FINANCING BALTIMORE'S GROWTH

Measuring Small Companies' Access to Capital

JOHNS HOPKINS
21ST CENTURY CITIES
INITIATIVE

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The authors received guidance and assistance from Lindsay Thompson, associate professor, Carey Business School; and Cliff Kellogg, management consultant, Financial Services Consulting Group. The following Johns Hopkins University students provided research and writing assistance: Edwin Lin, Jerry Yao, Holly Tice, and Kelvin Fu.

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21ST CENTURY CITIES INITIATIVE

The 21st Century Cities Initiative (21CC) at Johns Hopkins University is a new source of research, convening, and action on the most pressing challenges facing urban communities. Bringing together diverse stakeholders, performing applied research, and providing policymakers and practitioners with problem-solving ideas and tools, 21CC supports cities committed to opportunity, inclusion, and innovation.

21st Century Cities Initiative
3213 N. Charles Street
Baltimore, MD 21218

Contact us: 21CC@jhu.edu

JOHNS HOPKINS
21ST CENTURY CITIES INITIATIVE

www.21cc.jhu.edu

EXECUTIVE SUMMARY

Baltimore has the potential to be a city that is truly hospitable to small business growth, with all the economic benefits of jobs and tax revenue such growth would bring. But for new and established small businesses to thrive, the city needs a financing system with capacity to meet their needs.

Capital is certainly not the only ingredient necessary for successful business growth, but it is a critical input. If companies lack access to appropriate types of capital at critical stages of growth, they are likely to never take off and achieve scale, or even worse, to go out of business or leave Baltimore and relocate where financial support is more readily available, depriving the local economy of jobs and economic growth.

To better understand Baltimore's financing system and the flow of capital to small businesses, the 21st Century Cities Initiative at John Hopkins University embarked on this project to answer the following questions:

- What are the sources and amounts of financial investments, both private and public, going to small businesses in Baltimore?
- How much capital is from local sources versus regional or national sources?
- Where are there gaps in financing in terms of types of capital and funding amount ranges?
- Are successful businesses leaving Baltimore because they can't access adequate growth capital?

Over the five-year period from 2011 through 2015 about $560 million per year was invested or loaned to startups and small businesses in Baltimore City. Around 75 percent of the capital came from private sources, including banks and venture capital investors. Public sources made up the remaining 25 percent and included government subsidized and guaranteed loans, state and federal equity investments, and federal research grants to startups.

Equity investments in Baltimore's startups and small businesses have grown significantly over the past decade and especially the past two years when venture capital and other forms of equity investment exceeded $200 million annually, compared to $50 million invested per year nine years ago. Despite this impressive growth, most equity investments are on the smaller side, less than $1 million; and nearly 60 percent of venture capital investors are based outside of Baltimore and Maryland, making growing firms highly dependent on outside capital as they grow.

On the lending side, the total amount of loans to small businesses has grown in recent years, but has not reached pre-recession levels, which peaked in 2007. National trends in bank consolidations have hit Baltimore especially hard. The total current small business lending activity of the consolidated banking system does not equal the sum of the parts from the early 2000s. The loss of local banks has also left a void in larger, working capital loans, as national banks are more likely to focus on credit card loans, and smaller local institutions have struggled to fill the gap. Small Business Administration (SBA) guaranteed loans and state and city loan programs can fill key gaps in providing loans to small businesses that would not otherwise qualify for bank loans and in providing larger, working capital loans. However, these programs are very small within Baltimore's financing system.

The overall picture of Baltimore's financing system leads to a view that it needs to grow and modernize to meet the needs of small companies in the city. The system is both fragmented and underdeveloped to provide the full continuum of capital for small business growth. It is also not a system that is easy to navigate. Based on our findings, we have developed four recommendations for strengthening and growing Baltimore's startup and small business financing system.

Recommendation # 1
MEASURE, TRACK, AND REPORT

We cannot truly know the effectiveness of Baltimore's small business financing system unless we continuously measure it and track and report on successes, challenges, and changes over time. This should include tracking individual companies and their access to capital, as well as measuring the amount of capital present in Baltimore that could potentially support small business growth.

Recommendation # 2
CONNECT, CONVENE, AND RETAIN

One of the biggest challenges with the current small business financing environment in Baltimore is that startups and small businesses struggle to navigate the various financing programs, and similarly, funders, investors, and lenders don't have easy ways to connect with opportunities. We recommend a new initiative in Baltimore for showcasing growing companies at a regular convening of equity investors from Baltimore and elsewhere to make them aware of the opportunities. We also propose the creation of a navigation and concierge capacity within the city that can better connect businesses with investors and lenders.

Recommendation # 3:
BUILD MORE LENDING CAPACITY

The data show that Baltimore's lending capacity has shrunk and changed with bank consolidation and a shift to real estate backed loans and credit card loans as the principal forms of credit extension to small businesses in need of working capital. We need to rebuild the art and practice of small business lending in Baltimore.

To do this, public and private leaders need to work together to: 1) develop more lenders skilled in executing SBA 7a loans, 2) expand the role of Baltimore's community development financial institutions to have a greater focus on small business lending, and 3) leverage public dollars more effectively to grow working capital lending.

Recommendation # 4
EXPAND THE RANGE OF FINANCIAL INSTITUTIONS

There is a larger conversation to have about what is missing from the local financing system. For example, a concerted effort could be made to build corporate venture capital that could invest in local companies. There is also room for raising capital for a new Business Development Corporation or Small Business Investment Company that would provide working capital to growing companies in Baltimore. Another area to explore is whether there are opportunities to strengthen and grow some of the smaller, local banks and credit unions that are more likely to provide working capital loans.

The focus of this report has been on making what Baltimore has today work better, but our hope is that this initial exercise will unleash a discussion around infusing new capital into the system. There are many initiatives in Baltimore to support small business growth and a political leadership that is committed to growing the city's economy. We hope this report can be a resource to every stakeholder interested in seeing Baltimore thrive.

INTRODUCTION

Baltimore's small businesses form the backbone of the local economy, providing jobs for residents, tax revenues for the city, and a sense of identity to neighborhoods and commercial districts. Companies like the ones described below are representative of the many small businesses that have started up and grown up in Baltimore:

> *Established in 1986, an electrical contracting firm secured two, $200,000 working capital loans in 2008 and 2013 from M&T Bank through the U.S. Small Business Administration 7a program to finance work on Baltimore's premiere sports and cultural venues. In 2015, the company received a $1.5 million loan from the Maryland Small Business Development Financing Authority, which has helped to finance work on government contracts and planned expansion into new projects for Baltimore area hospitals and universities. The African-American owned firm employs 29 people and is located off Route 40 in West Baltimore.*

> *A Baltimore biotech startup has been providing cancer genome analysis tools to oncology researchers and drug developers since 2010. The company, founded by oncologists affiliated with Johns Hopkins, raised $500,000 of angel funding in 2011, and $2.8 million in seed funding in 2014. In 2015, the company raised $21 million in early stage venture capital from multiple investors. The company has also received critical grant and equity investments from federal research agencies and the Abell Foundation. The company, located in the Canton neighborhood of Southeast Baltimore, currently employs 150 people.*

These businesses have benefited from and contributed to a robust local economy led by Baltimore's "eds, meds, and feds" triumvirate, leading financial services firms, and budding technology and advanced manufacturing sectors. In recent years, Baltimore has supported the growth of world-renowned corporations that started out as small, homegrown businesses, such as Pixelligent, a light and optical materials firm that opened a 13,000 square-foot manufacturing facility in Baltimore in 2011, and sports apparel giant, Under Armour, which generated $4.8 billion in revenue in 2016.

Baltimore also has the potential to be a place that works for a wide range of entrepreneurs and small business owners who can create and support career opportunities for all Baltimoreans. There are a growing number of makerspaces and incubators supporting local businesses and products. The city boasts diverse business ownership: more than half of the approximately 50,000 firms in Baltimore City are minority-owned. Local institutions, both public and private, are committed to supporting the growth of these businesses with a range of resources, from micro and working capital loan programs managed by city and state agencies to community-focused financial entities like Harbor Bank, which is one of just 23 black-owned banks in the U.S.

Still, recent reports on Baltimore's small business support system confirm years of anecdotal evidence that Baltimore needs to attract more venture capital to fully support startups and growth firms (Brookings Institution, 2012), and lacks adequate financing products for small businesses in underserved markets (Milken Institute, 2017). An additional concern these and other studies bring to light is that the resources that are available in Baltimore are often hard to navigate and therefore underutilized.

With these strengths and weaknesses in mind, the 21st Century Cities Initiative at Johns Hopkins University embarked on this study to better understand whether the financing system catering to Baltimore's small businesses is sufficiently expansive and diverse to support the entire landscape of firms and their varying needs, as well as to gauge where the gaps are and how this affects the retention of successful businesses in Baltimore.

Capital is certainly not the only input necessary to turn a good idea into a successful company, or to sustain and expand an established firm. Entrepreneurs and business owners also require a range of other supports to succeed and grow, such as management and workforce talent, marketing and legal assistance, and access to mentors and collaborators. Capital is, however, the lifeblood of small businesses. If companies, both new and established, lack access to appropriate types of capital at critical stages of the business continuum, they are likely to never take off and achieve scale, or even worse, to go out of business or leave Baltimore and relocate where financial support is more readily available, depriving the local economy of jobs and growth.

To better understand the flow of capital to small businesses in Baltimore City, we set out to map the small business financing system by attempting to answer the following questions:

- What are the sources and amounts of financial investments, both private and public, going to small businesses in Baltimore?
- How much capital is from local sources versus regional or national sources?
- Where are there gaps in financing in terms of types of capital and funding amount ranges?
- Are successful businesses leaving Baltimore because they can't access adequate growth capital?

We have organized this report into two main sections. The **Observations** section outlines key findings and themes for Baltimore's financing system with a specific focus on equity and loan investments. The section also explores limited comparisons of financing sources in Baltimore and other cities. The **Recommendations** section draws from the observations a series of steps to strengthen Baltimore's financing system for consideration by public and private leadership.

At the outset, there are several points to note. First, the report focuses on Baltimore City. While local economies are driven by a range of factors across their larger regions, there are also significant disparities within regions. In the case of Baltimore City, there are particular challenges stemming from years-long population loss, neighborhood divestment, and crumbling infrastructure that are sometimes masked when measuring the economic strength of the larger Baltimore metropolitan area and certainly the greater Washington, DC – Baltimore region. We therefore believe there is good reason to specifically examine the well-being of small businesses located in the city in order to gauge their potential for growth and whether they might, directly or indirectly, help address some of the larger challenges facing Baltimore.

Second, despite our wide range of data, it is impossible to quantify the importance of financial support from outside the formal financing system—friends and family investors in startups, the use of personal credit by entrepreneurs, and emerging financial technologies for lending and investing, including crowdfunding. Also, we have not fully captured support from small institutions, like smaller banks and credit unions that are not required to report loan data in the same manner as larger banks. However, we are able to analyze the business lending balance sheets of these smaller institutions to understand the overall size of their business loan portfolios, which we reflect in the report. There are a few cases of these banks voluntarily reporting their detailed small business lending activity, which we have captured in our analysis, but they are the exception among the smaller banks. Despite these gaps, we believe we have captured the largest sources of support in a manner that can be replicated in the future.

Third, we did not set out to do a comparative analysis of Baltimore versus other cities. This would have been a much bigger project and would have taken much longer. Nevertheless, in a few cases where cross-city datasets were readily accessible, we show how Baltimore compares to a handful of other cities.

