

Minority Depository Institutions: Evolving Financial Technologies and the Challenge of Governance

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ABSTRACT

Minority Depository Institutions (MDI) came into being to create pathways for economic development in racially segregated neighborhoods. The effectiveness of MDIs in accomplishing this shared mission is acutely sensitive to three factors: the economic circumstances of the racial/ethnic community they serve; the structure of governance – both the public policies that directly govern MDIs, and also the overall pattern of urban governance, including macroeconomic policy stance and targeted public investment/tax programs; and third, the evolution of financial technologies. Together, these factors shape the strategic options that MDIs have for transformative practice in the communities they serve. This study examines how the intersection of historical unfolding of inequality, governance structures, and financial technologies have shaped the “logic of reinvestment” (Chiong, DymSKI, and Hernandez 2018) of MDIs through a case study of Los Angeles County.

We first examine the trajectory of mortgage lending in Los Angeles, as revealed by HMDA data in the time period 1981 to 2007. Second, we implement an analysis of the legal requirements and socio-economic impacts of different federal and state lending programs linked to housing development. Third, we summarize data on MDIs in Los Angeles County from 1994 to 2018 to understand the growth of active MDIs over this period and their capacity to serve their communities. These research elements permit us to develop an innovative approach to the interlinkages of lending technologies and the role of federal and other levels of governance in shaping market and policy opportunities.

Keywords: Los Angeles, minority depository institutions, redlining, financial technology, urban governance, logic of reinvestment, Opportunity Areas

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1. Introduction

Minority Depository Institutions (MDI) came into being to create pathways for economic development in racially segregated neighborhoods. Ethnic groups attempting to integrate into American urban life responded to racial and financial exclusion by pooling together resources through organized family associations. These associations provided capital to neighborhood entrepreneurs during times when financing for ethnic groups was prohibited or predatory in nature. Many of these financial associations matured into federally chartered institutions and are now classified as Minority Depository Institutions.

There is a distinct spatial dimension to the location of MDIs and the clients that they serve. US housing finance policy, by promulgating mortgage redlining and permitting the use of race covenants, created segregated housing, with intergenerational effects still felt today. As a result, MDIs' community development mission remains closely linked to these historical areas of racial and financial exclusion.

Chiong, Dymski, and Hernandez (2018) introduced the Logic of Reinvestment (LOR) as a process of decision-making that balances the goal of empowering communities through financial opportunities with MDIs' need to achieve the profitability required to maintain a viable banking business. We view LOR as a decision moment that reflects social relations, opportunities and constraints for both banking institutions as well as neighborhoods that rely on MDIs as an accelerator for local economic development. The logic of promoting neighborhood-scale lending and (re)investment opportunities is key to MDIs' shared mission of community development and a more inclusive financial system.

This said, the effectiveness of MDIs in accomplishing this shared mission is acutely sensitive to three factors. First is the economic circumstances of the racial/ethnic community they serve – whether human and financial capital is flowing into the community and is being converted into a business/employment growth dynamic. Second is the structure of governance – both the public policies that directly govern MDIs, and also the overall pattern of urban governance. These two factors have operated in very different directions for different minority communities, even in the same metropolis. The fiscal crisis and austerity policies that have acute negative effects on one community may be fully offset by strong capital inflows in another community; consequently, some MDIs may be thriving even while others exist in an increasingly precarious condition. Third, the evolution of financial technologies affects the strategic options that MDIs have for transformative practice in the communities they serve. This paper investigates what Bear (2014) refers to as “technai” or technology that create and sustain difference in market performance. Bear explains how “these technai carry the short-term volatile time of market exchange into many more arenas of life.”

Our paper will demonstrate that MDIs' capacity to renew their community economic development mission is affected jointly by the current forms of governance and by evolving financial technologies. We argue that financial technologies reflect patterns as well as priorities of governance. These technologies rely upon governance to take a structural approach – that is on a precommitment to investment in infrastructure development – to ensure their deployment. At the same time, understanding how these factors affect MDIs' LOR requires investigating the historical conditions that have shaped socio-economic opportunities and constraints for racial/ethnic minority communities.

Our continuing case study of Los Angeles tells a story of how historical financial technologies actually create the need for MDIs, its client base, and the geographies that guide their operation. We demonstrate how new financial technologies emerged, often leading to conditions of austerity adversely affecting MDI service areas. These conditions eventually led to new transnational flows of capital that now move to or from MDI neighborhoods. Through this new bi-directional transnational capital flow, we can begin to contextualize the conditions under which MDIs now operate today. This is the environment that MDIs are now being asked to perform the mission of community development.

To examine how the intersection of the historical unfolding of inequality, governance structures, and financial technologies have shaped the possibilities and thus LOR of MDIs, we undertake several independent steps in our research process. First, we will examine the trajectory of mortgage lending, as revealed by HMDA data in the time period 1981 to 2007. Second, we implement an analysis of the legal requirements and socio-economic impacts of different federal and state lending programs linked to housing development. Third, we summarize data on MDIs in Los Angeles County from 1994 to 2018 to understand the growth of active MDIs over this period and their capacity to serve their communities. These research elements permit us to develop an innovative approach to the interlinkages of lending technologies and the role of federal and other levels of governance in shaping market and policy opportunities.

We use a case study approach to investigate the preexisting conditions that contributed to shaping MDI service areas in LA. We examine how these conditions work over time to reproduce the geography of racialized space - geography created by the historical process of organizing space along racial categories (Iglesias 2000). Yin (1994) suggests that the case study method is preferred when research questions are more explanatory and are likely to deal with operational links needing to be traced over time. Moreover, the case study method provides an ability to deal with a full variety of evidence needed to explain why certain phenomena take place over time and within a particular place (Creswell 1998).

For these reasons, the case study method has advantages when investigating the convergence of local and external forces and how these forces interact to shape social, economic and physical landscapes. The case study method, therefore, allow us to uncover the historical dimensions of a societal phenomenon or setting (Feagin, Orum and Sjoberg 1991). The case study approach in this investigation provides the opportunity to reveal relationships between race, governance and market processes that occur over extensive periods and serve to manage the flow of capital to or

from particular localities. Thus, the case study approach helps us to contextualize the baseline conditions in which MDIs now operate in LA.

2. Analytical Lens

In developing our analysis of ethnic banks' (and mainstream banks') role in economic development processes in Los Angeles, we highlight an overlooked dimension of this process that was first delineated by the institutionalist John R. Commons in his 1924 volume, *The Legal Foundations of Capitalism*. The authors of this study examined the present-day relevance of Commons' 1924 volume in an essay published in the *Journal of Economic Issues* in 2014. In "Contracting the Commonwealth: John R. Commons and Neoliberal Financial Crises," the authors highlighted the importance of encouraging economic activity that builds overall community wealth (commonwealth) without detracting from the wealth-creating capacity of any portion of the overall community. This idea is pertinent to the analysis of banking processes, in that it highlights the 'public good' dimension of individual market transactions, especially those involving wealth assets.

We also incorporate the work of anthropologist Laura Bear (2017) who stresses the need to engage with the material timescapes of inequality in which ethics, knowledges and techniques of capitalist time interact and reveal commitments as well as barriers to social justice. Important to this discussion is the new role of the state and how the state invokes new modes of public and market control. Bear argues that financial technologies capitalize on public policy, or in other words, take root through an infrastructure of rulemaking or governance that promotes speculation – a range of practices that produce instability. Bear offers that a more anthropological approach can help reveal how agencies reorganize markets and performance through harmful market interventions that support speculative planning under the guise of agency responsiveness. Speculation, claims Bear (2015), must be historicized, situated, and investigated in its intimacies with the practice of governance. Hence, our focus on the institutional and structural conditions in which MDIs operate today.

3. Race and Technology

The term "technique" can be simply defined as "a systematic procedure, formula, or routines by which a task is accomplished."¹ Closely related, the term "technology" has been defined as "the purposeful application of information in the design, production, and utilization of goods and services, and in the organization of human activities."² We deploy the concepts of techniques and technologies (herein referred to as "technologies") as the bundle of processes and policies that support and standardize financial production and speculation through the marketplace. We view this bundle as the system of supportive infrastructure that organizes and operationalizes housing market activity in the U.S. with a primary focus on housing finance and community development; e.g. appraisals, loans, underwriting guidelines, standardization, risk assessment, law, secondary mortgage markets, securitization. The result was a market by design, a

¹ <http://www.businessdictionary.com/definition/technique.html>

² <http://www.businessdictionary.com/definition/technology.html>; <https://www.useoftechnology.com/what-is-technology/>

“deliberate, planned creation where supply and demand finding a competitive equilibrium was not the economic priority” (Garcia-Parpet 2007:8).

Through this lens, neighborhood development can be seen through two paths. First, housing market technologies that led to expansion of the real estate industry were key to promoting residential settlement and economic development in U.S. cities in addition to racialized market exclusion. As we will show, this concomitant action of expansion, speculation and exclusion is followed by episodes of market instability and periods of austerity and predation. Second, new market technologies are developed to work through periods of austerity, which are followed by a decline in public goods to those most impacted by market calamity. The result has been a repetition of experience across time and space creating the differential market access leading to the pronounced spatial and racial market exclusion that MDIs are now enlisted to repair. In this section, our interest lies in tracing the history and the devices that led to the formation of the MDI target population and its geographical territory.

3.1 Historical Use of Financial Technologies in Housing Market Organization

An abundance of research demonstrates how contemporary lending patterns in cities continue to reflect the uneven distribution of wealth in U.S. communities while giving local racialized geographies an intergenerational quality (Massey and Denton 1993; Hernandez 2009). Logan and Molotch (1987) point out that free markets, including housing markets, were constantly disrupted by government policies against minorities. Therefore, the geography of residential segregation in U.S. cities unfolded not just over several days but over historical periods (Hernandez 2009). The housing market events that took place in Los Angeles and other U.S. cities revealed how residential location was attenuated not only by race and poverty, but also by specific human actions, attitudes, and social relations that established segregated space. As we show below, it is the fusion of both explicit and supposedly race-neutral housing market practices that set the stage for present-day MDI operations in Los Angeles.

Although well known, this story of racialized housing finance in the U.S. bears repeating as it outlines the continuum of market interventions and governance that organized housing and housing finance across the country. This outline captures the cycle of speculation, market calamity, austerity and exclusion/predation through an interconnected bundle of technologies such as racially restrictive covenants on property, standardized appraisals, underwriting guidelines and mortgage insurance standards that created and enforced market-based restrictions on property ownership and residency. Thus, New Deal governance of the housing market during an important period of austerity marks a critical historical starting point for understanding the formation of the current MDI geographical baseline.

The end of the 19th century brought a rise in large-scale community development and new strategies to restrict residency along racial lines. During the late 1800s and early 1900s, the rise of large community builders transformed home construction into a nationwide industry by introducing racially restrictive covenants, property deed restrictions limiting residency to whites only, as an essential part of implementing their planning and design visions (Weiss 1987:3). Not only did large community builders dominate the planning, design, and construction of the new

American suburb but they also intentionally created patterns of housing segregation by race and class (McKenzie 1994:36).

When community builders formed the National Association of Real Estate Boards (NAREB) in 1908, race covenants became a fixed part of the urban building process (Hernandez 2014). The NAREB then issued templates of race covenants for its members to use in deeds and leases (McMichael and Bingham 1923; Philpott 1991) and through its Appraisal Division cautioned members that “residential values are affected by racial and religious factors” with covenants considered as important data for determining property value (Babcock 1924: 71-74). During the 1920s, the NAREB, through its nationwide network of realtors, community builders, mortgage lenders, and educational outreach sent clear and direct cultural and social signals to real estate professionals and homeowners across the U.S. that racial segregation was the standard for community development.

