CIVIC INFRASTRUCTURE AND THE FINANCING OF COMMUNITY DEVELOPMENT

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EXECUTIVE SUMMARY

The strength and diversity of non-profit community development organizations heavily influence how community development projects are funded and to what extent private sector financial institutions participate.

Variations in the number and geographic reach of lenders and intermediaries for capital, such as community development corporations (CDCs) and development-focused foundations, can significantly tailor national policy, such as the Low Income Housing Tax Credit, to local circumstance.

This paper examines how relationships between public, for-profit, and non-profit community development entities affect the capacity for financing urban neighborhood projects by examining networks among such groups in three cities—Cleveland, Indianapolis, and St. Louis.

To illustrate the impact of these relationships, the paper analyzes representative housing projects in each city, quantifying the net amount of subsidy that public agencies and non-profit organizations provide to urban development.

Taken together, these case studies reveal that while the financial instruments for urban development—first mortgages, subordinated debt, grants, tax abatements, and tax credits—remain the same in all three cities, the varying structure and strength of their respective community building institutions directly influence what gets built and how it's financed.

On a city-by-city basis, the case studies find that:

- **In Cleveland, a multifaceted and overlapping network of CDCs, urban development funds, and foundations fosters a vibrant marketplace for community development projects.** Overall, about $2.4 billion flows annually to urban development activities—more than in the other cities. Cleveland is the only city in the country, other than New York, where both the Local Initiative Support Corporation (LISC) and the Enterprise Foundation coexist in the same market. It is also the city with the highest amount of private sector participation among the three, resulting in a lower level of subsidy in its representative project. City support for urban development, including a tax abatement program and aggressive enforcement of the Community Reinvestment Act, also exceeds that of the other three. Over time it appears that the level of subsidy in Cleveland has declined, resulting in more bang for the community development buck.

- **In contrast, a single non-profit group—the Lilly Foundation, which provides 75 percent of non-profit sector funding in its region—dominates community development activity in Indianapolis, where a somewhat smaller pool of development money and community groups exist.** Each year, a total of $1.1 billion is available for community development, but the city has a limited network of only 16 CDCs (compared to over 100 in

Cleveland). Moreover, the activities of the CDCs, coordinated by the city, are limited to defined neighborhoods so they don't overlap. However, the near failure of one of the CDCs caused commercial banks to become hesitant about participating in Indianapolis projects, harming the entire city. For its part, the Lilly Foundation works both independently and in conjunction with LISC and the Indianapolis Housing Partnership. Lilly's weight is such that a perceived foundation preference for housing renovation rather than new construction is said to dampen commercial lending interest in new projects.

- **In St. Louis the public sector is the dominant player, because the city has an overall weak community development infrastructure.** Only about $850 million can be applied to urban development each year. Government largely plays the role CDCs do in other cities by providing secondary financing. Beside city efforts, the state of Missouri matches the federal Low Income Housing Tax Credit Program. There are few CDCs, but there is a large amount of non-profit participation—more than twice that of Cleveland or Indianapolis—in the form of pass through money from firms and banks. This spending, however, is not well coordinated in the absence of a robust network of CDCs.

To be sure, more information is needed from all parties to better understand the relative efficacy of different institutional networks and financial models.

In the interim, however, it does seem that a more layered and diverse universe of public and non-profit community development efforts leads to more opportunities for risk mitigation and hence more private sector participation. Further, with a robust institutional network in place, private sector participation in community development appears to increase over time as banks and other financial institutions grow more comfortable with such projects.

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CIVIC INFRASTRUCTURE AND THE FINANCING OF COMMUNITY DEVELOPMENT

I. INTRODUCTION

In discussions of real estate development, a distinction is often made between investments that are "market-driven" and those that are "subsidized." Yet this dichotomy is increasingly inappropriate for describing development activities in the central cities of metropolitan areas. Underlying the distinction is an implicit notion that market-driven investments are desirable and subsidized investments are undesirable.[1] To the contrary, the more successful market-driven investments often include some dimension of subsidy, whether from public or private sources.

Beyond subsidies themselves, the partnerships between private for-profit firms, private nonprofit firms and foundations, and public agencies that often help make these subsidies work are an important dimension of development in urban areas. Karen Phillips, president of Abyssinian Development Corporation in New York, provides a good summary of these relationships: "The public sector works with nonprofit groups to set the stage for the private sector to operate effectively at a profit."

It is possible that one of the hidden ingredients in the relative success of metropolitan areas is the extent to which such partnerships have been created and funded. Even if the amount of money is equal in two cities, the way that capital is organized and allocated in one city might lead to better results than in another. Furthermore, because each city has a unique set of institutions and policies in place, even common national policies, such as the Community Reinvestment Act or Low Income Housing Tax Credits, can have widely varying application.

This paper chronicles urban development in three metropolitan areas—Cleveland, Indianapolis, and St. Louis—to describe the broader investment framework that has emerged for urban development. Its primary purpose is to explore how the strength and structure of an area's institutional networks can influence local development deals. Of particular importance is how the institutional capacities of different cities—and the subsidies they contribute—ultimately influence the level of engagement among private, market-rate investors in urban development projects.

The first section of the paper examines the intricate web of capital sources (civically inclined investors, development-focused foundations, corporations, and government programs) that exist in these three cities, and offers some insight into the amount of capital they provide for community development and affordable housing. The paper also analyzes the broader market in which these "nontraditional lenders" operate, describing the intermediary networks (community-owned banks,

[1] For example, an editorial in the *Baltimore Sun* (April 21, 2001, p. 13-A) asks rhetorically, "When will those who enjoy taking taxpayers' hard-earned money and wasting it over and over again in the name of supplying low-income housing realize that unless those who live there have a financial stake in the area, the area will not survive? … Subsidized housing never made anyone respect and care for his or her environment."

credit unions, real estate funds, mortgage and investment firms, and community development corporations) that act as conduits for development funds.[2]

The second section of the paper compares the impact of these varying institutional frameworks by quantifying the net amount of subsidy that public agencies and private nonprofit organizations provide to private-sector, for-profit urban development. Because I do not have sufficient data for a statistical analysis of the complete extent and impact of these subsidies, I instead examine a "typical" affordable, single-family housing project in each of the three cities.[3] Through these case studies, I am able to illustrate how nontraditional sources of capital are used to complement and attract traditional public and private capital to create new opportunities.

[2] "Nontraditional lenders" are defined here as for-profit and nonprofit entities that pursue an objective in addition to or instead of maximizing profits.

[3] "Single family" housing units are defined here as those that consist of one to four family units (in contrast to multi-family housing units for five or more families).

II. THE INSTITUTIONAL INFRASTRUCTURE IN THREE CITIES: CLEVELAND, INDIANAPOLIS, AND ST. LOUIS

Because of the difficult questions of interpretation that arise when examining the various institutional arrangements in different cities, the task of gathering and analyzing the data is labor intensive. For that reason, I have chosen an approach that begins with a few selected metropolitan areas to gauge the incidence and scale of the various activities. This approach has the advantage of allowing a more in-depth analysis of the links among various organizations within the chosen cities. However, it does not allow for statistical analysis to understand differences in the efficacy of alternative organizational structures.

To hold as much constant as possible when comparing the organization of nontraditional capital, I selected three cities that have similar metropolitan economies— Cleveland, Indianapolis, and St. Louis. The similarities can be whimsically summarized by three "M's": each of these cities is medium-sized, Midwestern, and has a substantial manufacturing base. Their metropolitan structure, in terms of the relative strength of the central city and the rest of the metropolitan area, is also comparable.[4]

Although their underlying metropolitan economic structures are similar, the institutions that have evolved in the three cities are substantially different, as are the amounts of capital these institutions provide for urban development activities. Table 1 provides a summary of the capital available annually in each city. (Table 1 summarizes information detailed in Figures 3, 5, and 8.) Cleveland generates more money per year than either St. Louis or Indianapolis; about $2.4 billion annually is available in Cleveland compared with $1.1 billion in Indianapolis and $850 million in St. Louis. Most of the difference among cities reflects the differences in the level of activity of commercial lenders. Whether this is the result of aggressive enforcement of the Community Reinvestment Act or differences in the attractiveness of investment opportunities remains an open question.

Table 1. Annual Amount of Capital Available for Community Development and Affordable Housing

Type of Capital	Cleveland	Indianapolis	St. Louis
Government	$72,117,584	$20,680,109	$38,817,000
Tax Credit	$20,375,011	$1,848,679	$4,993,640
Not-for-Profit	$14,193,636	$12,513,560	$30,000,000
Commercial Bank	$2,260,570,000	$1,043,832,000	$766,340,681
Total	$2,367,280,931	$1,078,874,348	$850,151,321

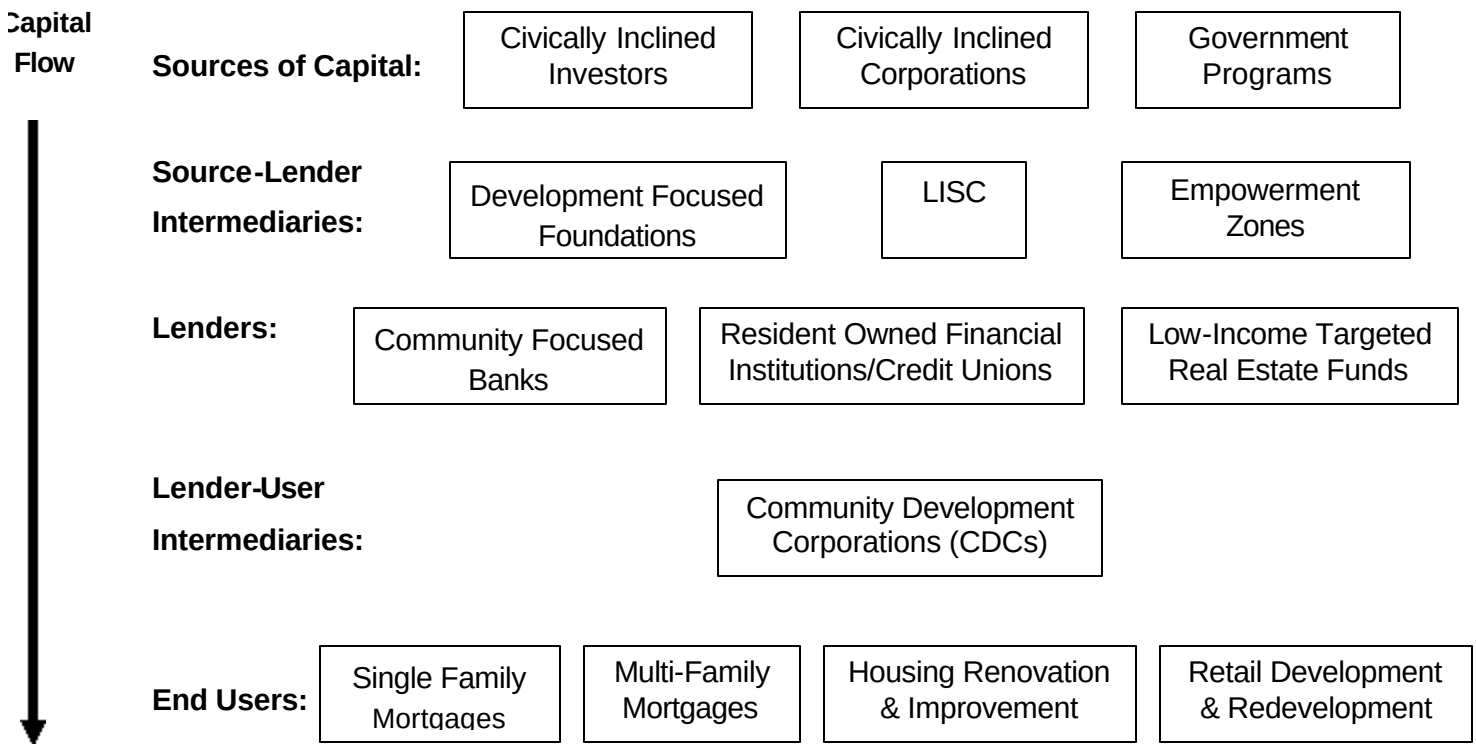
Source: Author's calculations from multiple sources.