It is our intention to use this report as a baseline analysis that can be updated and enhanced. Across Baltimore, there are a number of ongoing research projects exploring access to capital and other small business needs. We intend for this report to complement these other efforts and be a resource for anyone interested in working on innovative solutions for small business development in Baltimore.

METHODOLOGY

Data Sources

In order to construct a comprehensive map of Baltimore's small business financing system, we looked at investments through 40 different public and private funding programs and sources, including federal programs such as Small Business Administration (SBA) 7a loans and state and local revolving loan funds, as well as private sources of capital such as Federal Deposit Insurance Corporation (FDIC) insured bank loans and venture capital investments. Much of the data accessed was through publicly available sources, such as web sites and annual reports. In other cases, we received investment data directly from the organizations or investors overseeing specific funds or programs. We also accessed investment data through Pitchbook and Crunchbase, online subscription services that focus on venture capital and other equity investments going to individual companies; and through a data agreement with the Opportunity Finance Network, the leading, national policy and research network of community development financial institutions (CDFI). For a complete list and description of the data sources examined for this study, see Appendix A.

Expert Interviews

In addition to collecting a large and varied amount of data, the analysis has been complemented by interviews with local experts and stakeholders directly involved in Baltimore's financing system. In developing this report, we have spoken with more than 50 individuals from government agencies, banks, investment firms, CDFIs, startup incubators, nonprofit associations, individual startups, and small businesses. The Federal Reserve Bank of Richmond's Baltimore office has been a valuable partner in convening experts and stakeholders. These expert conversations have led to the identification of new data sources and confirmed and contributed to our observations and recommendations.

Finally, we have applied the following rules in our analysis of the small business financing system:

- **Destination-based analysis:** The analysis looks at funding received by Baltimore City-based companies as opposed to investments made by Baltimore-based investors and banks, which may be going to companies based outside of Baltimore.
- **Small business definition:** We define small businesses here as firms with fewer than 500 employees at the time of the investment. Most of Baltimore's small businesses interacting with the financing system have 50 or fewer employees. Of the more than 2,000 individual firms with available data that have been analyzed, 95 percent had 50 or fewer employees.
- **Analysis time period:** We have collected data from 2000-2016. Not all data sources are available for this entire period of time. In instances where data are not available for this period of time, either because they are not accessible or the specific investment program is not in existence, we use the most available data, which typically covers a 5-year or 10-year period.[1]
- **Level of data:** For most data sources, we have access to individual transactions. For some sources, the only available data are total number of transactions and total dollar amount per year. For individual transactions, the report masks company names and investment information.

OBSERVATIONS

To better understand the overall size of the financing system in Baltimore City, we organized the available data into public and private sources of financing for small businesses. The 5-year period of 2011 through 2015 is the longest period when the entire set of data sources accessed is available.

During this five-year period, an average of $559 million was invested per year into startups and small businesses in Baltimore City, see Table 1. Around 75 percent of the capital comes from private sources, including banks and venture capital investors. Public sources include government subsidized and guaranteed loans, state and federal equity investments, and state and federal grants. In terms of the number of transactions, private sources represent the vast majority of deals or investments.

In the most recent year of complete data, 2015, private financing was slightly higher than the five-year average, largely driven by a spike in venture capital funding for that year.

Charts 1 and 2 break out individual sources of private and public financing by total dollar amount. Private financing sources are largely comprised of FDIC-insured bank loans and venture capital investments, as well as a small number of initial public offerings (IPO). Foundation and university grants only account for 0.2% of the total dollar amount, as noted, and are too small to be visible on the chart.

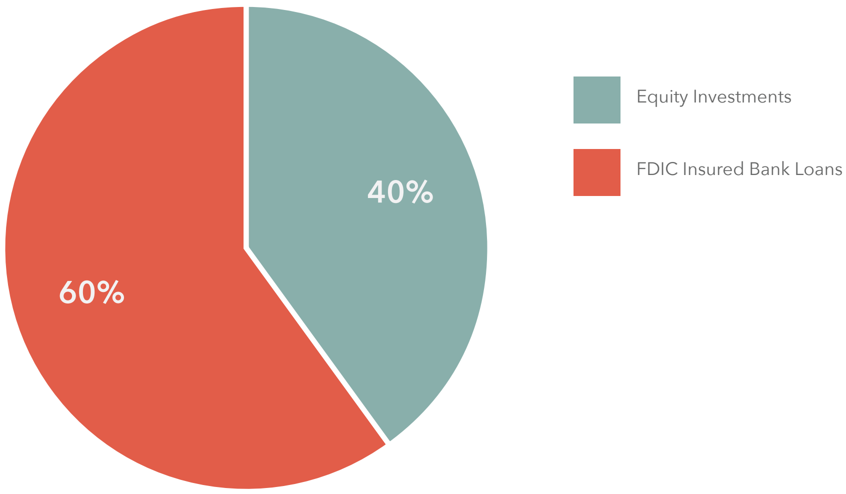
On the public side (Chart 2), SBA guaranteed loans and federal grants are each responsible for nearly one third of investments in small businesses. State of Maryland and Baltimore City financing programs fill in the gaps for small businesses that struggle to access bank loans, but these programs

TABLE 1
TOTAL FINANCING SYSTEM BY PUBLIC AND PRIVATE SOURCES
BALTIMORE CITY SMALL BUSINESSES, 2011-2015

	2011 - 2015		2015	
Source	**# of Transactions**	**$ Amount**	**# of Transactions**	**$ Amount**
Private	33,858	$2,115,730,315	8,221	$493,066,301
Public	1,124	$676,908,597	279	$110,704,110
Total	**34,982**	**$2,792,638,912**	**8,500**	**$603,770,411**

Sources: Private includes Venture Capital, Initial Public Offerings, FDIC Insured Banks, and Private University and Foundation Grants. Public includes Small Business Administration 7a and 504, Export-Import Bank, CDFI Fund, Federal Grants, Maryland Department of Commerce, Maryland Department of Housing and Community Development, and Baltimore Development Corporation.

CHART 1
PRIVATE SECTOR SOURCES OF FINANCING BY $ AMOUNT SHARE
BALTIMORE CITY SMALL BUSINESSES, 2011-2015



Note: Foundation and University Grants account for 0.2% of the total amount.

are a very small percentage of the financing system.

In analyzing the data, we have observed that of the more than 2,000 companies in our dataset, **only eight firms accessed at least one subsidized or guaranteed loan and one equity investment**. This apparent bifurcation in the system where companies access either loans or equity investments, but not both, raises the question of whether companies are getting the right kind of capital throughout their lifecycle. Would some startups be better served with debt capital, and are some small companies trying to borrow when they really need equity investors?

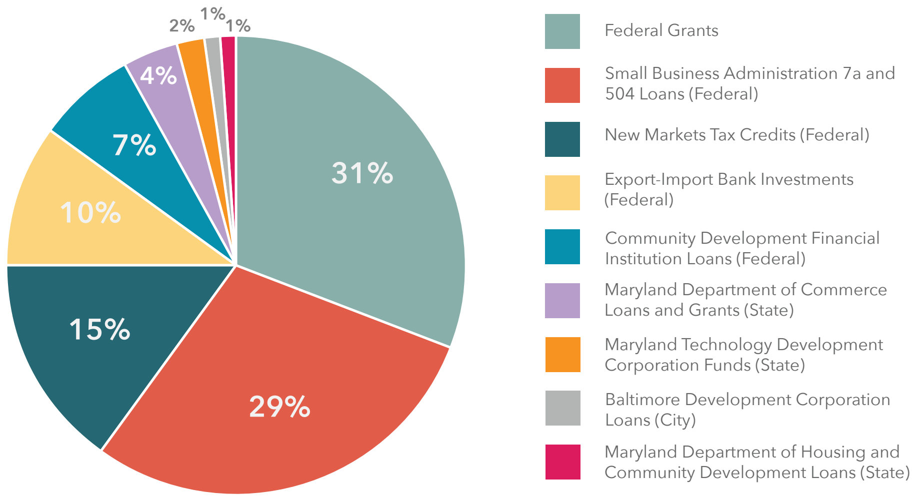
Equity Investments

Baltimore is home to a growing number of life sciences and information technology startups seeking to transfer research and early stage technology into profitable businesses. Almost all successful startups require equity at some point in their life cycle, in the form of seed, early, and late stage venture capital investments, to develop ideas and bring products to market. The lack of access to these resources could result in a business failing, looking outside of Baltimore for capital, or leaving the city for a more hospitable financing system.

To get a clearer understanding of the equity investment side of Baltimore's small business financing system, we analyzed venture capital equity investments in Baltimore's small businesses over the 10-year period of 2007 to 2016 using data from Pitchbook and Crunchbase, cross-checked and augmented by data provided to us from individual investment funds.[2]

While venture capital investments constitute the vast majority of equity investments, we have also considered

CHART 2
PUBLIC SECTOR SOURCES OF FINANCING BY $ AMOUNT SHARE BALTIMORE CITY SMALL BUSINESSES, 2011-2015



A RARE CASE

Between 2007 and 2012, a tech startup received four SBA 7a loans, totaling $1 million, to develop an "app" to expand services across the city. In 2014, the firm raised $10.5 million in angel and early stage venture capital financing, and continued to successfully expand its business before being acquired in 2015 by a Chicago-based company for $89 million.

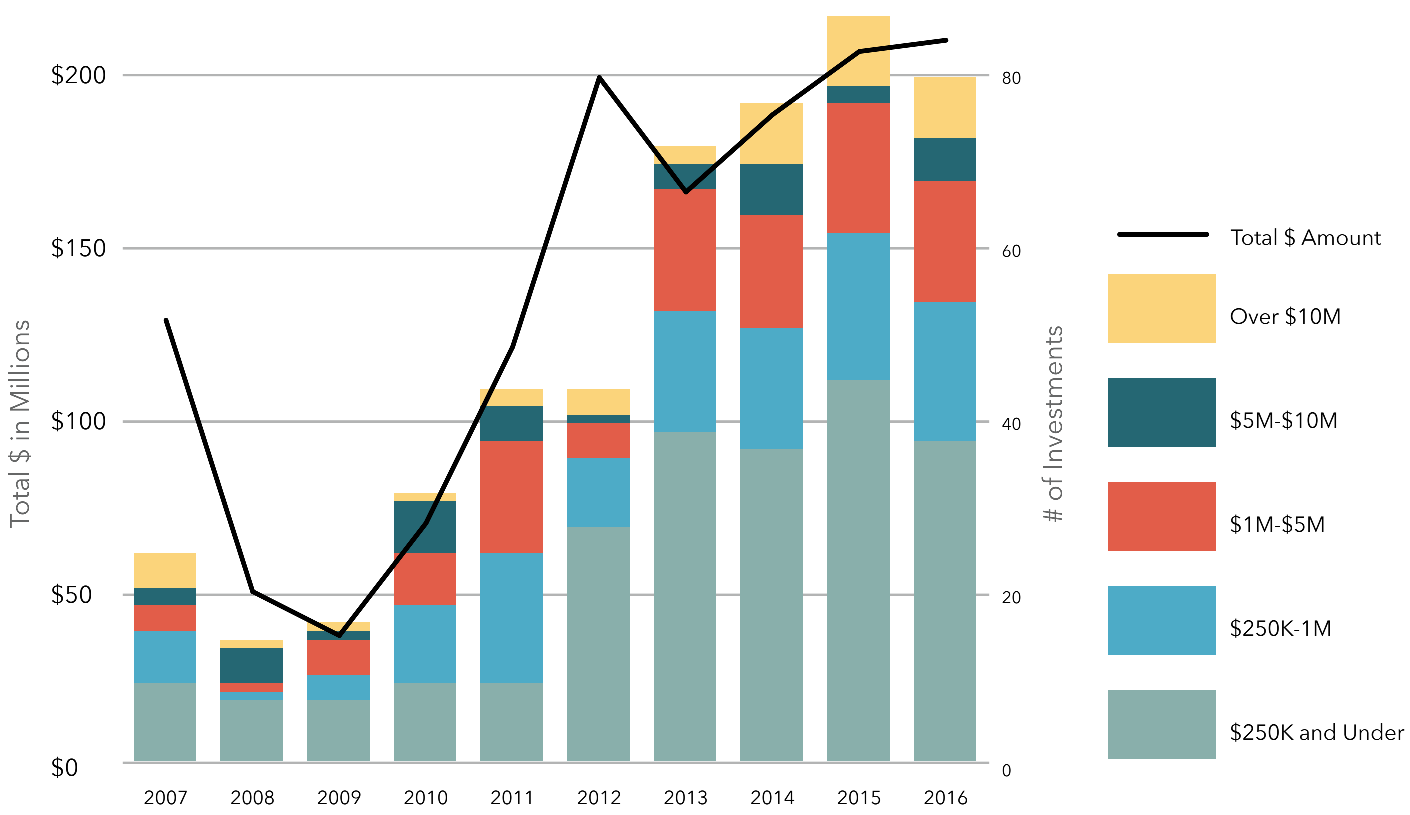
IPOs, mergers and acquisitions, and private equity deals. For IPOs, we have included those that involved small businesses with fewer than 500 employees at the time of the transaction. During the 10-year time period analyzed, there were only two IPOs involving small businesses.

