PUBLIC-PRIVATE PARTNERSHIPS IN MICHIGAN DURING THE FINANCIAL CRISIS: THE UNIVERSITY'S ROLE

Roger E. HAMLIN
Cristina R. BENTON
James VAN RAVENSWAY

Roger E. HAMLIN (corresponding author)
Professor, School of Planning, Design and Construction, Michigan State University, East Lansing, MI, United States of America
Tel.: 001-517-355.6672
E-mail: hamlin@msu.edu

Cristina R. BENTON
PhD student, Department of Geography, Michigan State University, East Lansing, MI, United States of America

James VAN RAVENSWAY
Adjunct professor, School of Planning, Design and Construction, Michigan State University, East Lansing, MI, United States of America

Abstract

The following paper is the result of research conducted by the authors as a part of the Michigan State University, Institute for Public Policy and Social Research, Applied Public Policy Program. Specifically many findings were the result of a survey of economic development professionals conducted in 2009 in the middle of the economic/financial crisis of that year. The first section describes the changing paradigm of public-private partnerships. The second section discusses public-private partnerships and the financial crisis. Part three describes the methodology of the study and the fourth part gives results of the survey. The last section provides a summary and conclusion.

Keywords: public-private partnership, financial intermediaries, recession, urban redevelopment, public developer.

1. Public-private partnership paradigm shift

Extensive use of public-private partnerships to promote the physical redevelopment of declining built-up areas has been common for over three decades in the U.S. (Barnekov *et al*., 1989; Dewar, 1998; Greenstein and Sungu-Eryilmaz, 2004; Weaver and Dennert, 1987) and many parts of the world (Couch *et al*., 2003; Duffy, 1998; Fitzgerald and Green, 2002; Hamlin, 2002a; Fosler and Berger, 1982; Hamlin and Lyons, 1996; Holland, 1984; Waltzer and Jacobs, 1998).

Public-private partnerships are broadly defined as any positive public effort to induce the private actors to behave in ways that accomplish public goals while assisting them to pursue their own private goals (Giloth, 1992; Wassmer and Anderson, 2001). Private objectives might include business profit, personal income, ego, public relations, and legal compliance (Fisher and Peters, 1997). The best partnerships produce maximum mutual goal achievement at minimal cost to all parties (Austrian and Norton, 2002; Gunyou, 1990). In addition to formal, legal, joint ventures, public-private partnerships for urban redevelopment take the form of public incentives (Peters and Fisher, 2005) for private development projects (Anderson and Wasserman, 2000; 2002; Fisher and Peters, 1997; Friedman, 1994; Ledebur and Woodward, 1990; Waits and Heffernon, 1994). Incentives promise to reduce development costs or increase annual revenues so as to increase net operating income (NOI) per dollar of private investment (*i.e.* rate of return on total capital) (Pesky *et al*., 1997; White, 2002).

A gradual refinement of the concept of public-private partnerships over the decades as it relates to private real estate redevelopment has produced a paradigm of risk/reward balance. Private developers have a sense that tells them how much potential reward they might receive to be induced to take some amount of risk.

Many developers regard the redevelopment of built-up, urban areas to be more costly and more risky than the development of suburban greenfields. Not only do they expect redevelopment costs to be higher and potential revenues to be lower in older built-up cities, but they also sense a greater uncertainty in every variable of the NOI equation (Hamlin, 2002b). These perceptions are particularly strong in the U.S., where the price of suburban land is relatively inexpensive, where mobility is high, where land development regulation of fringe properties is relatively weak, and where the culture of the development community is particularly anti-government.

These perceptions are often based in reality. Extra inner-city development costs might include higher land prices; land assembly problems; brownfield mitigation; building demolition; complex site preparation; infrastructure updating; multi-level or underground parking facility construction; extra security; more stringent building, housing and zoning codes; elevated labor costs and higher taxes. Yet, sometimes, great opportunities are overlooked because of lack of experience with, or preconceived biases about doing projects in inner cities (Bartik and Bingham, 1997).

Many feel that for built-up communities in the U.S. to attract new, private redevelopment, their government must take action to level the playing field with greenfields (Bartik, 1990; 1991; Reese and Sands, 2006). Local governments must, by partnering with the developer, reduce their perceived risk and/or increase potential rewards until the ratio is better for redevelopment sites than for projects on competitive, undeveloped, suburban, greenfield sites (Murphy, 1998). Except for a few prime locations in the nation's largest cities, where the demand for property is great enough to overcome problems, this leveling process is not easy (Reese and Fasenfest, 1997; Reese and Sands, 2006).

Furthermore, there is the question of brownfields. Brownfield are generally defined as locations with site contamination (Donati *et al*., 2004; Hoffman and Ventresca, 1999). The U.S. government has maintained a forceful attitude concerning responsibility for and the need to clean up brownfields (Environmental Law Institute 1999; 2002). The U.S. government has generally identified the current owner of a property as legally responsible for contamination regardless of who actually did the contaminating (Rahm, 1998). Often, cleanup must be to current residential standards regardless of the future use of the property (Rosenbaum, 2008). Moreover, one may have to pay for cleanup even if the contaminating activity was legal at the time of the contaminated (Alberini *et al*., 2005; Andrews, 2006; Hula, 1999; Kaiser, 1998).

This policy has added cost, risk and uncertainty to the redevelopment process (Mazmanian and Morell, 1992). Developers might purchase properties that appear uncontaminated. Then, years later, discover that they face an expensive cleanup (U.S. Conference of Mayors, 1998; Vig and Kraft, 2006). Banks have been reluctant to lend money for the purchase of built-up properties (Bacot and O'Dell, 2006; Nakamura and Church, 2003). Lenders fear they might take over a property in foreclosure, and then discover they face a cleanup bill much greater than the outstanding loan balance (Meyer and Lyons, 2000; Hula, 2001). The Michigan brownfield program has attempted to soften liability issues, expand the definition of brownfields to include obsolete and deteriorated properties, and add significant incentive programs (Consumers Renaissance Redevelopment Corporation, 1998a; 1998b; Wernstedt *et. al*., 2006).

Financing of public-private partnership activities is always difficult. Even in the best of times, state and local governments have little general-fund cash for public-private partnerships (Bradbury *et al*., 1997; Landis, 1990). States and localities have had to innovate to attract investment. In fact, the trend toward use of partnership approaches became strong in an era when local governments were experiencing severe fiscal stress. The national government cut back on direct aid to localities in the early 1980s at the same time that a taxpayer revolt against the property tax reduced cities' ability to raise revenues using their primary source (Lyons and Hamlin, 2001). As necessity is the mother of invention, local governments became creative (Tennyson and White, 2000). When redevelopment of a site was important to a community, cities used theirs powers to pursue low-cost, low-risk actions that reduce the perceived risk of private redevelopment vis-à-vis the potential rewards (Smoke, 1997; Weber, 2002).

American cities have invented an array of tool they use to affect the private developers' risk/reward equation at little direct cost to tax payers. These include stimulating the financial intermediary process (Hamlin and Lyons, 2002; Kimball, 1997), and borrowing against future tax revenues (Lawrence and Stephenson, 1995). In the financial-intermediary realm, approaches have included: 1) selling tax-exempt revenue bonds that provide funding for project-related infrastructure or site preparation (Wiewel, 1991), 2) providing low-interest loans from revolving loan funds (Dunlap *et al.*, 1995), 3) offering partial loan guarantees (Berger and Udel, 1998; Bradshaw, 2002), and 4) institutionalizing loan insurance pools (Hamlin, 1998; Hamlin and Duma, 1999; Laughlin and Digirolamo, 1994; Osborne and Plasterik, 1997), to name a few (U.S. Treasury, 1998). Tax actions have included: 1) tax free zones (Brintnall and Green, 1988; Boarnet and Bogart, 1996; Dabney, 1991; Dowall, 1996; Erickson, 1992; Lambert and Coomes, 2001; McDonald, 1997; Peters and Fisher, 2002; Rubin, 1991; Wilder and Rubin, 1996), 2) tax abatements (Sands *et al.*, 2006; Sands and Zalmezak, 2000) tax credits, and tax increment financing (use of the tax revenue increment caused by the new project) (Anderson, 1990; Brueckner, 2001; Forgey, 1993). While all of these strategies carry risk for the local governments, they can greatly change the private developer's pro forma with little, immediate, apparent impact on the local taxpayer.