[4] Nathan Anderson and William T. Bogart, "The Structure of Sprawl: Identifying and Characterizing Employment Centers in Polycentric Metropolitan Areas," *American Journal of Economics and Sociology* 60 (2001): 147–169.

A. General Framework

In determining the impact of nontraditional sources of capital on urban development, the allocation and target of such funds may be as important as the total amount available. There are a number of actors in this relationship. Although their roles are not explicitly defined, they can be organized based on their activities. Two groups are quite well-defined: the end-users of such capital, and the ultimate sources of nontraditional capital. The *end-users* include, for example, single- and multi-family groups who want to mortgage or rent a house, residents who wish to renovate their home, and development groups who wish to invest in the central city. The *sources* of nontraditional capital include civically inclined investors and the government. A third set of actors includes *those who receive capital from the sources and lend it to the end-users*, entities such as community-owned banks, real estate funds that target investments to low-income neighborhoods, and specialized mortgage and finance firms. A fourth set of actors includes *intermediaries* between these groups who direct funds from the investors to the lenders, and from the lenders to the end-users. Thus, the relationship could be organized as in Figure 1.

Figure 1. A Structural Model of Nontraditional Investment



Admittedly, some capital flows skip over certain groups of actors—for example investors may bypass the source-lender intermediaries and directly contribute to a community-owned bank, or a real estate fund may directly finance a development project. However, it will still be useful to explore the links among these different groups. I begin with a detailed discussion of the organizations in Cleveland, Indianapolis, and St. Louis. Each city has unique features, but approximately conforms to the theoretical model sketched in Figure 1.[5]

B. Cleveland: A Network

The complex network of linked organizations in Cleveland is sketched in Figure 2, and a detailed list of the various sources of investment capital is provided in Figure 3. (See Appendix 1 for the derivation of the numbers in Figure 3.) The large set of intermediary organizations in Figure 2 is a distinguishing feature of Cleveland. Below, I explore the relationships of a few of these organizations in more detail. Although Figure 3 suggests the extent of interaction among these various organizations, it does not do justice to the way in which they have identified and specialized in providing services to various market niches in ways that complement one another.

[5] Because of the multiple roles played by some organizations, it is not always possible to neatly pigeonhole an organization into one of the roles in the model.

Figure 2. Cleveland Organizations

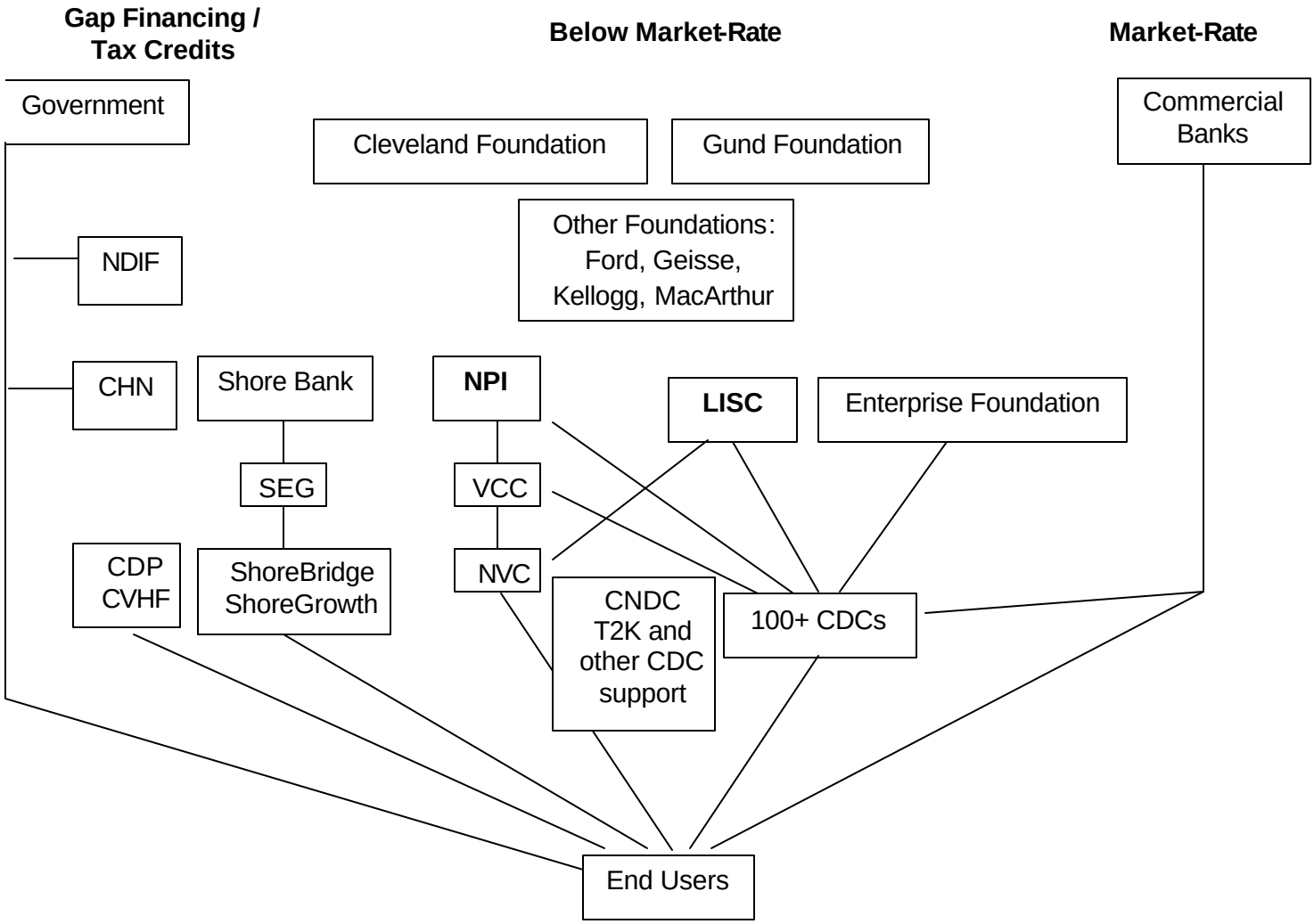


Figure 3. Community Development and Affordable Housing Funds in Cleveland

Government $72,117,584

Source		Value
Tax Abatement (1995 – 2001) #		$23,070,584
CDBG (2001)		$30,794,000
HOME (2001)		$8,908,000
ESG (2001)		$1,060,000
HOPWA (2001)		$765,000
Revolving Loan Funds	NDIF (1995- 2001)	$2,000,000
	HTF (2000)	$5,000,000
CDFI (1996 – 2001)		$670,000
Debits		
NPI	(CDFI)	-$75,000
ShoreBridge	(CDFI)	-$75,000

Commercial Banks $2,260,570,000

Source		Value
National City (1996) # !		$37,323,000
Huntington (1998) # !		$241,516,000
Keybank (1999) # !		$414,792,000
Fifth Third (1998) # !		$167,014,000
Charter One (1998) # !		$1,400,000,000
Debits		
ShoreBridge	(National City CDC)	-$25,000
ShoreBridge	(Keybank)	-$25,000
ShoreBridge	(Huntington CDC)	-$25,000

Nonprofits $14,193,636

	Source	Value
Cleveland Foundation (2000)	general grants	$2,127,780
Gund Foundation (2000)	general grants	$778,240
Civic Vision Housing (2000-2001)	real estate development	$625,000
NPI	CNPP (1999)	$3,100,000
NPI	VCC (1991 – 2001)	$1,785,714
NPI	NVC (1991 – 2001)	$150,000
ShoreBridge (1998 – 2001)	CDP II	$83,333
ShoreBridge (1998 – 2001)	National City CDC	$25,000
ShoreBridge (1998 – 2001)	Cleveland Foundation	$17,500
ShoreBridge (1998 – 2001)	Gund Foundation	$17,500
ShoreBridge (1998 – 2001)	First Merit CDC	$12,500
ShoreBridge (1998 – 2001)	Key CDC	$12,500
ShoreBridge (1998 – 2001)	Keybank NA	$12,500
ShoreBridge (1998 – 2001)	Huntington CDC	$25,000
ShoreBridge (1998 – 2001)	Met Life Insurance	$12,500
ShoreBridge (1998 – 2001)	Banc One CDC	$25,000
ShoreBridge (1998 – 2001)	CDFI	$75,000
ShoreBridge (1998 – 2001)	SEG	$55,000
ShoreBridge (1998 – 2001)	Geisse Foundation	$2,500
ShoreBridge (1998 – 2001)	Kellogg Foundation	$25,000
ShoreGrowth (2000 – 2001)	Ford Foundation	$100,000
ShoreGrowth (2000 – 2001)		
ShoreGrowth (2000 – 2001)	HHS RLFund	$25,000
LISC		
Enterprise Foundation	loan loss reserve	$17,500
CDP II (1995-2000)	Cleveland Office (2000)	$3,213,700
DEBITS	loans (2000)	$649,036
ShoreBridge	real estate development	$1,720,833
NPI VCC		
	CDP II	-$83,333
	CDP II	-$416,667

Tax Credits $20,375,011

Syndicator	Value
LISC	
Enterprise Foundation	
	NEF $9,802,088
	ESIC $10,572,923

Notes: # includes multi-family ! MSA-level data

1. Commercial lenders

Although the dollar amounts in Figure 3 are not entirely comparable, they are nevertheless instructive about the relative roles of the various sectors. The most important point is the overwhelming dominance of commercial banks. Their more than $2 billion in lending includes all affordable housing and community development lending reported by the banks under the CRA.[6] Although this total includes lending throughout the metropolitan area (and not just in the city of Cleveland), it is nonetheless impressive. Because a successful community development exercise must engage the private sector, the level of commercial bank lending suggests the impact of nontraditional investment in Cleveland development.

2. The City of Cleveland

In addition to their role as providers of tax credits and other assistance, some local governments have become directly involved in providing loans to spur urban development.[7] The city of Cleveland, for example, administers the Neighborhood Development Investment Fund (NDIF), a $40 million revolving loan fund that has effectively replaced Urban Development Action Grants (UDAG) in Cleveland. The fund focuses on small-business lending, but has also helped finance both single-family and multi-family housing renovation and construction. The $40 million for NDIF came from a settlement from First Energy, as part of the deregulation of electrical supply in Ohio.

In addition to administering the NDIF, the city plays another important role in urban development. Every housing unit newly constructed or substantially renovated in Cleveland since 1989 has enjoyed property tax abatement on the increased value of the structure. As shown in Figure 3, these abatements were worth $23 million from 1995 to 2001.

3. Cleveland Development Partnership/Cleveland Civic Vision Housing Fund

These two funds provide support for investments that create "catalytic development" in Cleveland. Cleveland Development Partnership I was created in 1989, Cleveland Development Partnership II in 1993, and the funds (CDP) were consolidated in 1999. The CDP was one of the first funds of its type in the country. Its strengths include its connection to leading corporations in

[6] Estelle Loar, a Cleveland city official, cites $4.4 billion in loans for the city's marginalized neighborhoods as a result of "forced" credit agreements with local lenders during the administration of Mayor Michael White (1990–2002).