Mergers and acquisitions were not included in our analysis since they do not represent an investment in a business, but rather a sale and change in business ownership. But to provide a sense of such activity in Baltimore, there were 28 mergers and acquisitions involving Baltimore small businesses during the 10-year period for a total value of $3.8 billion. Two of these merged or acquired companies remained headquartered in Baltimore, eight moved outside the city but remained within the Baltimore metro area, and 15 continued to have a regional office in the city. Finally, we did not count private equity deals in our analysis, since they tend to transfer company ownership rather than add wealth or jobs.

Chart 3 presents annual data over the 10-year period for the total dollar value of venture capital and equity investments, which totaled just over $1.3 billion for the entire period. The data show that over the past 10 years, equity investments in small businesses in Baltimore have grown significantly, recovering from a dip during the Great Recession (2008-09) to greatly outpace pre-recession levels in recent years. Investments in 2015 and 2016 both exceeded $200 million, and 2017 appears to be on pace to sustain this level, exemplified by a $40 million series C round of investment received by ZeroFOX earlier this year.

Despite this impressive growth in total dollar amount, it is important to look at the dollar

CHART 3
EQUITY INVESTMENTS BY TOTAL $ AMOUNT AND # OF INVESTMENTS
BALTIMORE CITY SMALL BUSINESSES, 2007-2016



Note: Colored bars refer to number of investments in dollar ranges, while the line refers to the total $ amount.
Sources: Pitchbook, Crunchbase, Maryland Venture Fund, Baltimore Angels, Camden Partners, Abell Foundation, New Markets Tax Credits, and TEDCO.

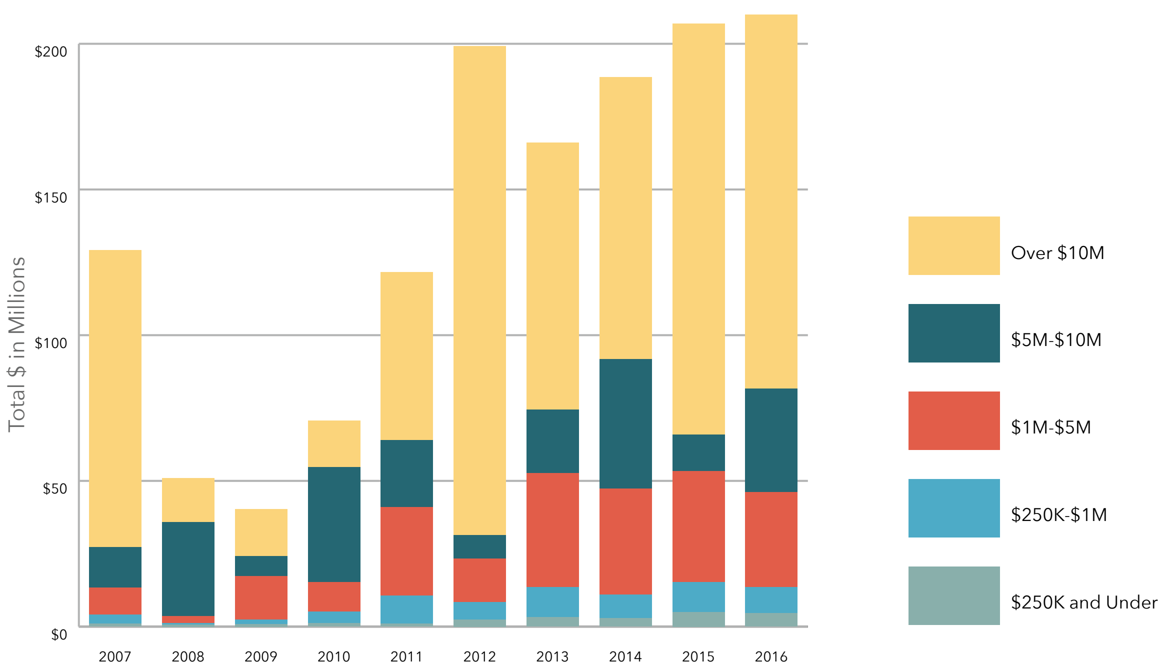
amounts of individual investments,[3] which reveals most of the individual investments are under $1 million. Chart 3 also displays the number of investments per year divided across five investment ranges. In 2016, for example, there were 79 equity investments to small businesses in Baltimore City, totaling $208 million. Of those 79 investments, 37 were under $250,000, while only seven investment rounds were greater than $10 million per investment.

This is a consistent trend over the entire period. During the period, 14 percent of the number of investments were over $5 million, totaling over $1 billion and secured by 32 different companies, revealing that over this 10-year period, large venture capital investments have represented over 75 percent of the total funding, but it has gone to a fairly small group of companies. Chart 4 displays this trend by identifying total dollar investments per year by investment range.

SUCCESS AT ALL STAGES

Between 2011 and 2016, a social media marketing startup received six rounds of equity investments. Three rounds were under $250,000, one was approximately $500,000, and one was over $2 million. In 2016, the business received a later stage venture capital investment round over $5 million. The company was recently recognized as a Red Herring Top 100 Company.

CHART 4
SUM OF EQUITY INVESTMENTS BY $ AMOUNT RANGE
BALTIMORE CITY SMALL BUSINESSES, 2007-2016



Note: Colored bars refer to total value of investments in each funding range.
Sources: Pitchbook, Crunchbase, Maryland Venture Fund, Baltimore Angels, Camden Partners, Abell Foundation, New Markets Tax Credits, and TEDCO.

Where Does the Venture Capital Come From?

Businesses need reliable sources of capital during each stage of growth to be successful. A lack of access to capital at any stage can disrupt growth and potentially force a business to relocate. By looking at where equity investments to Baltimore's startups and small businesses come from, we have attempted to quantify the extent to which local investors are supporting local companies. We were able to perform this analysis on a subset of venture capital investments, which are a portion of the overall equity investments quantified above.

Table 2 explores the source of venture capital investment in Baltimore small businesses using Pitchbook data augmented and cross-checked with data from individual investors and funds. The table presents the number of individual investments across three stages of funding rounds (as labeled by Pitchbook), seed, early, and late. For each funding round, there are typically multiple investors. We were able to capture location information of individual investors for about 60 percent of the funding rounds, which represent 493 individual investments and 260 unique investors.[4] The table shows that while 29 percent of seed investments are from Baltimore, only 16 percent of early and 14 percent of late stage investments in Baltimore startups are from Baltimore (row highlighted in gray). While these startups could look to Baltimore to grow their business at the earliest stages, the data indicate that they must look elsewhere for capital to scale.

Through interviews with experts and stakeholders, we learned that investors making large investments in businesses often prefer close oversight of their investment, and will make an investment contingent on a company's willingness to be located near the investor. Given that more than half of venture capital investors in Baltimore startups and small businesses are from outside Baltimore and Maryland, the following question arises: are growing companies pressured to leave Baltimore to access capital?

TABLE 2
VENTURE CAPITAL INVESTMENTS BY INVESTOR LOCATION
BALTIMORE CITY SMALL BUSINESSES, 2007-2016

	Seed	Early	Late	All
Individual Investments	174	231	88	493
% of Investors from Baltimore	29%	16%	14%	21%
% of Investors from Maryland	28%	25%	18%	21%
% of Investors Outside Maryland	43%	59%	68%	58%
$ Amount	$48,100,000	$376,968,276	$417,721,846	$842,790,122

Sources: Abell Foundation, Baltimore Angels, Camden Partners, Crunchbase, TEDCO, Pitchbook, and Propel.

To get a better understanding of relocation patterns, we analyzed the current status and locations of companies that received venture capital investments at any stage while based in Baltimore, as well as companies that launched in Baltimore but did not receive equity investments while based in Baltimore. This analysis led to the following observations:

- Companies that received any level – seed, early, or late – of equity investment while based in Baltimore tend to remain located in Baltimore. Even when there are exceptions to this trend, more established firms that leave Baltimore tend to retain a local presence. A notable example is Graybug Vision, which was founded in 2011 as a spin-out from the Wilmer Eye Institute at Johns Hopkins. Graybug accessed numerous federal grants and early stage equity investments before moving its management functions to Silicon Valley in May 2016 after receiving a $44.5 million investment from a California based venture capital firm and naming a new, seasoned biotech CEO. Despite the headquarters' relocation, a significant portion of the company has remained in Baltimore.
- Many startups appear to leave Baltimore before receiving their first round of investment. For example, of the companies that got their start in Baltimore at two of the local, successful tech incubators, about 30 percent of these firms received their first equity investment after relocating to another city.
- Fewer startups relocate to Baltimore and access equity investments from local investors. In 2007 and 2010, two industrial and home goods manufacturing startups moved to Baltimore from the surrounding region and subsequently received $30 million each in early and late stage equity investment.

IN SEARCH OF CAPITAL

Between 2013 and 2015, an Edtech startup received five rounds of equity investment. During three seed funding rounds, 17 investors participated, 12 of which were from Baltimore. As the company grew and needed capital for piloting new software, they participated in an early stage round of venture capital funding. Of the six investors that participated in the funding round, only one was from Baltimore.