Following the lead of NAREB, the early stages of residential development in Los Angeles led to the establishment of all-white residential enclaves such as Beverly Hills, Bel-Air, Holmby Hills, Brentwood, Westwood, Sunset, Laurel Canyon, Encino, Hollywood and North Hollywood. Just north and to the east of the central business district, Burbank, Glendale, Silver Lake, Los Feliz, Flintridge, Pasadena, Altadena, San Marino, Monterey Park, Alhambra, and Santa Anita also incorporated race covenants into residential development. In fact, a review of area descriptions from the 1939 Home Owners Loan Corporation (HOLC) Residential Security Maps for Los Angeles reveals that almost 200 residential areas throughout the county had racial deed restrictions on properties.³

By 1930, the United States was in the early stages of the Great Depression. The housing boom of the 1920s resulted in a large supply of new homes. However, few mortgages at the time were for longer than five years while second mortgages operated as a bootleg form of financing to aid in home purchase and renovation. The credit shortage that accompanied the massive unemployment of the Depression years trapped homeowners needing to extend their mortgages, which were nearing their five-year due date. In a story eerily similar to recent housing market calamities, the credit shortage during the Depression years froze the real estate market and triggered a wave of foreclosures across the country (Davies 1958:172). By June 1933, the number of foreclosures in the U.S. was approximately 1,000 per day (Davies 1958: 176) causing the federal government to directly intervene and reorganize how the nation’s housing markets operated. The result was National Housing Act of 1934 and the formation of the Federal Housing Administration (FHA).

The creation of the FHA and its mortgage insurance program revolutionized the home mortgage industry by creating new mortgage programs with low down payments, low fixed-rate mortgages and long-term repayment plans and made purchasing a home affordable for working class families. FHA financing also made it easier for community builders to obtain construction loans. The FHA guarantee was thus an insurance that lessened the risk of loss faced by construction financiers in the Depression years and subsequent decades. Moreover, the shifting of risk from

³ Residential Security Map and Area Descriptions for Los Angeles and Vicinity. Appraisal Department, Home Owners Loan Corporation and the Division of Research and Statistics, Federal Home Loan Bank Board. September 30, 1939. Obtained courtesy of the Testbed for the Redlining Archives of California’s Exclusionary Spaces (T-Races). <http://salt.umd.edu/T-RACES/demo/demo.html#>

private investment to government-sponsored insurance programs proved critical to the success of revitalizing the housing industry and easing the risk associated with speculative development. Facilitating access to credit for community builders, along with easy loan terms for home buyers now radically altered community building across the nation bringing into practice wide-scale speculation through real estate development.

However, several NAREB members were enlisted for administrative posts in the newly established FHA. Thus, it came as no surprise when FHA underwriting staff drafted the procedures manual containing the housing, credit and appraisal policies that laid the foundation for government sponsored residential segregation to take hold in American cities. NAREB policies regarding racial exclusion became the foundation for developing loan underwriting and appraisal guidelines. Only properties with race covenants were deemed suitable for FHA financing while property in racially integrated neighborhoods were “redlined,” or excluded from obtaining FHA financing. As a result, federal housing finance policy, with its emphasis on segregation, encouraged abandonment of the inner city and shaped the new homogeneous suburb.

In Los Angeles, our review of the HOLC area descriptions and Residential Security Maps show that 71 racially integrated residential areas were excluded from government housing finance programs. To the northeast, San Fernando and Pacoima were redlined. The central core from Downtown south to Compton including Inglewood and parts of Long Beach were redlined. In fact, our review of the HOLC data shows that nearly every census tract adjacent to downtown was redlined; an area that was at that time one of the most concentrated Latino populations in the nation (Abu-Lughod 1999). Parts of Pasadena and Altadena to the north and the areas surrounding Baldwin Park and Pomona to the east were also redlined. This four-part geography of imposed racial residency was deemed unsuitable for FHA financing and comprise the foundational building blocks for race and housing in Los Angeles that would continue to this day.

The mandated use of race covenants by FHA also embedded race in the organizing of the Federal National Mortgage Association (Fannie Mae). Fannie Mae was created in 1938 to establish a national secondary mortgage market for loans insured by the Federal Housing Administration. Lenders were unable to sell loans to Fannie Mae unless the mortgaged property had race covenants and white occupants in place. Consequently, race covenants in property deeds became a standard practice and a necessary condition for participation in what was a rapidly growing Los Angeles housing industry.

The effects of this new relationship between housing finance, real estate development and race relations would show up in federal and state urban redevelopment programs. Inner-city locations, devalued as a result of racial concentrations from the barriers of race covenants and the lack of federally insured mortgages to those places, created the opportunity to transfer large blocks of inner-city mixed-use land to developers for commercial real estate speculation. During this period, business and industrial land uses occupying the same areas in which people lived was considered a sure sign of blight (Roher 1946). Mixed-use properties were characteristic of ethnic enclaves occupying California’s downtown district as racial restrictions on residency forced minority entrepreneurs to merge their place of residency with their business.

In California, the Community Redevelopment Act of 1945 and the Federal Housing Act of 1949 provided the infrastructure for financial help to cities seeking to rehabilitate their “blighted” areas. In 1952, Tax Increment Financing (TIF) was created in California as the mechanism for local governments to meet the federal requirement for matching funds to participate in federally funded redevelopment projects (Huddleston 1982). Local governments could issue redevelopment bonds to generate revenue for land acquisition and infrastructure projects that supported speculative commercial development and in theory generate a higher assessment of land that allowed for the incremental increase in tax revenues. The increased tax revenues would in turn be used to pay the balance of the redevelopment bonds. Tax increment financing became the financial technology to solve the problem of inner-city blight created by the federally sponsored restrictions on real estate financing to racially integrated neighborhoods. When combined with the de-valuing of real estate in segregated inner-cities, TIFs provided the financing innovation needed for commercial real estate speculation by both private developers and municipalities.

This pattern of government-sanctioned racialized suburban growth along with inner-city divestment and subsequent displacement continued uninterrupted until the urban riots of the 1960s, caused in part by the poor housing conditions and discrimination in the four-part geography of redlined areas.⁴ The post-riot reorganization of the mortgage markets and the racial split in secondary mortgage markets in 1968 with the Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac) providing housing credit products for conventional financing; their high down-payment requirements virtually ensured that such loan products would be used primarily in suburban housing developments. The Government National Mortgage Association (Ginnie Mae) was also established in 1968 to guarantee bonds backed home mortgages insured by FHA and VA, which were now permitted in racially integrated hoods.

Despite these groundbreaking legislative changes, there is much debate whether extending FHA programs to such neighborhoods initially did more harm than good. Similar to today’s subprime market, FHA mortgage insurance effectively shifted the risk of lending in redlined neighborhoods to the federal government while lenders profited from servicing a previously untapped credit-starved clientele. Since FHA originally focused on new suburban housing, FHA was unprepared to monitor the actions of lenders issuing loans on substandard inner-city properties. High volumes of loans, deficient underwriting practices, and the lack of limits on fees charged to borrowers led to rampant fraud and abuse of the FHA Section 221 and 235 loan programs by lenders, appraisers and speculators.

In Los Angeles, testimony from special hearings on redlining conducted by the California State Business and Transportation Agency in 1975 revealed how redlined neighborhoods such as South Central, Compton, Pomona and Inglewood, unable to access credit, experienced severe property decline. Redlining also made it difficult or impossible for owners to finance repairs, which further contributed to the decline in property values (Urquidi, D. et al . 1977). Speculators would then purchase undervalued boarded up properties, complete substandard repairs, then sell

⁴ See also The McCone Commission - Violence in the City—An End or a Beginning?: A Report by the Governor's Commission on the Los Angeles Riots, 1965; The Kerner Commission - Report of the National Advisory Commission on Civil Disorders, 1968.

to buyers using Section 221 and 235 loan programs. The low or no down payment requirements of these loan programs, along with the ability to finance closing costs, meant that loan amounts were frequently above the appraised value of the home. Speculators would work directly with lenders to sell their properties to buyers marginally qualified or unqualified to handle the financial burden of ownership. Lenders also took advantage of a fee structure that allowed them to charge clients through a point system with one point equivalent to 1% of the loan amount. Points charged to the seller by the lender were deducted from the proceeds of the sale. Through this point/fee system, lenders now had incentives to charge higher fees and originate as many loans as possible. Sellers raised their asking prices, and appraisers inflated property values to make transactions work (Urquidi et al. 1977).

Much like the predation of the subprime boom, this manipulation of loan applications found many new homeowners unable to afford payments and defaulting on their loans (Urquidi et al. 1977). Consequently, these abuses by both lenders and speculators resulted in a massive number of FHA-insured foreclosed loans in the four-part geography redlined by conventional lenders; a scenario similarly replicated in cities across the U.S. (Boyer 1973; Bradford 2007). The widespread predation by lenders and speculators resulted in substantial revisions to the Section 221 program and led to the termination of the Section 235 program.

By 1980, FHA loans were so concentrated in minority neighborhoods that lending patterns matched racial patterns of residency (Bradford et al. 1975). Moreover, the interventions to undo mortgage redlining via FHA reprogramming failed to address the lack of conventional lenders in nonwhite housing markets and lax enforcement practices. Restructuring the FHA system of financing did nothing to reverse long-standing racial practices of thrifts and commercial banks (Bradford 2007). Instead, FHA reprogramming had the effect of further reducing levels of conventional lending in segregated neighborhoods (Bradford 1979). In fact, our review of post-riot Los Angeles shows that redlined geographies in the 1970s continued to mirror the four-part geography of redlined spaces captured in the HOLC maps of the 1930s (see Chiong et al. 2018).