[7] I am aware of only one scholar-practitioner study of the goals and metrics of such a public-sector fund. Dunlap and coauthors ("Reshaping the Local Economy through a Revolving Loan Fund Program in an Entrepreneurial City," *Economic Development Quarterly* 9: 74–79), describe the goals of the Revolving Loan Fund of the city of Auburn, Alabama. (Dunlap is the director of economic development for the city of Auburn.) This fund was created using Urban Development Action Grant (UDAG) money from the federal government. There are five criteria: jobs created and retained, economic viability, tax benefits, leverage ratio, and availability of funds. They find that the leverage ratio ranges from 1:3.18 to 1:5.36, indicating that the city typically invests about 25 percent of the value of a fixed asset loan. This is consistent with their emphasis (p. 77) that the city not be the sole investor and that there should be substantial private-sector investment. It is also consistent with the role that several of the nontraditional lenders see for themselves. In Cleveland, for example, none of the nontraditional lenders provides lending in the absence of a partner who is providing primary financing.

Cleveland. Cleveland Tomorrow, an organization of CEOs from the largest manufacturing and service firms in the region, staffs it.[8] However, the investors have an indefinite payout structure (zero coupon, approximately 25 year term), which restricts the scale at which CDP can operate because it relies on donations from corporate and community foundations rather than investments by the corporations. The CDP invested more than $80 million between 1990 and 2000, of which $22 million has already been repaid and reinvested.

Cleveland Tomorrow created the Cleveland Civic Vision Housing Fund in 2000 to provide a more market-rate investment vehicle that continued to focus on catalytic development in neighborhoods near downtown. This fund is organized as a for-profit corporation and closed in September 2000 with a capitalization of $12.5 million obtained from two classes of investors. Class A investors are corporations that receive a regular payout based on the interest rate on U.S. Treasury bills, with the payout as of summer 2001 at about 8 percent. Class B investors are foundations that receive a lower rate of about 3 percent and who are subordinate to the Class A investors. The Civic Vision Housing Fund usually participates in projects by offering mezzanine-subordinated financing that is relatively patient and charges interest of about 7 to 7.5 percent. The fund's payout of 8 percent to its Class A investors is lower than the 10 to 15 percent return by real estate funds making comparable investments. ("It sounds like this is civic duty to me," said one person quoted in *Crain's Cleveland Business*.)[9] It is nevertheless a reasonable return to Class A investors based on their reduced risk since the subordinated nature of the lower return Class B investors means that the fund would have to make disastrous investments for the Class A investors not to get paid. As Steve Strnisha, vice president of the fund, says in that same *Crain's* article, "This is not a philanthropic institution, this is—kick the tires—an investment fund."

4. Community Development Corporations

There are more than 100 Community Development Corporations (CDC) in the Cleveland area, many of which overlap in geographic area covered, and in the activities and services they provide. Complementing the large number of CDCs are more than 25 support organizations. These supporting groups coordinate and connect the CDCs, provide guidance and training to the CDCs, give technological assistance, and advertise their presence to interested parties. The activities of the support organizations are critical in helping a neighborhood or project find partners among the many active CDCs.

5. LISC–Cleveland

Cleveland's source-lender intermediaries function as part of an orchestrated symbiosis among Neighborhood Progress, Inc. (NPI), the Enterprise Foundation, and the Local Initiative Support Corporation–Cleveland (LISC–Clv). Originally managed from the New York regional LISC office, LISC–Clv was established in 1981, about the same time as Cleveland Tomorrow, through a

[8] Cleveland Tomorrow led the syndication of the first six waves of tax credits for Cleveland Housing Network, illustrating the long-standing relation between for-profit, not-for-profit, and public-sector activity in Cleveland.
[9] Stan Bullard, "A Jump Start for City Housing," *Crain's Cleveland Business*, August 28, 2000, p. 1.

grant from the Cleveland Foundation.[10] Subsequently, in 1988, the Enterprise Foundation entered Cleveland and Cleveland Tomorrow formed NPI, also with the support of the Cleveland Foundation. Although it is unusual for both the Enterprise Foundation and LISC to coexist within the same market (only New York shares this distinction), the institutions avoid duplication of efforts and redundancy by carefully coordinating activities.

For example, in 1998, LISC–Clv and Enterprise established a collaborative effort to provide technical assistance and support services to eight of the nine CDCs receiving tax credit assistance in Cleveland, resulting from a 10-year, $38 million Low-Income Housing Tax Credit (LIHTC) investment.[11] In addition to providing LIHTC investments to local CDCs, LISC–Clv provides loans at below market rates (cost of capital to LISC–Clv is 4 percent with a 12-year term; money is lent at 6 percent with a 3–7-year term) to local CDCs. Via a memorandum of understanding with NPI that codifies the nature of cooperation between NPI and LISC–Clv, NPI, through its wholly owned subsidiary Village Capital Corporation (VCC), serves as the local loan oversight committee for LISC–Clv, qualifying loans before they are submitted to the national LISC office for approval.

Mark McDermott, executive director of Enterprise Foundation–Cleveland, is a member of the board of trustees of VCC. Prior to joining the Enterprise Foundation, McDermott was the executive director of the Cleveland Housing Network (CHN), an umbrella nonprofit organization that provides financing, construction, and management support to 14 community-based development corporations and that developed the innovative tax credit syndication vehicle described earlier.[12] During the same period that McDermott was with CHN, India Lee, program director, LISC–Clv, worked as the director of Cleveland's newly formed Empowerment Zone.[13] In addition, LISC–Clv has made $4.5 million in loans to New Village Corporation (NVC) for housing and retail projects. The NVC is NPI's real estate development subsidiary, and NVC works directly with CDCs and private developers to secure the resources of other local and national programs that help CDCs handle complex real estate development.

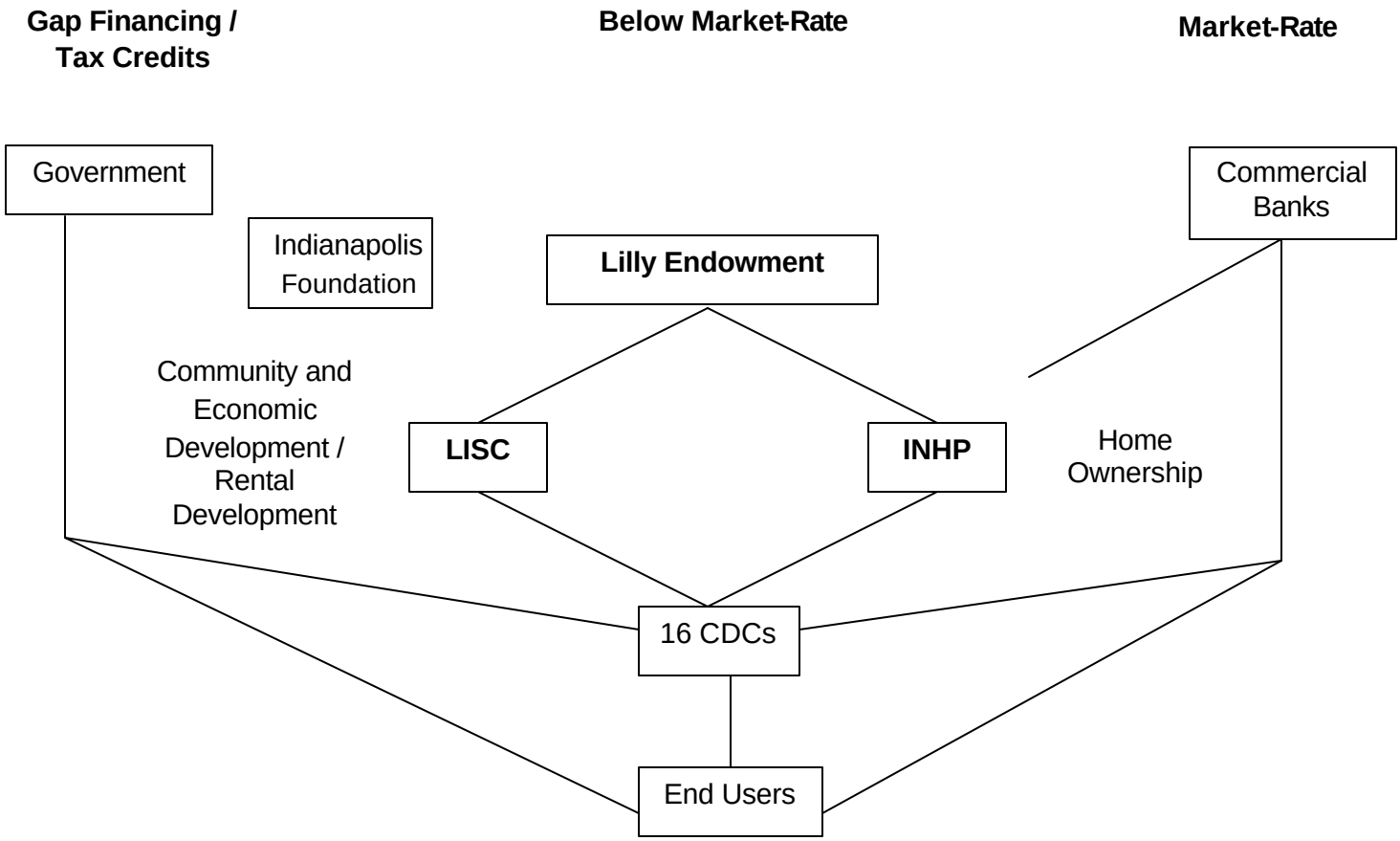
C. Indianapolis: A Hierarchy

Figure 4 illustrates the main actors in community development in Indianapolis, and Figure 5 shows the amount of capital available from each source. (See Appendix 1 for the derivation of the numbers in Figure 5.) The contrast to Cleveland is immediately apparent. The Lilly Endowment is clearly the dominant force in Indianapolis, providing about 75 percent of the total funds for the not-for-profit sector. In fact, the Lilly Endowment is almost one-half the size of the combined activities of the federal and local governments in Indianapolis.

[10] Conversation with India Lee, LISC–Clv program director, based on remarks from Steve Minter, president, Cleveland Foundation.
[11] Enterprise Foundation, "Cleveland Receives $38 Million for Affordable Housing," June 17, 1998, available at www.enterprisefoundation.org/infofor/media/archives/pressarch.asp?ID=12 (March 2003).
[12] "CHN Lease Purchase Program," available at www.chnnet.com/lp2.htm (May 2003)
[13] "City Partnerships Revive Neighborhoods," June 28, 1996, available at www.clev.frb.org/ccca/frm961/citypart.htm, (March 2003).

As in Cleveland, the amount of capital lent by commercial banks for affordable housing and community development outweighs the amount lent by the government and not-for-profit sectors by a factor of more than ten. Again, if truly catalytic change is desired, it is necessary to mobilize this vast supply of private capital to build on the activities of government and not-for-profits.

Figure 4. Indianapolis Organizations



1. Community Development Corporations (CDCs)

Although Cleveland and Indianapolis are both active in the field of urban redevelopment, the organization of their development groups is strikingly different. Both cities have several CDCs, which provide funding and guidance to urban redevelopment projects either directly or by leveraging lenders such as banks and credit unions, as well as a number of support organizations and government programs.

