26.8%), citizen opposition (21.7%), environmental regulations

(21.4%), taxes (19.1%), lack of skilled labor (16.6%), distance from major markets (15.3%), traffic congestion (14.1%), high cost of housing (14.1%), lengthy permit process (11.7%), lack of political support (10.2%), declining market due to population loss (8.5%), high cost of labor (7.9%), poor quality of life (5.9%), lack of affordable, quality child care (5.6%), and other (10.6%). In 2009, as in 2004, the top two barriers were cost and availability of land. As a reflection of the financial crisis, 47% of respondents listed lack of capital as a barrier in 2009 (in contrast to only 28% of respondents in 2004). Lack of building availability, limited number of major employers, inadequate infrastructure, environmental regulations, and taxes were the next most commonly mentioned barriers (similar in order to 2004).

Table 3 provides descriptive statistics for the 2009 full sample and the combined 2004–2009 sample for all matched respondents and for new and experienced business incentive users. The 2009 full survey and the matched 2004–2009 samples exhibit similar values, although variable means in the matched sample are slightly higher and the experienced users show the highest values for most of the model variables. The matched 2004–2009 sample shows a slightly higher level of business incentive use relative to the full sample. However, the highest business incentive use is among experienced users (6.25 incentives on average), and the lowest use is among the new users (4.56 incentives on average). A similar pattern is found in the number of participants, number of barriers, number of accountability measures used, and level of competition faced. Among experienced business incentive users, property tax is highest and unemployment is lowest, suggesting that these places may be effective in their use of business incentive policy. We see that new business incentive users have lower property tax and higher unemployment, which may induce them to increase their use of business incentives. Overall across the full 2009 sample, compared with 2004, there was growth in the number of business incentives used (from 3.31 to 4.95), economic development barriers encountered (from 3.51 to 4.24), and accountability measures applied (from 2.78 to 4.02).

Model Results

To understand differences among business incentive users, we run ordinary least squares regressions on the full 2009 sample by overall use of business incentives and by the different types of business incentives used. Then we run ordinary least squares regressions on the paired sample to compare new users and experienced users of business incentives. Regression results are presented in Tables 4 and 5. We see in the 2009 sample (column 1 in Table 4) that municipalities that involve more participants and use more accountability measures offer more business incentives; they also face less citizen opposition. This confirms that municipalities widely recognize the importance of accountability and

Table 3. Descriptive Statistics: Mean and Standard Deviation.

Variables	2004-2009 Merged sample			
	2009 Full sample	Full matched	New users ¹	Experienced users ²
Total number of business incentives (of 19) ^a	4.95 (3.31)	5.24 (3.29)	4.56 (2.84)	6.25 (3.03)
Total number of participants (of 16) ^a	5.16 (2.97)	5.25 (2.98)	5.28 (3.21)	5.45 (2.88)
Total number of economic development barriers (of 20) ^a	4.24 (2.55)	4.23 (2.59)	3.93 (2.16)	4.60 (2.67)
Total number of accountability measures applied (of 14) ^a	4.02 (3.27)	4.53 (3.20)	3.55 (3.00)	5.52 (2.93)
Level of competition (of 6) ^a	2.53 (1.50)	2.59 (1.46)	2.29 (1.44)	2.89 (1.35)
Citizen opposition (1 = Opposition) ^a	0.22 (0.41)	0.20 (0.40)	0.19 (0.40)	0.21 (0.41)
2007 Per capita property tax (\$ dfl 2005 = 100) ^b	509.06 (1184.62)	543.09 (1385.07)	384.74 (351.92)	659.92 (1769.67)
Average unemployment rate between 2005 and 2009 ^c	6.89 (2.75)	6.61 (2.23)	6.83 (2.48)	6.53 (2.14)
Total respondents	844	265	89	157

Source.

a. ICMA Economic Development Surveys, 2004 and 2009.

b. 2007 Census of Government.

c. American Community Survey, 2005-2009.