3.2 Global economic impacts on housing finance technology

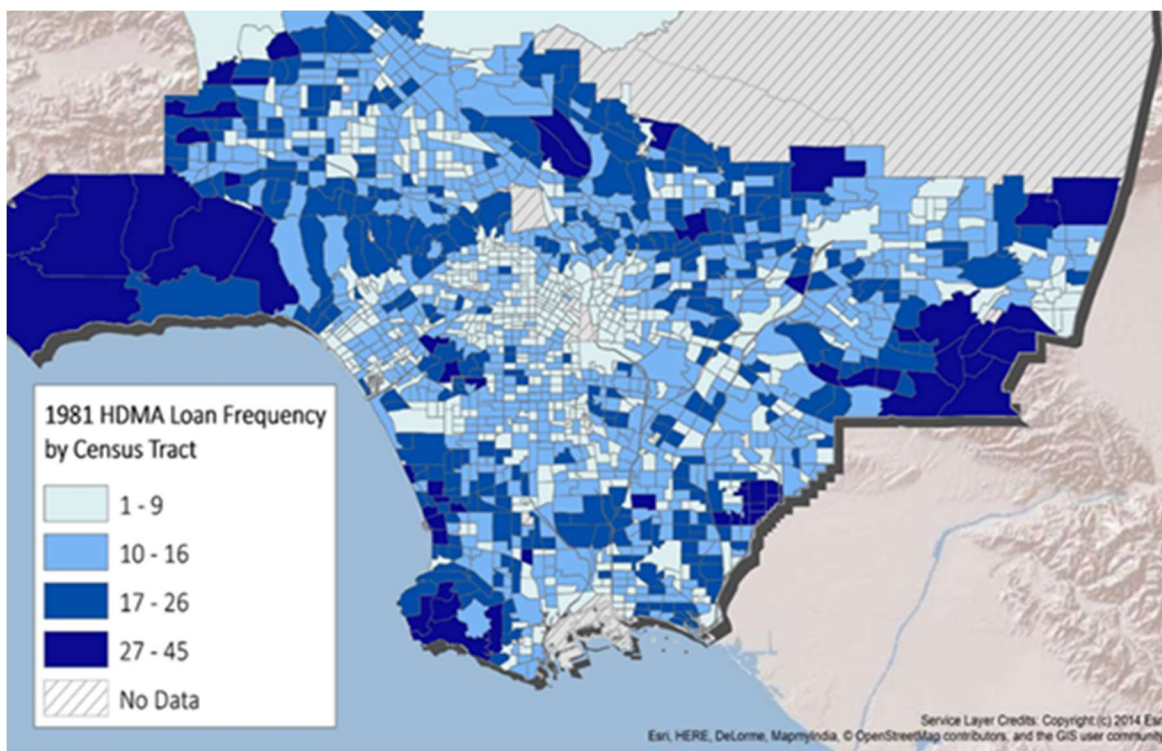
The worsening of the U.S. and global economic environments in the 1970s would lay the foundation for new financial technologies in the U.S. banking system that, in time, would reproduce the racialized foreclosure wave inner-city neighborhoods experienced following the transformation of FHA in 1968. The breakdown of the Bretton Woods system of monetary exchange and the oil-price shocks associated with unrest in the Middle East and the Iranian revolution placed the U.S. economy in an extreme inflationary period during the 1970s (Dymski 1999; Goodfriend 1993).

Interest rates for FHA loans rose steadily from 5 percent in 1961 to 7.5 percent in 1969 and 11.5 percent in 1979. By 1982, rates on FHA mortgages reached 15 percent resulting in extreme monthly payment amounts for new borrowers rendering the loan product useless for those in previously underserved areas.⁵ Interest rates for conventional home loans reached a high of 19

⁵ See The Wall Street Journal, "President Orders Point Cut in FHA Ceiling on Mortgage Rates to Spur Housing," February 2, 1961; The New York Times, "FHA Loan rate is Raised to 7 1/2%. Romney Calls Move Overdue,"

percent in 1981 and limited loan activity to higher income areas. Figure 1 shows the frequency of approved loans by census tract in Los Angeles for 1981.

Figure 1: 1981 Loan Frequency by Census Tract for Los Angeles County
Source: 1981 HMDA Raw Data



We can see how loan frequency begins to outline the geography of mortgage redlining established in the 1930s and repeated in the 1970s. San Fernando, the Downtown core, parts of Pasadena, Baldwin Park and Pomona all show a lower frequency of approved mortgages for loans subject to reporting under the Home Mortgage Disclosure Act. In contrast, we see higher frequencies in non-redlined neighborhoods.

Lenders now viewed long-standing regulations intended to stimulate business and banking during the Great Depression, which also put in place economic safeguards to prevent another depression, as out of touch with the changing economic environment and contributing to the instability of the American banking system (Peek 1990). Lenders recognized the need to adjust their loan portfolio in line with the fluctuating interest rates produced by a rapidly changing global economy. Lenders realized the need for a variable or adjustable interest rate mortgage (ARM) product to eliminate the interest rate risk inherent in fixed-rate mortgages (Cassidy 1984). Moreover, lenders needed a loan product that would prevent profit margins from deteriorating in case of early refinancing by borrowers. Lenders sought products that provided

January 25, 1969; The New York Times, “New Jersey Housing Mortgage Guide for the Perplexed,” October 26, 1979; The Los Angeles Times, “US Reduces Ceiling on Home Mortgages to 15%,” August 9, 1982.

for frequent rate adjustments, prepayment penalties in case of early refinance, and the ability to consider market interest rates (use of an index) in structuring borrower repayment.

Lenders also desired the ability to impose a balloon payment, a loan feature that allowed for the 30-year amortization of a loan payment but requires the loan to be repaid in full within a short period of time, usually within five years or less. Balloon payments provide a lender with the option of calling the balance of a note due and payable or simply converting the balance into a new loan or continuing loan with a new interest rate. The balloon, therefore, allows for a window period where the interest rate on a loan could be adjusted to reflect market rates. The use of balloon payments forces borrowers to refinance their mortgage in order to avoid paying the remaining balance of the loan now due and payable. Thus, the interest rate crisis of the 1970s and early 1980s pushed the banking industry to seek a variety of loan options which were not allowed under the regulatory structure in place at that time (Hernandez 2009).

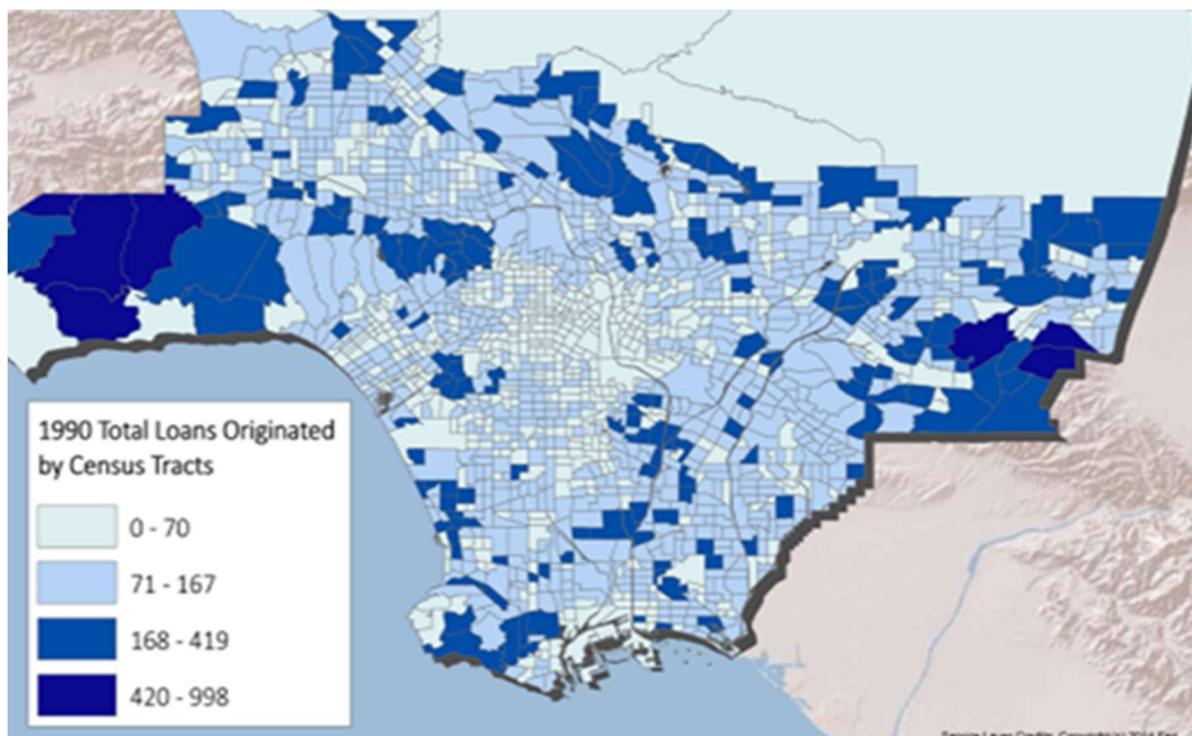
Finally, the credit histories of many borrowers deteriorated considerably during this period of economic stress. As conventional mortgage interest rates began to descend, lenders were preparing for a new wave of credit damaged borrowers paying on mortgages with high interest rates now seeking to refinance to lower rates. Many of these borrowers were unable to meet the strict credit requirements of conventional financing.

The administrative infrastructure needed to provide the finance industry with the tools to revamp credit market organization gained considerable traction through a series of legislative acts during the 1980s. The Depository Institutions Deregulatory and Monetary Control Act of 1980 eliminated all usury controls on first lien mortgage rates, permitting lenders to charge higher interest rates to borrowers with presumed higher credit risks. The Alternative Mortgage Transaction Parity Act of 1982 permitted the use of variable interest rates and balloon payments while specifically overriding local government restrictions on alternative lending products. These regulatory changes enabled lenders to establish price differentials (interest rates) for higher risk borrowers (Gramlich, 2004). Rather than just rejecting high-risk applicants with poor credit as in the prime mortgage market, lenders could now select loan terms that reflected their exposure to risk by adjusting interest rates and loan fees, and imposing balloon payments. This concept, better known as risk-based pricing, encouraged lenders to target “high-risk” borrowers due to the profit margin associated with the new fee-based risk mitigation loan approval process (Hernandez 2009).

The demand for subprime mortgage products also increased when the Tax Reform Act of 1986 created the Real Estate Mortgage Investment Conduit (REMIC) to promote the issuance of Mortgage Backed Securities (MBS). The REMIC provided a federal tax-exempt status for MBS avoiding the imposition of two levels of income taxes and allowing financial institutions to essentially take mortgage debt packaged in MBS off their balance sheets by eliminating the requirement for reserves on securitized debt in order to avoid regulatory capital requirements and related costs. The REMIC also provided MBS investors with the option of selecting the level of credit risk and the accompanying rate of return and attracted a new pool of secondary market investors to purchase subprime-mortgage-backed securities. The formalizing of the subprime mortgage market during the 1980s now provided the necessary protections from high-risk borrowers and taxes and started a shift in the housing credit market from the traditional fixed-rate loan to nontraditional loans such as adjustable rate mortgages (Hernandez 2009).

While Congress spent the 1980s working on establishing the financial infrastructure needed for subprime lending to take hold, the Department of Housing and Urban Development (HUD) initiated policies for a distributive loan approval process called Direct Endorsement (DE). The DE program granted lenders the ability to underwrite loans and determine an applicant's eligibility for FHA mortgage insurance without HUD's prior review. Prior to DE, lenders were required to submit FHA loan applications to HUD for insurance endorsement, a very lengthy and time-consuming process. Through DE, HUD now relies on lenders to accept mortgage applications, obtain employment verifications and credit histories on applicants, select appraisers and order appraisals, and perform other tasks that precede the loan underwriting process while certifying that their underwriters meet FHA's standards. In theory, DE would remove many of the delays in processing loan applications and improve access to FHA financing in underserved areas. However, as Figure 2 shows, in Los Angeles, DE had little or no impact on redlined areas as lending patterns continued to mirror redlined geographies when compared to loan frequencies for census tracts throughout the county.