During the past 15 years, many state economic development policies, and state-enabled local programs (Reese and Malmer, 1994) have focused on tax increment financing (TIF) (Bartsch and Anderson, 1998; Johnson and Kriz, 2001; Johnson and Ma, 2001; Man, 2001). TIF can induce local private development at low perceived cost while providing substantial subsidy to the private development (Ritter and Oldfield, 1990). A local tax increment finance authority (TIFA) can borrow (issue a tax-exempt, revenue bond), improve a project area to induce real estate investment (infrastructure, parking, site preparation), and then pay back the bonds with the new property tax revenues generated by the induced development (the increment) (Healey and McCormick, 1999; Klacik and Nunn, 2001). In the U.S., where local functions are fragmented among several property tax-levying, local governments (*i.e.* school districts, transit authorities, cities and counties) tax increment finance authorities are often allowed to capture all local taxes generated by all development in the designated project area, including those revenues that would otherwise go to other types of local governments that also serve the designated area (Weber, 2003).

Some states' enabling laws (including Michigan's) now allow tax increment finance authorities to reimburse private developers for some of their costs for a fixed number of years (Michigan DEQ, 2008). The reimbursement comes from property tax revenues generated by the new, private, real estate redevelopment. This reimbursement effectively reduces the developers project cost (or increases revenues). The policy also incentivizes developer success and reduces the public sector's risk. The amount of the public subsidy the developer receives depends in part on the success of the development project, the increase in the value of the property, and therefore the property tax increment.

2. Public-private partnerships and the financial crisis

Clearly, during economic downturns, investor risks rise. Vacancies increase as demand for real estate space falls. One would naturally expect that redevelopment activity would decline, all other things being equal. Yet, since many governments engaging in public-private partnerships focus on risk mitigation, should not this paradigm of local economic stimulus cushion the decline in redevelopment activity during economic downturns, maybe even redirect it to older, built-up cities? Wouldn't, for example, a low interest, quasi-public, second-position loan or mezzanine loan or an equity injection from a sellable tax credit or a TIF reimbursement, reduce private lenders debt-to-equity ratio and therefore improve the opportunity for private debt financing. Wouldn't cost-reducing measures such as tax abatements, regulator relaxation or contributed infrastructure increase total return on capital and improve the attraction of equity capital? And, cannot states and localities use those tools that do not demand up-front funding from taxpayers more aggressively during downturns. And, wouldn't they want to become more aggressive since they need to make up for a loss of tax revenues from other sources?

Redevelopment projects often have a several-year gestation period and a several decade life. So, why would a three or four-quarter-long recession slow down the number of projects in the pipeline? Since the public sector is reducing some of the developer's costs and risks, shouldn't private real estate developers in public partnerships be in a better position to ride out downturns in national and regional economic activity?

Since U.S. public-private partnership strategies have become very risk/reward-based (and, perhaps, in the background, always were) the question arises, what happens to the public-private partnership system during a crisis in the nation's financial intermediary system. Does the extensive existence of a public-private partnership system, reduce risk and therefore mollify the impact of the financial crisis on urban redevelopment; does it exacerbate the decline in urban redevelopment; or, is the effect neutral?

This question is important to local governments. Because of their heavy reliance on the property tax, localities require continual development within their borders to produce the revenues needed to keep up with increased governmental costs. Built-up communities are dependent on the redevelopment of properties since they often have few greenfields within their boundaries. A decline in redevelopment activities, occurring at the same time that general property values are flat or declining, represents a double financial hit for such communities. Recessions might also be a time when the cost of government would rise faster than normal as localities face greater social welfare and security costs during high unemployment. Also, aid from state governments typically decline as state governments are forced to cut budgets.

The issue also becomes important nationally. Real estate development has typically been a leading industry in pulling the nation out of recessions. Low interest rates associated with slow economies have historically stimulated construction of housing, factories, commercial facilities and office buildings, helping to regenerate employment and, in turn, general economic activity. In the post-World War II era in the U.S. much of that construction has taken the form of suburban homes, strip shopping centers, malls and industrial parks in greenfields. However, with oil prices experiencing a secular incline and an array of other sustainability issues pressing the nation, depending on suburban sprawl to turn the economic corner after recessions may become less and less of an option in the future.

It is impossible to fully know the answer to the questions presented here. Development data is not yet available for the period of the study. The experiment cannot be run multiple times. Yet, the 2008-9 international financial-intermediary crisis represents a unique opportunity to investigate the effects of recessions on public-private partnerships. Extensive input from state and local officials at a critical point in the 2008-9 international financial-intermediary crisis might shed light on the subject. In fact, the attitudes of local functionaries might be both a cause and an indicator of the answers to these questions presented here.

Therefore, the purpose of this study is to determine the attitudes and perceptions of local officials about the effects of the 2008-9 crisis on the use of public-private partnerships for physical, urban redevelopment. The hypothesis is that the risk-mitigating nature of local public-private partnership incentive programs in the U.S. works to mollify the effects of the national/international economic decline on urban redevelopment. Because the issue is complicated, it has many component questions. The first component question is, do risk mitigating partnerships, if continually implemented actually mollify economic effects? In other words, 1) do governmental equity positions in real estate projects during recessions promote project development by reducing the amount of capital that the developer needs to raise; 2) do second-position loan programs, loan guarantees, and loan insurance reduce lender risk and improve mortgage lending at reasonable terms for a redevelopment project during recessions? and, 3) do tax increment financing with developer reimbursement, property tax abatements, tax deductions, and tax credits reduce the cost of the project and/or increase annual NOI sufficiently to mollify the effects of economic downturns? Furthermore, do all of these forms of partnership and incentive increase the competitive advantage of built-up older cities vis-à-vis greenfields during recessions and enable developers to carry a project through difficult economic times more easily?

A second component question has to do with the attitudes of elected officials, the general public and municipality's professional staff. In other words, do economic downturns change the willingness of the public sector to support entrepreneurial approaches to urban redevelopment including partnership arrangements and incentives? Do communities become more aggressive in their efforts to make up for economic problems, or do they retreat and retrench because of their own financial stresses? This study focuses on the attitudes of local officials as described below.

3. Survey of local officials

The study is based primarily on a survey of 226 local government officials in the state of Michigan, USA, during May and June of 2009. This is a period in which the international financial-intermediary panic that began in September 2008 had somewhat abated, but the effects of the financial crisis were still increasingly felt on main-street. During the two-week administration of this survey, for example, the United States continued to experience double digit and rising unemployment (CNN.com, 2009). Europe registered the largest amount of unemployment in 10 years (dailymarkets.com, 2009; bloomberg.com, 2009); General Motors, and Chrysler Corporation with their headquarters in Michigan, were in bankruptcy, the Bank of England held the interest rate to 1/2 of one percent (Guardian.co.uk, 2009), and Japan experienced the largest reduction in exports in 10 years (Finfacts, 2009).

The survey asked a variety of questions about each community's public-private partnership experience. We asked about the number of projects, the size of projects, types of projects, partnership strategies, politician and local citizen support for partnership strategies, and evaluation methods. In each case we also asked how the economic/ financial crisis was affecting their answer to the question based on their situation. In other words, was the crisis affecting the number of projects, changing the tools they use, altering their support etc? The exact wording of relevant questions is discussed in the Results section.

3.1. Choice of survey population

Michigan was a good place to test the hypothesis for both positive and negative reasons. On the one hand, the economic decline was more severe in Michigan because of the impact on the U.S. auto industry. The Michigan unemployment rate was the highest in the nation, topping 15 per cent in June 2009 (U.S. Labor Dept., 2009). On the other hand, partly because of the years of economic stagnation, Michigan has had one of the most aggressive and innovative systems of public-private partnerships in the U.S (MEDC, 2000).

Michigan was the first state to develop and institutionalize the capital access (CAP) loan insurance pooling concept (Hamlin, 1999; U.S. Treasury Dept., 1998) and was the first to initiate a new approach to brownfield redevelopment (Hula, 2001; 2002; 2003a). The Michigan brownfield program was one of the first to institute a baseline environmental assessment that limits liability risk. And, Michigan was one of the first to allow differential cleanup standards based on the future use of the property instead of demanding complete cleanup to residential standards (Alberini *et al.*, 2005; Lester and Lombard, 1990). Contaminants left on the site can be capped if the property owner files a 'due care' plan to ensure that contaminants never leach out of the capped area.

These changes to the brownfield program greatly reduced developers' fear of liability risk and reduced cleanup costs for inner-city redevelopment (Kummler and Card, 1999). Michigan was also the first in the U.S. to broaden the definition of brownfield to include deteriorated and obsolete properties (Hula, 2002; Davis and Margolis, 1997) so as to include much of the redevelopment arena within the brownfield rubric.