Figure 5. Community Development and Affordable Housing Funds in Indianapolis

Government $20,680,109

Source		Value
Local programs	(2000)	$100,000
Tax Abatement	(1996)	$1,404,109
CDBG	(FY 2001)	$12,321,000
HOME	(FY 2001)	$5,026,000
ESG	(FY 2001)	$415,000
HOPWA	(FY 2001)	$654,000
Revolving Loan Funds		
CDFI (1999)		$1,760,000
Debits		
CDFI (1999)	(INHP)	($1,000,000)

Nonprofits $12,513,560

Source		Value
Lilly Endowment	(1998-2000)	$9,354,824
LISC		$3,153,459
INHP		$6,773,217
Debits		
INHP	from Lilly	($6,267,940)
LISC	from Lilly	($500,000)

Commercial Banks $1,043,832,000

Source		Value
NBD Bank (1996)	# !	$216,634,000
National City Bank	(1996) # !	$17,985,000
Bank One (1999)	# !	$732,331,000
KeyBank (1999)	# !	$76,882,000

Tax Credits $1,848,679

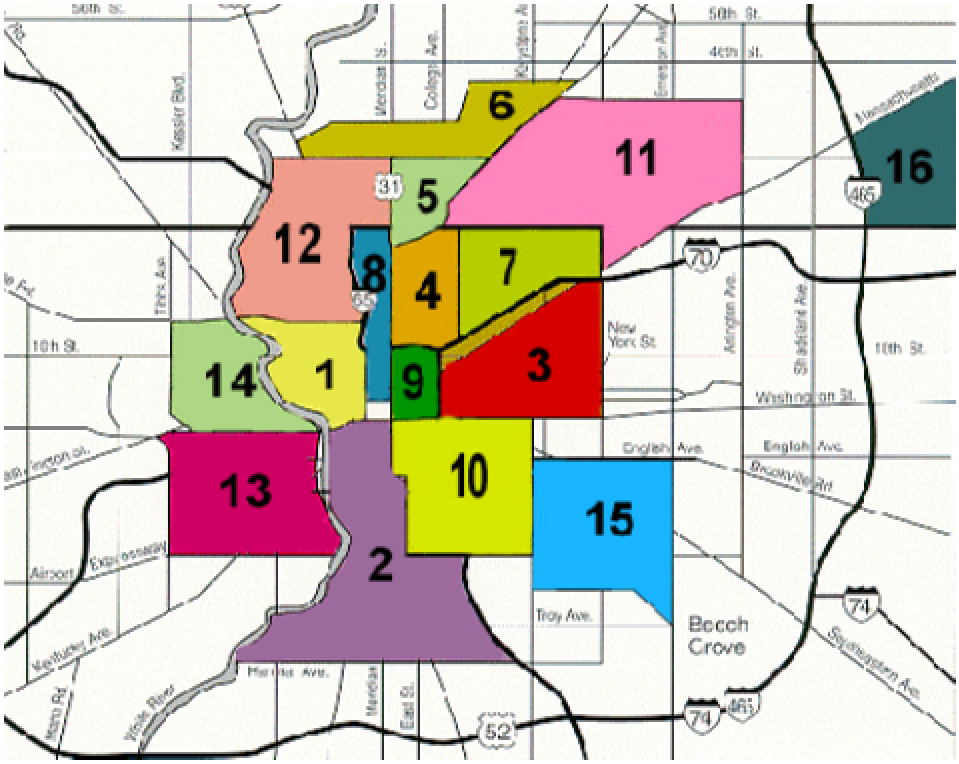
Source	Value
LIHTC (2000–2010)	$181,056
LIHTC (1997–2007)	$405,500
Historic Tax Credits:	
Federal (1996)	$312,123
Federal (1998)	$797,000
State (1996)	$90,000
State (1998)	$63,000

Notes: # includes multifamily ! Denotes MSA-level data

Indianapolis, however, has a stricter hierarchical structure. There are only 16 CDCs in the city, each with a defined neighborhood to serve. (The service areas are mapped in Figure 6.) Thus, each neighborhood has only a single active CDC. The Community Development and Financial Services division of the Department of Metropolitan Development oversees the activities of the development corporations and coordinates their programs to ensure there is no redundancy. The Lilly Endowment, through its partnership with LISC–Indianapolis and the Indianapolis Housing

Partnership (INHP), provides the majority of the funding and leadership in the private nonprofit sector.[14]

Figure 6. CDC Geographical Coverage in Indianapolis



2. East Side Community Investment[15]

Under the leadership of Dennis West, Eastside Community Investments (ECI) in Indianapolis grew to be among the five largest CDCs in the country. (The ECI service area is labeled number 3 in Figure 6.) At its height in 1995, ECI had 80 employees and an annual budget of $9 million. However, by September of 1997, ECI collapsed, unable even to cover its payroll. The rise and fall of ECI is a demonstration of the problems that can arise when a CDC grows too large and attempts to vertically integrate the entire process of urban development.

As president of ECI, West used a government subsidy program that offered one-time development fees to organizations that would renovate buildings into homes and apartments for low-income housing. In a few years ECI had renovated more than 500 units, earning millions in

[14] Conversation with Sherry Seiwert, LISC–Indianapolis, May 2001.
[15] This case study is based on Ellen Retting, "ECI Emerges from Fallout; Leadership Ready to Leave Past Behind," *Indianapolis Business Journal,* October 1999, p. 3; and Norm Heikens, "ECI Collapse Leaves Scars; Tangled Legacy Unfolds at Community Development Group," *Indianapolis Business Journal,* May 1998, p. 1.

development fees. West then used this to leverage additional funding for other programs: employment training, day care facilities, venture capital for urban entrepreneurs, and a savings-matching program. Eastside Community Investments was the most successful CDC in Indianapolis and received local and national awards. It was identified as an example of urban redevelopment done right.

West, however, wanted to expand ECI's activities by starting for-profit subsidiaries that would feed profits into ECI and provide training for local residents. West created a construction company that ECI would use for its projects and a manufacturing company to make roof trusses. The for-profit motives of the subsidiaries quickly clashed with the desires of ECI. Managers were asked by ECI to rehire unproductive workers because it helped the neighborhood. The subsidiaries consumed a significant portion of ECI's cash resources and failed to generate significant revenues. Within a year, the manufacturing company collapsed, losing $800,000. The companies were not competitive because they had no network of contacts and had no experience. They tried to enter an extremely competitive industry and were restricted to focusing on the near east side. The ECI's subsidiaries could not keep up with specialized, independent firms.

Poor management further hampered ECI. By 1996, the development fees were becoming harder to earn as for-profit developers began to take advantage of the program. (Ironically, the involvement of for-profit developers is often a goal of nontraditional lenders.) This created a cash shortage in ECI, exacerbated by the resources tied up in the subsidiaries. The scope of ECI's operations made it difficult for the organization to follow through on important details. Forms to collect tax abatements were not filed, funds were wasted, projects were unfinished, and rents were not collected. By expanding too far and too fast, ECI was unable to fulfill its original mission. The ECI is smaller now, consisting of four employees and a budget of $350,000. It has learned to remain narrowly focused on providing funding to development projects, and to rely on contractors to carry out the rest.

The difficulties at ECI are alleged by some in Indianapolis' community development sector to have had a spillover effect on other CDCs. Commercial banks are said to be less willing to extend credits for projects in Indianapolis, both because of the negative signal sent by the ECI experience and because of the financial losses experienced by investors in ECI. Because of the single-layer approach in Indianapolis, there is no alternative to the existing set of institutions. Hence, problems in one CDC become an albatross for other CDCs. The area served by ECI is most affected by the absence of any backup organization that could replace, in part, the activities of ECI while ECI rebuilds.

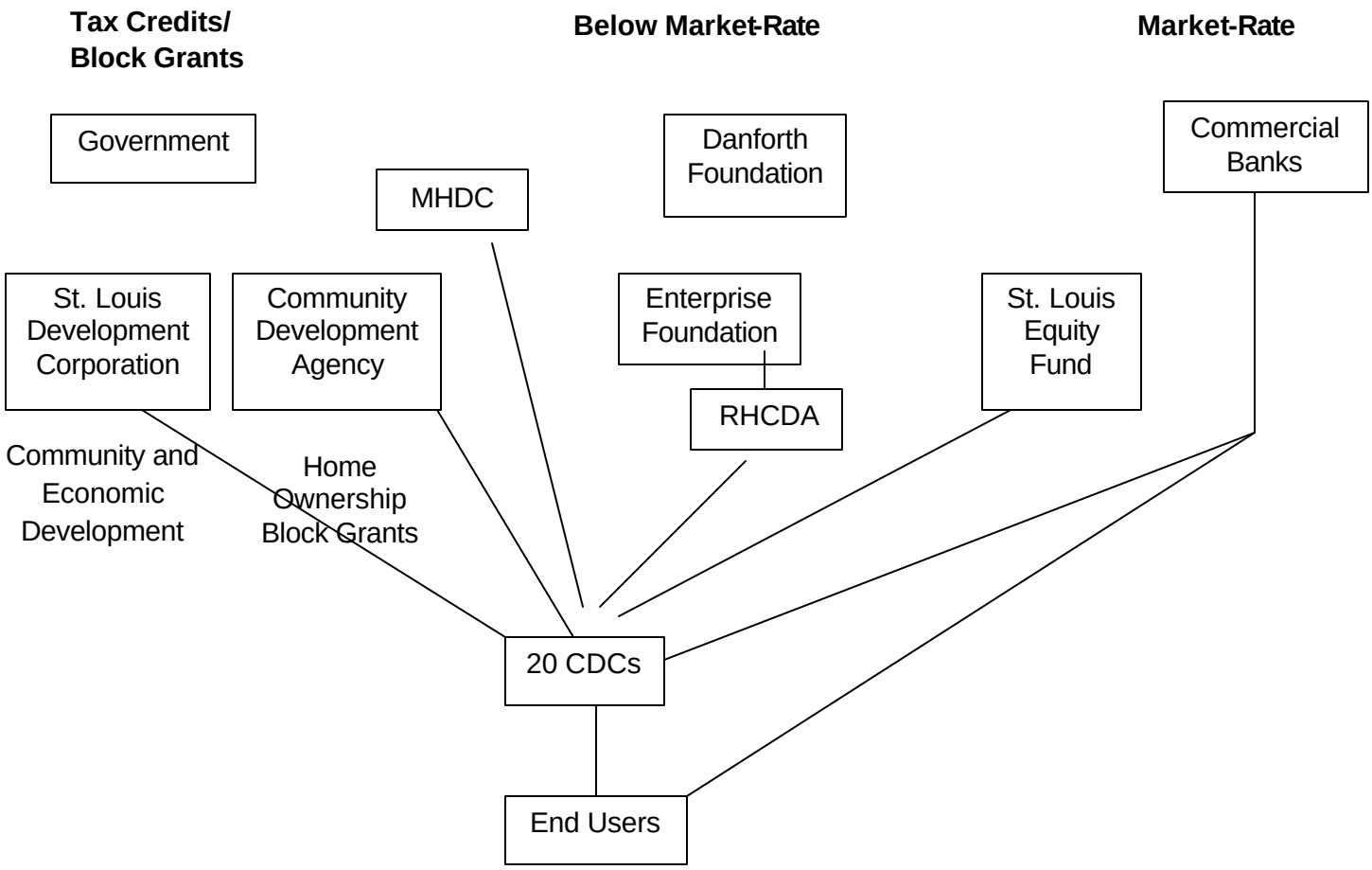
D. St. Louis: Public Sector Dominance

The nonprofit sector in St. Louis has neither the rich network observed in Cleveland nor a dominant presence as in Indianapolis. Rather, the city and the state of Missouri have been extremely active in developing a set of tax credit programs that are the main source of capital for affordable housing investment. For example, the state of Missouri (through the Missouri Housing

Development Corporation, or MHDC) operates a low-income housing tax credit program that matches the amount of tax credits from the federal LIHTC. Figure 7 illustrates the connections among the main organizations, and Figure 8 lists the dollars in each sector. (See Appendix 1 for the derivation of the numbers in Figure 8.)