Figure 2: 1990 Loan Frequency by Census Tract for Los Angeles County
Source: 1990 HMDA Raw Data



The DE lender certification process during the rollout of the program provided only limited assurance that lenders receiving this authority are qualified. Like the Section 221 and 235 foreclosure scandals of the 70s, HUD had not taken sufficient steps to hold lenders accountable

for poor performance and program violations.⁶ Once again, the combination of lax oversight, predatory business arrangements between lenders and speculators, and the minimal risk in lending money to marginally qualified borrowers purchasing substandard properties resulted in yet another wave of foreclosures in Los Angeles' redlined neighborhoods and other cities across the U.S.⁷

The regulatory revamping of the banking industry during the period 1980–2000 created the infrastructure needed to accommodate a new adjustable interest rate mortgage product that allowed lenders to price profit margins according to perceived risks of default. This new infrastructure effectively removed the system of checks and balances separating commercial banking activities from insurance companies and non-banking investment finance on Wall Street. Banks of all sizes now had the ability to engage in a much wider range of financial activities without regulatory restraint (Kregel 2007). Commercial banks could now offer financial services similar to investment bankers, merge with investment banks, and compete with their relatively unregulated Wall Street competitors.⁸ With regulators prohibited from monitoring credit default swaps, insurance-like policies covering the losses on securities in the event of a default, the conditions for rapid subprime loan expansion were now set.⁹

This new array of financial technologies made it possible to alter the fundamentals of housing finance from a system that provides safe long-term credit to stabilize households and neighborhoods to a system that originates loans for immediate sale and short-term profit. Regulatory activity during this period signaled a shift from traditional lending based on accepting deposits and setting aside reserves to one in favor of unregulated markets while facilitating global investment by freeing capital from its national boundaries (Dymski 2007; Wray 2007). As Dymski, Hernandez and Mohanty (2013) point out, the subprime crisis was not just a breakdown of market mechanisms or a shock that was experienced by all homeowners or market participants: “it represented the final stage in a step-by-step coevolution of banking strategies and communities, one shaped by and reinforcing patterns of racial and gender inequality.”

This brief history of securitization and subprime lending reveals how this bundle of technologies triggered a wave of mergers and provided unparalleled opportunities for marketing subprime mortgage products. Also, many lenders participating in DE were engaged in the subprime market, either directly or through a network of affiliate brokers established to increase market access. Thus, it was relatively easy for a lender to cross-market subprime loans or to steer a

⁶ See: Property “Flipping”: HUD’S Failure to Curb Mortgage Fraud. Report by the Minority Staff of the Permanent Subcommittee on Investigations of the Committee on Governmental Affairs United States Senate. 107th Congress, 1st Session. U.S Government Printing Office. Washington. September 25, 2001; Single-Family Housing: Stronger Oversight of FHA Lenders Could Reduce HUD’s Insurance Risk. Report to Congressional Requestors GAO/RCED-00-112. United States Accounting Office. April 2000.

⁷ Ibid.

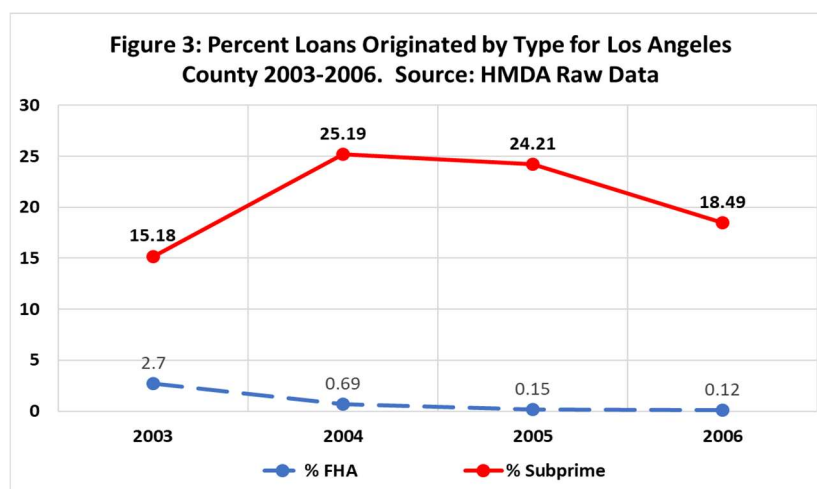
⁸ See the Gramm-Leach-Bliley Bank Reform Act of 1999.

⁹ See the Commodity Futures Modernization Act, a last-minute amendment to the 2000 Federal Budget Bill. Under the Act, neither the Securities Exchange Commission nor the Commodities Futures Trading Commission had authority to monitor credit swap transactions to guarantee that insurers and hedge funds maintained sufficient assets needed to cover any losses they were guaranteeing.

client from an FHA loan to a subprime loan product given the financial incentives accompanying subprime loan origination.

It is easy to see how the bundle of financial technologies was aggressively used to asset strip vulnerable MDI service areas in Los Angeles. Loan products with no- or low-down payment options, low introductory “teaser” interest rates, higher loan amounts, and no- or low-documentation on borrower assets and income streamlined applications helped attract borrowers with a fee structure to help mitigate any credit issues. With the option of using a 2nd mortgage as a down payment (“piggyback” loan) to avoid mortgage insurance requirements, subprime became the preferred method for lenders, realtors, and developers to finance property transactions in a heated real estate market.

A survey of borrowers in Los Angeles County during the period 1998–2000 by the California Reinvestment Coalition (CRC 2001) revealed a pattern of excessively high-priced home lending, with high interest rates, points and fees and aggressive and misleading sales tactics targeted to low-income people, the elderly and people of color. Common loan features noted by survey participants included “teaser” adjustable interest rates that rose quickly with balloon payments trapping borrowers into refinancing the balance due and incurring a new bundle of application processing fees and closing costs. Prepayment penalties (\$5,000 or higher) prevented borrowers from exiting these asset-stripping credit arrangements. We can begin to see how banking strategies were shaped by and reinforced patterns of racial and gender inequality, permitting lenders in evolving financial markets to offer new loan instruments to previously excluded loan applicants (Dymski, Hernandez and Mohanty 2013).



We use HMDA data for the period 2003-2006, the peak years of the subprime loan boom, to show how government support for subprime lending resulted in the abandonment of consumer-friendly FHA loans in MDI service areas. In Figure 3, our calculations of actual loans originated in Los Angeles County show that the percent of subprime loans increased dramatically when compared to FHA loans approved during this period. By 2004, one in four loans in Los Angeles

County were subprime loans. In contrast, we see FHA activity accounting for less than one percent of all loans reported via HMDA.

Dymski, Hernandez and Mohanty (2013) provide compelling evidence that a disproportionate share of subprime loans during the subprime boom went to minorities and women. African American women and Latinas received subprime loans at a much higher rate than whites. Further, as the percent of nonwhites increased in a census tract, so did the percent of subprime loans to minorities, especially minority women, revealing a very important spatial dimension to the racialized and gendered access to credit in the housing finance industry. Chiong, Dymski and Hernandez (2018) confirm that the location of subprime loans in Los Angeles mirrors the long-standing geographical pattern of racial and economic segregation documented above.

To demonstrate the predatory nature of subprime lending in Los Angeles we use data from the Wells Fargo's Corporate Trustee Services (CTS). Wells Fargo CTS provides trustee and fiduciary services on asset- and mortgage-backed securitizations, municipal bonds, warehouse, and conduit programs created by public and private corporations. The CTS collects and reports loan-level performance information to investors for approximately 3.25 million subprime and "alt-A" mortgages.¹⁰ All of these mortgages are securitized in trusts for which Wells Fargo acts as trustee. This database, known as the Columbia Collateral File, represented approximately five percent of the mortgage market at that time. The trustee servicing data allows us to identify the use of a mortgage product known as a "stated income" loan in which the income of the applicant requires no verification or documentation for loan approval. The income stated on the borrower's loan application, along with a fee and/or interest rate increase, was sufficient for a lender to issue a loan. In other words, by paying a premium that resulted in higher yields to lenders and investors, borrowers were allowed to take out loans they simply could not afford to repay. Normally issued with an adjustable interest rate, stated-income loans quickly became unaffordable and triggered a wave of loan defaults and foreclosures in Los Angeles' poorest neighborhoods.

We are interested in understanding the geography of stated-income loans in Los Angeles and how residential settlements historically excluded from housing finance were over-included in predatory lending. We map stated-income loan transactions using the Wells Fargo CTS data which represents five percent of the subprime loans issued in the U.S. during the period 2000-2007 to isolate the location of stated-income loans. Because the CTS data is captured by zip code, we use the ZIP Code Tabulation Areas (ZCTA) created by the U.S. Census Bureau for Census 2010 and HUD's Low-income level of \$44,000 in annual income - approximately 80 percent of the County median family income in 2009.

¹⁰ An "alt-A" loan, or Alternative A-paper loan, is a loan considered to be more of a risk to lenders than the traditional conventional, or A-paper, loan. Alt-A borrowers generally have excellent credit ratings but may not meet traditional underwriting guidelines at the time of loan application. They may not possess all of the necessary documentation needed to qualify for an A-paper loan such as employment verification or evidence of assets. However, alt-A borrowers are considered to be a much lower risk than subprime borrowers. Hence the need for an intermediate or "alternative" grade of credit.

Figure 4. Stated-Income Subprime Loan Frequency by Low-Income Zip Codes in Los Angeles County, 2000- 2007. Source: Wells Fargo Corporate Trustee Services Columbia Collateral File; U.S. Census.

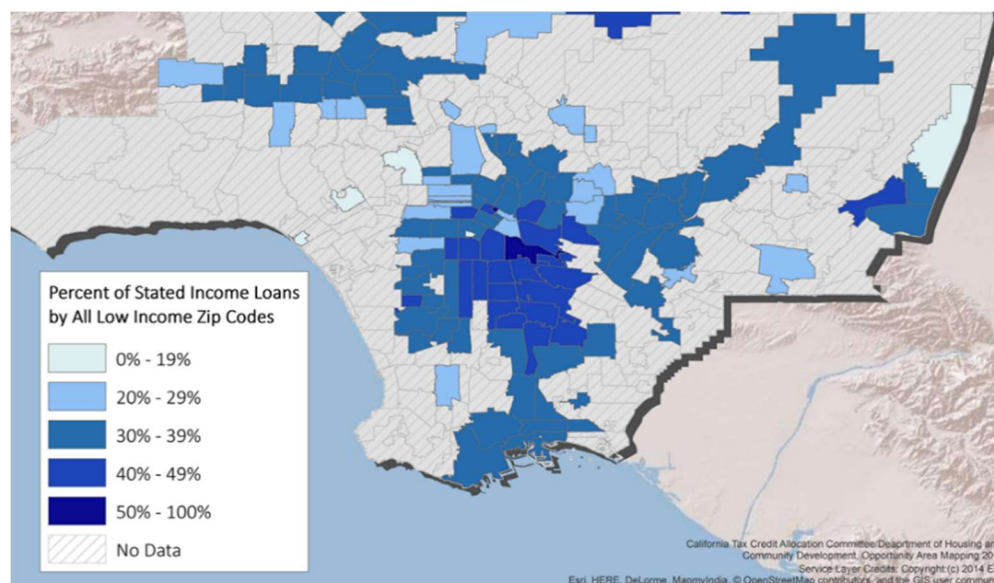


Figure 4 shows that the location of low-income zip codes in Los Angeles closely resembles the redlining patterns shown above. Approximately one-in-three loans in these zip codes are stated-income. In the downtown core and to the south of the core, we see a cluster of zip codes with stated-income rates of over 40 percent. The rate of stated-income loans as a percent of all loans in low-income zip codes is troubling and helps explain the resulting wave of Notices of Default (mortgages where legal foreclosure actions have been initiated) in redlined neighborhoods. Again, a pattern similar to past geographies of housing and racial residency is repeated (Chiong et al. 2018). Molina (2011) also shows an identical geographic pattern when mapping foreclosure frequencies in the Los Angeles metro area.