Michigan was also one of the first states to establish BIDCOs (Business and Industrial Development Corporations). These private companies receive matching capital injections from both the public and private sector and are chartered to provide mezzanine debt financing to small businesses. These loans may include royalty and warrant equity kickers to compensate for risk and may also provide consulting to businesses that receive loans in ways not afforded to banks (Hamlin and Lyons, 2002).

Michigan has also been aggressive in the use of tax increment financing (TIF). Michigan applies TIF policies to a variety of other local economic development initiatives including downtown development authorities, local development finance authorities, brownfield redevelopment authorities as well as local tax increment finance authorities (Lynch *et al.*, 1996). These authorities may use TIF revenues to reimburse developers, build infrastructure, buy and prepare sites, provide loans, offer second position loans, guarantee loans, float and payoff bonds and insure bonds, to name a few. TIF financing may also be used in conjunction with various kinds of tax credits, state loans and grants, and federal programs (Anderson, 1990; Brueckner, 2001; Davis, 1989; Forgey, 1993; Grueling, 1987).

3.2. Nature of survey

The 226 surveyed local governments in Michigan were based on a random sample. They should accurately reflect the state's population of local governments for a variety of reasons. First, the surveyed group included communities containing over 95% of the state's population. Second, the surveyed local governments were spread across the state with respondents by regions reflecting the state's regional population distribution. Third, they also represented communities of all population sizes. The distribution of respondent communities reflects the distribution by population of the state's local governments. Respondents included the largest city, Detroit, and the county in which it is located. Detroit is the central city of a metropolitan region of over 5 million people. Respondents also included all of the medium sized cities of the state, and a wide variety of small communities with populations as low as 1,000. Fourth, the 226 respondents comprise all kinds of local governments with public-private partnership powers including cities, villages, counties, charter townships, and statutory townships. Charter townships are typically suburban townships with semi-city powers. Statutory townships are less urban and have fewer powers. Villages are municipal corporations for small urban areas inside townships. Responding villages ranged from 19,000 in population to 1,000 in population.

The individuals responding to the survey were generally employees of the local governments or their authorities, or elected officials who also sat on boards of authorities that dealt with planning and economic development. Michigan is well experienced and well-endowed with public-private partnership laws and governmental structures. All of the local governments described above may, in certain circumstances, establish downtown development authorities, local development finance authorities, brownfield redevelopment authorities, port authorities, foreign trade zones, housing authorities, and economic development corporations. Nearly all of the respondents were staff to or board members of one of these local quasi-public organizations.

4. Survey results

When asked if they participated in public-private partnerships, 89.4% indicated that they did. Local governments participating in partnerships included all sizes and types. The first indication of the effects of the global financial crisis is the respondents' answers to the second question, 'Do you think that the current economic/financial crisis is affecting the number of projects that will be completed in the next five years?' Five years was chosen so as to investigate perceptions of significant changes in activity, not just temporary delays. Ninety-three percent of those communities that said they participated in public-private partnerships indicated that the current economic/financial crisis would affect the number of projects in their community.

A follow-up research question was, 'What specifically would cause the number of projects to change?' We asked them in an open-ended question to 'Please explain how the current economic/financial crisis will or will not affect the number of projects completed [in your community] in the next five years'. Among those who estimated that the number of public-private partnership projects would be affected, 93 percent said the number of projects would decrease. The remaining seven percent did not say that they expected the number of projects to increase. Rather, they indicated the hope that the current situation should drive developers to look for public partners and/or increase the level of collaboration between sectors. Respondents saw this as a positive since many private real estate developers in the U.S. have a low opinion of local governments and governmental functionaries, and are not inclined to collaborate. In other words, these respondents (7 percent) were expressing the hope that financial necessity might push potential collaborators together and help them overcome their differences. Some of these comments were as follows:

1) 'The current situation is acting as a driver for our community to be more proactive than it has ever been, and we have had very good partnerships in the past'.

2) 'It will increase the number [of partnerships] because of the financial constraints facing both cities and organizations working to accomplish development activities'.

3) 'With local governments struggling/hemorrhaging in Michigan, it's only a matter of time before more and more public/private partnerships must be made to preserve city services'.

4) '[The financial crisis] Should drive increased collaborations'.

Looking further at the respondents' written elaborations, about 2/3 of those who felt that the number of project will decline, put the blame for the reduced number of projects on the private side. Among those who predicted a decrease in the number of public-private partnership projects 47 percent pinpointed to a lack of private capital as the reason (Handcock and Weston, 1998).

Some indicative comments were as follows:

1) 'Frozen credit markets have affected the purchase and redevelopment of one large vacant industrial complex [in our community] and the expansion of a destination resort. Both had associated public infrastructure projects, job creation and significant amounts of private investment'.

2) 'Banks are not willing to lend money, leading developers to pull back, and some projects are at risk as a result'.

3) 'I am hearing that there are investors ready to move projects, but lack of financing is not allowing for the project to move forward. Additionally, the current situation might look far more like our 'normal' recessions if it were not for the credit crunch'.

4) 'Mixed-use residential projects can't get funding due to the mortgage market'.

5) 'Financing is too tight for most companies to qualify for expansion and growth projects'.

6) 'Well established companies are going out of business and cannot receive financing assistance to help survive this economic downturn. Their accounts receivables are longer, which affects their cash flow, which ultimately affects their ability to pay the bills, make payroll etc. and these companies cannot even get a line of credit from their bank... and they eventually go out of business. Companies that have been in business for 50 years in our region are going under... so this crisis continues. We will not be able to work on potential expansion projects, due to many companies going under. I think proposed development projects in our region, that require a certain pre-sale commitment, will not break ground or get off the ground, because in order for the developer to obtain financing they need tenant commitments and retail/office tenants are not committing to expansion activity during this time'.

7) 'Financing of projects is currently non-existent. Until the credit markets stabilize it will be difficult to find capital to finance any project'.

8) 'Financing/credit is unattainable'.

Within the group that said that private capital was the problem, 26 percent focused primarily on debt capital and credit market constraints, as illustrated above. An additional thirteen percent mentioned only equity capital problems. The majority 62 percent mentioned both private debt and equity capital difficulties and/or the general reluctance of equity investors to invest during the difficult economy. The following comments are indicative of the difficulties associated with multiple sources of private capital.

1) 'We are a county, economic-development program. Many project developers, business owners and building owners have reported to us that commercial lending by banks is severely limited at this time and private investors are scarce to non-existent for many projects. The drop in the housing market has hurt the market for much needed additional housing in our downtowns and thus new housing and mixed-use development plans are on hold'.

2) 'The ability of the industrial sector to expand, relocate, or start up is hampered by their inability to secure financing or to attract development partners. The financial crisis is making it very difficult for new ideas and existing companies to get financing, to get started or to expand'.

Returning to the entire group who are expecting a decrease in public-private partnership activity, only 11 percent put the blame entirely on public-sector funding or public reluctance and about 21 percent mentioned in their comment a lack of both public and private sources of finance. Another 11 percent of those predicting a decline in activity indicated a weak economy in general without specific reference to the ability to raise private capital.

It seems evident from the survey results, particularly from these open-ended comments, that nearly all professionals involved in planning and economic development anticipate a decrease in activity. From their point of view, the stagnation is not caused by a lack of public funding or willingness of the public sector to engage in development partnerships during hard times. Rather, more importantly, they expect the number of projects to be reduced for a lack of private financing, and within that category, they perceived it to be a lack of lending on the part of banks and other lenders as well as a lack of outside equity capital.

Although the survey represents perceptions of municipal officials, other factors indicate that what they expressed by might be true in Michigan. Many local governments are being hit hard in their general fund. But, few local governments spend general fund dollars on economic development partnerships. As described earlier, they use other means that do not represent a direct cost to the taxpayer. And, the more development they stimulate, the more tax revenues they can generate to help the general fund. The use of developer-reimbursing tax increment financing described previously implies that the local government's ability to participate is always there. Furthermore, the state stands ready to promote good projects with tax credits, and some grants and loans.

To go beyond the issue of project numbers, we also asked the respondents which strategies, programs and incentives they use to promote the kind of development they want. They were asked to choose their top two from a list of partnership strategies. Sixty-four percent of the responding communities typically use local tax increment financing, the largest single category. (Thirty percent of respondents (including some overlap) also use a form of TIF that allows the capture of state school taxes but must be approved by the state Department of Environmental Quality (DEQ) or the Michigan Economic Growth Authority (MEGA). In total, 70 percent of communities were using some form of TIF. About 52 percent use various kinds of tax incentives such as tax abatements, which only offer abatements on new construction or expansion. Other methods were selected much less than these two.

After indicating which types of partnership activities they used, survey respondents were asked whether the current economic/financial crisis was changing their approach. They were given the choice of 'yes, fundamentally', 'yes, temporarily', or 'no'.