Unlike Cleveland and Indianapolis, no major national nonprofit housing and community development organizations operate in St. Louis. Enterprise Foundation provides the bulk of the funding to the Regional Housing Community Development Association (RHCDA), but has no local staff. Hence, it is incumbent on local organizations to develop both credibility and critical mass, and to date, none has been able to do so. It is possible that the extensive state and local government activities have worked to crowd out local nonprofit entrepreneurs.

Figure 7. St. Louis



Community Development Corporations

The CDCs are only an adjunct to the low-income housing market in St. Louis. A combination of for-profit developers, commercial banks, and government organizations fill the role occupied in other cities by CDCs. For example, more than one-half of the funding in nonprofit spending in Figure 8 represents pass-through money from firms and banks that are not well coordinated with CDCs. Even though there is more money in this sector in St. Louis than in Indianapolis or Cleveland, coordination and leadership are lacking among the nonprofit organizations. Thus, the money is less able to catalyze neighborhood development.

This more limited role for CDCs dates to decisions in the late 1980s. St. Louis focused at that time on private, for-profit developers to drive its low-income housing stock creation. Therefore, the city faced a strategic decision when confronted with a regional economic recession: continue to support the private, for-profit developers, or put its efforts behind neighborhood CDCs. St. Louis supported the for-profit organizations, most of which were undercapitalized and undiversified, and therefore could not survive an extended downturn in the economy. The 1990s saw many loan restructurings, which had a sustained impact similar to the failure of ECI in Indianapolis.

Commercial banks continue to be instrumental in leading the low-income housing markets throughout this period. Bank of America (BoA), First Star/US Bank Corp., and Mercantile invested considerably in St. Louis. The BoA formed its own CDC and started "writing checks." The goal of the BoACDC is not to compete with local entities, but to be a catalyst and to make investments that could not go forward without BoA assuming the risk. Ultimately, BoA wants the BoACDC to be so successful that it puts itself out of business and the bank can focus on lending money to the neighborhoods. Many projects with which BoACDC is involved are financed using only unsecured cash equity investments (grants). First Star/US Bank Corp. handles most of the syndicated low-income housing tax credit investment along with National Equity Fund (a part of LISC), and, to a lesser extent, the Enterprise Social Investment Corporation, a part of Enterprise Foundation.[16]

[16] I am grateful to Mary Campbell, senior vice president in the Community Development Banking Group at Bank of America, for her willingness to share information.

Figure 8. Community Development and Affordable Housing Funds in St. Louis

Government	**$38,817,000**
Source	**Value**
Local programs	N/A
Tax Abatement	N/A
CDBG (FY 2001)	$28,348,000
HOME (FY 2001)	$5,612,000
ESG (FY 2001)	$969,000
HOPWA (FY 2001)	$1,062,000
Revolving Loan Funds	N/A
CDFI (FY 2000)	$660,000
MHDC (State gov't.) 2000-2001	$2,166,000

Note; MHDC figures above include only non-tax credit related financing

Nonprofits	**$30,000,000**
Source	**Value**
RHCDA (Enterprise Foundation)	$14,000,000
St. Louis Equity Fund (firms)	$10,000,000
Greater St. Louis Land Development Fund (banks)	$6,000,000

Commercial Banks		**$766,340,681**
Source		**Value**
Mercantile Bank (1997)	# !	$533,277,134
First National Bank (1999)	# !	$78,614,680
South Side National Bank	# !	$23,182,200
Bank of America (1998-2000)	# !	$131,266,667

Tax Credits	**$4,993,640**
Source	**Value**
LIHTC (2000)	$2,496,820
MHDC State LIHTC (2000)	$2,496,820

Notes: # includes multi-family ! MSA-level data

E. Summary

The late 1980s was a watershed time for the community development field, particularly affordable housing developers. The wholesale changes in the federal tax treatment of housing in the Tax Reform Act of 1986, coupled with the introduction of the LIHTC, forced organizations and regions to rapidly adapt to a different environment. In Cleveland, for example, this time period saw the creation of NPI and the opening of an Enterprise Foundation office. By contrast, the 1980s brought the end of an era in St. Louis, without the creation of a new set of strong institutions.

Because the measures of activity in each city include dollar figures from various years, comparing the total amount of capital available remains difficult. Some conclusions, however, suugest themselves:

- The Cleveland metropolitan area saw much more commercial bank lending for affordable housing and economic development than in the other two metropolitan areas, which suggests that the aggressive posture taken by Mayor White toward encouraging CRA enforcement has affected local investment.

- Cleveland's tax abatement program represents a tremendous investment in the housing market, and it dwarfs local government activity in the other two cities.

- The Lilly Endowment dominates private nonprofit sources of funds in Indianapolis to a far greater extent than the largest funders in other cities (Cleveland Foundation in Cleveland, Enterprise Foundation funding RHCDA in St. Louis). However, Indianapolis generates less total investment in the nonprofit sector than do either of the other two cities.

In sum, community development involves a wide range of institutional players, and the way in which they are organized varies substantially across cities. The following section demonstrates how the organization and capacity of these groups, in turn, influence how development deals are structured and the extent of commercial investors' engagement in community development activities.

III. MOVING THE MARGIN: MEASURING THE SIZE OF SUBSIDIES

As indicated above, most development projects involve many different organizations. Although the nature of real estate investments is unique for every project, it is nevertheless possible to make some general statements about the activities of the various actors.[17] A typical deal for affordable housing construction, for example, involves a commercial bank as the lead lender, usually with a senior debt position. There is also participation from the public sector in the form of tax credits and, in some cases, tax abatements, HOME, and Community Development Block Grant funds. Finally, a private nontraditional lender provides some predevelopment, bridge or mezzanine capital. The nontraditional lender provides this capital at a usually lower cost, earlier in the development process, at a higher level of risk, and on more flexible (patient) terms than would a commercial bank.

One of the difficulties in quantifying the amount of money contributed for development, however, is that some of the contributions appear as arm's-length market transactions. For example, when a firm invests in a for-profit real estate investment fund, it is tempting to not count that investment as a contribution. However, suppose that the fund intentionally pays a return that is lower than the return paid by other funds with comparably risky investments. Further, suppose that this lower return is due, in part, to the fund's management, which targets investments to revitalize urban areas rather than to maximize profit. In that case, the opportunity cost of the investment is correctly counted as a contribution. Similarly, linked deposit programs, where local governments or foundations deposit funds in a bank in return for the bank making below-market-rate loans for home improvements, are appropriately thought of as a public-private partnership subsidizing urban development activities of private individuals.[18]

The analysis below attempts to bring some transparency to the amount of subsidy found in urban development projects, using representative examples of affordable housing projects in each of the three cities. The different subsidy structures calculated for the projects illustrate the relative impacts of these cities' varying institutional structures on how development deals are constructed.

A. The Value of the Subsidy Provided by Nontraditional Lenders

In partnerships established between private for-profit firms, private not-for-profit firms and foundations, and public agencies, risk is mitigated for first mortgage holders (senior debt holders such as commercial banks or private investors) first, by passing through the collateralized value of

[17] A detailed set of case studies on housing finance for low-income and moderate-income households is found in Sally Merrill and coauthors, *Housing Finance for Low and Moderate Income Households: Innovations in the United States and around the World* (Washington: Urban Institute, 2000). They focus on the activities of individual groups, emphasizing specific innovations rather than the general structure of finance for nontraditional lenders in cities.

[18] This report can be thought of as a contribution to the analysis of social capital. See Jed Emerson, "The Nature of Returns: A Social Capital Markets Inquiry into Elements of Investment and the Blended Value Proposition." *Social Enterprise Series* 17 (Roberts Enterprise Development Fund, 2000) for a general discussion of social capital and a bibliography of research on the topic.

the physical assets and unused tax shields to the senior debt holders, and second, by allocating the remaining risk to no recourse subordinated debt (sub-debt). Sub-debt holders use aggressive below-market loan rates and flexible repayment terms to optimize the ability of the borrower to satisfy the terms and conditions of the debt, and are often willing to restructure terms and conditions should the borrower experience difficulty in complying.[19] Flexible terms and the willingness to restructure sub-debt repayment to relieve financial distress for the borrower can be viewed as no-cost hedges for risk that benefit the senior debt holders. The early-stage intermediary lenders also reduce transaction costs for commercial lenders by gathering and packaging information.

Using an appropriate valuation method can help quantify the net amount of the subsidy provided to private sector, for-profit investment by public and private nonprofit investment in urban development. Based on the assumption that markets price debt efficiently, rendering the net present value (NPV) of debt equal to zero, one can treat the investment as if it were all equity financed.[20] In a financial context, NPV allows investors to evaluate the worthiness of investment in a risky project based on the ability of the project to generate future cash flows. The NPV provides a relatively straightforward and standardized method to gauge the level of risk associated with the project in question, permitting the selection of discount rates consistent with expected return on investments in projects possessing similar risk. The ability to use comparable expected returns makes NPV a good proxy for estimating subsidy rates given that market rate returns for unsubsidized real estate development are widely known and accessible.

In addition, NPV allows for sensitivity analysis to be applied to the discount rate (expected return) selected for the project in a consistent and concise manner. This helps the observer to understand the impact of fluctuations in the discount rate as well as the project cash flows in a variety of iterations. Therefore, numerous scenarios can be played out to assist in validating the choices for the variables (discount rate and cash flow) as well as the impact of changes in the capital structure (senior debt/sub-debt/equity) on a project-by-project basis.

Measuring Subsidies: An Example

A typical housing development project is financed using four general sources of funds: (1) cash equity provided by the developer; (2) a first mortgage typically provided by a commercial bank; (3) subsidized equity in the form of syndicated low-income housing tax credits, property tax abatements, or grants, or below-market loans from public or private nonprofit sources; and (4) subordinated debt typically provided by local intermediaries such as LISC. My approach assumes that the cash equity and the first mortgage are provided at market rates.[21]

[19] This also has the advantage of reducing the percentage of technically nonperforming loans that the lender must report. Given the hostile public perception of nontraditional lenders as money sinks, maintaining a portfolio with minimal defaults can be a prerequisite for survival.

[20] This assumption is not necessarily appropriate in the markets for debt that we study. If there are informational or other transactions cost hurdles that prevent efficient pricing of debt, then we cannot completely eliminate the risk of the debt from the calculation.