We continue to stress the importance of location in analyzing the impact of financial technologies: spatial differences in access to credit are key to understanding the connection between the historical patterns of discriminatory housing credit and the service area of MDIs today. Residents lacked the legal capacity to stop the deployment of fraudulent mortgages backed both by large banks' legal arsenal and by government agencies' support. The result has been inner-city dispossession followed by opportunities for speculation in the MDI service areas. The effect has been to neutralize the efforts of even long-established MDIs to deploy practical financial tools that result in meaningful investment towards community development.

This brings us to the historical emergence and development of MDIs in Los Angeles. As we have seen, minority residents of this city-region were subjected to reduced access to credit for decades before the creation of subprime lending vehicles permitted their predatory inclusion. And over those decades, as documented by Li, Dymski, *et al.* (2006), members of these communities – Japanese-American, African-American, Chinese-American, Latino/Mexican-American – opened their own banks in the first seven decades of the 20th Century. Some of the MDIs operating today

– such as Broadway, Cathay, and East-West banks – were founded in those decades; others (such as California Korea Bank) have not survived.

From the 1980s onward, the continued growth of minority populations in Los Angeles – consisting not only of new immigrant flows, but also of the growing domestic minority and mixed-race populations these immigrant flows have fed – have expanded the spatial map of minority settlement in Los Angeles and environs. It has led to the rise of ‘ethnoburbs’ (Li 1998) in the San Gabriel and to the growing minority-population components of Los Angeles’ newer and older suburban communities. In these decades, a new phase of ethnic-bank creation, led by Asian-American and especially Chinese-American banks, has opened, both deepening MDI presence in some established minority-population clusters and growing along with the expanded geographic map of minority-ethnic residence. For example, Hanmi was founded to serve the Korean/Korean-American community in Los Angeles in 1982; and while its first branch was located in Koreatown, in the heart of Los Angeles, its 17 Los Angeles County branches (as of 2018) operate in a range of Los Angeles communities.

These dual impulses in the growth of Los Angeles’ ethnic banks – unmet banking and financial-service needs rooted both in domestic histories of residential segregation and minority exclusion, and in the cross-border-fed population growth of new California residents swelling the size of minority populations – explain why the MDI landscape in Los Angeles today is so rich and so varied. The differential exposure of the newer and older minority-ethnic residents and neighborhoods served by these MDIs to the processes of credit-market exclusion and then of predatory financial inclusion that have unfolded over these years has, of course, affected MDIs’ evolving dynamics – individual institutions’ appearance and disappearance, their growth and shrinkage, their branch openings and closings. To explore this shifting nexus of Los Angeles’ MDIs, the next section examines the empirical record of MDIs in Los Angeles from the 1990s through the present.

Section 4: MDIs and Bank Branches in Los Angeles County, 1994-2018

Sections 2 and 3 have shown that the settlement of Los Angeles County, guided by explicit and implicit racial criteria, have informed the credit-market technai deployed by banks and other lenders to finance local housing and business growth and turnover. Section 3 concluded by noting that minority-owned banks (MDIs) have co-evolved alongside this long history of racial segregation, of differentiated mortgage and other credit flows, and of migration and immigration and intra-metropolitan movement. This section documents MDIs’ spatial trajectory in the past 24 years by mapping out the evolution of MDI banks and branches against the backdrop of the overall bank population in Los Angeles county.

This section proceeds in three parts. Section 4.1 summarizes data on MDIs in Los Angeles County from 1994 to 2018. It records the growth of active MDIs over this period, with data recorded at six-year intervals, and it presents data on evolving branch and deposit totals for MDIs in the context of the population of non-minority banks. Section 4.2 analyzes the dynamic evolution of MDIs, by ethnic-bank category, in this time period, as the MDI bank population has experienced considerable turbulence in terms of entry and exit of institutions. Section 4.3 explores the evolution of MDI branches and non-MDI bank branches across space in Los Angeles, focusing on geo-coded data.

4.1. Minority Depository Institutions and their Los Angeles branch offices, 1994-2018

Since the Federal Reserve Board published its first list of Minority Depository Institutions (MDIs) in 2001, some 68 institutions have been registered as MDIs in California. All but five of these have branches in Los Angeles. Some 33 of these 63 banks remain open in the latest (2018) listing. This section summarizes data about California MDIs active in Los Angeles County in the 1994-2018 period. It also analyses data for MDI branches, as these data are published by the Federal Deposit Insurance Corporation (FDIC).

MDIs operating in LA County	1994	2000	2006	2012	2018	% change, 1994-2018
MDI-Asian	11	22	22	34	29	163.6
MDI-Hispanic	4	1	2	2	2	-50.0
MDI-Black	3	3	2	2	2	-33.3
Branches per MDI bank	1994	2000	2006	2012	2018	
MDI-Asian	5.2	4.5	4.1	6.1	7.2	
MDI-Hispanic	2.5	4.0	2.0	3.0	3.5	
MDI-Black	4.5	4.0	4.5	4.5	2.0	

Table 1 presents data on the number of active MDIs in Los Angeles County over six-year intervals between 1994 and 2018. What is immediately clear is the contrast between Asian banks, on one hand, and Hispanic and Black banks, on the other. Note that the meteoric rise in the number of Asian banks comes in two steps: first, a doubling in number by 2000, then a further surge between 2006 and 2012, followed by a slight contraction by 2018. Note that the population of Black banks remains at two due to the acquisition of Los Angeles-based Founders National Bank by OneUnited, a Black-owned bank headquartered in Massachusetts.

The lists of MDIs recorded in Table 1, and the MDI bank branches and deposits reported in Tables 2 and 3, respectively, are based solely on those institutions that are registered as such on the Federal Reserve and FDIC lists. These official listings are available only from 2001 onward. At the same time, minority-owned banks have existed prior to 2001 across the United States. The co-authors of this study have been engaged with the analysis of the trajectory of minority-owned banking in Los Angeles over a longer timespan (see the references indicated in footnotes 1 and 2). And the pre-2001 portion of that history is dynamic, encompassing both the founding of the first minority-owned banks in Los Angeles as of the mid-20th Century and the emergence of waves of new Asian banks from the 1980s onward. This posed an analytical challenge: how to systematically incorporate as much of this longer history.

Total number, LA County:	1994	2000	2006	2012	2018	% change, 1994-2018
All branches	1,725	1,508	1,680	1787	1,747	1.3
MDI-Asian	50	115	90	207	199	298.0
MDI-Hispanic	4	10	4	6	7	75.0
MDI-Black	12	9	9	9	4	-66.7
All Other Banks	1,659	1,374	1,577	1,565	1,545	-6.9
% of total:	1994	2000	2006	2012	2018	
MDI-Asian	2.9	7.6	5.4	11.6	11.4	
MDI-Hispanic	0.2	0.7	0.2	0.3	0.4	
MDI-Black	0.7	0.6	0.5	0.5	0.2	
All Other Banks	96.2	91.1	93.9	87.6	88.4	

The availability of FDIC bank-branch data by institution and branch for the United States as a whole since 1994 provided a solution. Our method of tracking officially-registered MDIs back in time to 1994 was to follow the rule that the any bank (and its branch offices) that appears on the MDI list for Los Angeles County at any point in the 2001-18 period is classified as an MDI in any year in which it appears in FDIC ‘Summary of deposits’ lists.¹¹

Deposit totals, LA County:	1994	2000	2006	2012	2018	% change, 1994-2018
All branches	128,397	138,191	222,934	266,064	412,995	221.7
MDI-Asian	2,515	8,156	9,694	27,124	47,911	1804.7
MDI-Hispanic	83	505	156	207	349	321.5
MDI-Black	319	260	449	552	568	78.1
All Other Banks	125,480	129,271	212,634	238,180	364,167	190.2
% of total:	1994	2000	2006	2012	2018	
MDI-Asian	2.0	5.9	4.3	10.2	11.6	
MDI-Hispanic	0.1	0.4	0.1	0.1	0.1	
MDI-Black	0.2	0.2	0.2	0.2	0.1	
All Other Banks	97.7	93.5	95.4	89.5	88.2	

Notes: The Hispanic MDI totals for 2006 exclude data for Banco Popular de Puerto Rico, which had 27 branches in LA county in that year. Subsequently some of these branches were closed and others were absorbed by other institutions. Note that prices in 2018 are approximately 25% higher than in 1994; so the %-change figures for deposits should be downward adjusted by 25 to measure approximately constant dollars.

¹¹ Only rarely have ‘non-minority institutions’ transitioned to minority ownership in recent history; see Dymski and Li (2003) and Ahn *et al.* (2010).

Table 2 contains a list of MDI and non-MDI bank branches, then, between 1994 and 2018. Overall, the number of bank branches remained relatively stable during this 24-year time-span, growing 1.3% overall – less than 1 net branch per year. However, the population of non-ethnic bank branches shrank by 6.9%, while that of ethnic bank branches almost doubled (+94.9%). This growth, like that of MDIs per se, has been unbalanced. Asian banks' branch total tripled, while Hispanic banks' branch total grew by 3, from 4 to 7, and Black banks' branch total fell from 12 to just 4. MDI branches' share of total Los Angeles County branches climbed from 3.8% in 1994 to 11.6% in 2018.

Table 3 provides the figures for deposits between 1994 and 2018. In raw terms, deposit totals for all categories of banks grew, those for Asian banks by a spectacular 1800%. Asian banks' share of the total rose from 2% to 11.6% of the county total; but that of Black and Hispanic banks varied little from their 0.1% share of the 2018 total. If we take into account the 58% increase in prices between 1994 and 2018, the compound growth rate of constant-price deposits was 3.1% per annum for all banks: 2.7% for non-MDI banks, 11.4% for Asian MDIs, 4.4% for Hispanic banks, and just 0.5% for Black banks.

4.2. MDI's cohort survival and evolution over time in Los Angeles County, 2001-2018

While the data shown in Section 4.1 suggests that the rapid growth of Asian MDIs has been relatively continuous during the 1994-2018 period, while Black and Hispanic banks' footprint in Los Angeles has contracted, non-MDI banks' branches have been stable, and non-MDI banks' deposits have grown modestly. This image of continuity is misleading in the case of MDIs, especially Asian MDIs. This period examines the churn among MDIs – these institutions' pattern of entry and exit – and finds a pattern of considerable turbulence.¹²

A total of 28 banks were included in the first FRB listing of CDIs in 2001. Of these, 12 had closed their doors by 2006 (10 Asian, 1 Black, 1 Latino); 2 more closed between 2006 and 2012, and another 4 between 2012 and 2017. The 8 banks that remain open from those in that first listing include 6 Asian banks, 1 Black bank, and 1 Latino bank.¹³ These 'original 8' banks all were opened for business well before 2001: the oldest of them, Broadway Federal Bank, Universal Bank, and Cathay Bank, were chartered in 1947, 1954, and 1962, and the remaining 5 between 1976 and 1996. These 'original 8' account for 71 of the 210 MDI bank branches open in 2018.¹⁴

¹² Our investigation of exit and entry undertaken here does not cover non-MDI banks.

¹³ The terms 'Asian bank', 'Black bank,' and 'Latino bank' are used here for convenience to refer, respectively, to Asian-American-owned, African-American-owned, and Hispanic-Chicano-owned institutions. It was noted in Dymski, Veitch, and White (1991), a report to the Los Angeles City Council, that the terms 'Black', 'Asian,' 'Latino,' 'Hispanic', and 'Chicano' are all contested descriptors for minority-owned banking firms. This terminological problem remains unsettled to this day. The term 'ethnic bank' is used here to refer to minority-owned banks, whether or not they are designated as MDIs.