1. New users used incentives in 2009, but not in 2004.

2. Experienced users used incentives in both 2004 and 2009.

Table 4. Regression Results: Use of Business Incentives—2009 Full Sample.

Variables	All	Factors		
		Tax ^a	Labor ^a	Planning ^a
Number of participants in local economic development process	0.123*** (3.87)	0.0199 (1.28)	0.0634*** (3.95)	-0.00990 (-0.52)
Number of economic development barriers	0.0984** (2.38)	-0.00238 (-0.12)	0.0154 (0.74)	0.0559** (2.28)
Number of accountability measures applied	0.500*** (16.72)	0.122*** (8.37)	0.0669*** (4.45)	0.101*** (5.73)
Level of competition	0.243*** (3.72)	0.0621* (1.95)	0.0483 (1.47)	0.0242 (0.62)
Citizen opposition	-0.797*** (-3.20)	-0.360*** (-2.97)	-0.146 (-1.17)	0.124 (0.84)
2007 per capita property tax	-0.000162** (-2.14)	-0.0000649* (-1.76)	0.0000132 (0.35)	-0.0000390 (-0.87)
Average unemployment rate (2005-2009)	0.104*** (3.17)	0.0475*** (2.96)	0.0403** (2.43)	-0.0386** (-1.98)
Adjusted R ²	0.3906	0.1468	0.0777	0.0570
Total respondents	844	844	844	844

Note. Factor scores differentiating business incentives by type, predicted from the factor analysis using Bartlett's method. Data in parentheses are *t* scores.

Source. ICMA Economic Development Survey 2009; American Community Survey 2005-2009; and 2007 Census of Government.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

broad participation in the business incentive process. Municipalities that have lower tax revenue, face more competition, and perceive more economic barriers, also use a higher number of business incentives. This suggests that heavier users of business incentives face more economic development challenges.

Next, we model differences in driving factors by type of business incentive used. Tax incentives look most similar to the overall results—and are driven by higher competition, lower citizen opposition, lower property tax, and more unemployment. The only difference is that the tax incentive

equation shows that higher use of tax incentives is not related to more barriers or more participants but rather to poorer economic conditions. Labor incentives involve more participants, and this broader participation may explain the focus on labor issues as these incentives have a broader community benefit. Labor incentive use is a response to unemployment but is not driven by competition, barriers, or opposition. Planning is the only group of incentives that appears to be a response to higher barriers, as permitting and zoning are barriers within local governments' capacity to address. But the use of planning incentives is lower in places with more

Table 5. Regression Results—2004 and 2009 Matched Sample.

Variables	2004-2009 Matched sample			
	New users ^a		Experienced users ^b	
Dependent Variable	Total number of business incentives used 2009			
Number of participants in local economic development process	0.156* (1.79)	0.165* (1.91)	0.128 (1.60)	0.187** (2.32)
Number of economic development barriers	0.178 (1.39)	0.156 (1.24)	0.0857 (0.89)	0.114 (1.13)
Number of accountability measures applied	0.388*** (4.43)	—	0.327*** (4.18)	—
Level of competition	0.308 (1.66)	0.304 (1.65)	0.324** (1.99)	0.458*** (2.78)
Citizen opposition	-0.152 (-0.22)	-0.112 (-0.16)	-1.397** (-2.27)	-1.685*** (-2.64)
2007 per capita property tax	-0.000989 (-1.37)	-0.00101 (-1.41)	-0.000177 (-1.47)	-0.000239* (-1.92)
Average unemployment rate (2005-2009)	0.112 (1.07)	0.111 (1.07)	0.274*** (2.67)	0.233** (2.20)
Change in accountability measures applied (2004 and 2009)	—	0.394*** (4.55)	—	0.152** (2.24)
Adjusted R ²	0.3549	0.3615	0.2438	0.1827
Total respondents	89		157	

Note. Data in parentheses are *t* scores.

a. New users are municipalities that did not report using any business incentives in 2004.

b. Experienced users are municipalities that used business incentives in both 2004 and 2009.