Table 1: Response to survey question
'Will your public-private partnership strategy change as a result of the economic/financial crisis?'

	Valid Percent	Cumulative Percent
Yes, fundamentally	27.0	27.0
Yes, temporarily	33.7	60.7
No	39.3	100.0
Total	100.0	

Source: Survey conducted by the Survey Research Center, Institute for Public Policy and Social Research, Michigan State University, East Lansing, Michigan, May-June, 2009.

As seen in Table 1, over 60 percent indicated that the financial crisis was having an effect on the mix of partnership tools they would use. Twenty-seven percent felt it would be a fundamental change that would affect the use of public-private partnerships into the future. Another 33.7 percent felt there would be at least a temporary change. The remaining 39.3 percent anticipated no change in the partnership methods they would try to use because of the financial crisis.

They were asked, as an open-ended question, 'Please explain how the current economic/financial crisis is or is not affecting the type of incentives their community uses?' We analyzed these responses by first dividing them by their answer to whether there was an effect. Those who said that there would be a fundamental change in the use of public-private partnerships listed a variety of reasons. The largest group referred to the lack of public funding for their side of the partnership. This group included those who bemoaned the cut-back in grants and revenue sharing from higher units of governments as well as those who felt that their community had no tax revenues to allocate to infrastructure or to fund partnerships in other ways.

Despite the heavy reliance on TIF in Michigan, only three mentioned a fundamental change in TIF and talked primarily about the lack of revenues from the tax increment or their reluctance to use TIF because it might take money away from basic services. Only one respondent mentioned tax abatements, indicating that their community would be reluctant to grant tax abatements during this time of fiscal stress, even though the abatement is only on new development. Two mentioned that they would make fundamental changes in their use of their revolving loan fund, tightening criteria and standards and changing types of loans.

In the group that indicated a fundamental change in their use of public-private partnerships, only four communities said that they were embarking on an effort to keep things going by looking for innovative ways to engage in partnerships and provide incentives. They did not mention specific new directions.

Among those who expressed that there would only be a temporary change in their use of public-private partnerships most of the comments simply bemoaned the lack of funding of all kinds, including private capital, public revenue sharing, local tax revenues or TIF increment revenues. Rather than indicating that their local government would become more aggressive or innovative, several suggested that their community would be more conservative or careful in the use of TIF, tax abatements, revolving loan funds etc. The respondents in this group seemed resigned to a significant but temporary downturn or cessation in public-private partnership activity. Nobody suggested a major change in direction or attempt to use innovative schemes or be more aggressive in the use of governmental powers. This group saw any change as temporary, seemed to pursue a strategy of keeping their head down until the difficulties passed. Sample comments were as follows:

> 1) '[The] Community has a revolving loan fund but is unwilling to use it in case it needs the funds to backstop brownfield bonds as a result of reduced investment at brownfield sites where TIF is used to pay p[rincipal] & i[nterest] on bonds'.
>
> 2) 'One community I work with has a [downtown development authority] DDA that is facing short-term cash-flow concerns. These concerns will be remembered long after this recession and may make the leaders in the community a little less willing to take risk on these types of ventures. Similarly, another community has done some significant special assessment district (SAD) financing. Now they are seeing their residents with financial issues as a result of the SAD's. This may make the community leaders more reluctant to use SAD financing'.

3) 'Limited funding and priorities must shift to essential service'.

4) 'The city is questioning granting incentives when they are running out of money to fund police and fire'.

5) 'Less money coming into municipalities' means less money for incentives'.

Among those who claim that no change in their use of public-private partnership strategies has been caused by the economic/financial crisis, comments break into about three equal groups: 1) those who are continuing to use the same array of tools even though few private prospects have come forward during the slowdown; 2) those that purport to becoming more aggressive even though their 'tool box' is the same; and 3) those who claim that they have always approached incentives judiciously and cautiously and therefore do not need to change their approach.

Summarizing this part of the survey, little in the responses to the questions concerning the choice of tools and methods by communities indicates that public-private partnerships are working to soften the effects of the current economic/financial crisis on the level of urban redevelopment activity. Over 60 percent said that the situation was causing fundamental or temporary changes in their community's behavior and activities in this area. Yet, less than five percent indicated that activity would increase. About five percent said that they would try to be more innovative or entrepreneurial, but didn't indicate how. Others mentioned that they could not do much about a great reduction in private activity and that they or their elected leaders were becoming more cautious in the use of specific tools.

The next set of questions in the survey relevant to this study concerns whether elected officials generally support public/private partnerships and whether and/or how that support has changed because of the financial crisis. The question was as follows: 'How supportive are your elected officials in the use of public-private partnership techniques? Choices were: 1) They are always very supportive, 2) They are usually supportive for good projects, 3) They are supportive about 50% of the time, depending on the situation, 4) Elected officials scrutinize the use of public-private partnerships very carefully, 5) Elected officials are suspicious of public-private partnership techniques and are seldom supportive, 6) Elected officials never support the use of partnership or incentive techniques such as those discussed in this survey'. Table 2 indicates the frequency of each choice.

Table 2: Response to survey question
'How supportive are your elected officials in the use of public-private partnership techniques?'

	Valid Percent	Cumulative Percent
They are always very supportive	20.8	20.8
They are usually supportive for good projects	51.4	72.1
They are supportive about 50 percent of the time depending on the situation	7.7	79.8
Elected officials scrutinize the use of public-private partnerships very carefully	14.8	94.5
Elected officials are suspicious of public-private partnership techniques and are seldom supportive	5.5	100.0
Total	100.0	

Source: Survey conducted by the Survey Research Center, Institute for Public Policy and Social Research, Michigan State University, East Lansing, Michigan, May-June, 2009

As seen in the table, most local professionals feel that their elected officials are usually supportive of their entrepreneurial efforts, and nearly 80 percent are supportive more than half the time. As mentioned early in the paper, Michigan has a long history of aggressive economic development because of its struggles in the post-industrial age. In the follow-up question to the previous question nearly 70 percent indicated that the economic/financial crisis did not change elected official support, one-way or the other.

Among the 30 percent that indicated that elected official support has changed because of the economic/financial crisis, most responded to our open-ended question concerning how or why they think the support has changed. We analyzed the responses to the open-ended question. Nearly 40 percent (12 percent of the total survey population) felt that local officials had become more supportive and about 60 percent said less supportive. The 'less supportive' responses are as expected. Communities feel they have less money to promote these kinds of projects; they see the projects as more risky; and, they feel citizens are less patient with programs that incentivize developers when residents are seeing a reduction in basic services.

On the other hand those expressing increased support for public-private partnerships emphasize greater recognition of the need to promote development. Some responses are as follows:

1) 'I think the current crisis has enabled the non-supporters of a pro-business policy to relax their objections'.

2) 'The situation (…) has placed an emphasis on the Council for the need of the City to be aggressive and pro-active'.

3) 'The Council is looking for creative ways, that don't take away money from the general fund in order to provide an incentive'.

The results hint at one trend that cannot be stated with statistical significance. The crisis tends to magnify previously held attitudes. Elected officials that have been supportive of public-private partnership programs in the past are more likely to respond to the crisis with a desire to become more aggressive. They want to counteract the effects of the downturn on tax base and local economic activity. Those elected officials that have been suspicious of public-private partnerships have become even more conservative on that issue.

5. Policy implications and the university's role

Public-private partnership strategies of local communities to promote the physical redevelopment of built-up areas in the U.S. have focused on leveling the playing field with greenfields with respect to the risk/reward ratio. They do this by working with the private sector to reduce perceived risk and increase projected NOI through cost reductions, revenue enhancements and market stabilization. A variety of tools and organizational structures have been refined over the decades that, at least theoretically, allow localities to engage in partnerships without a direct cost to the general-fund taxpayer and with minimal risk. These strategies have placed emphasis on private market forces to determine which projects have the greatest potential for success (Hamlin and Lyons, 1993).

During recessions private business perceptions of their risk/reward ratios take a significant turn for the worst. Costs increase, revenues decline and all parameters of the net-operating-income (NOI) equation become less certain. Theoretically, public-private partnerships might cushion downturns in activity by reducing impacts on costs and revenues and by mitigating perceived risks. So, the question arises, what happens to public-private partnership activities during severe economic downturns? Do such partnerships mollify changes in the level of activity, do they have no significant effect, or might some aspect of their existence magnify the problems of the larger economy on urban redevelopment endeavors?

During the period starting in September of 2008, the world financial-intermediary system was shaken by the accelerating failure of major components of that system, including some of the world's largest investment banks, commercial banks, stock and bond markets, and hedge funds. By December of 2008 it was clear that the problems of the financial sector were having severe implications for the general economy. By June of 2009, some of the panic of the financial crisis had diminished but 'main street' economic trends were still in a downward spiral.