¹⁴ Not included in this count is the one Los Angeles branch of OneUnited Bank of Boston, an MDI chartered in Massachusetts. In 2001, OneUnited merged with Founders National Bank of Los Angeles. Founders and Family Savings Bank, along with Broadway, constituted a population of 3 Black banks in Los Angeles in the 1990s, with 12 branches in 1994 (as shown in Table 1).

Another 9 banks chartered prior to 2001 received MDI accreditation by the Federal Reserve between 2002 and 2006; these included the two other longest-existing ethnic banks in Los Angeles, Chinatrust Bank (later renamed CTBC Bank Corp USA), chartered in 1965, and East-West Bank, chartered in 1972. These banks account for a further 86 branches in the 2018 ‘count’. The remaining 53 MDI branches open in 2018 (25% of the MDI total) are operated by 15 remaining MDIs, all chartered in 2001 or later.

Several features of this evolving population of MDIs stand out. First of all, there is a lot of ‘churn’ among these institutions, over the years. Note that only 10 of the 28 MDIs registered as of 2001 (36%) survive to the present day. Another 20 MDIs were recorded for the first time in the 2001-2006 period; by 2018, six have been delisted – so a 70% survival rate. And of 18 banks registered as MDIs for the first time between 2006 and 2017, 4 have been delisted – a 78% survival rate.

A second finding about this population of MDIs is that the expanding ranks of officially registered MDIs have grown in two waves since the publication of the first governmentally-sponsored MDI list in 2001. All the additional MDIs registered in Los Angeles between 2001 and 2006 had been operating as ethnic banks since the 1990s – as noted, several were founded considerably earlier in time. The MDIs added after 2006, by contrast, were largely newer institutions founded in the 2000s.¹⁵ A third finding is that the ‘churn’ of MDIs observed here – with 30 banks having disappeared between 2001 and 2018 – affects all ethnic categories of MDI.

4.3. The spatial distribution of MDI branches in Los Angeles County, 1994-2018

As noted above, branch addresses and zip codes are published annually by the FDIC. Because census tracts for the 2006 and 2010 U.S. Census shape files are almost identical, we linked these geocoded data with census data on racial segregation and poverty from the 2018 California Tax Credit Allocation Committee Opportunity (CTCACO) Area maps. This subsection then displays the location of MDI branch locations within Los Angeles County, and indicate these branches’ location relative to distressed areas of Los Angeles County as identified in 2018 CTCACO maps. We describe the CTCACO mapping process and its application in more detail in Section 5.

Figures 5 through 7, shown immediately above, display MDI branch data by location and ethnicity in Los Angeles County for 1994, 2006 and 2018, respectively. Two immediately striking aspects of these figures is the growth in the MDI branch network – from 66 branches in 1994, to 103 in 2006, to 210 in 2018. Second, this growth has been asymmetric. In 1994, a significant presence of Black MDIs covers south LA, an area that has been historically redlined and that also has been the largest population hub for African Americans in Los Angeles County. While Black MDIs’ presence remains significant in 2006, it shrinks significantly by 2018 (to four branches). The presence of Latino MDIs, by contrast, expands considerably between 1994 and 2006; by the latter year, an extensive network of Latin MDI branches covers large portions of east Los Angeles county – the historical population hub for Latino/Chicano residents. However, in 2018 this Latino MBI presence has shrunk considerably.

¹⁵ The one exception to this rule is Commercial Bank of California, a Latino bank founded in 2003 and registered as an MDI after 2011.

Figure 5: Minority Depository Institutions by Location and Ethnicity in Los Angeles County 1994. Source: FDIC

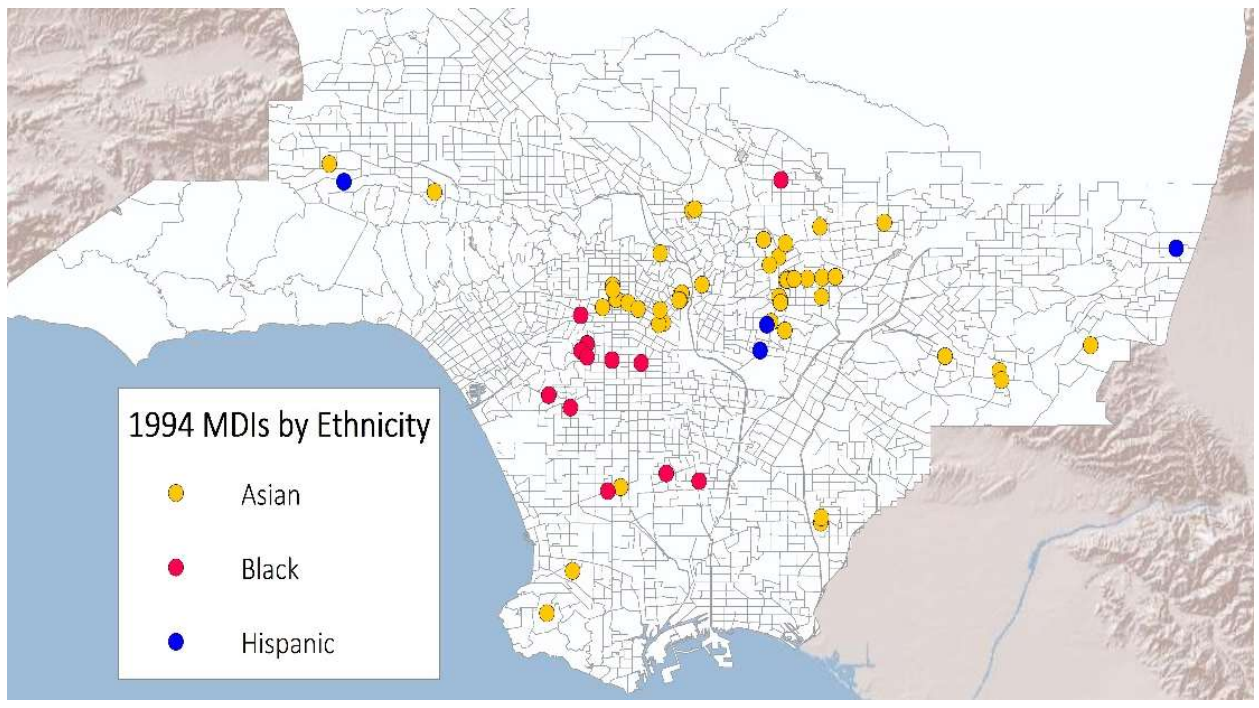


Figure 6: Minority Depository Institutions by Location and Ethnicity in Los Angeles County 2006. Source: FDIC

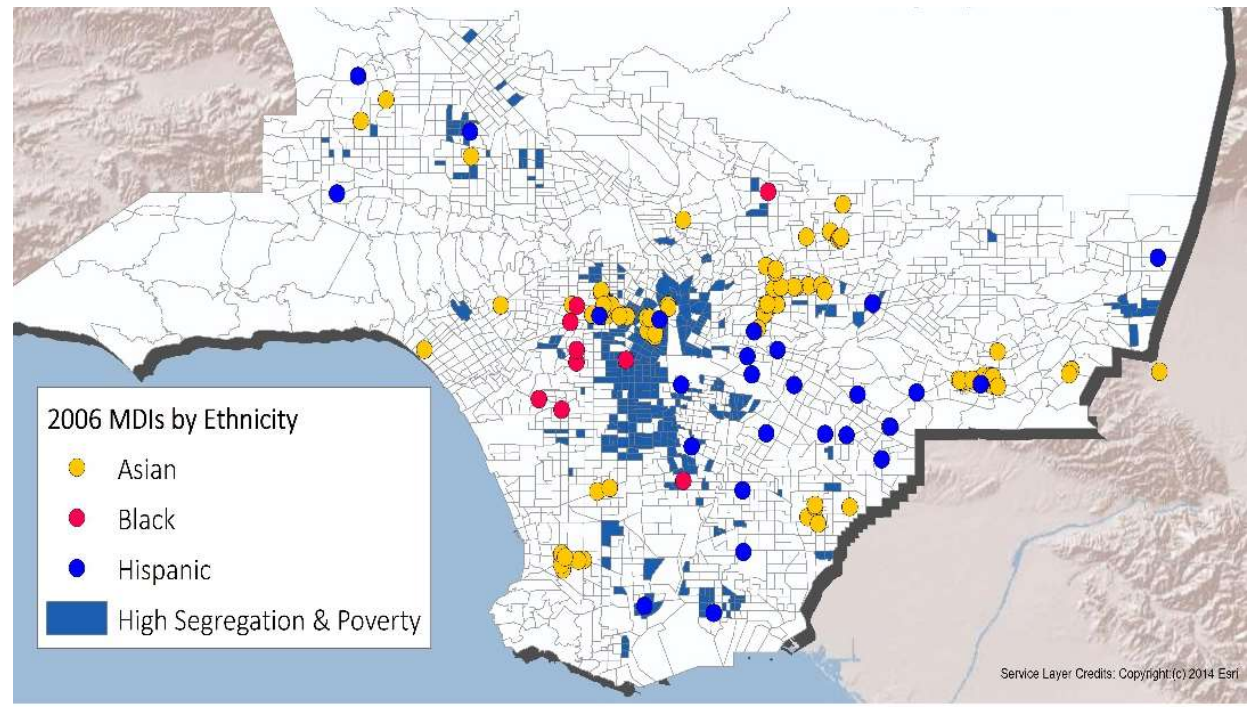


Figure 7. Minority Depository Institutions by Location and Ethnicity in Los Angeles County 2018. Source: FDIC

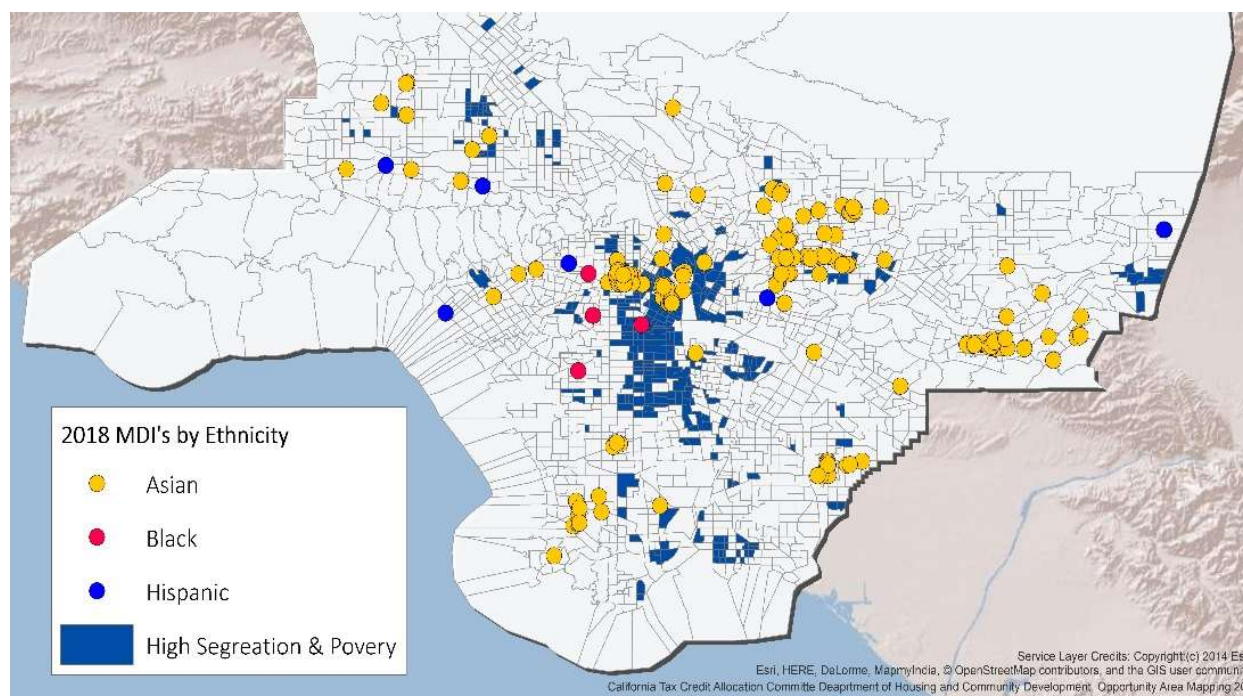


Figure 5-7 illustrate the very different development profile for Asian MDIs. In 1994, two intensive Asian MDI clusters are evident – one in the Koreatown/Chinatown areas of central Los Angeles and the other in the Alhambra-Monterey Park area of eastern San Gabriel Valley. These branches cover other areas of Los Angeles County as well. The branch patterns for 2006 and 2018 then show a densification of the 1994 Asian-MDI cluster areas, the emergence of several new clusters – notably a concentrated cluster in the western San Gabriel Valley area that encompasses Rowland Heights and Hacienda Heights – and continued expansion into the San Fernando Valley as well as into Los Angeles County’s south-eastern and southwestern areas. The ‘churn’ noted in Section 4.2 does not show up here as a hollowing out of Asian-MDI presence anywhere in the County; to the contrary.