Loans

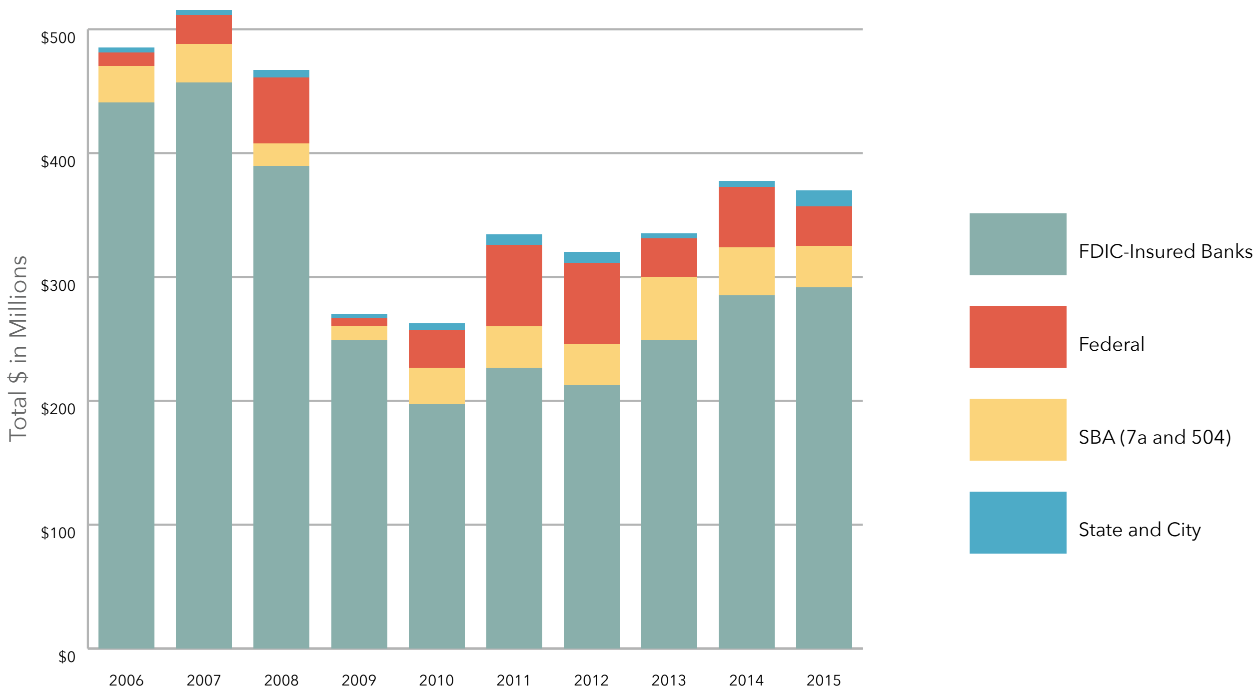
The majority of small businesses in Baltimore are Main Street businesses that interact with the financing system quite differently than tech startups accessing venture capital. These businesses require small to medium size loans in the form of working capital, lines of credit, or financing to purchase new equipment or real estate to grow their business.

The main types of loans to small businesses are private FDIC-insured bank loans, SBA guaranteed loans, federally subsidized loans and investments such as CDFI loans or the loan portion of NMTC investments, and Maryland State and Baltimore City subsidized loan programs. Of course, a significant caveat is that the system as mapped here does not include loans or other contributions from family, friends, personal savings or credit, and online lending.

Chart 5 shows the total loan amount by source for the 10-year period, 2006 to 2015. [5] Despite a recent uptick, loans have not reached pre-recession levels. Over this time, FDIC-insured banks have been responsible for the largest share of total lending by dollar amount, but they have also seen the steepest decline since the recession and have not fully rebounded to pre-recession levels. Federally guaranteed and subsidized loans have been consistently higher than combined state and city loans.

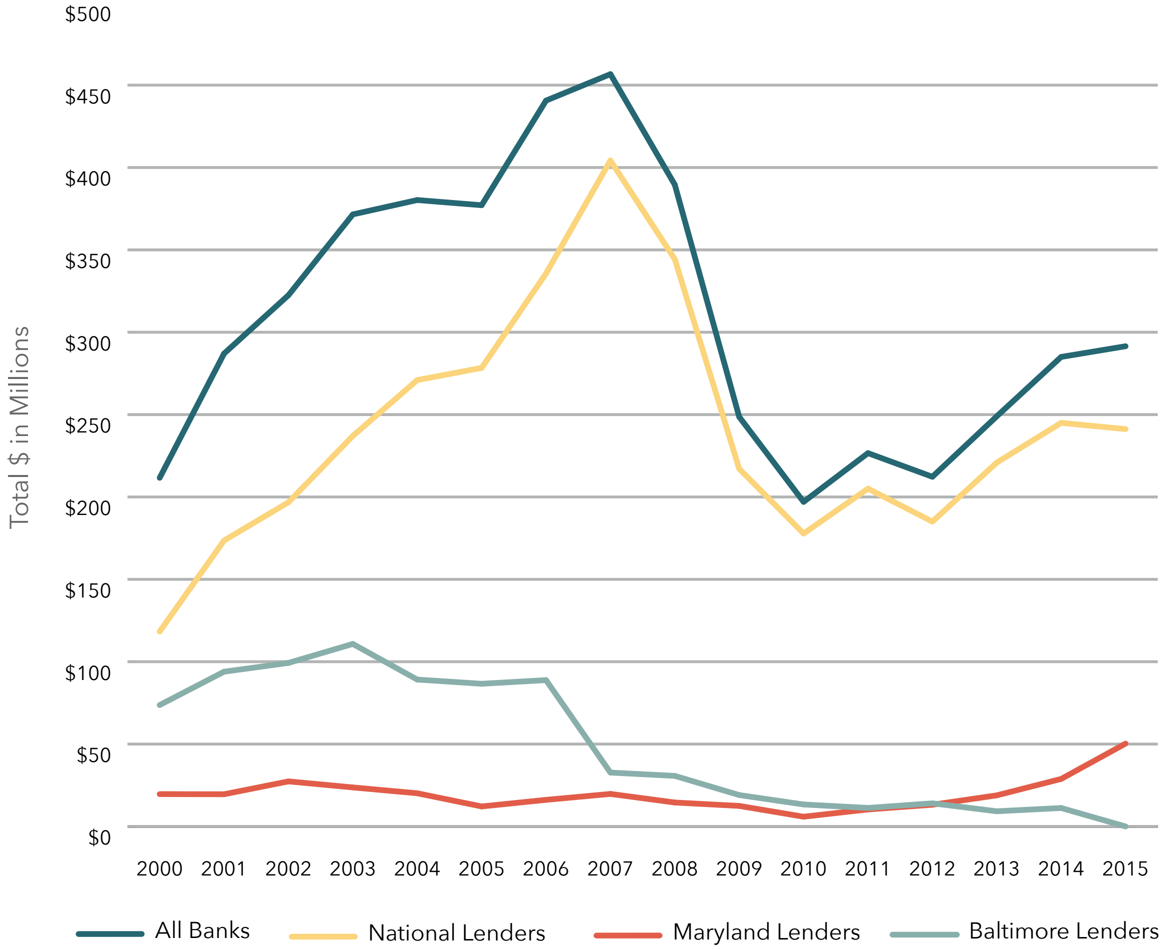
The vast majority of loans by private FDIC-insured banks are primarily in the form of credit card loans. In recent years, especially coming out of the Great Recession, SBA guaranteed loans and federally subsidized loan funds have been an important and significant source of financing for small businesses in Baltimore. While state and city loan programs are a small portion of the overall loan landscape, they fill gaps for businesses that struggle to secure loans from the private market.

CHART 5
SOURCES OF LOAN FINANCING BY TOTAL $ AMOUNT BALTIMORE CITY SMALL BUSINESSES, 2006-2015



Sources: U.S. Small Business Administration 7a and 504, FFIEC CRA Reports, Export-Import Bank, CDFI New Markets Tax Credits, CDFI CIIS, Opportunity Finance Network CDFIs, Baltimore Development Corporation, Maryland Department of Commerce, and Maryland Department of Housing and Community Development.

CHART 6
BALTIMORE, MARYLAND, AND NATIONAL BANK LENDING BY TOTAL $ AMOUNT BALTIMORE CITY BUSINESSES, 2000-2015



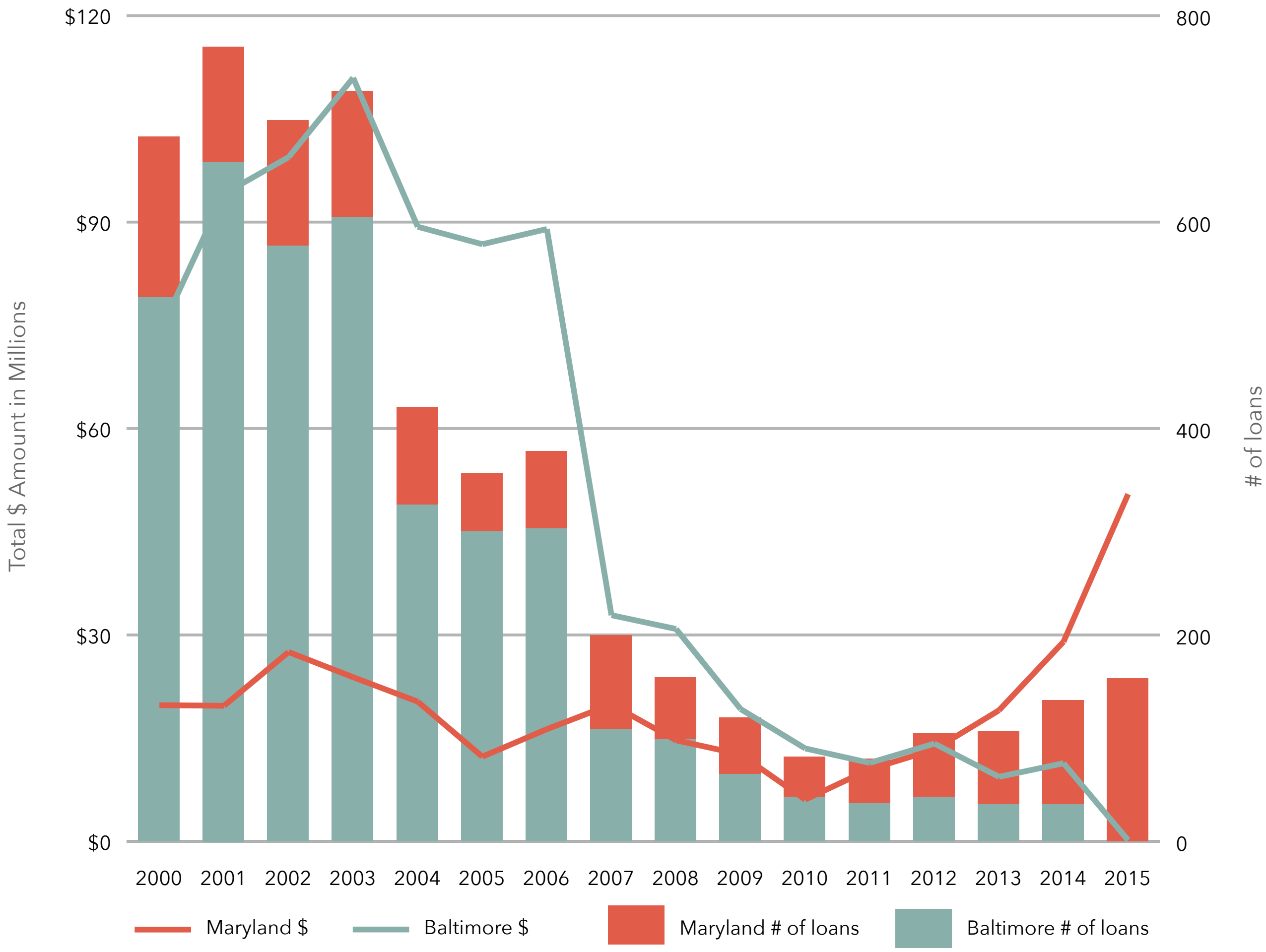
Source: FFIEC CRA Reports

Location Matters: National Consolidation and the Loss of Local Banks

The largest source of loan financing for Baltimore City small businesses is private FDIC-insured banks. The Community Reinvestment Act requires all banks with assets over a certain threshold, currently $1.226 billion, to report their annual lending activity to the Federal Financial Institutions Examination Council (FFIEC). Some smaller banks below this threshold voluntarily report that same data. Included in these data are all loans under $1 million to all businesses. Most of these loans are to small businesses. For example, in 2015, over 50 percent of all loans in the data went to very small firms with under $1 million in annual revenue. While data are not available on the name of individual companies receiving loans and individual loan amounts, the data do contain information on the total number of loans and total dollar amount of loans by individual bank per year to firms located in Baltimore City, allowing us to analyze characteristics of banks that are lending to Baltimore businesses.