Source. ICMA Economic Development Survey, 2004 and 2009; American Community Survey 2005-2009; and 2007 Census of Government.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

unemployment, where more attention is given to tax and labor incentives instead.

We next use the combined 2004-2009 sample to assess whether there are differences between new and experienced users of business incentives in 2009 (Table 5). We find that new users tend to involve more participants in the economic development policy process and employ a larger number of accountability measures when offering more business incentives. This suggests wide acceptance of policy learning regarding accountability and participation, as even new business incentive users employ accountability controls. The model of experienced users shows that the municipalities facing more competition, less citizen opposition, and higher unemployment use more business incentives. For new users, none of these variables are significant, suggesting that experienced users, who face more economic development challenges (competition, unemployment), tend to use more incentives.

For both new and experienced users, more accountability measures applied tend to be associated with higher levels of incentives used. Because of the concerns about endogeneity, we also model change in accountability measures used from 2004-2009 and get similar results—those who use more accountability measures also use more business incentives. However, in this model, for the experienced users we find that engaging more participants and having lower property tax revenue are associated with higher use of business incentives. These results suggest that experienced users, who utilize more incentives, face more challenges with regard to property tax but are trying to address performance and

accountability by increasing the range of participants. Despite having lower property tax and higher unemployment on average, these factors are not significant driving forces of new users' practice. New users may primarily be responding to the incentive ideology that sprang up during the Great Recession (from the federal Wall Street bailouts), and they may not be targeting their economic development policy to best meet local needs. Although the Great Recession encouraged more local governments to offer business incentives in 2009, we find that only the experienced users of business incentives are motivated by lower property tax revenue and higher unemployment.

The positive correlation between accountability and level of business incentive use is a constant result across all models. One of the themes over the 1994-2004 decade was the increased attention given to accountability in the use of business incentives (Zheng & Warner, 2010). That trend holds true in the 2009 period as well, across all types of business incentives and among both new and experienced users. This suggests that the policy learning regarding the importance of accountability has become widespread.

Discussion

Our models have shown that increased use of business incentives is associated with an increase in attention to accountability. Performance measures are not only employed by experienced users but also by new users, suggesting policy diffusion regarding the need for accountability in local economic development policy. Accountability is also

a consistent driver across the three types of business incentives used. What differentiates tax incentives from labor and planning incentives is the higher level of intergovernmental competition and lower level of property tax revenue. Such jurisdictions may face more pressure from firms to offer tax incentives due to greater intergovernmental competition and the destructive race to the bottom that such tax competition entails.

But what do we know about the targets for local government economic development programs? Some authors have suggested that business incentives are now being targeted to strategic sectors that have more long-term economic development potential (Lowe, 2012). We look back at the ICMA survey and find that although retail services and manufacturing were the primary focus for economic development activity in both 2004 and 2009, in 2009, 27% of respondents said the technology sector was the primary future focus for their economic development efforts, up from 10% in 2004. Although we do not include these items in our dependent variable due to survey inconsistency over time, we describe them here to give a sense of the shifts in targets for business incentives and broader economic development policy. In 2009, special technology zones designed to encourage technology-related firms to move to the jurisdiction were reported by 18% of respondents, 8% of respondents offered flexibility in special zoning, and 5% offered reduction in permit fees for technology companies. The more focused nature of business incentives reflects a more thorough planning process, as more than half of the sample had written economic development plans (see Zheng & Warner, 2011, for a complete description of survey results).

Beyond targeting and focusing business incentives, we also find increased attention to community development investments. The ICMA survey expanded the set of questions regarding government support for community development activities in 2009. Table 6 shows that almost two thirds of responding municipalities support programs that promote high quality of life (good education, recreation, and arts/cultural programs) as an economic development strategy, which has increased almost 10 percentage points (from 54% to 64%) compared with 2004. Several new items were added in the community development category in the 2009 survey, and they received very high response rates among survey respondents. For instance, support for high-quality physical infrastructure was noted by 52% of respondents. Affordable housing was the next most common focus with 42% of respondents, and efficient transportation systems, including transit programs to minimize congestion, ranked fourth, with 38% of respondents supporting such programs.