Figures 6 and 7 show MDI branches’ location against the areas of high segregation and poverty designated in the 2018 CTCACO maps. These 2018 areas represent the core portions of the historically redlined neighborhoods in Los Angeles, as a comparison with Figure 1 will demonstrate. Note that Black and Latino MDIs are not located in the heart of this high-segregation/poverty area; by 2018, only one is – Broadway’s headquarters branch. By contrast, the much larger numbers of Asian MDI branches include offices located in or adjoining these CTCACO areas; and these offices are complemented by concentrations of Asian MDI branches in other areas of Los Angeles County, including dynamically expanding areas such as the eastern San Gabriel Valley. We pointed out in our 2018 Federal Reserve report (Chiong, Dymski, and Hernandez 2018) that Asian MDI’s are well positioned to take advantage of the Federal Immigrant Investor Program, better known as the EB-5 program; this extensive pattern of Asian MDI branches positions them well to take advantage of other emerging technologies in the new

financial world, such as Opportunity Zones and Areas, a topic to which we turn next. By contrast, Black and Latino MDIs' shrinking branch networks and presence, and the continuing impact on the balance sheets of their client households and businesses, leaves them badly positioned to participate in existing technologies (such as Small Business Administration loan programs), much less in emerging financial technologies.

5. New technologies and persistent baseline geographies

For quite some time local governments have grappled with how to revitalize distressed inner-city neighborhoods. The traditional approach has been to attract outside capital through a system of public/private partnerships that incentivizes investment in inner-city/downtown development (Squires 1989; Logan and Molotch 1987; Smith 1988). Following the traditional approach, an example of a new financial technology now being deployed across the U.S. is the concept of Opportunity Zones. The Tax Cuts and Jobs Act of 2017 attempts to spur investment in distressed communities by providing a federal tax incentive as motivation for investors to invest in real estate projects and businesses located in administratively designated low-income "communities." Opportunity Zones provide investors with deferred and/or tax reductions of reinvested capital gains as well as forgiveness of taxes on new capital gains based upon the length of time an investment is held.

This new financial infrastructure encourages the rapid pooling and immediate deployment of excess capital. A search of available funds listed on OpportunityDb, a database tracking qualified Opportunity Funds throughout the U.S., indicates a total of 97 qualified funds with a total investment capacity of \$27.1 billion ready for deployment as of June 13, 2019 with more funds added to the database regularly.¹⁶ The Local Initiatives Support Corporation (LISC) and Economic Innovation Group (EIG) both report over \$2 trillion in unrealized capital gains held by U.S. investors representing a significant untapped resource that can be channeled towards local economic development.¹⁷

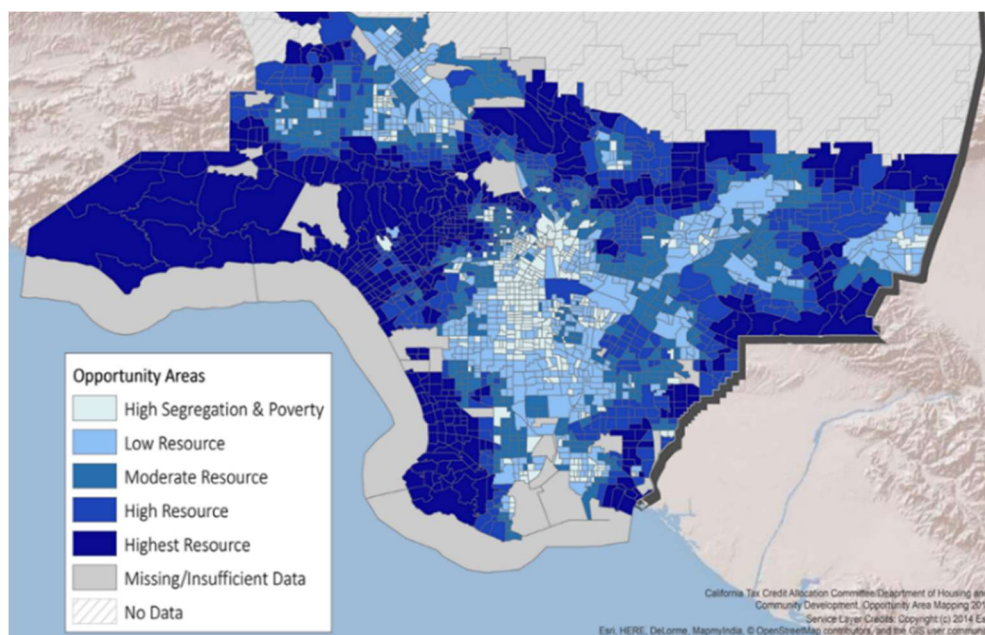
In California, Opportunity Areas, which include federal Opportunity Zones, were created to promote private investment in affordable rental housing for low-income Californians. The California Fair Housing Task Force was formed to develop an opportunity mapping tool to demonstrate the spatial dynamics of opportunity in each California neighborhood and region – that is, to indicate which areas have the greatest and least private and public resources associated with childhood development and economic mobility.¹⁸ The mapping tool uses an index developed from 21 indicators measured at the census tract level and uses a categorical ranking from "Highest Resource" census tracts to "High Segregation and Poverty." Shown below in Figure 8, the mapping tool allows us to quickly identify "Low Resource" and "Segregated" census tracts in Los Angeles County.

¹⁶ See OpportunityDb: The Opportunity Zones Database at <https://opportunitydb.com/funds/>.

¹⁷ See Opportunity Zones: Tapping into a \$6 Trillion Market. Economic Innovation Group. <https://eig.org/news/opportunity-zones-tapping-6-trillion-market>. LISC Opportunity Zone Overview. <https://nefinc.app.box.com/s/6ozrqlzpxwvljlk3s4cofoezhe05clkf>

¹⁸ See the California Fair Housing Task Force, Opportunity Mapping Methodology. November 27, 2018. <https://www.treasurer.ca.gov/ctcac/opportunity/final-opportunity-mapping-methodology.pdf>

Figure 8: Opportunity Areas in Los Angeles County.
Source: California Tax Credit Allocation Committee.



We are concerned with how these Opportunity Areas are closely related to historical patterns of segregation shaped using financial technologies described above and that this persistent geography, which represents much of the MDI service areas, is not random in nature but instead an intergenerational process. We use the Opportunity Area ordinal ranking of census tracts by levels of affluence in Los Angeles County to test for spatial autocorrelation, which occurs when the relative outcomes of observations are related to their distance. Spatial autocorrelation is important because statistics relies on observations being independent from one another. If autocorrelation exists in a map, then this violates the fact that observations are independent from one another making this a useful method to analyze clusters of events such as segregation. The Global Moran's Index is the most common statistic of spatial autocorrelation. We test the null hypothesis that the pattern of racially and economically segregated census tracts in Los Angeles County are random.

Incremental Spatial Autocorrelation was performed to determine an appropriate distance band (6 miles) which was then used to construct a spatial weights matrix to quantify the spatial relationships among the census tract polygons necessary for the Global Moran's Index. The result was an index value of 0.47 with a z-score of 146.1601 and p-value of 0.000 indicating that the clustering of segregated census tracts is statistically significant at the 99% confidence interval. The findings show that census tracts of segregation and poverty in mortgage-redlined areas are not randomly situated but instead highly clustered together, an event driven in part by the persistent, intergenerational racialized practices associated with housing finance policies in Los Angeles County.

Our Cluster and Outlier Analysis (Anselin Local Moran's Index) distinguishes between a statistically significant cluster of high values (HH), a cluster of low values (LL), an outlier in which a high value is surrounded primarily by low values (HL), and an outlier in which a low value is surrounded primarily by high values (LH). Statistical significance is set at the 95 percent confidence level.¹⁹ While the Global Moran's Index is focused on identifying the extent of spatial relationships, the Local Moran's Index illustrates the results of the Global test. Together, the indices provide sufficient evidence to reject the null hypothesis that the pattern of racially and economically segregated census tracts in Los Angeles are random.

Figure 9: Cluster and Outlier Analysis for Opportunity Areas in Los Angeles County