This period represented a good time to pursue the question of the reciprocal effects of downturns on public-private partnership strategies. While it was too early at the time of this writing to obtain exact activity data, asking municipal officials what they perceive to be happening in the middle of the economic/financial crisis provides a unique perspective on the question at hand.

Michigan represents a good case in which to pursue these questions. Partly because Michigan has experienced secular deindustrialization since the 1983 recession, Michigan has one of the more comprehensive sets of partnership strategies, and citizens have become accustomed to their use. Michigan state law enables localities, at their discretion to engage in a wide variety of partnership approaches. At the same time, Michigan was one of the most severely affected places in the industrialized world by the economic/financial crisis. During mid-2009 Michigan had the highest unemployment rate in the U.S. (U.S. Labor Dept., 2009), and as home of the U.S. auto industry, experienced some of the largest and highest levels of bankruptcies.

The methodology of this study was to survey local government officials from every kind of local government throughout Michigan. The survey asked them how and how much public-private partnership activity they had engaged in during the past and what changes they perceived were resulting from the economic/financial crisis.

The survey confirmed that a very high percentage of communities have historically engaged in public-private partnership activities and established that a high percentage of local elected officials supported those efforts. The study also showed that a very high percentage (approximately 95 percent of those communities that participated in public-private partnerships) were witnessing or expected a decline in such activities.

Only about 5 percent indicated a hope that economic need would promote positive collaboration, without offering evidence of how or how much increase might occur.

The overwhelming reason for the decline, in the view of interviewees was a drying up of private capital, particularly debt capital, for partnership projects (Hancock and Weston, 1998). Most respondents indicated that local governments' willingness to engage in such partnerships had not declined. Some expressed a need to be more aggressive during economic declines.

Among the smaller group that suggested some reluctance on the public side, the concern was evenly split between: 1) lack of public funding, and 2) reduced elected official support for partnership approaches. Within the latter, the most common political hesitation was that private business should not receive public subsidies or incentives at a time when budget constraints forced local citizens to forgo basic services (whether a direct connection existed between general-fund, budget stress and partnership arrangements or not).

These data suggest the conclusion that, in an economic slump of the type and depth of the 2008-9 recession in a place like Michigan, public-private partnerships did NOT mollify the economic decline. Those partnership arrangements may reduce developer risk, reduce development costs, and stabilize future revenues to improve developers' risk/reward calculus. Yet, most partnership arrangements also depend heavily on market forces. Rather than providing direct financing, for example, partnership arrangements facilitate private developer acquisition of private debt capital, with the private lending institution making the ultimate go-no-go loan decision (Kimball, 1997).

In the case of TIF reimbursement to a developer for certain project costs, the amount of reimbursement depends on the success of the project. This reduces public risk but indirectly makes public participation dependent on the success of the private development. The developer then factors the projected TIF reimbursements into the pro forma he/she takes to potential lenders (Huddelston, 1982). Yet, if credit markets seize up and private risk capital is in hiding, the mechanisms described in this paragraph do little to revive redevelopment projects.

Not only do public-private partnership programs not mollify downturns, this survey may indicate that the prevalence of risk/reward-based, market-based, partnership strategies that rely almost entirely on inducing private debt and equity capital to flow into projects, may in fact exacerbate the decline in real estate development and redevelopment. These strategies become caught up in the forces of the economic cycle.

Across the spectrum of communities included in the survey, respondents reported that new projects were not able to find financing, future projects were not appearing, and even ongoing projects were often shutting down. The survey results offered no evidence that partnership incentives were stimulating new projects at the time of the survey. While causes might be temporary, the effects might be more permanent as the pipeline of new projects and the infrastructure of small businesses are severely damaged.

The replication of these results to other places and situations might be limited. Both the timing of the survey and the Michigan case were chosen to take a snap shot of a fairly unique point in time and space. The study was organized to capture an event that cannot often be studied. Also, the partnership paradigm prevalent in U.S. cities and particularly in Michigan, relying heavily on market forces and private risk/reward perceptions, is not the case in every country. Yet, many places experienced similar situations across the U.S. and around the world. And, the results of the study point to important policy implications related to the use of public-private partnerships worldwide.

One policy implication is that the set of strategies used to engage the private sector must be flexible enough to bypass traditional sources of debt capital when necessary. Michigan has a fairly extensive and flexible toolbox, but one component is missing. The missing link is a well-established and formalized system of debt capital that does not depend on banks or traditional lender participation.

Nearly all urban, redevelopment projects and small industrial ventures are considered medium to high risk, even in the best of times (Houstoun, 1996). Banks, as conservative guardians of savers' deposits, and as collateral-oriented lenders, are always reluctant to take on these kinds of loans. While very-high risk, venture capital is well established in some areas of the world, the mid-range of the risk spectrum, including everything from 'bankable' to venture capital is nearly always underserved.

During the kind of economic downturn studied here, nearly all development and redevelopment projects fall out of the bankable range, as project risks rise and lender risk-taking propensity falls. While cash looking for good investment opportunities may have existed during June of 2009, the investors of that cash required substantially more reward for their investment than normal. The question is how to provide that reward to potential investors while 1) maintaining the viability of the project pro forma and 2) not adding to broader systemic risk in society.

Higher interest-rate loans cannot in themselves do the trick because the kind of interest rate that would have been necessary in June of 2009 would have added exorbitantly to a project's annual debt service. A second approach is to fully institutionalize a system of equity and revenue kickers. That is, institutionalize organizations that make loans with equity features such as warrants or revenue-based royalties. These kickers would pay high-risk lenders additional rewards for financing and sticking with projects with long-term success.

This kind of mezzanine-risk financing exists on an ad hoc basis but is expensive to find and negotiate project by project. Some states engage to a limited extent in this kind of public-private mezzanine financing through the institutionalization of Business and Industrial Development Corporations (BIDCOs). These private industrial development banks are capitalized through a matching combination of government and private debt and equity capital. They are then authorized to engage in high-to-medium-risk debt financing with equity features and often without traditional lender participation. However, most state authorized BIDCOs are too small to dent the problem described in this paper and are restricted in the kinds of industries they may serve. Michigan had one of the nation's first BIDCO program but stopped supporting it over ten years ago. At the time of the survey, Michigan was attempting to reconstitute its BIDCO program.

A flexible and comprehensive state development bank modeled after Business and Industrial Development Corporations could be a partial solution to the problem pointed out by this survey. It would raise funds through state bond issues and could support bank loans, or bypass banks when necessary. It could also lend money to or inject equity into local quasi-public development banks. And, both the state and local development banks could make loans with equity or royalty features or insurance pool provisions that would compensate for the higher risk involved.

In short, one missing link is public-private partnership middle-risk financing that can bypass traditional banking when necessary to keep the pipeline of projects and activities moving when traditional credit markets fail as they did in Japan during the 1990's, as they did in Korea after 1997 and as did in many parts of the world during the 2008-9 economic/financial crisis.

A second issue has to do with public economic developer skills and attitudes in administering public-private partnerships. Most local economic developers were content to allow projects to stop and did not seek new projects when they perceived that private bank financing was no longer available. They were unable to shift strategies in the new situation. They did not understand or were unable to respond to the opportunities offered by extreme low interest rates and declining property values. They did not recognize the high cash position of corporations as an opportunity. Since the tools they had been using no longer worked, many were content to wait out the downturn. Some evidence suggests that even today, local economic developers are waiting out the period of economic stagnation and reluctant capital, and are not looking for new methods of capital access, risk reduction and reward enhancement.

So, how skilled are local economic developers in administering public-private partnerships? The June 2009 survey also delved into this issue. Public-private partnerships are increasingly being structured as business deals as opposed to simply government subsidies. Correspondingly, the role of economic development practitioners is changing, and practitioners need to expand their skill sets to reflect the changing methods if they hope to be effective. In the survey respondents were asked if they believed it was important to have knowledge of the business and real estate fields to be effective in their role as public developer. A significant 74 percent of the respondents indicated that they felt it is very important to have the knowledge of the businesses they are supporting. This is a positive attitudinal shift away from the more regulatory and bureaucratic attitudes that were more prevalent in previous years.