Other community development activities showed little change. Job training and community development corporations were supported by one third of the respondents, and child care was supported by just 9% (a drop from 2004). A

Table 6. Community Development Activities, 2004 and 2009.

Community development activity	Percentage	
	2004	2009
Community development corporation	34.2	32.9
Community development loan fund	26.2	22.4
Environment sustainability	—	33.8
Efficient transportation systems, including transit options that minimize congestion	—	38.2
High-quality physical infrastructure	—	51.9
Job training	32.2	33.5
Affordable, quality child care	18.3	9.1
Affordable housing	—	42.4
High quality of life (good education, recreation, and arts/cultural programs)	54.4	64.1
Other	11.6	5.7
Total respondents	726	844

Source. ICMA Economic Development Surveys, 2004 and 2009.

supplemental question asking specifically if a community had used economic development tools (tax credits, grants, loans, business assistance) to support child care was answered in the affirmative by 13% of respondents.

These trends indicate that along with the shift toward greater use of business incentives, we also are seeing increased economic development attention to investments in lifestyle-based incentives. Although lack of compatibility with 2004 prevents further comparison of these community development activities, these results suggest that although we are seeing increased offerings of traditional factor cost (tax-focused) business incentives, we are also seeing a broadening of economic development focus to new business targets focused on emerging sectors and more attention to community development investments associated with improving quality of life.

Conclusion

The 2009 survey shows that municipalities are responding to the recession by increasing their use of business incentives. It also shows, however, that policy learning regarding the importance of accountability and performance measurement was widely adopted, even by new business incentive users. Users of traditional tax-focused incentives can be differentiated from users of transaction-cost incentives focused on labor and planning because heavier users of the former tend to face more interjurisdictional competition, less opposition, and lower tax revenue. This suggests that reliance on more tax-focused business incentives to reduce factor costs of firms may not be the most effective economic development strategy. Whereas increased attention to accountability is

associated with increased offerings of business incentives, broader economic benefits are not. Our analysis shows that the increase in business incentive use was a response in part to economic challenges, but it does not show that business incentive use leads to better outcomes, nor does it explain what other factors contribute to the increase in accountability measures. Future research should address these subjects.

We have differentiated three types of business incentives: tax, labor, and planning. Only tax-focused incentives are driven by lower property tax revenues, only labor incentives show the broader participation that many have called for in business incentive policy, and only planning incentives respond to barriers that local governments can effectively address. Although labor and tax incentives are responses to unemployment, we cannot assess whether they have an effect on unemployment or on property tax revenue because post-2009 data are not yet available. American Community Survey estimates are 5-year rolling averages and the 2006-2010 average still includes the period prior to our survey. The Census of Governments only collects data every 5 years, and the 2012 data will not be available for several more years. Future research should address these outcome measures.

A balanced approach, which includes more business incentives that focus on transaction costs (such as regulatory assistance) and labor support, may have more impact than incentives focused on tax abatements. We find that a broader range of economic development targets appears to be gaining attention. Economic developers now use their tools to support quality of life and other social and physical infrastructure needed to promote the distinctiveness of the region and the locational stickiness of firms. Attention to business incentives that address the transaction costs of economic development, labor, and quality of life investments may offer a more balanced approach that could position localities better in an increasingly competitive and fiscally constrained local government environment.

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Notes

1. New users in 2009 could be returning users, so we checked the 1999 survey and found 143 matched users across all 3 years.

Of the 36 respondents who used business incentives in 2009 but not in 2004, half (19) used business incentives in 1999. If a similar proportion holds for the full 2004-2009 matched sample, then we might assume half of the “new” users are actually returning users and this may explain why we see greater use of accountability measures even among this “new” group.

2. There were 11 substitutions for property tax and six for unemployment in the full 2009 sample, four for property tax, and none for unemployment in the paired 2004-2009 sample.

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