[21] This is consistent with the evidence provided by Karl Case ("Investors, Developers, and Supply-Side Subsidies: How Much is Enough?" *Housing Policy Debate* 2 (1991): 341–356) on rates of return to developers,

I selected a discount rate for subordinated debt (14 percent) as a plausible expected return for a similar investment in a market-rate real estate fund with comparable risk.[22] Subordinated debt in these transactions behaves much like equity in that all assets capable of being secured are devoted to the first mortgage. In this regard, the sub-debt is truly a residual claim on par with equity, especially given the flexible repayment terms common in these transactions. This does not account for the value to the commercial lender of the no-cost hedge included with the sub-debt. I chose the discount rate for equity (16.3 percent in the analysis that follows) based on data provided by Karl Case.[23] Although the discount rates are high relative to current market conditions, the impact of changing them is straightforward to calculate. Further, the relative magnitudes of the discount rates for equity and subordinated debt are important; because the equity is riskier, it should have a higher discount rate.[24]

By standardizing the process for valuing nontraditional capital investment in urban development as well as the process by which terms, conditions, and the restructuring of subordinated debt is handled, a model for pricing the hedge option could be established. For example, the willingness of a nontraditional lender to renegotiate the timing of a debt payment could be considered as a series of put options provided to the borrower and priced accordingly. A standard approach could also facilitate developing secondary markets for nontraditional debt, although such a development currently seems impractical. This could allow the nontraditional lenders to reduce their risk by separating underwriting and portfolio investment as is standard in commercial loan markets.[25]

Table 2 describes the capital structure and subsidy level, by component and in total, for a transaction that closed in Cleveland in 1990. The project, CHN VI (Cleveland Housing Network Limited Partnership VI), built 80 units on 53 separate properties. The finance package included one conventional first mortgage, five separate linked deposits from four different sources, two "soft"

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and Robert Van Order and Peter Zorn ("Income, Location, and Default: Some Implications for Community Lending," *Real Estate Economics* 3 (2000): 385–404) on the riskiness of mortgage lending for community development.

[22] It is likely that the rate will vary over time and from city to city. Our qualitative results are robust to these sorts of changes, and the impact of any alternative assumptions about interest rates on the subsidy calculations is straightforward to determine. This is also true of the discount rates for the other forms of finance discussed. The spreadsheet used to calculate the subsidies is available from the author by request.

[23] Case, "Investors, Developers, and Supply-Side Subsidies."

[24] Arguably, both the subsidized loans and tax abatements should be discounted at a lower rate because they are much less risky to the developer. Doing so would increase the calculated amount of subsidy.

[25] Michael Klausner ("Market Failure and Community Investment: A Market-Oriented Alternative to the Community Reinvestment Act." *University of Pennsylvania Law Review* 143 (1995):1561–1593) is an advocate of such an approach. Robert Avery and coauthors ("Neighborhood Information and Home Mortgage Lending," *Journal of Urban Economics* 45 (1999): 287–310) provide evidence that such an approach is efficient. They find evidence that efficiencies in loan origination are concentrated within individual banks rather than spilled over across banks. Hence, there is little marginal benefit to increasing the number of banks originating loans in a given area, while there are fixed costs of doing so. A more efficient approach is to have some banks specialize in originating loans and allow others to hold the loans in a portfolio. Jean Cummings and Denise DiPasquale ("Developing a Secondary Market for Affordable Rental Housing: Lessons from the LIMAC/Freddie MAC and EMI/Fannie Mae Programs," *Cityscape* 4 (1998): 19–41) analyze the challenges of developing a secondary market for affordable rental housing and conclude that it is vital to undertake such operations at sufficient scale to be viable.

second mortgages, one grant, and two interim loans in addition to the $910,080 equity investment made by the limited partnership and secured by investment tax credits.26 (Details on Table 2 calculations are provided in Appendix 2.)

Table 2. Finance Structure and Subsidy to CHN VI
(Total Project Cost = $2,261,621)

Source (% of Cost)	Subsidy as % of Project Cost
Cash Equity: $0 (0%)	0.0%
(Grant): $139,000 (6.2%)	6.2%
First Mortgage: $350,000 (15.5%)	0.0%
Subordinated Debt: $862,541 (38.1 %)	13.2%
Syndicated Tax Credits: $910,080 (40.2%)	36.1%
(Deferred Interest)	0.6%
(Tax Abatement)	12.4%
Total:	68.5%

There was no cash equity invested. However, Cleveland provided a $139,000 grant through its Home Weatherproofing Assistance program. Because this grant was not to be repaid, I include it as equity and include the entire amount as a subsidy to the project.

I calculated the subordinated debt subsidy as the NPV of the difference between the interest payments at the 4.93 percent average rate of the subordinated debt and the estimated 14 percent market rate. The term is assumed to be 15 years for all of the debt, and all of the NPVs are calculated over 15 years. Some of the interest payments on the subordinated debt are deferred, and I calculate the NPV of those deferred payments and include them as a separate line item in Table 2.

I assumed the return on equity required for a market-rate investor to be 16.3 percent. In other words, a market-rate investor would expect an annual return of $148,343 (16.3 percent of $910,080), while the actual annual cost to the developer of CHN VI is zero.[27] I calculate the NPV assuming a 16.3 percent discount rate and a 15-year period.

The final component of the subsidy is property tax abatement by Cleveland. In practice, the tax abatement is only on the value of the structure, while land continues to be taxed. Because I was unable to extract the difference between land value and structure value for every transaction, I make the assumption that the tax abatement applies to the entire project cost. All else being equal, this will tend to overstate the amount of subsidy provided by tax abatement. I do not allow for any

[26] Details of the financing are found in Chris Warren, "Housing: New Lessons, New Models." In W. Dennis Keating, Norman Krumholz, and David C. Perry, eds., *Cleveland: A Metropolitan Reader* (Kent, OH:Kent State University Press).

[27] The tax credits clearly cost the government something, but I am performing all of the calculations from the point of view of the developer (often a CDC). The question is how much the developer would have to pay an investor whose funds would replace the syndicated tax credits.

increase in property value, however, which tends to understate the amount of abatement.[28] The overall results are robust to reasonable changes in these assumptions. Because the tax abatement is a form of equity, I assume that a developer would need to raise equity finance at 16.3 percent to replace it.[29] Because the tax abatement term is for 15 years, I calculate a 15-year NPV using a 16.3 percent discount rate.

The total subsidy to this project was 68.5 percent of the project cost, or more than two-thirds.[30] This is not an atypical finding for this type of project. It is comparable with an average subsidy of 68 percent for a nationwide sample of projects and 64.4 percent for a Cleveland metropolitan area sample of projects analyzed.[31]

I use a subsidy calculator to compare the size and composition of subsidies in the three cities. One important question is the extent to which the different institutional structures lead to both a different capital structure for projects and a different level of subsidy for the typical project. Although each project is unique, there are nevertheless systematic differences in the activities in each city, reflecting the different institutional structures already examined.[32]

B. Subsidy in Cleveland: A Representative Project

I use recent projects (2001) approved by the Civic Vision Housing Fund (CVH) as representative of the way that nontraditional lending projects are currently funded in Cleveland.[33] The first project is one that consists of owner-occupied and lease-purchase single family affordable housing being constructed in a neighborhood near downtown Cleveland. The financing consists of a first mortgage for 50 percent of the total costs. The first mortgage is held by a commercial bank that lends at market rates. A subordinated mortgage provided by CVH at about a 7.5 percent interest

[28] Robert Simons and David Sharkey ("Jump-Starting Cleveland's New Urban Housing Markets: Do the Potential Fiscal Benefits Justify the Public Subsidy Costs?" *Housing Policy Debate* 8 (1997): 143–171) use a 2 percent annual increase in property values in their analysis of the costs of subsidizing new housing in Cleveland.

[29] Because property taxes are assessed as a fraction of market value, the government collecting property taxes is essentially a silent partner in the real estate investment. Hence, the choice by the government to give up tax collections for a period of time is equivalent to an equity investment in the company. The no recourse and unsecured nature of most tax abatements reinforces their nature as equity rather than debt.

[30] It is worth emphasizing that I am considering the value of the subsidy from the point of view of the developer. The opportunity cost of providing some of the subsidy might be lower, especially to governments, which causes the amount of subsidy received to be less than the value of the subsidy given. See Michael Stegman ("The Excessive Costs of Creative Finance: Growing Inefficiencies in the Production of Low-Income Housing." *Housing Policy Debate* 2 (1991): 357–373) for an early and influential criticism of housing subsidies on these grounds.

[31] Jean Cummings and Denise DiPasquale, "The Low-Income Housing Tax Credit: An Analysis of the First Ten Years," *Housing Policy Debate* (10)(1999): 251–307.

[32] Stegman, "The Excessive Costs of Creative Finance," criticizes as inefficient the ad hoc and complicated nature of financing arrangements for constructing affordable housing. Roberto Quercia, William Rohe, and Diane Levy ("A New Look at Creative Finance," *Housing Policy Debate* 11 (2000): 943–972) take a more benign view that these arrangements lead to long-term partnerships, community acceptance, and improved technical skills of staff.

[33] I am grateful to Steve Strnisha for his willingness to share this information with us. In order to protect anonymity of projects, we are omitting total project costs and only providing the approximate financial structure.

rate accounts for 15 percent of the project costs. The remaining 35 percent of the financing is provided through equity. This includes syndicated low-income housing tax credits and grants from governments and foundations that account for about 30 percent of the costs, with the remaining 5 percent coming in cash from the developer. Table 3 provides the details of the subsidy calculation for this project.

Table 3. Finance Structure and Subsidy to CVH Neighborhood Project

Source (% of Cost)	Subsidy as % of Project Cost
Cash Equity (5%)	0.0%
First Mortgage (50%)	0.0%
Subordinated Debt (15%)	3.0%
Syndicated Tax Credits and Grants (30%)	26.9%
(Tax Abatement)	12.4%
Total:	42.3%

Consider the noticeable difference in the financial structure between the projects in Table 2 and Table 3. The "market" portion of the financing (cash equity and first mortgage) accounts for 55 percent of the costs in the 2001 project but only 15.5 percent of the costs in the 1990 project. Further, the terms on the subordinated debt are less favorable in the current project than in the previous project because none of the interest payments is deferred. These changes in the structure of the project imply a reduction in the total subsidy as a percent of project cost from 70 percent to 42 percent, or a decrease of 40 percent. The reduced subsidy is arguably evidence in favor of the success of the various subsidized projects during the preceding years in generating market rate investment in the neighborhood.

There is an active market for constructing and rehabilitating housing in downtown Cleveland. Table 4 provides the financial structure of a recent project for owner-occupied and lease purchase single-family affordable housing.

Table 4. Finance Structure and Subsidy to CVH Downtown Project

Source (% of Cost)	Subsidy as % of Project Cost
Cash Equity (5%)	0.0%
First Mortgage (70%)	0.0%
Subordinated Debt (10%)	1.8%
Syndicated Tax Credits (15%)	13.4%
(Tax Abatement)	12.4%
Total:	27.6%

This transaction resembles a "pure" market-rate project, and in fact it is more like a normal project and less like an affordable housing project than the previous examples. Only 25 percent of the project is financed using subsidized capital, and the fraction of the project subsidized is less than one-half that in the 1990 project, and 35 percent lower than the fraction subsidized in the neighborhood project. More than 40 percent of the subsidy represents tax abatements, which are applied to *all* new and renovated housing in Cleveland. To reiterate an earlier theme, subsidies are pervasive in the Cleveland housing market, as even housing that is not targeted to low and moderate income households receives favorable tax treatment.

One reason (according to Strnisha) for the large commercial bank presence in the downtown is that the FHA is willing to insure loans of this type. This suggests a potential area where public policy can encourage commercial lenders by providing a "carrot" to complement the "stick" of the CRA. However, any such incentive would require the loans to meet FHA underwriting standards, which might not be feasible for many affordable housing projects.

C. Subsidy in Indianapolis: A Representative Project

The project used as a prototype in Indianapolis was developed by the Southeast Neighborhood Development Corporation (SENCORD, within the service area labeled 10 in Figure 6) in 1998. The SENCORD limited partnership produced 54 units of affordable housing on scattered sites, including 32 new town homes, and 22 rehabilitated existing housing units. The total project development cost was $6,565,320.