Another question measured the amount of skill or knowledge the respondents (self-) reported that they actually had. Nearly half of the respondent public economic developers indicated they lack sufficient training – or none at all – in the areas of business and real estate development. The analysis of the responses by size and location (*i.e.* less than 50,000 population) of where respondents practice shows that 78 percent of those who believe they lack significant training or knowledge are from smaller and more rural agencies. These results are alarming. They are self-reported responses, but the fact that they are self-reported juxtaposed with the importance economic development professionals placed on knowledge (previous question) might increase the concern. Economic development professionals are admitting that they lack skills that they consider to be highly important for their job. Further, the magnitude of these numbers may offer some evidence that deficient skills may in some way be contributing to the decline in the use of public-private partnerships during a severe economic recession.

One policy implication is that midcareer training is extremely important to insure that public-private partnerships are not exacerbating economic downturns. Community-oriented universities are uniquely situated to provide this mid-career training. They can pull in the practitioner expertise needed to enhance the research-based knowledge and an understanding of best practices around the world. They can also offer graduate credit and continuing education credit needed by many professionals.

6. Conclusions

During the economic crisis caused by the collapse of the financial intermediary system in 2008-9 real estate development utilizing public-private partnerships declined. The use of these strategies by some communities did not seem to mollify the decline. Some evidence suggests that public-private partnership strategies may have exacerbated the decline in some areas. Most survey respondents blamed this on the lack of financial capital. Most public-private partnership endeavors depend heavily on stimulating or enhancing traditional sources of capital. But, when those sources seize up, those strategies are not helpful. On the other hand, while certainly a lack of private capital can be extremely difficult to overcome, alternative and creative methods might help to find and/or apply various capital generating tools. Few communities changed strategies to respond to the crisis. For example, tax increment dollars generated by a project can temporarily replace the lack of private capital through some form of short-term mezzanine financing. Recognizing when and how to use public incentive dollars to move a project forward – even in difficult economic times – is essential for the success of the public developer. This recognition comes from having a good grasp of business or real estate process.

Nearly half of public developers in Michigan self-reported that they lacked adequate understanding of the businesses they are working with. Universities may play a role in providing greater midcareer training for public sector employees managing public-private partnership projects in local communities.

References:

1. Alberini, A., Longo, A., Tonin, S., Trombetta, F. and Turvani, M., 'The Role of Liability, Regulation and Economic Incentives in Brownfield Remediation and Redevelopment: Evidence from Surveys of Developers', 2005, *Regional Science and Urban Economics*, vol. 35, no. 4, pp. 327-351.
2. Anderson, J.E., 'Tax Increment Financing: Municipal Adoption and Growth', 1990, *National Tax Journal*, vol. 43, no. 2, pp. 155-163.

3. Anderson, J.E. and Wassmer, R.W., *Bidding for Business*, Kalamazoo, MI: Upjohn Institute for Employment Research, 2000.
4. Anderson, J.E. and Wassmer, R.W., *Bidding for Business: The Efficacy of Local Economic Development Incentives in a Metropolitan Area*, Kalamazoo, MI: Upjohn Institute for Employment Research, 2002.
5. Andrews, R.N.L., *Managing the Environment, Managing Ourselves: A History of American Environmental Policy*, 2nd edition, New Haven: Yale University Press, 2006.
6. Austrian, Z. and Norton, J., 'What Works in Economic Development Practice: An Evaluation of Tools', A report prepared for the John S. and James L. Knight Foundation, August 2002.
7. Bacot, H. and O'Dell, C., 'Establishing Indicators to Evaluate Brownfield Redevelopment', 2006, *Economic Development Quarterly*, vol. 20, no. 2, pp. 142-161.
8. Barnekov, T., Boyle, R. and Rich, D., *Privatism and Urban Policy in Britain and the United States*, Oxford: Oxford University Press, 1989.
9. Bartik, T.J., 'The Market Failure Approach to Regional Economic Development Policy', 1990, *Economic Development Quarterly*, vol. 4, no. 4, pp. 361-370.
10. Bartik, T.J., 'Who Benefits from State and Local Economic Development Policies?' Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 1991.
11. Bartik, T.J., and Bingham, R.D., 'Can Economic Development Programs Be Evaluated?', in Bingham, R.D. and Mier, R. (eds.), *Dilemmas of Urban Economic Development: Issues in Theory and Practice*, Newbury Park, CA: Sage Publications, 1997, pp. 246-277.
12. Bartsch, C., and Anderson, C., *Matrix of Brownfield Programs by State*, Washington, D.C.: Northeast-Midwest Institute, 1998.
13. Berger, A.N. and Udel, G.F., 'The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle', 1998, *Journal of Banking and Finance,* vol. 22, no. 6-8, pp. 613-673.
14. Bloomberg.com, 'Europe Registers the Largest Unemployment in 10 Years', July 31 2009, [Online] available at http://www.bloomberg.com/apps/news?pid=20601085&sid=agI7pjSBOfOE&refer=europe, accessed on December 10, 2012.
15. Boarnet, M. and Bogart, W.T., 'Enterprise Zones and Employment: Evidence from New Jersey', 1996, *Journal of Urban Economics*, vol. 40, no. 2, pp. 198-215.
16. Bradbury, K.L., Kodrzycki, Y.K. and Tannenwald, R., 'The Effects of State and Local Public Policies on Economic Development: An Overview', 1997, *New England Economic Review*, March/April, pp. 1-12.
17. Bradshaw, T.K., 'The Contribution of Small Business Loan Guarantees to Economic Development', 2002, *Economic Development Quarterly*, vol. 16, no. 4, pp. 360-369.
18. Brintnall, M., and Green, R.E., 'Comparing State Enterprise Zone Programs: Variations in Structure and Coverage', 1988, *Economic Development Quarterly*, vol. 2, no. 1, pp. 50–68.
19. Bruekner, J.K., 'Tax Increment Financing: A Theoretical Inquiry', 2001, *Journal of Public Economics*, vol. 81, no. 2, pp. 321-343.
20. CNN.com, '13 Cities Post Unemployment above 15%', June 3rd 2009 [Online] available at http://money.cnn.com/2009/06/03/news/economy/metropolitan_area_unemployment/index.htm, accessed on December 10, 2012.
21. Consumers Renaissance Redevelopment Corporation, 'Michigan's Brownfield Redevelopment Program: First in the Nation', Jackson, MI: Consumers Renaissance Redevelopment Corporation, 1998a.

22. Consumers Renaissance Redevelopment Corporation, 'National Comparative Analysis of Brownfield Redevelopment Programs', Jackson, MI: Consumers Renaissance Redevelopment Corporation, 1998b.
23. Couch, C., Fraser, C. and Percy, S., *Urban Regeneration in Europe*, Oxford, UK: Blackwell Publishing Company, 2003.
24. Dabney, D.Y., 'Do Enterprise Zone Incentives Affect Business Location Decisions?', 1991, *Economic Development Quarterly*, vol. 5, no. 4, pp. 325-334.
25. Dailymarkets.com, 'European Unemployment Highest in 10 Years', July 31st 2009 [Online] available at http://www.dailymarkets.com/forex/2009/07/31/eurozone-july-consumer-prices-log-biggest-fall-june-unemployment-at-10-year-high/, accessed on December 10, 2012.
26. Davis, D., 'Tax Increment Financing', 1989, *Public Budgeting & Finance*, vol. 9, no. 1, pp. 63-73.
27. Davis, T.S., and Margolis, K.D., *Brownfields: A Comprehensive Guide to Redeveloping Contaminated Property*, Chicago: American Bar Association, 1997.
28. Dewar, M.E., 'Why State and Local Economic Development Programs Cause So Little Economic Development?', 1998, *Economic Development Quarterly*, vol. 12, no. 1, pp. 68-87.
29. Donati, A., Rossi, C. and Brebbia, C.A., *Brownfield Sites II: Assessment, Rehabilitation, and Development*, Southampton, UK; Boston: WIT Press, 2004.
30. Dowall, D.E., 'An Evaluation of California's Enterprise Zone Programs', 1996, *Economic Development Quarterly*, vol. 10, no. 4, pp. 352-368.
31. Duffy, H., 'Partnerships in Two European Cities' in Waltzer, N. and Jacobs, B.D. (eds.), *Public-Private Partnerships for Local Economic Development*, Westport, CT: Praeger, 1998.
32. Dunlap, T.P., Burkhalter, B.B., Watson, D.J. and Fitzpatrick, J.A., 'Reshaping the Local Economy through a Revolving Loan Fund Program in an Entrepreneurial City', 1995, *Economic Development Quarterly*, vol. 9, no. 1, pp. 74-79.
33. Environmental Law Institute, 'An Analysis of State Superfund Programs: 50-state Study, 1998 Update', Washington D.C.: U.S. Environmental Protection Agency Office of Emergency and Remedial Response Hazardous Site Control Division, 1999.
34. Environmental Law Institute, 'An Analysis of State Superfund Programs: 50-state Study, 2001 Update', Washington D.C.: U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Hazardous Site Control Division. November 2002.
35. Erickson, R.A., 'Enterprise Zones: Lessons from the State Government Experience' in Mills, E.S. and McDonald, J.F. (eds.), *Sources of Metropolitan Growth*, New Brunswick, NJ: Center for Urban Policy Research, 1992, pp. 161–182.
36. Finfacts, 'Asia-Pacific Business and Finance News: Japan's Export Slide Slowed to 45.6% Slump in March Compared with Year Ago; GDP in 2009 to be Revised Down to -3%', April 22nd 2009, [Online] at http://www.finfacts.ie/irishfinancenews/article_1016494.shtml, accessed on December 10, 2012.
37. Fisher, P.S. and Peters, A.H., 'Tax and Spending Incentives and Enterprise Zones', Proceedings of a Symposium on the Effects of State and Local Public Policies on Economic Development, 1997, *New England Economic Review*, March/April.
38. Fitzgerald, J. and Green Leigh, N., *Economic Revitalization: Cases and Strategies for City and Suburb*, Thousand Oaks, CA: Sage Publications, 2002.