One of the characteristics we analyzed is the location of banks' headquarters. Chart 6 breaks down loan amounts by bank headquarter location (National outside of

CHART 7
BALTIMORE AND MARYLAND BANK LENDING BY TOTAL $ AMOUNT AND # OF LOANS
BALTIMORE CITY BUSINESSES, 2000-2015



Source: FFIEC CRA Reports

Maryland, Maryland outside of Baltimore, and Baltimore) over a 16-year period. The chart shows that leading up to the Great Recession, Baltimore, Maryland, and national banks were generally increasing their lending activity or holding steady. During the recession, lending decreased across all banks, but coming out of the recession, national and Maryland bank activity is trending up, while Baltimore bank activity has gone down. This trend is largely driven by bank consolidations. By 2015, Baltimore City no longer had a locally headquartered FDIC-insured bank with over $1 billion in assets.

The trend of bank consolidations is especially evident in Chart 7 which isolates changes in lending activity over time for banks based in Baltimore and Maryland. Loans by Baltimore-based banks, represented by the line (total dollar amounts) and green bars (number of transactions), have decreased rapidly since the early 2000s before eventually disappearing. Local banks with significant small business lending portfolios, such as Allfirst, Mercantile, and Provident, were acquired in the early and mid-2000s by national banks, such as M&T and PNC. The recent upturn in Maryland bank lending is due to increased business lending activity by Maryland banks headquartered outside the city. In August 2017, Howard Bank announced plans to acquire First Mariner Bank and relocate the combined bank's headquarters in Baltimore, the first bank with over $1 billion in assets headquartered in the city since 2015.

The loss of locally based banks to consolidation raises two significant issues. First, while the banks that took over these local banks, such as M&T and PNC, have developed strong local relationships and are a key capital resource for Baltimore's small businesses, **the total current small business lending activity of the consolidated banking system does not equal the sum of the parts from the early 2000s**. The second concern is that national bank lending tends to focus on credit card loans, as evidenced by the small average loan size of $29,000 over the period. While credit cards are an important capital source for small businesses, they cannot replace the importance of larger working capital loans in helping to grow small businesses.

As referenced above, the data in Charts 6 and 7 do not include banks that are either below the CRA reporting requirement threshold, non-FDIC banks, or credit unions. Some of the smaller FDIC-insured banks that have voluntarily reported lending data, notably Howard Bank, are captured in Charts 6 and 7. We can fill in some of the gaps for smaller FDIC-insured banks that have not voluntarily reported because they are required to report data on their total outstanding business loan portfolios, but are not required to provide location of borrower or transaction information as is the case with larger banks.

Federal credit unions also provide similar data through the National Credit Union Administration, an independent federal agency that regulates federal credit unions. Through these reports, we were able to compile the aggregate, point-in-time loan balance sheets for all small and intermediate FDIC-insured banks and federal credit unions in the Baltimore area covering the period 2012 to 2015. These data at least provide a sense of the overall small business lending portfolios of these smaller institutions. Though, we should note that these balance sheets represent much more than direct lending activity to small businesses in Baltimore City, since they include loans to businesses outside of Baltimore City, as well as loan participations where a bank or credit union purchases small business loans from other financial institutions.

These balance sheet data are presented in Table 3. The table distinguishes between Baltimore City-based banks and credit unions and "Baltimore Area" banks and credit unions, defined as banks and credit unions headquartered in Baltimore County, Howard County, and Anne Arundel County. Examples of some of the banks and credit unions included in this table are Bay Bank, F&M Bank, Harbor Bank, MECU, SECU, and Securityplus Federal Credit Union. Note that we did not separate out balance sheet data for the few banks, including Howard Bank, that also voluntarily report detailed loan data. It is worth noting that loan amounts to small businesses in Baltimore City for these few smaller banks where we have both sets of loan reports represents only about 5 percent of their overall balance sheets. This is a clear indication that looking at the overall outstanding loan balance sheet data in Table 3 significantly overstates direct loans to Baltimore City small businesses.

Table 3 further highlights how the number of small and intermediate lending institutions in the Baltimore area has shrunk in lending amount, number of loans, and number of active institutions. While the business lending portfolio of banks in the Baltimore Area and Baltimore City have both declined over the period, Baltimore City's has declined at a much greater rate. As many of the local banks that companies can turn to for reliable sources of financing have disappeared or been consolidated, businesses have had fewer options for accessing affordable and suitable capital.

Local banks, even these smaller banks, are more likely to provide bigger working capital loans than large, national banks, which are more likely to focus on credit card loans. The average loan size by the small and intermediate lending institutions examined in Table 3 is $210,000, similar to the average loan size of Baltimore- and Maryland-based banks with over $1.226 billion in assets. Local banks, regardless of their asset size, are more likely to make bigger business loans than non-local banks. As the number of small and intermediate FDIC-insured banks (not including credit unions) based in Baltimore has declined from 20 to 13 over this period, so has the outstanding volume of larger working capital loans.

Local credit unions have made modest inroads into small business lending as bank lending has declined. However, they have not been able to fill the void left by the consolidation and acquisition of smaller banks. SECU and MECU are the biggest local players in this space, with $148 million and $35 million in total outstanding business loans (these figures are all business loans, not just businesses in Baltimore City), respectively. A third credit union, Securityplus has recently expanded its small business portfolio by purchasing business loans from other credit unions as it gears up to launch a new small business product of its own in 2018.

Online Lending: An Emergent Player

As local banks have disappeared from the financing system, small businesses are turning to the growing field of financial technologies, including online lenders. Companies such as Lending Club, On Deck Capital, and Kabbage offer point-and-click access to needed capital for small businesses. There is no public data on these companies' loans specifically to Baltimore based companies, but one company confidentially reported that in 2016 they had roughly 150 active accounts in the city of Baltimore, with 362 loans totaling $2.5 million, for an average loan size of just over $6,900. We have not captured these loans in our overall analysis.

TABLE 3
SMALL AND INTERMEDIATE BANKS AND CREDIT UNIONS, OUTSTANDING BUSINESS LOANS BALTIMORE CITY AND AREA, 2012-2015

	Baltimore Area				Baltimore City			
Year	Total $ Amount (in millions)	Total # of loans	Year-to-Year change in portfolio	# of Banks & Credit Unions	Total $ Amount (in millions)	Total # of loans	Year-to-Year change in portfolio	# of Banks & Credit Unions
2012	$781	3,895	-	22	$326	1,441	-	21
2013	$719	3,451	-13%	20	$287	1,373	-5%	20
2014	$721	3,266	-6%	18	$240	1,158	-19%	17
2015	$785	3,629	10%	19	$170	960	-21%	14

Notes: Baltimore Area is defined as Baltimore County, Howard County, and Anne Arundel County. Small and Intermediate Banks are defined by the federal government as those with under $1.226 billion in assets per CRA reporting requirements. Loans under $1 million are only included for small banks; all credit union business loans are included.

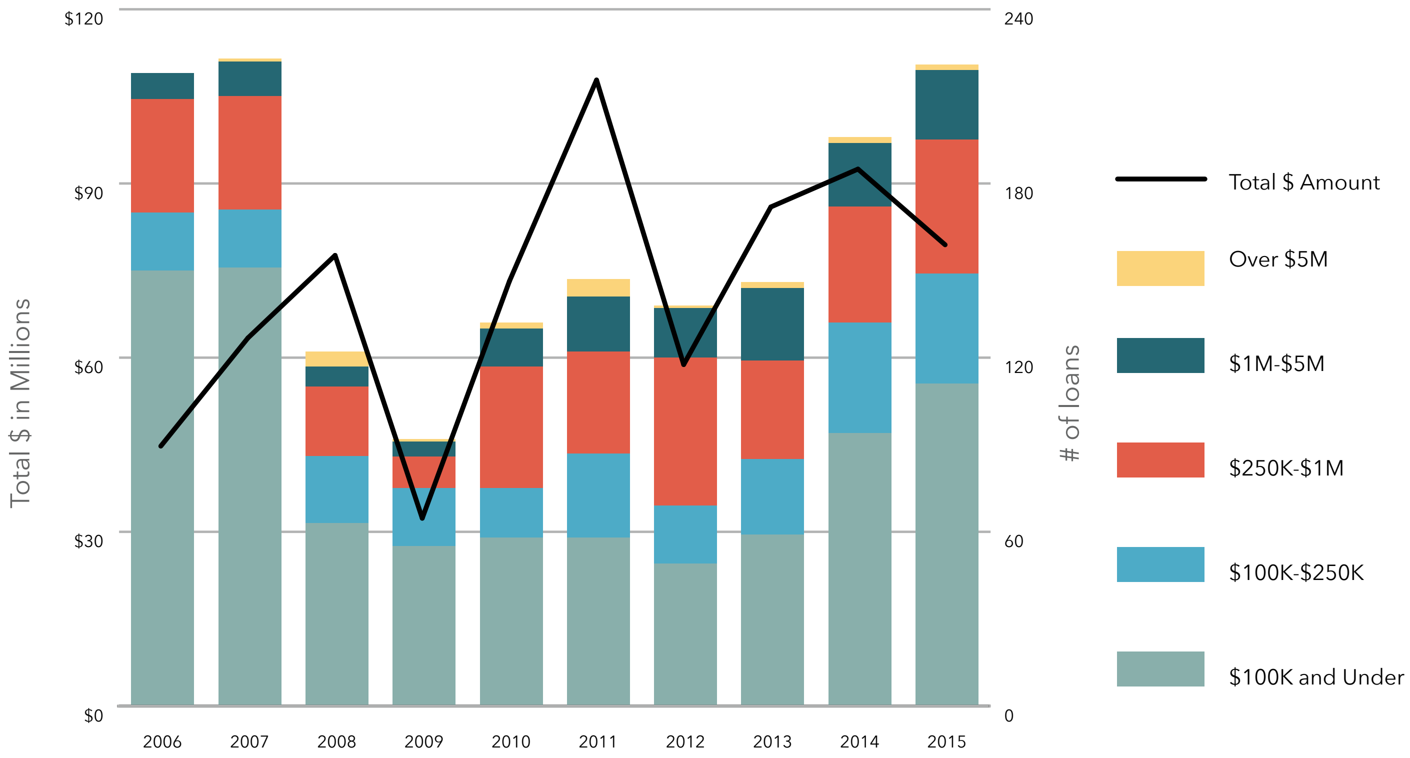
Sources: US Small Business Administration Office of Advocacy's Small Business Lending in the United States 2012-2015. National Credit Union Administration Quarterly Reports, 2012-2015.

Publicly Guaranteed and Subsidized Loans

While private sources of loans make up the largest portion of the overall lending landscape in Baltimore, publicly guaranteed or subsidized loans are an additional component of the financing system for small businesses. These loan funds provide needed capital to businesses that may not qualify for bank loans, or they provide access to larger loan amounts than a business could otherwise access via a traditional bank or credit card loan. Such loan funds include SBA guaranteed loans, U.S. Export-Import Bank guaranteed loans, CDFI micro and small business loans, NMTC loan investments, and state and city agency subsidized loan programs.

Chart 8 presents the value of these loans over the 10-year period, 2006 to 2015, by total annual dollar amount and number of transactions broken down per year across five loan amount ranges: $100,000 and under, $100,000 to $250,000, $250,000 to $1 million, $1 million to $5 million, and over $5 million. About half of these loans to small businesses in Baltimore are for under $100,000, while 37 percent fall in the $100,000 to $1 million range, and 11 percent in the over $1 million range.