Table 5. Finance Structure and Subsidy to SENCORD
(Total Project Cost = $6,565,320)

Source (% of Cost)	Subsidy as % of Project Cost
Cash Equity: $17,354 (0.3%)	0.0%
First Mortgage: $1,020,000 (15.5%)	0.0%
Subordinated Debt: $755,000 (11.5 %)	8.6%
Syndicated Tax Credits: $4,772,966 (72.7%)	65.2%
(Tax Abatement - 6 years)	13.0%
Total:	86.8%

The SENCORD development is overwhelmingly financed using tax credits (see Table 5). This does not seem to be an anomaly in Indianapolis. In fact, it is the lowest fraction of tax credit finance of the projects examined, with other projects from the same period having between 83 and 88 percent of their development costs covered by syndicated tax credits. The first mortgage percentage in this 1998 project in Indianapolis is the same as the percentage in the 1990 project in Cleveland, and much less than the amounts currently evident in Cleveland or in St. Louis (see the next subsection).

There are three possible explanations for the low first mortgage contribution. The most likely is that it is a low-income project in a low-income neighborhood, and rents in the neighborhood only support this much of a first mortgage. A second explanation is that it represents the continuing fallout from the collapse of ECI (described in section II.C above), as commercial lenders are leery of engaging in affordable housing in the area. A third explanation is that it could reflect excess supply in the part of the housing market served by these types of projects. Further, there is an alleged reluctance attributed to the influence of the Lilly Endowment to emphasize renovation of housing over construction. Renovation might better match the current demand and supply but the only subsidized support is for new construction, which is having difficulties attracting private investment.

D. Subsidy in St. Louis: A Representative Project

In St. Louis, I characterize the typical project using a special tabulation of LIHTC developments with information from the Missouri Housing Development Commission (MHDC).[34] There were 34 multi-unit projects sponsored by the commission between 1987 and 1995 in St. Louis. Of these, 29 used a commercial bank as the primary lender and first mortgage holder, and five used the MHDC as the primary lender. There is little difference in the capital structure in the two cases, except that MHDC projects included on average a higher fraction of cash equity (2.7 percent versus 0.9 percent); I combine all of the projects for the analysis. Table 6 presents the capital structure and subsidy for the average of the 34 projects.

Table 6. Finance Structure and Subsidy to a Representative St. Louis Project

Source (% of Cost)	Subsidy as % of Project Cost
Cash Equity (1.2%)	0.0%
First Mortgage (38.4%)	0.0%
Subordinated Debt (25.8%)	8.9%
Syndicated Tax Credits (34.6%)	31.0%
(Tax Abatement)	7.6%
	Total: 47.5%

The capital structure is different than that in Cleveland (compare Table 3 and Table 6), with a smaller first mortgage and a larger role for subordinated debt. A hidden difference between Cleveland and St. Louis is the source of the subordinated debt. In Cleveland, it is almost entirely from the private sector, while in St. Louis, it is almost entirely from the public sector (23.9 percent of project costs are public subordinated debt, 1.9 percent are private subordinated debt). This is consistent with the findings in Section II on the different structure of nontraditional lending in the cities, with St. Louis dominated by the public sector and Cleveland with a stronger private nonprofit

[34] I am grateful to Professor Kirk McClure for providing these data. The data are a subset of those used in use by McClure in "The Low-Income Housing Tax Credit as an Aid to Housing Finance: How Well Has It Worked?" *Housing Policy Debate* 11 (2000): 91–114, and include only the MHDC-sponsored projects within St. Louis.

network. However, the lower tax abatement resulting from the lower property tax rate in St. Louis almost completely offsets the higher subsidy from subordinated debt and tax credit equity. This implies that the margin at which projects are profitable after the subsidy is roughly equal in the two cities.

E. Summary

As these examples illustrate, although the basic pieces of finance for affordable housing are identical—subordinated debt, grants, tax abatement, tax credits—the way in which they are assembled varies across the cities:

- The amount of subsidy provided to affordable housing projects in Cleveland is generally much less than in Indianapolis and St. Louis owing to the active engagement of market-rate investors in these developments.

- Affordable housing development in Indianapolis is financed primarily by LIHTCs, while first mortgage contributions by commercial lenders are far less than in both Cleveland and St. Louis.

- Subordinated debt is an important source of capital in St. Louis, and largely consists of contributions from the public sector, as opposed to nonprofits.

Although the results of this analysis are telling, we nonetheless cannot draw broad conclusions about the impact of subsidies across the three cities based only on these representative projects. None of the cities has collected data in an organized way to enable a comprehensive evaluation of the net benefits of the structures described above. The implicit assumption is that the ongoing operation and financial soundness of the operations is sufficient evidence of their success. It is possible, though, that a truly successful set of operations would be one that "put itself out of business" by drawing in the commercial banks and other private for-profit actors from whom low-income households and neighborhoods are often isolated. Unfortunately, there seems to be little political incentive for the type of careful data gathering and cost-benefit analysis that is needed to truly evaluate these programs.

IV. CONCLUSION

This study has identified substantial differences in the institutional infrastructure of affordable housing construction across three cities with similar economic underpinnings. Though it is a cliché to observe that all metropolitan areas are different, examining the differences among these three cities helps to identify three important elements of a successful and durable development system.

First, nonprofit organizations play an important role in not only channeling capital to projects that need it, but also in giving the market-rate sector faith in the viability of investment in low-income areas. Successful and respected nonprofit corporations lure commercial lending into distressed areas with the carrot of profitable investment. While banks may at first need assurances that the subordinated debt of nonprofit organizations will take all the risk of a project, the progression of projects in Cleveland indicates that as banks gain confidence both in the profitability of such projects and in their nonprofit partners the capital structure of development approaches that of a commercial deal.

Second, entrepreneurship and resiliency of the capital system will help maintain successful development in the long run. The collapse of ECI in Indianapolis shows that even the most successful organization can fall on hard times. However, the structure of Indianapolis prevents another CDC from stepping in and filling the gap. ECI was the premier CDC in Indianapolis, and its decline has not only left its own area underserved but also chilled investment throughout the city. A number of developers commented that, in the aftermath, banks became reluctant to be as involved in new nonprofit projects. Many developers have had to scale back their activities and rely almost exclusively on grants and equity for funding. Indianapolis's single-layered system, with one foundation, one rental intermediary, one housing intermediary, and one CDC in each neighborhood means that a breakdown or a cutback in any one area threatens the whole system.

Above all, any policy for development must be cognizant of the unique environment of each city. Yet in each situation, guiding principles may be of use. The goal of development should be not only to initiate and fund housing projects in poor neighborhoods, but also to attract traditional commercial lending through the success of nontraditional capital. To this end, the grass roots nonprofit organizations should be supported, and strong intermediary organizations should be encouraged. Organizations such as LISC and the Enterprise Foundation can be the keystone of a successful development market by providing expertise and leadership, serving as a focal point in which the commercial sector can place its confidence. A variety of organizations and funding sources ought to be encouraged, including foundations, revolving loan funds, tax credit syndicates, and below-market investment funds. By encouraging an integrated and diversified capital system at each level, cooperation and flexibility can be promoted.

APPENDIX 1

Methodology

Data collection is a challenge, and any serious effort at program evaluation must first begin by addressing the absence of available data for the evaluator to use. In order to construct the citywide totals by sector in Figures 3, 5, and 8, it was necessary to combine a wide variety of data sources and to make some assumptions regarding allocation of funds. This appendix provides the sources for the dollar amounts along with a brief explanation of any additional calculations applied to the data before they were reported. In general, we converted any stock of capital into a flow of investment by assuming that 5 percent of the stock was loaned each year. If we observed data that pooled several years, we assumed that the annual flow was the average of the pooled figure (for example, $12 over 3 years was assumed to reflect an annual flow of $4). For HUD programs, the total reported for each program is the amount that went to the city in that year. For nonprofits, we try to identify the annual amount actually invested during a year for affordable housing and community development. In some cases, the data are exceedingly detailed and allow us to do so. In other cases (particularly in the case of nonprofits in St. Louis) we do not have sufficient detail to make such distinctions and we are likely to report higher expenditures than actually occurred. For commercial banks, we rely on CRA lending data. These have the advantage of being readily available, but the disadvantage of including the entire metropolitan area as well as combining multi-family lending with lending for single-family housing and community development.

Figure 3

Government

1. Tax abatement—six-year average, 1995–2001, source, City of Cleveland, Department of Community Development, Bill Resseger
2. CDBG—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
3. HOME—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
4. ESG—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
5. HOPWA—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
6. Revolving Loan Funds
   a. NDIF—five percent per year loaned of $40,000,000 stock
   b. HTF—FY 2000
7. CDFI—five-year average, 1996–2001, source, http://www.ustreas.gov/cdfi/awardees/pdf/states/ohio.pdf

CRA Commercial Bank (Source; Federal Reserve, or Office of the Comptroller of the Currency, or Office of Thrift Supervision, or FDIC)

8. NCB—FY 1996
9. Huntington Bank—FY 1998
10. Key Bank—FY 1999
11. Fifth Third Bank—FY 1998
12. Charter One Bank—FY 1998

Nonprofits

13. Cleveland Foundation—FY 2000, source, 2000 Annual Report
14. Gund Foundation—FY 2000, source, http://www.gundfdn.org/grants_edcr_00.html
15. Cleveland Civic Vision Housing Fund (CVH)—$12,500,000 loaned at 7-year terms imply $12,500,000/7 = $1,785,714 per year; source: CVH
16. Cleveland Development Partnership II (CDP II): low income investment history (1995–2000) = $10,325,000
    1. Multi-family housing $5,250,000
    2. Village Capital Corp. $2,500,000
    3. For sale housing $2,075,000
    4. ShoreBridge $ 500,000

    Annual flow = $10,325,000/6 = $1,720,833
    Debits of $416,667 per year to VCC and $83,333 per year to ShoreBridge
    Source: CDP

17. NPI-CNPP FY 1999
18. NPI-VCC & NVC, capital stock invested at five percent per year
19. ShoreBridge—capital stock invested at five percent per year
20. ShoreGrowth—capital stock invested at five percent per year
21. LISC-Cleveland office FY 2000

Tax Credits

22. LISC—NEF FY 2000
23. Enterprise Foundation—
    a. ESIC—FY 2000
    b. Loans—FY 2000

Figure 5

Government

1. Local programs—5/2001 conversations with Sherry Siewert, LISC.
2. Tax abatement—1996 Sencord, L.P. seven-year tax abatement (year 7, 100% property tax payment)
3. CDBG—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
4. HOME—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
5. ESG—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
6. HOPWA—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
7. CDFI—FY 1999, source, http://www.ustreas.gov/cdfi/awardees/pdf/states/indiana.pdf

CRA Commercial Bank (Source; Federal Reserve, or Office of the Comptroller of the Currency, or Office of Thrift Supervision, or FDIC)

8. NBD Bank—FY 1996
9. NCB—FY 1996
10. Bank One—FY 1999
11. Key Bank—FY 1999

Nonprofits

12. Lilly Foundation—three-year average, 1998–2000, source; Annual Reports
13. LISC—20-year average, Program activity since 1981; $63,069,178. Source: http://www.liscnet.org/wherewework/indianapolis , retrieved 7/31/01.
14. INHP—FY 2000, source; Annual Report, Financial Statements (FY 2001&2000)