39. Forgey, F.A., 'Tax Increment Financing: Equity, Effectiveness, and Efficiency' in the Municipal Yearbook, Washington, D.C.: International City Management Association, 1993, pp. 25-33.
40. Fosler, R.S. and Berger, R.A., *Public-Private Partnerships in American Cities: Seven Case Studies*, Lexington, MA: Lexington Books, 1982.
41. Friedman, M., 'Governments Can Use Incentives Rationally', 1994, *Economic Development Review*, vol. 12, no. 4, pp. 25-28.
42. Giloth, R.P., 'Stalking Local Economic Development Benefits. A Review of Evaluation Issues', 1992, *Economic Development Quarterly*, vol. 6, no. 1.
43. Greenstein, R. and Sungu-Eryilmaz, Y., *Recycling the City: The Use and Reuse of Urban Land*, Cambridge, MA: Lincoln Institute of Land Policy, 2004.
44. Grueling, J.E., 'Tax Increment Financing: A Downtown Development Tool', 1987, *Economic Development Review*, vol. 5, no. 1, pp. 23-28.
45. Guardian.co.uk, 'Bank of England Held Its Interest Rate to 1/2 of One Percent', June 4th 2009, [Online] available at http://www.guardian.co.uk/business/2009/jun/04/interest-rates-held-record-lows, accessed on December 10, 2012.
46. Gunyou, J., 'Managing Economic Development Resources', in Robinson, S.G. (ed.), *Financing Growth: Who Benefits? Who Pays? And How Much?*, Chicago: Government Finance Officers Association, 1990.
47. Hamlin, R.E., *The Capital Access Program: An Evaluation of Economic Benefit*, Lansing, MI: The Michigan Jobs Commission, 1998.
48. Hamlin, R.E., 'Capital Access Programs Spur Growth', *Urban Policy Briefing no. 99-2*, Program in Politics and Policy, Michigan State University, 1999.
49. Hamlin, R.E., 'Global and Local Consequences of Intersectoral Integration', in Marga, A., Păun, N. and Gyemant, L. (eds.), *Paradigme ale Integrării* (Paradigm for Integration), Cluj Napoca: Editura Fundației pentru Studii Europene, 2002a, pp. 125-143.
50. Hamlin, R.E., 'Public-Private Partnerships for Inner-City Revitalization', in Thornton, D.W. and Weissert, C.S. (eds.), *Urban Policy Choices for Michigan Leaders*, East Lansing: Michigan State University Press, 2002b, pp. 183-221.
51. Hamlin, R.E. and Duma, F.S., 'The Capital Access Program: Its Application for Eastern Europe', in Gyemant, L. (ed.), *European Traditions and Experiences*, Cluj Napoca: Editura Fundației pentru Studii Europene, 1999, pp. 169-191.
52. Hamlin, R.E. and Lyons, T.S., 'Public, Private, and Nonprofit Sector Interactions for Economic Development in a Restructuring World: Implications for Professional Planning', in Lim, G.C. and Lee, M.H. (eds.), *Dynamic Transformation of Societies*, Seoul: Nanam Publishing House, 1993, pp. 176-206.
53. Hamlin, R.E. and Lyons, T.S., *Financing Small Business in America: Debt Capital and Small Business Transformations*, New York: Praeger, 2002.
54. Hamlin, R.E. and Lyons, T.S., *Economy without Walls: Managing Local Development in a Restructuring World*, New York: Praeger, 1996.
55. Hancock, D and Weston, J.A., 'The 'Credit Crunch' and the Availability of Credit to Small Business', 1998, *Journal of Banking and Finance*, vol. 22, no. 6-8, pp. 821-845.
56. Healey, L. and McCormick, J.F., 'Urban Revitalization and Tax Increment Financing in Chicago', 1999, *Government Finance Review*, December, pp. 27-30.

57. Hoffman, A.J. and Ventresca, M.J., 'The Institutional Framing of Policy Debates - Economics versus the Environment', 1999, *American Behavioral Scientist*, vol. 42, no. 8, pp. 1368-1392.
58. Holland, R.C., 'The New Era in Public-Private Partnerships', in Porter, P.R. and Sweet, D.C. (eds.), *Rebuilding America's Cities: Roads to Recovery*, New Brunswick, NJ: Center for Urban Policy Research, 1984.
59. Houstoun Jr., L.O., 'Business Improvement Districts', 1996, *Economic Development Commentary*, vol. 20, no. 1, pp. 4-9.
60. Huddelston, J.R., 'Local Financial Dimensions of Tax Increment Financing: A Cost-Revenue Analysis', 1982, *Public Budgeting & Finance*, vol. 2, no. 1, pp. 40-49.
61. Hula, R.C., *An Assessment of Brownfield Redevelopment Policies*, Washington, D.C.: Pricewaterhouse Coopers Endowment for the Business of Government, November 1999.
62. Hula, R.C., 'Changing Priorities and Programs in Toxic Waste Policy: The Emergence of Economic Development as a Policy Goal, 2001, *Economic Development Quarterly*, vol. 15, no. 2, pp. 181-199.
63. Hula, R.C., 'There is Gold in Those Brownfields...Maybe', in Thorton, D. and Weissert, C. (eds.), *Urban Policy Choices*, East Lansing, MI: Michigan State University Press, 2002.
64. Hula, R.C., 'The Michigan Brownfield Initiative and Private Market Redevelopment: An Assessment', 2003, Institute for Public Policy and Social Research, Michigan State University, [Online] available at http://www.ippsr.msu.edu/Publications/ARHulaI.pdf, accessed on December 10, 2007.
65. Johnson, C.L. and Kriz, K.A., 'A Review of State Tax Increment Financing Laws', in Johnson, C.L. and Man, J. (eds.), *Tax Increment Financing and Economic Development: Uses, Structures and Impact*, Albany: State University of New York Press, 2001, pp. 31-56.
66. Johnson, C.L. and Man, J.Y. (eds.), *Tax Increment Financing and Economic Development: Uses, Structures and Impact*, Albany: State University of New York Press, 2001.
67. Kaiser, S.E., 'Brownfields National Partnership: The Federal Role in Brownfield Redevelopment, 1998, *Public Works Management and Policy*, vol. 2, no. 3, pp. 196-201.
68. Kimball, R.C., 'Specialization, Risk, and Capital in Banking', 1997, *New England Economic Review*, November, pp. 51-73.
69. Klacik, D.J. and Nunn, S., 'A Primer on Tax Increment Financing', in Johnson, C.L and Man, J. (eds.), *Tax Increment Financing and Economic Development: Uses, Structures and Impact*, Albany: State University of New York Press, 2001, pp. 15-29.
70. Kummler, R.H., and Card, D.S., *Brownfield Redevelopment: The Michigan Strategy*, Detroit, MI: College of Urban, Labor & Metropolitan Affairs, Wayne State University, 1999.
71. Lambert, T.E. and Coomes, P.A, 'An Evaluation of the Effectiveness of Louisville's Enterprise Zones', 2001, *Economic Development Quarterly*, vol. 15, no. 2, pp. 168-180.
72. Landis, J.D., 'Public/Private Development: Techniques of Project Assessment', in Robinson, S.G. (ed.), *Financing Growth: Who Benefits? Who Pays? And How Much?*, Chicago: Government Finance Officers Association, 1990.
73. Laughlin, J.D. and Digirolamo, V.A., 'A Market-Based Approach to Development Finance: Case Study of the Capital Access Program, 1994, *Economic Development Quarterly*, vol. 8, no. 4, pp. 315-324.
74. Lawrence, D.B. and Stephenson, S., 'The Economics and Politics of Tax Increment Financing', 1995, *Growth and Change*, vol. 26, no. 1, pp. 105-137.