CHART 8
PUBLICLY GUARANTEED AND SUBSIDIZED LOANS BY TOTAL $ AMOUNT AND # OF LOANS
BALTIMORE CITY SMALL BUSINESSES, 2006-2015



Note: Different colors on each bar represent the number of investments for each $ range.
Sources: CDFI NMTC, CDFI CIIS, Opportunity Finance Network CDFIs, SBA 7a and 504, Export-Import Bank, Maryland Department Commerce, Maryland Department of Housing and Community Development, and Baltimore Development Corporation.

SBA Loans

SBA 7a guaranteed loans are the largest source of publicly supported financing in both number and dollar amount of loans. SBA loans fill a key gap in the $100,000 to $1,000,000 working capital range for small businesses poised for growth. Table 4 shows that of the top five SBA 7a lenders to businesses in Baltimore, M&T Bank is responsible for almost half of the number of loans and more than 20 percent of the dollar amount of the total lending. Over the 10-year period, the five banks listed in Table 4 accounted for nearly two-thirds of the number of loans and over half of the dollar amount of all SBA 7a lending to Baltimore City businesses.

A RECIPE FOR SUCCESS

In 2014 and 2015, a Baltimore home-brewer was able to secure three SBA 7a guaranteed loans ranging from $50,000 to $280,000. The loans enabled the purchase of a building and equipment to start brewing beer at greater volumes and open a brewpub. The business, located in Central Baltimore, employs 10 people.

TABLE 4
TOP SBA 7A LENDERS BY TOTAL $ AMOUNT AND # OF LOANS
BALTIMORE CITY SMALL BUSINESSES, 2007-2016

Bank Name	# of Loans	% of Total Loans	Total $ Amount	% of Total $ Amount	Average $ Amount
M&T Bank	471	44%	$64,008,375	21%	$135,899
Wells Fargo Bank	66	6%	$23,181,600	8%	$351,236
BB&T Bank	58	5%	$33,007,966	11%	$569,103
SunTrust Bank	39	4%	$25,998,600	8%	$666,631
Sandy Spring Bank	21	2%	$11,113,000	4%	$529,190
Total (All Banks)	1,075		$306,061,656		$236,678

Source: U.S. Small Business Administration

State and City Programs

The State of Maryland and Baltimore City have a number of loan, investment, and grant funds geared directly toward small businesses and startups, listed in Table 5. While relatively small within the grand scheme of Baltimore's small business financing system, these funds play several roles in the system. In some cases, they help companies leverage other investments from the private sector. In other cases, these programs take risks that banks cannot take in unproven yet promising businesses.

The Maryland Department of Commerce has the longest history and the most funds, 12 in total. Some of these funds are active in Baltimore City in some years and dormant in others. The Maryland Small Business Development Financing Authority (MSBDFA) program is the largest and most consistently active individual fund, providing working capital and growth stage loans to primarily minority-owned firms that do not qualify for private sector financing. The Maryland Industrial Financing Authority (MIDFA) provides insurance or guarantees to encourage private sector investments. But, as the table indicates, MIDFA has been used sparingly in Baltimore City.

TEDCO is an innovative program run by the State of Maryland that provides equity investments and grants primarily to biotech and cybersecurity startups through seven funds. In some cases, these funds were taken over by TEDCO from the Department of Commerce, such as the Maryland Venture Fund. In other cases, TEDCO took over Commerce funds and converted them from grant vehicles into equity financing, as is the case with the Technology Commercialization Fund. The University of Maryland's Maryland Industrial Partnerships Program offers startups another way to develop products through grant funded partnerships with local universities.

The Maryland Department of Housing and Community Development's Neighborhood BusinessWorks program and Baltimore Development Corporation's six loan funds primarily provide micro and small business loans, averaging about $100,000 per loan, to minority-owned businesses within underserved markets. The BDC funds have more variability in individual loan amount across funds. In recent years, though, much of the activity has been in microloans.

In total, the state and city oversee 27 separate small business investment funds, which on the one hand may create confusion from the perspective of a small business seeking capital, but also creates an existing infrastructure for growing Baltimore's small business financing system.

It should be noted that these funds are not the only forms of financial assistance offered by the state and city to small businesses. For example, while tax credits are an important tool in the state and city toolkits, we have not included them in the analysis as we could not access the tax return data of either small businesses or investors that use them. These credits may be offered for property improvements, job creation, relocation, or as investment incentives in particular industries or areas of the state. Our focus was on measuring direct financial flows through the system to small companies, rather than more indirect incentives through the tax code, which does not mean that they are not important. The state's Biotechnology Investment Incentive Tax Credit, for example, provides a targeted tax credit against corporate and personal income taxes for investors in qualified companies. The tax credit can attract investors in these companies who may not have stepped forward otherwise, but the direct financial benefit is to the investor not the company.

Finally, we would note that public resources are also used to provide technical assistance and small business services, including help with accessing capital. These funds also have not been included in our analysis of the city's and state's contributions to the small business financing system.

TABLE 5
STATE OF MARYLAND AND BALTIMORE CITY FINANCING PROGRAMS, BALTIMORE CITY SMALL BUSINESSES

Maryland Department of Commerce			
Fund Name	**Years Active in Baltimore**	**# of Investments and Grants**	**Total $ Amount**
BioCenter Challenge	2015	1	$100,000
Biotechnology Commercialization	2010-2012, 2014, 2015	7	$982,079
Video Lottery Terminal Funds	2014-2016	13	$1,471,500
Maryland Economic Adjustment Fund	2008-2010	3	$465,000
Maryland Economic Development Assistance Authority and Fund	2006-2015	48	$12,877,118
Maryland Industrial Development Financing Authority	2009-2011, 2014	10	$9,308,287
Military/Disabled Veterans	2010	1	$50,000
Maryland Industrial Training Program	2007	3	$218,500
Maryland Small Business Development Financing Authority	2006-2016	70	$31,594,128
Maryland Venture Fund	2006-2015	60	$13,482,909
Partnership for Workforce Quality	2009-2014	11	$96,426
Transitional Research	2010, 2011, 2013-2015	7	$1,264,995
Total	**2006-2016**	**234**	**$71,910,942**

Maryland Department of Housing and Community Development			
Fund Name	**Years Active in Baltimore**	**# of Investments and Grants**	**Total $ Amount**
Neighborhood BusinessWorks	2011-2016	78	$10,125,722

University of Maryland			
Fund Name	**Years Active in Baltimore**	**# of Investments and Grants**	**Total $ Amount**
Maryland Industrial Partnerships Program	2005, 2007-2015	20	$3, 167,500

Maryland Technology Development Corporation (TEDCO)			
Fund Name	**Years Active in Baltimore**	**# of Investments and Grants**	**Total $ Amount**
BioMaryland Fund	2012-2014	5	$1,000,000
Cyber Security Investment Fund	2014, 2016	5	$1,000,000
Life Sciences Investment Fund	2016	3	$600,000
Maryland Innovation Initiative	2011, 2013-2016	13	$1,225,000
Maryland Venture Fund	2015-2016	10	$3,075,000
Propel Baltimore Fund	2012-2015	12	$2,225,000
Technology Commercialization	2011-2016	41	$4,000,000
Total	**2011-2016**	**89**	**$13,125,000**

Baltimore Development Corporation			
Fund Name	**Years Active in Baltimore**	**# of Investments and Grants**	**Total $ Amount**
City Loan Fund	2011-2013, 2015	10	$3,681,352
Economic Development Administration Loan Fund	2011, 2013, 2015, 2016	14	$2,335,677
Innovation Loan Fund	2016	1	$250,000
Micro Loan Fund	2013-2016	46	$944,500
Maryland Industrial Land Act Loan Fund	2011-2012	5	$460,000
Video Lottery Terminal Loan Fund	2015-2016	11	$2,456,000
Total	**2011-2016**	**87**	**$10,127,529**

Sources: Individual agencies.

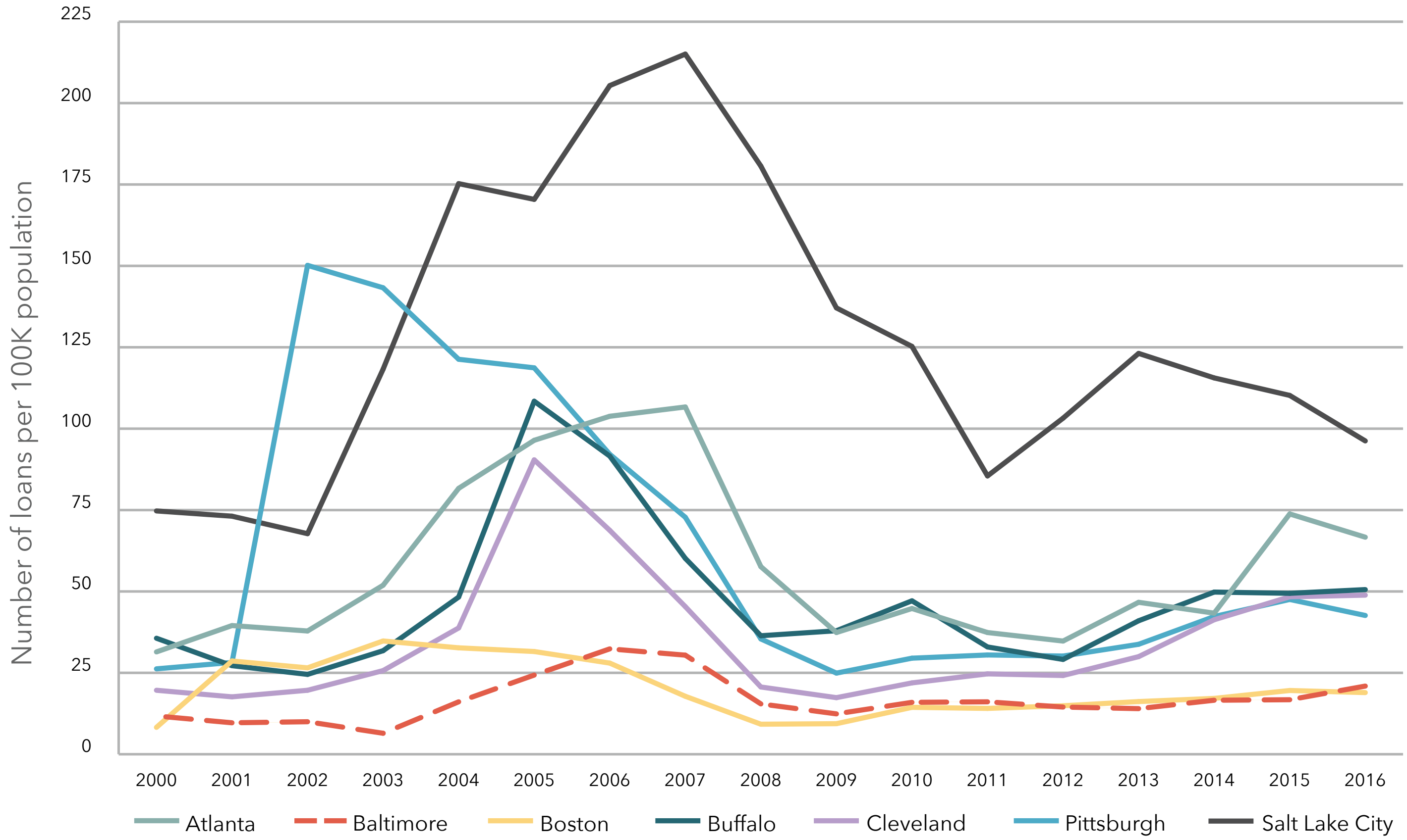
How Does Baltimore Compare?