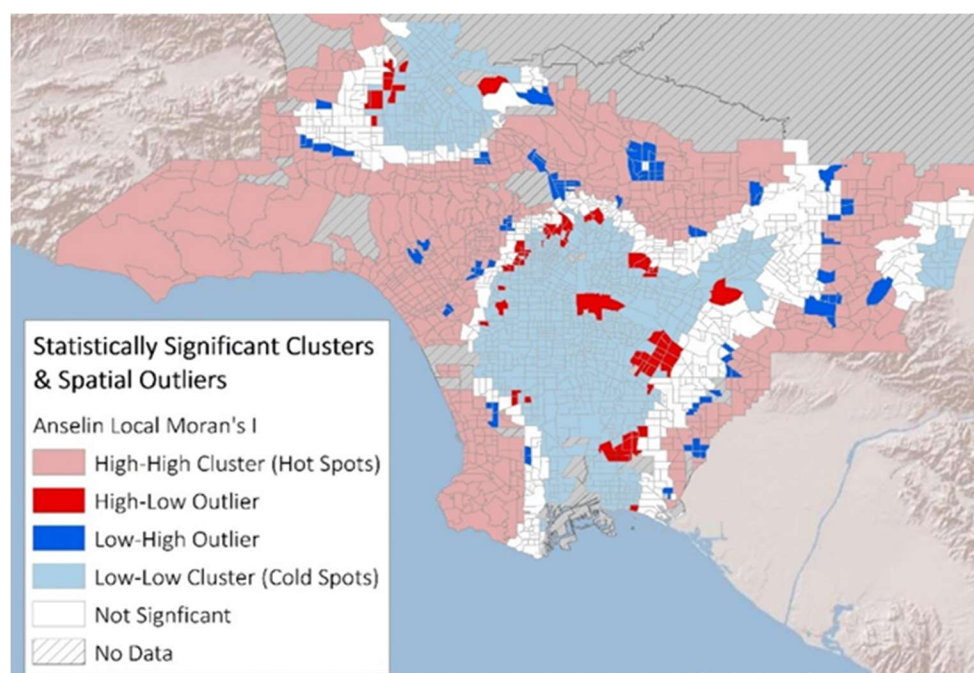


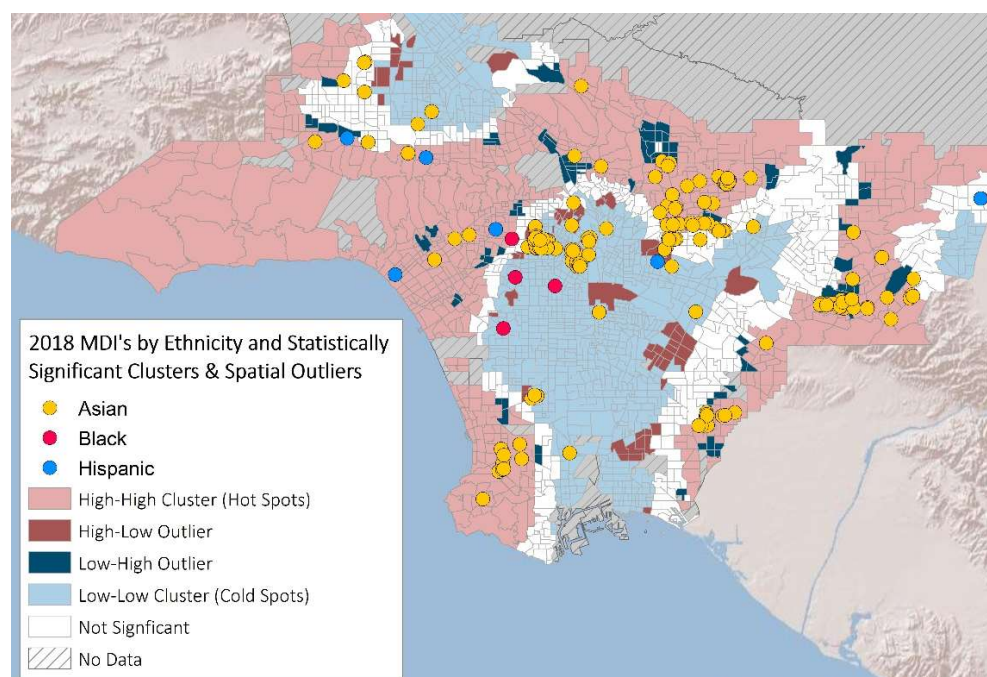
Figure 9 captures the results of the Local Moran's Index and shows how the highest resourced census tracts (hot spots) in Los Angeles County are highly clustered and indicate the geographic location of wealth and opportunity, a pattern that is well documented in section 3 above. Cold spots represent the clusters of low-resourced census tracts – places associated with long-standing patterns of segregation and redlining initially captured in the original HOLC redlining maps in 1939 and continually documented by redlining maps in the 1970s, and with HMDA data from 1980 – 2006.

Figure 10 combines the results of Local Moran's Index with the MDI branch location by ethnicity for 2018. We can see a paucity of Black and Hispanic bank branches in the low-resourced cluster indicating the uneven capacity to provide Black and Hispanic MDI clients with the services they and their neighborhood need. Although we do see a cluster of Asian MDI

¹⁹ For Global and Local Moran's Index methodology, see Griffith, D. 1987; Anselin, L. 1995; Mitchell, A. 2005; Stopka, T.J. et al 2014.

branches in the low-resource cluster, these branches are for the most part isolated in the central business district that makes up the downtown core near the Koreatown and Chinatown neighborhoods.

Figure 10. Cluster and Outlier Analysis for Opportunity Areas in Los Angeles County with MDI Branch Locations by Ethnicity



Federal agencies have consistently stressed the importance of minority owned banks in promoting the economic viability of minority and underserved areas. These banks can provide specialized, culturally sensitive services that can improve access to the credit needed to revitalize the most distressed MDI service areas. However, Figure 10 provides a cautionary notice that the MDI mission will be difficult to meet given the number of MDI branches in Los Angeles' most distressed areas. Only three Black bank branches and one Hispanic bank branch can be found in the largest cluster of low-resource census tracts.

Considerable concern must be given to how new financial technologies are now imposed upon the MDI service areas to address the issues facing MDIs today. How will these technologies impact the MDI service area in Los Angeles? Chiong, Dymski and Hernandez (2018) have shown how the leveraging of immigration policies that grants lawful permanent residence in the U.S. when making a minimum capital investment towards development projects led to a new financial tool to attract foreign investment capital via the EB-5 program. Providing development capital to approximately 1,200 commercial real estate projects in Los Angeles County, the investor-friendly EB-5 program raises a real concern for gentrification in MDI service areas. Similarly, the tax shelter-driven Opportunity Zone Program, promulgated as a sign of the Trump

administration's commitment to aid distressed communities, comes with no legal requirement or guarantee that the tax-sheltered capital will be deployed in a way that provides a public benefit equal to the public loss of tax revenues. While the new tax breaks enable investors to accumulate more wealth, it includes no requirements to ensure that distressed communities serving as the place for sheltering wealth must actually benefit from investments receiving the tax break. Thus, this tax break could amount to a "subsidy for gentrification" in many areas instead of, as intended, for providing housing and jobs for low-income communities.²⁰

New financial technologies such as Opportunity Zones continue the innovation needed to safeguard new flows of old capital seeking new places where surplus wealth becomes productive for investors. The concept of Opportunity Zones places a priority on sheltering wealth from risk with the possibility of neighborhood revitalization occurring as an ancillary event. Sheltering wealth from taxation in effect becomes the proxy for meaningful urban planning and community development. Through this traditional method of incentivizing private investment, the MDI mission is further compromised. Financial technologies, as Bear (2017) argues, continue to provide direct support for harmful speculative planning under the guise of agency responsiveness.

Public/private partnerships across the U.S are quickly organizing the infrastructure needed to leverage the technologies that make private capital available for real estate development (e.g. EB-5; Opportunity Zones). It is clear that Black and Latino MDIs do not have access to these new streams of private capital, nor do they have the business and political relationships needed to assist in the deployment and management of these funds. Private and transnational capital using the MDI service area as a safe haven will not be deposited in Los Angeles' Black and Latino MDIs. The redirection of new development capital shows how these banks will be contributing less to the meeting the MDI mission as new financial technologies are deployed.

6. Conclusions and policy recommendations

This study has used an investigation of the emergence and development of MDIs in Los Angeles County to explore the factors that influence their effectiveness in creating pathways for economic development, especially in neighborhoods that have historically been subject to racial segregation and multi-dimensional economic exclusion (including redlining by non-ethnic banks). This study has built on the premise that MDIs' effectiveness in accomplishing their shared mission is acutely sensitive to three factors: the economic circumstances of MDIs and of the racial/ethnic communities they serve, the structure of governance, and the evolution of financial technologies. While the governance structures that shape urban community development encompass several different layers and many factors, we have focused here on policies shaping the financial flows and wealth creation and destruction in Los Angeles from the 1970s to the present. The public policies governing these processes, as well as the market-based practices and instruments deployed by privately owned actors – banks and investors – are identified herein as financial technologies.

As the site of our case study, Los Angeles has offered some unique advantages: its remarkably

²⁰ See Potential Flaws of Opportunity Zones Loom, as Do Risks of Large-Scale Tax Avoidance. Center on Budget and Policy Priorities. January 11, 2019. <https://www.cbpp.org/sites/default/files/atoms/files/1-11-19tax.pdf>

diverse racial/ethnic population, and its long history of receiving migrants both from elsewhere in the United States and from other countries. The histories of residential racial segregation and financial exclusion experienced by African-American, Latino, and Asian-American residents have led in Los Angeles to a multi-ethnic population of MDIs. Since the 1980s, Los Angeles' migration stream has shifted due to the emergence of a robust flow of new residents and of capital from Asia, especially from China and from Asia's Chinese diasporic countries. This shift has changed the evolutionary trajectory of MDIs in Los Angeles. Asian MDIs – despite significant turn-over in the specific institutions active at different points in time, between 1994 and 2018 – have emerged as an increasingly significant presence in Los Angeles County; due to the explosive growth in their numbers and spatial density, Asian MDIs have captured a growing share of total banking activity. Black and Latino MDIs, by contrast, have experienced only incremental growth in deposits, and have seen their branch networks shrink significantly since 2006. In sum, the intersecting dynamics of inequality, governance structures, and financial technologies have shaped MDIs' "logic of reinvestment," both in Los Angeles and, by extension, in other urban areas of the United States.

The evidence reviewed here suggests that governance strategies aimed at assisting MDIs in fulfilling their historical mission must take into account the varying circumstances of the racial/ethnic minority communities – and of the MDIs that serve them – in different parts of the country. For urban communities with large proportions of African-American and Latino residents, the combined impact over the years of redlining, displacement, and asset-stripping – most recently via foreclosures due to subprime loan exposures – means that urban development and planning must proceed at the neighborhood scale, and involve greenlining. Financial technologies that have often, in the past, been used to extract wealth from minority communities can be repurposed so as to bring needed resources into socially and economic excluded areas. This is, of course, what programs such as Opportunity Areas have done for decades. What is especially needed is to design interventions and asset/wealth-building programs that work with residents whose families have been subjected to historically-evolving patterns of economic predation and exclusion. The fact that this shameful record has been built on the basis not only of biased financial technologies, but of broader aspects of urban and economic governance, means that intervention strategy must be similarly broad in its reach and outlook.

The key stakeholders in Los Angeles with whom we have interacted in the course of this study – all involved in reversing patterns of racial-ethnic exclusion – have suggested some of the specific pathways that can be pursued. It should be noted, first of all, that 'divide and conquer' approaches are a non-starter. The success of the growing Asian-American – and especially Chinese-American – population in expanding its population footprint and its levels of wealth and credit flows cannot be blamed as the 'cause' of the relative stagnation of largely African-American and Latino areas within Los Angeles; that success has come alongside the relative neglect of these other racial/ethnic communities. The shared experience of the Los Angeles 'uprising' of 1992 led to the coming-together of Los Angeles residents across racial/ethnic lines, not to finger-pointing and breaking apart. However, that spirit of civic renewal was not accompanied by changes in governance at the national level, or by accommodations in market-based financial technologies, that facilitated any such renewal of shared prosperity. Instead, the technology that became dominant in the post-'uprising' years was the subprime loan and its variants – and as we have noted, this technology made a rich feast by encouraging a housing

bubble and then bursting it, with losses concentrated among the communities whose members have historically been most subject to discrimination and redlining.

So a strategic shift is in order. The focus must instead be on emerging financial technologies that support underserved populations and their neighborhood- investment without displacement. Commercial banks – especially the large ones, whose subsidiaries captained the subprime explosion, can invest in a variety of ways in MDIs. They can put deposits into MDIs in underserved and high-poverty areas, they can help to underwrite and buy securities that MDIs might issue, and so on, supporting these institutions and gaining CRA credit. Incentives can be created for foreign investments/deposits to flow to MDIs. And opportunity-area projects and funds can be created through MDIs with features that both provide CRA credit and meet anti-displacement criteria. MDIs' expertise in understanding how to cope with the challenges of high-poverty/segregation areas can be used to enable these institutions as experts in engineering community turn-arounds. These small steps demonstrate how financial technologies can be deployed in a way that furthers, not constrains, the MDI mission.

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