75. Ledebur, L.C. and Woodward, D.P., 'Adding a Stick to the Carrot: Location Incentives with Clawbacks, Rescissions, and Recalibrations', 1990, *Economic Development Quarterly*, vol. 4, no. 3, pp. 221- 237.
76. Lester, J.P. and Lombard, E.N., 'The Comparative Analysis of State Environmental Policy', 1990, *Natural Resources Journal*, vol. 30, no. 2, pp. 301-319.
77. Lynch, R.G., Fishgold, G. and Blackwood, D.L., 'The Effectiveness of Firm-Specific State Tax Incentives in New York', 1996, *Economic Development Quarterly*, vol. 10, no. 1, pp. 57-68.
78. Lyons, T.S. and Hamlin, R.E., *Creating an Economic Development Action Plan: A Guide for Development Professionals*, Revised and Updated Edition, New York: Praeger, 2001.
79. Man, J.Y., 'Effects of Tax Increment Financing on Economic Development', in Johnson, C.L. and Man, J.Y. (eds.), *Tax Increment Financing and Economic Development*, Albany, NY: State University of New York Press, 2001, pp. 101-109.
80. McDonald, J.F., 'Comment on Kala Seetharam Sridhar's 'Tax Costs and Employment Benefits of Enterprise Zones'', 1997, *Economic Development Quarterly*, vol. 11, no. 3, pp. 222-224.
81. Mazmanian, D. and Morell, D., *Beyond Superfailure: America's Toxics Policy for the 1990s*, San Francisco: Westview Press, 1992.
82. Meyer, P.B. and Lyons, T.S., 'Lessons from Private Sector Brownfield Redevelopers', 2000, *American Planning Association Journal*, vol. 66, no. 1, pp. 46-57.
83. Michigan Department of Environmental Quality, 'Summary of the Brownfield Redevelopment Financing Act, Public Act 381 of 1996, [Online] available at http://www.michigan.gov/deq/0,1607,7-135-3311_4110_23246-63519--,00.html, accessed on December 10, 2012.
84. Michigan Economic Development Corporation (MEDC), 'Renaissance Zones', [Online] available at http://ref.michigan.org/medc/services/sitedevelopment/renzone/index.asp, accessed on December 10, 2012.
85. Murphy, M.L., *A Private Sector Model for Rebuilding Inner-City Competitiveness: Lessons from Mid-Town Cleveland*, Washington, D.C.: Brookings Institution Center on Urban and Metropolitan Policy, 1998.
86. Nakamura, R.T. and Church, T.W., *Taming Regulation: Superfund and the Challenge of Regulatory Reform, Washington*, D.C.: Brookings Institution Press, 2003.
87. Osborne, D.E. and Plasterik, P., 'Backing the Unbankable', The Washington Post, Sunday, September 14, 1997, W07.
88. Pesky J., Felsenstein, D. and Wiewel, W., 'How Do We Know That 'But for the Incentives' the Development Would Not Have Occurred?', in Bingham, R. and Mier, R. (eds.), *Dilemmas of Urban Economic Development*, Sage: Thousand Oaks, CA., 1997, pp. 99-114.
89. Peters, A. and Fisher, P., *State Enterprise Zone Programs: Have They Worked?*, Kalamazoo, MI: W.E. Upjohn Institute for Employment Research Press, 2002.
90. Peters, A. and Fisher, P., 'The Failure of Economic Development Incentives', 2005, *Journal of the American Planning Association*, vol. 70, no. 1, pp. 27-37.
91. Rahm, D., 'Superfund and the Politics of US Hazardous Waste Policy', 1998, *Environmental Politics*, vol. 7, no. 4, pp. 75-91.
92. Reese, L.A. and Fasenfest, D., 'What Works Best? Values and the Evaluation of Local Economic Development Policy', 1997, *Economic Development Quarterly*, vol. 11, no. 3, pp. 195-221.

93. Reese, L.A. and Malmer, A.B., 'The Effects of State Enabling Legislation on Local Economic Development Policies', 1994, *Urban Affairs Quarterly*, vol. 30, no. 1, pp. 14-35.
94. Reese, L.A. and Sands, G., 'The Equity Impacts of Municipal Tax Incentives: Leveling or Tilting the Playing Field?', 2006, *Review of Policy Research*, vol. 23, no. 1, January, pp. 71-94.
95. Ritter, K. and Oldfield, K., 'Testing the Effects of Tax Increment Financing in Springfield, Illinois: The Assessor's Role in Determining Policy Outcomes', 1990, *Property Tax Journal*, vol. 9, no. 2, pp. 141-147.
96. Rosenbaum, W.A., *Environmental Politics and Policy*, 7th edition, Washington, D.C.: CQ Press, 2008.
97. Rubin, M., 'Urban Enterprise Zones in New Jersey: Have They Made a Difference?' in Green, R. (ed.) *Enterprise Zones: New Directions in Economic Development*, Sage: Newbury Park, 1991, pp. 105-121.
98. Sands, G., Reese, L.A. and Khan, H.L., 'Implementing Tax Abatements in Michigan: A Study of Best Practices', 2006, *Economic Development Quarterly*, vol. 20, no. 1, pp. 44-58.
99. Sands, G. and Zalmezak, P., *Michigan Property Tax Abatements*, Detroit, MI: Wayne State University Center for State Policy, 2000.
100. Smoke, P., 'Relating Values, Goals, and Results in the Evaluation of Local Economic Development Policy', 1997, *Economic Development Quarterly*, vol. 11, no. 3, pp. 212-216.
101. Tennyson, R. and White, L., *The Guiding Hand: Brokering Partnerships for Sustainable Development*, New York: United Nations Staff College and Prince of Wales Leadership Forum, 2000.
102. U.S. Labor, Department of, Bureau of Labor Statistics News: Regional and State Employment and Unemployment, July 2009. Washington, D.C.
103. U.S. Treasury, Department of, 'The Capital Access Program: A Summary of Nationwide Performance', Washington, D.C.: U.S. Treasury, October 1998.
104. United States Conference of Mayors, *Recycling America's Land: A National Report on Brownfield Redevelopment*, Washington, DC: United States Conference of Mayors, 1998.
105. Vig, N.J. and Kraft, M.E., *Environmental Policy: New Directions for the Twenty-First Century*, 6th edition, Washington, D.C.: CQ Press, 2006.
106. Waits, M.J. and Heffernon, R., 'Forging Good Policy on Business Incentives', 1994, *Economic Development Review*, vol. 12, no. 4, pp. 21-24.
107. Waltzer, N. and Jacobs B.D. (eds.), *Public-Private Partnerships for Local Economic Development*, Westport, CT: Praeger, 1998.
108. Wassmer, R.W. and Anderson, J.E., 'Bidding for Business: New Evidence on the Effect of Locally Offered Economic Development Incentives in a Metropolitan Area', 2001, *Economic Development Quarterly*, vol. 15, no. 2, pp. 132-148.
109. Weaver, C. and Dennert, M., 'Economic Development and the Public-Private Partnership: Introduction to the Symposium', 1987, *Journal of the American Planning Association*, vol. 53, no. 4, pp. 430-437.
110. Weber, R., 'Do Better Contracts: Make Better Economic Development Incentives', 2002, *Journal of the American Planning Association*, vol. 68, no. 1, pp. 43-55.
111. Weber, R., 'Tax Increment Financing in Theory and Practice', in White, S., Bingham, R. and Hill, E.W. (eds.), *Financing Economic Development in the 21 Century*, Armonk, NY: M.E. Sharp, 2003, pp. 53-69.

112. Wernstedt, K., Meyer, P.B. and Alberini, A., 'Attracting Private Investment to Contaminated Properties: The Value of Public Interventions', 2006, *Journal of Policy Analysis and Management*, vol. 25, no.2, pp. 347-369.
113. Wiewel, W., *User Experience with Industrial Revenue Bonds*, Chicago: University of Illinois at Chicago, Center for Urban Economic Development, 1991.
114. White, S., 'Do Incentives Work?', Book review of Anderson, J.E., *Bidding for Business: The Efficacy of Local Economic Development Incentives in a Metropolitan Area*, 2002, *Journal of the American Planning Association*, vol. 68, no. 1, pp. 119-120.
115. Wilder, M.G. and Rubin, B.M., 'Rhetoric versus Reality: A Review of Studies on State Enterprise Zone Programs', 1996, *Journal of the American Planning Association*, vol. 62, no. 4, pp. 473-491.