While it would require significantly more data access and analysis to compare Baltimore's small business financing system with those of other cities than what this study set out to accomplish, we are able to provide a snapshot of how Baltimore compares with other cities by looking at a couple of the federal programs where data are available and comparable across city jurisdictions. The comparisons reveal that Baltimore compares poorly to a sample of other cities on federally guaranteed and subsidized loans, but performs well compared with other cities on federal research grants for startups.

SBA 7a: At the Bottom

As noted above, SBA 7a guaranteed loans are an important source of funding for many small businesses in Baltimore. Chart 9 compares the volume of SBA 7a guaranteed loans over a 17-year period from 2000 to 2016 per 100,000 population (as defined by the 2010 Census) across the following cities: Baltimore, Atlanta, Boston, Buffalo, Cleveland, Pittsburgh, and Salt Lake City. The cities

CHART 9
SBA 7A LOANS BY # OF LOANS PER 100K POPULATION
CROSS CITY COMPARISON, 2000-2016



Source: U.S. Small Business Administration were selected due to either their similar population size to Baltimore, similar economic history as Baltimore (i.e., "Rust Belt" cities), or their perceived friendly atmosphere for small businesses.

While Baltimore has a high average loan size compared to other cities, the city consistently ranks at or near the bottom in the number of SBA 7a loan transactions. Baltimore's average SBA 7a loan amount during the period examined is $236,000. Of the cities looked at, only Atlanta has a higher average loan size, $348,000. With the exception of Boston, every other city provides access to SBA loans at a rate of at least twice the amount as Baltimore. This suggests that while individual SBA 7a loans may be well funded in Baltimore, their reach is comparatively small. While we have heard through our stakeholder interviews that the SBA 7a lending process is onerous for both businesses and banks, the city comparisons indicate that banks in other cities have built more capability to extend these loans.

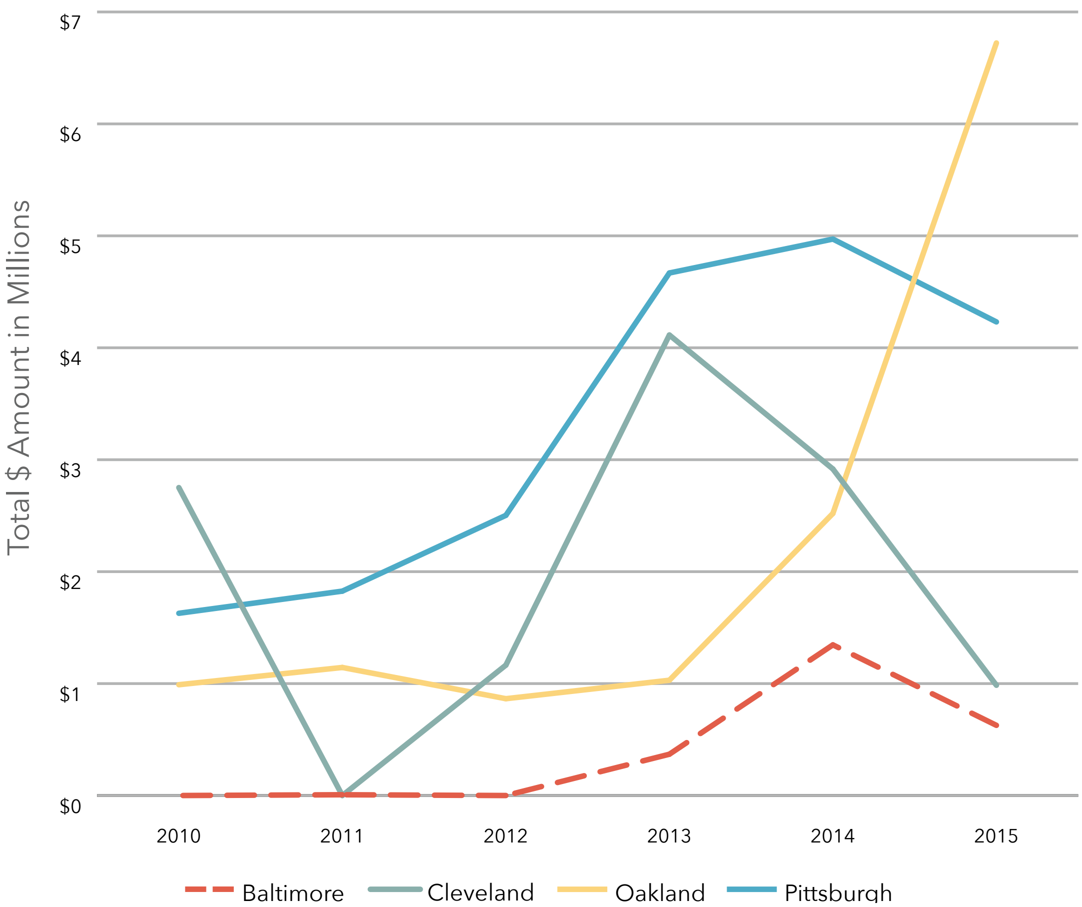
CDFI Lending: Also at the Bottom

CDFI lending can be an important part of a city's small business financing system, providing loans to businesses that don't qualify for traditional or even guaranteed bank loans, and putting them on a firm financial footing so that they can ultimately qualify for bank loans. An analysis of lending by CDFIs in Baltimore reveals that CDFIs are in fact very active in Baltimore, though the primary focus has historically been on residential housing development and nonprofit real estate. Small business and commercial lending has been much smaller, but has tended to focus on commercial real estate rather than micro and working capital loans.

A MIXED REVIEW

Baltimore compares poorly to a sample of other cities on federally guaranteed and subsidized loans, but performs well compared with other cities on federal research grants for startups.

CHART 10
CDFI SMALL BUSINESS AND MICROENTERPRISE LENDING BY TOTAL $ AMOUNT CROSS CITY COMPARISON, 2010-2015



Source: Opportunity Finance Network

To get a sense of how Baltimore compares with other cities, Chart 10 illustrates total CDFI small business and microenterprise lending by dollar amount to small businesses in Baltimore, Cleveland, Oakland, and Pittsburgh, not adjusted for population. Commercial real estate loans were excluded from this chart to show only working capital loans to businesses. Baltimore businesses received $2.3 million in small business and microenterprise loans over the six-year period, while Cleveland businesses received $11.9 million, Oakland businesses received $13.2 million, and Pittsburgh businesses received $19.8 million.

These figures indicate that CDFIs and their partners in these other cities are much more aggressive in accessing federal grant dollars, via the CDFI Fund, Economic Development Administration, Community Development Block Grants, and other sources, and utilizing those funds for small business lending.

Oakland represents an interesting comparison, as their CDFI small business lending largely mirrored Baltimore's until 2014, when, among other initiatives, an existing CDFI launched a new small business loan fund focused on growth capital between $250,000 and $2 million per investment.

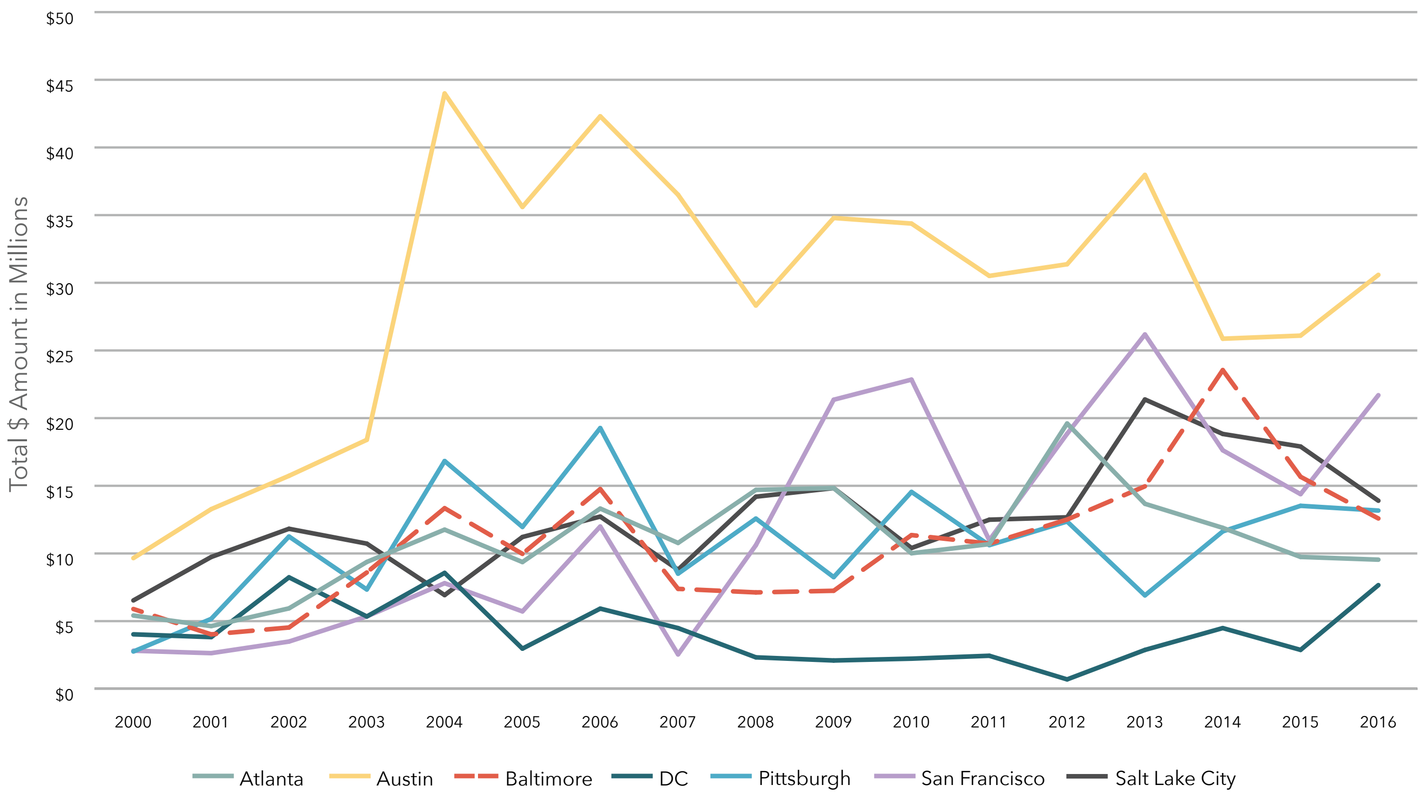
Federal Research Grants: Faring Better

Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants are an important resource for technology and research-based startups. They help businesses fund research and development of new products that have potential market opportunities. Noting the large volume and value of SBIR and STTR grants in Baltimore, Chart 11 compares Baltimore businesses to other cities that are renowned for having a large community of tech and research based startups.

The chart looks at SBIR and STTR grants by value over a 17-year period from 2000 to 2016, not adjusted for population. Baltimore businesses are in the middle to the top of the pack, roughly on the same level as San Francisco. Nearly 60 percent of grant funds entering Baltimore come from the Department of Health and Human Services, which largely supports Baltimore's life sciences and biotech startups. Austin received more SBIR and STTR grants than any other city that we examined. The majority of Austin's grants come from the Department of Defense, supporting the area's large defense industry.

Though the past two years have seen a decline in the value and volume of SBIR and STTR grants to Baltimore companies, there remains an upward trend. These two programs support emerging companies in Baltimore as much as or more than in other, comparable cities.