Tax Credits

15. LIHTC—Sencord, L.P. 15-year average, 1996–2010
16. LIHTC—Blue Triangle, L.P. 10-year average, 1999–2008
17. Federal and State Historic Tax Credits—Sencord, L.P. 1996
18. Federal and State Historic Tax Credits—Blur Triangle, L.P. 1998

Figure 8

Government

1. Local programs—information currently not available
2. Tax abatement—information currently not available
3. CDBG—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
4. HOME—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
5. ESG—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
6. HOPWA—FY 2001, source, http://www.hud.gov/offices/cpd/about/budget/budget01/budget_data/RegAreaAlloc.PDF
7. CDFI—FY 2000, source, http://www.ustreas.gov/cdfi/awardees/pdf/states/missouri.pdf
8. MHDC—2 year average, 2000–2001, sources, http://www.mhdc.com/rental_production/Prior_years_1997_2001.pdf

CRA Commercial Bank (Source; Federal Reserve, or Office of the Comptroller of the Currency, or Office of Thrift Supervision, or FDIC)

9. Mercantile Bank—FY 1997
10. First National Bank—FY 1999
11. South Side National Bank—FY 2000
12. Bank of America—three year average, 1998–2000, source, http://www.bankofamerica.com/community/index.cfm , retrieved July 31, 2001

Nonprofits

13. RHCDA (Enterprise Foundation)—FY 2001, source, Peter Benoist, RHCDA
14. St. Louis Equity Fund—FY 2001, source, Peter Benoist, RHCDA
15. Greater St. Louis Land Development Fund—FY 2001, source, Peter Benoist, RHCDA

Tax Credits

16. LIHTC—FY 2000
17. MHDC (state) LIHTC—FY 2000

APPENDIX 2

Providing a variety of parameters to a spreadsheet that then generates the final subsidy figures generates the subsidy calculations summarized in Tables 2 through 6. The spreadsheet used to generate Table 2 is illustrated in this appendix. The value of such an approach is that the impact of alternative assumptions and financing structures can be quickly analyzed. The Excel version of the spreadsheet is available on request from the author.

Nontraditional Capital Discounted Cash Flow Subsidy

EXAMPLE; CHNLP VI

Project Development Budget	**$2,261,621**	**Step 1; Insert Project Cost/Budget**
		Step 2; Insert % of Capital Structure for First Mortgage, SubDebt and Equity.
Project Capital Structure (%)		**If using numerical values use "Goal Seek" tool to calculate %**
First Mortgage	15.48%	**$350,000**
Subordinated Debt	38.14%	**$862,541**
Cash Equity	6.15%	**$139,000**
Equity (Syndicated Tax Credits, etc.)	40.24%	**$910,080**
Total	100.00%	

	$	**% Proj Bd.**
SUBDEBT SUBSIDY=	**$298,229**	**13.19%**
Equity Subsidy=	**$815,590**	**36.06%**
Deferred Interest Subsidy=	**$14,290**	**0.63%**
Tax Abatement Subsidy=	**$279,401**	**12.35%**
Subsidy Total=	**$1,407,511**	**62.23%**

NPV Subordinated Debt DCF		
Subdebt Loan Rate (%)	4.93%	<--
Subdebt Loan Term (yr)	15	<--
Subdebt Market Rate (%)	14.0%	<--

Step 3; Insert Subdebt Loan Rate, Term and Market Rate %

Subdebt Subsidy Calculation			
Subsidized NPV=	$443,473	Market Rate NPV=	$741,702

	Subdebt Discount Rate	Year	Cash Flow
		0	-$862,541
		1	$42,523
		2	$42,523
		3	$42,523
		4	$42,523
		5	$42,523
		6	$42,523
		7	$42,523
		8	$42,523
		9	$42,523
		10	$42,523
		11	$42,523
		12	$42,523
		13	$42,523
		14	$42,523
		15	$42,523
	total		$637,849

Year	Cash Flow
0	-$862,541
1	$120,756
2	$120,756
3	$120,756
4	$120,756
5	$120,756
6	$120,756
7	$120,756
8	$120,756
9	$120,756
10	$120,756
11	$120,756
12	$120,756
13	$120,756
14	$120,756
15	$120,756
	$1,811,33
	6

NPV Equity DCF		
Equity NPV	**0.0%**	
Equity Term (yr)	**15**	
Equity Market Rate Return	**16.3%**	<-- Equity Discount Rate

Step 4; Insert desired Equity Market Rate (%) Return for discount rate of equity

Assumptions-

1- Equity and First Mortgage Term equals Subdebt Term

2- Discount Rate for Equity equals Subdebt (Second Mortgage) rate.

3- Equity NPV equals "0"

Equity Subsidy Calculation	
Equity NPV=	**$0**

Year	Cash Flow
0	**-$910,080**
1	**$0**
2	**$0**
3	**$0**
4	**$0**
5	**$0**
6	**$0**
7	**$0**
8	**$0**
9	**$0**
10	**$0**
11	**$0**
12	**$0**
13	**$0**
14	**$0**
15	**$0**
total	$0

Market Rate NPV=	**$815,590**

Year	Cash Flow
0	**-$910,080**
1	**$148,343**
2	**$148,343**
3	**$148,343**
4	**$148,343**
5	**$148,343**
6	**$148,343**
7	**$148,343**
8	**$148,343**
9	**$148,343**
10	**$148,343**
11	**$148,343**
12	**$148,343**
13	**$148,343**
14	**$148,343**
15	**$148,343**
	$2,225,146

Step 5; If Tax Abatement is available

insert abatement period, tax rate per $1000 assessed value and property value

(**Cleveland** property tax rate equals **$64.20/ $1000 of assessed value**)

(Assessed value equals 35% of property value)

NPV Tax Abatements		
Abatement period (yr.)	15	EPTR (%)
Tax rate (per $1000 assessed value)	$64.20	2.25%
Property value	$2,261,621	
Assessed Value=	$791,567	

Assumptions-

1- Assessed value equals 35% of market value

2- Market value equals Property value or Project Development Cost

3- Abatement period equals 15 years

4- Tax rate is constant for abatement period

Tax Abatement Subsidy Calculation		% of Prop Value
Tax Abatement PV=	$279,401	12.35%

Year	Cash Flow
1	$50,819
2	$50,819
3	$50,819
4	$50,819
5	$50,819
6	$50,819
7	$50,819
8	$50,819
9	$50,819
10	$50,819
11	$50,819
12	$50,819
13	$50,819
14	$50,819
15	$50,819
total	$762,279

Step 6: If Deferred Interest Payments are available, insert Principle Amount, Nominal Interest Rate and Deferral period(s) with effective interest rate.

Deferred Payments; Interest

Principle Amount with Deferred Interest Payments	**$400,000**
Nominal Interest Rate	**8.0%**
Period 1 Deferral term (yrs)	**5**
Period 1 Effective Interest Rate	**6.0%**
Period 2 Deferral Term (yrs)	**10**
Period 2 Effective Interest Rate	**2.0%**

Assumptions

Year	Interest Rate	Deferred Interest	Deferred Cash Flow
1	6%	2.0%	$533.33
2	6%	2.0%	$533.33
3	6%	2.0%	$533.33
4	6%	2.0%	$533.33
5	6%	2.0%	$533.33
6	2%	6.0%	$1,600.00
7	2%	6.0%	$1,600.00
8	2%	6.0%	$1,600.00
9	2%	6.0%	$1,600.00
10	2%	6.0%	$1,600.00
11	2%	6.0%	$1,600.00
12	2%	6.0%	$1,600.00
13	2%	6.0%	$1,600.00
14	2%	6.0%	$1,600.00
15	2%	6.0%	$1,600.00

NPV Period 1
$2,514

NPV Period 2
$11,776

REFERENCES

Anderson, Nathan, and William T. Bogart. 2001. "The Structure of Sprawl: Identifying and Characterizing Employment Centers in Polycentric Metropolitan Areas." *American Journal of Economics and Sociology* 60: 147–169.

Avery, Robert B., Patricia E. Beeson, and Mark S. Sniderman. 1999. "Neighborhood Information and Home Mortgage Lending," *Journal of Urban Economics* 45: 287–310.

Bullard, Stan. 2000. "A Jump Start for City Housing." *Crain's Cleveland Business*. August 28, p. 1.

Case, Karl. 1991. "Investors, Developers, and Supply-Side Subsidies: How Much is Enough?" *Housing Policy Debate* 2: 341–356.

Cummings, Jean, and Denise DiPasquale. 1998. "Developing a Secondary Market for Affordable Rental Housing: Lessons from the LIMAC/Freddie MAC and EMI/Fannie Mae Programs." *Cityscape* 4: 19–41.

———. 1999. "The Low-Income Housing Tax Credit: An Analysis of the First Ten Years." *Housing Policy Debate* 10: 251–307.

Dunlap, T. Phillip, and others. 1995. "Reshaping the Local Economy through a Revolving Loan Fund Program in an Entrepreneurial City." *Economic Development Quarterly* 9: 74–79.

Emerson, Jed. 2000. "The Nature of Returns: A Social Capital Markets Inquiry into Elements of Investment and the Blended Value Proposition." *Social Enterprise Series,* no. 17. Roberts Enterprise Development Fund.

Grogan, Paul S., and Tony Proscio. 2000. *Comeback Cities: A Blueprint for Urban Neighborhood Revival*. Boulder, CO: Westview Press.

Heikens, Norm. 1998. "ECI Collapse Leaves Scars; Tangled Legacy Unfolds at Community Development Group." *Indianapolis Business Journal*. May 4, p. 1.

Klausner, Michael. 1995. "Market Failure and Community Investment: A Market-Oriented Alternative to the Community Reinvestment Act." *University of Pennsylvania Law Review* 143:1561–1593.

Liou, Y. Thomas, and Robert C. Stroh. 1998. "Community Development Intermediary Systems in the United States: Origins, Evolution, and Functions." *Housing Policy Debate* 9: 575–594.

Litan, Robert E., and others. 2002. *The Community Reinvestment Act after Financial Modernization: A Baseline Report.* Washington: U.S. Department of the Treasury.

McClure, Kirk. 2000. "The Low-Income Housing Tax Credit as an Aid to Housing Finance: How Well Has It Worked?" *Housing Policy Debate* 11: 91–114.

Merrill, Sally, and others. 2000. *Housing Finance for Low and Moderate Income Households: Innovations in the United States and around the World*. Washington: Urban Institute.

Quercia, Roberto G., William M. Rohe, and Diane K. Levy. 2000. "A New Look at Creative Finance." *Housing Policy Debate* 11: 943–972.

Retting, Ellen. 1999. "ECI Emerges from Fallout; Leadership Ready to Leave Past Behind." *Indianapolis Business Journal*. October 11, p. 3.

Schumpeter, Joseph. 1950. *Capitalism, Socialism, and Democracy*. New York: Harper & Row).

Simons, Robert, and David Sharkey. 1997. "Jump-Starting Cleveland's New Urban Housing Markets: Do the Potential Fiscal Benefits Justify the Public Subsidy Costs?" *Housing Policy Debate* 8: 143–171.

Stegman, Michael. 1991 “The Excessive Costs of Creative Finance: Growing Inefficiencies in the Production of Low-Income Housing.” *Housing Policy Debate* (2): 357–373.

Van Order, Robert, and Peter Zorn. 2000. “Income, Location, and Default: Some Implications for Community Lending.” *Real Estate Economics* 3: 385–404.

Warren, Chris. 1995. “Housing: New Lessons, New Models.” In W. Dennis Keating, Norman Krumholz, and David C. Perry, eds., *Cleveland: A Metropolitan Reader*. Kent, OH: Kent State University Press.