CHART 11
SBIR AND STTR GRANTS BY TOTAL $ AMOUNT
CROSS CITY COMPARISON, 2000-2016



Source: Small Business Innovation Research and Small Business Technology Transfer programs.

RECOMMENDATIONS

Measuring Baltimore's small business financing system yielded some ideas for driving more economic growth for the city. Mayor Catherine Pugh has prioritized small business as a focus for her administration and is working to bring new resources, both public and private, into Baltimore. Governor Larry Hogan has similarly prioritized small business and recently launched Excel Maryland, which aims to grow the state's leading position in life sciences and cybersecurity industries. This is an opportune time to identify some concrete steps that harness this momentum. It's time to solve the riddle of why Baltimore punches below its weight relative to its clear economic assets and competitive advantages.

Becoming a city that is truly hospitable to small business growth – for all the economic benefits of jobs and tax revenue that this would bring – involves much more than a strong financing system. Many of the experts and stakeholders we interviewed raised talent and mentoring as key ingredients to success, but access to capital also clearly matters. The Baltimore financing system is fragmented and underemployed. It is not a system that is easy to navigate or deep enough to sustain companies with sound business plans. Fortunately, these are not insurmountable problems and can be addressed with leadership, commitment, and creativity from both the public and private sectors.

Recommendation # 1
MEASURE, TRACK, AND REPORT

We cannot truly know the effectiveness of Baltimore's small business financing system unless we continuously measure it and track and report on successes, challenges, and changes over time. This report has attempted to begin that process by developing a baseline measurement of the small business financing system using key indicators relating to annual number, type, funding source, and dollar amount of investments; as well as attempting to measure, in aggregate, the types of financing that businesses are accessing at different stages of growth. **This exercise should be repeated at regular intervals.**

These indicators could be further refined and organized into a dashboard report that could be updated and published on an annual basis, similar to the type of data reporting performed by the Baltimore Neighborhood Indicators Alliance-Jacob France Institute at the University of Baltimore.

We suggest that this reporting project go one step further to track companies that are trying to succeed in Baltimore in an active database that shows financing rounds, lending activity, and growth statistics such as number of employees and annual revenue. Such a report could be drawn from public data sources as well as easily accessible resources, such as Pitchbook and Crunchbase. This report should also track company location to see how many firms remain in Baltimore as they grow. Only by following these companies in a centralized way will we be able to work on retention and support for homegrown entrepreneurs.

Finally, we recommend a follow-on exercise to measure the amount of capital that is present in Baltimore that could potentially support small business growth. While this project was focused on capital received by small businesses, along the way we noted significant leakage of capital away from Baltimore, but we did not have the resources or data to quantify this leakage. The amount of leakage may indicate that investors are not aware of profitable financing opportunities in Baltimore.

Recommendation # 2
CONNECT, CONVENE, AND RETAIN

One of the biggest challenges with the current small business financing environment in Baltimore is that startups and small businesses struggle to navigate the various financing programs, and similarly, funders, investors, and lenders don't have easy ways to connect with opportunities.

We recommend a new initiative in Baltimore for showcasing growing companies at a regular convening of equity investors from Baltimore and elsewhere to make them aware of the opportunities. Such an event could be organized into companies at different stages of growth to properly align early, middle, and late stage companies with potential capital. While this is occurring already in forums such as the Baltimore Angels and the universities' incubators, a more robust presentation would attract more attention and likely more investment.

We also propose the creation of a navigation and concierge capacity within the city that can better connect businesses with investors. This would involve repositioning and modernizing the city's existing small business resources to better face the needs of both startups and Main Street businesses. The navigation function for small businesses could be accomplished through a web-based tool, similar to the Maryland Workforce Exchange (which is a resource for connecting employers looking to hire with job seekers looking for work). The development and piloting of such a website could be a good project for the Bloomberg Philanthropies funded Innovation Team in City Hall.

The next step up from navigation assistance could be an expanded concierge service where trained and expert staff would help connect small businesses to financing opportunities and provide assistance throughout the process of applying for funding, such as helping to set up meetings with prospective investors, putting together required materials, and following up on the application process. It seems the most appropriate location for this concierge services would be with the city's Small Business Resource Centers, where some of this work is already taking place, or perhaps directly in the Baltimore Development Corporation. The concierge service could potentially be folded into other small business support efforts in the city, such as the recent expansion of the Goldman Sachs 10,000 Small Businesses Initiative.

Finally, throughout our interviews we consistently heard that Baltimore doesn't tell its story well, or do enough to make the outside world aware of its many strengths. One effort that we are aware of – a Baltimore homecoming event scheduled for October 2018 – will bring successful investors back to their hometown and would be an ideal time to communicate these initiatives.

Recommendation # 3: BUILD MORE LENDING CAPACITY

The data show that Baltimore's lending capacity has shrunk and changed with bank consolidation and a shift to real estate backed loans and credit card loans as the principal forms of credit extension to small businesses in need of working capital. This situation is not healthy for either Main Street businesses or startups that are revenue producing and ready to assume debt capital. **We need to rebuild the art and practice of small business lending in Baltimore.**

We should develop more lenders skilled in executing SBA 7a loans, which generally offer lower interest rates and larger loan amounts to small businesses. These loans are not high risk for a bank to extend, but they require trained loan officers and resources to execute. Comparisons with other cities indicate that Baltimore ranks poorly in the use of such loans. The State of Maryland has been engaging with the SBA to help modernize the loan application process – this should be a priority to raise local access to credit.

The CDFIs in Baltimore have also been more focused on real estate and affordable housing development loans than small business lending. This appears to be changing as the CDFI Roundtable, which is hosted in Baltimore by the Federal Reserve Bank of Richmond's local office, is now focusing on how to provide loans to small businesses. **This would be extremely helpful to companies that are not meeting the thresholds for private bank loans but still need credit to grow.** Again, there is a need to build resources to be able to provide this type of lending.

There is a larger need to leverage public dollars more effectively to grow working capital lending. The project being led by Baltimore Community Lending with other local CDFIs and banks to spur small business lending using the state's Neighborhood BusinessWorks fund to backstop private lending is a good example of how to repurpose and better leverage public funds. A related proposal to use the Maryland Housing Fund as a loan pool insurer is another example worthy of further exploration.

Another candidate for this role is the Maryland Industrial Development Financing Authority (MIDFA). MIDFA is already structured to serve as a guarantor for working capital loans, but seems to be largely inactive at this time. It seems like a worthy exercise to revisit this and other programs already in place to see whether they can be enlivened in ways to further leverage small business growth.

Examining the use of public dollars for direct lending to small businesses, whether through the city's BDC or the many programs operated by the state through the Department of Commerce or the Department of Housing and Community Development, raises the question of whether more leverage could be realized from public sources as a guarantee fund for private lending. The same amount of dollars secured in a revolving loan loss reserve fund could leverage multiple dollars in private lending. We recommend revisiting the existing public programs to see whether more leverage might be possible by moving some of these funds to a guarantee rather than direct lending model.

A final recommendation on spurring small lending in Baltimore is to convene a business financing summit on this topic with experts in the field of credit models and innovations in the market. We see the growth of online lenders and other financial technologies that are aimed at small businesses, and recognize the role they can play in the market. At the same time, we need to make sure that we have the local specialized knowledge to effectively meet the needs of companies in Baltimore.

Recommendation # 4
EXPAND THE RANGE OF FINANCIAL INSTITUTIONS

The final recommendation attempts to grow the overall size of the small business investment pie in Baltimore City. There is a larger conversation to have about what is missing from the local financing system. For example, a concerted effort could be made to build corporate venture capital that could invest in local companies. Baltimore's expertise in cybersecurity would seem to be an area of interest to many such corporations.

There is also room for raising capital for a new Business Development Corporation or Small Business Investment Company that would provide mezzanine capital to growing companies in Baltimore. Another area to explore is whether there are opportunities to strengthen and grow some of the smaller, local banks and credit unions that are more likely to provide working capital loans. The recent news that Howard Bank plans to acquire First Mariner and relocate the combined bank's headquarters to Baltimore City is a promising development.

In conclusion, the focus of this report has been on making what we have today work better, but our hope is that this initial exercise will unleash a larger discussion around additional strategies for infusing new capital into the system. Now is an ideal time for Baltimore to examine best practices from other cities and states and to explore models that can be replicated and adapted locally.

Many of the basic building blocks are in place, as well as a political leadership that is committed to growing the city's economy. For Baltimore to become a leading city for entrepreneurs and small businesses, we need a diversified local financing system that is better positioned to find and take risks on good ideas. We hope this report can be a resource to every stakeholder interested in seeing Baltimore thrive.

APPENDIX A: DATA SOURCES

This table outlines the full list of data sources and programs analyzed to build Baltimore's small business financing landscape.

Sources of data by financing source				
Financing Source	**Investment/Program Name**	**Type of Investment**	**Years of Data**	**Source of Data**
Federal				
	Small Business Administration (SBA) 7a and 504 Program	Guaranteed Loan	2000-16	SBA web site
	Community Development Financial Institution (CDFI) Loans and Investments	Subsidized Loan	2006-16	CDFI Fund web site, Community Impact Investment System (CIIS), Opportunity Finance Network data agreement, Data provided by LEDC
	Export-Import Bank	Guaranteed Loan	2007-16	Export-Import Bank web site
	Small Business Innovation Research and Small Business Technology Transfer Programs	Research Grant	2000-16	SBIR web site
	Other Federal Research Grants	Research Grant	2000-16	Pitchbook subscription service
State				
	Maryland Department of Commerce Funds (12 programs in total)	Subsidized Loan, Equity Investment, Grant	2006-16	Data provided by Agency
	TEDCO Funds (7 programs in total)	Equity Investment, Grant	2011-16	Data provided by Agency
	Maryland Department of Housing and Community Development BusinessWorks	Subsidized Loan	2011-16	Maryland.gov Open Data
City				
	Baltimore Development Corporation Loan Programs (6 programs in total)	Subsidized Loan	2011-16	Data provided by agency
Private				
	Federal Deposit Insurance Corporation Insured Bank Small Business Loans	Bank Loan including Credit Card Loan	2000-16	Community Reinvestment Act Reports from the Federal Financial Institutions Examination Council (FFIEC) web site
	Venture Capital Investments	Equity Investment	2000-16	Pitchbook subscription service, Crunchbase service, data provided by Abell Foundation, Baltimore Angels, Camden Partners, Propel
	Mergers/Acquisitions and Initial Public Offerings	Equity Investment	2000-16	Pitchbook subscription service
	Financial Technology/Online Lending	Loan	2016	Data provided directly by an individual fintech firm.

ENDNOTES

1 We have also attempted to record investments at the point they are closed or settled, and organized by calendar year. In some cases, there may be discrepancies in the year an investment is recorded due to programs that track investments by fiscal year and where we don't have the precise investment date, or in cases where investment data is provided at the point of approval rather than closing.

2 Data from individual funds include: the Abell Foundation, Baltimore Angels, Camden Partners, Propel, and TEDCO. Also included are federal New Markets Tax Credit (NMTC) investments that are in the form of equity investments, which typically applies to a portion of a larger commercial real estate NMTC project. (We removed federal grant data for this analysis of equity, since grants, while important sources of capital to startups, are not equity.)

3 An individual investment may include multiple investments from more than one investor that are packaged together as a single funding round. This is often the case for venture capital investments.

4 While Pitchbook data contain information on the investors that participate in each round of funding, it does not break down the amount contributed by each investor in a funding round, meaning that this analysis is limited in looking at the origin of each stage of investment, rather than dollar amount invested by each investor.

5 Note that this 10-year period is one year off from the 10-year period explored in the equity section above, due to the availability of consistent data across programs.