

What Has Never Happened Before and Is Happening Again: Development and Discrimination in the San Joaquin Valley

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INTRODUCTION

Areas with substantial impoverishment are normally regarded as stagnant and socially isolated; think of South Los Angeles, rural Mississippi, or Appalachia. The San Joaquin Valley was itself once such place—photographs of dust-hardened faces of migrant farm-workers in the Valley are among the iconic images of poverty in America. Instead of stagnation and social isolation, however, the San Joaquin Valley is today experiencing unbridled population growth. Much of the growth can be attributed to households from more prosperous regions with far more net worth or financial capacity than longer-term Valley residents. New challenges are arising with the population swell, including pressure on unprepared transportation, social-service and education systems, and a transformation in the structure of businesses and of employment opportunities.¹

Because developments are unfolding very rapidly in the San Joaquin Valley, these challenges will require accelerated attention by analysts, residents, and policy-makers. This paper focuses on just one of the many market processes that are shaping the Valley's growth: the credit markets for home-purchase loans. Specifically, this study presents results from an empirical examination of the possible existence of racial discrimination in these markets. This evidence demonstrates a strong pattern of how racial discrimination affected African-American, Latino, Asian, and Native American home-loan applicants in the 1992-2002 periods in eight San Joaquin Valley counties.

Section I of this paper sketches out trends in recent urban development in the U.S., and argues that the recent pattern of urban growth in the Valley is unique relative to recent U.S. experience, especially in terms of its implicit racial dynamics.

Section II presents some ideas about macro aspects of development processes and reviews some recent data on the San Joaquin Valley home-purchase market in this context.

Section III turns to some micro aspects of the development process, with a

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1. The urgency of the problems posed by the Valley's growth is also highlighted in a November 2004 report issued by the Public Policy Institute of California. See Hans P. Johnson & Joseph M. Hayes, *The Central Valley at a Crossroads: Migration and Its Implications*, 61-78 (Public Policy Institute of California 2004).

focus on the credit-market decisions for home purchases. This section also summarizes the results of an empirical study on racial discrimination in home-purchase credit markets.

The conclusion finishes by linking the patterns noted in Section III to the unique pattern of Valley growth (per Section I), which impact the nature of the Valley's growth process (per Section II).

I. WHY THE GROWTH DYNAMIC OF THE SAN JOAQUIN VALLEY IS (NEARLY) UNIQUE

The United States, among the world's most advanced and dynamic economies, has also been characterized by persistent poverty problems,² and by high levels of income and wealth inequality.³ One manifestation of this inequality is the relatively high number of unbanked American households. The 2004 Survey of Consumer Finances, released in February 2006, shows that 9% of all households are unbanked, 25% of them in the lowest income quintile.⁴

California, like the United States as a whole, is characterized by substantial income inequality, due in part to its recent experiences of strong economic growth. The recent high tech bubble in areas of California such as San Francisco, San Jose, and San Mateo caused a notable increase in income inequality.⁵ The Bay Area's late-1990s high-tech bubble caused substantial stress on households, especially due to lack of affordable housing and widespread economic distress.⁶

The living-cost pressures associated with this bubble accelerated growth into spillover bedroom communities for Bay Area workers in the San Joaquin Valley. Rapid, largely ill-planned suburbanization consequently occurred in north-central portions of the Valley near the Bay Area and Sacramento River Delta regions. Meanwhile, southern Valley areas such as Bakersfield and Fresno saw population bulges and construction booms due to similar housing-cost pressures in Los Angeles. These population inflows put substantial stress on the transportation infrastructure throughout the San Joaquin Valley. Additionally, such flows injected the Valley with new residents who drove up Valley housing prices and altered socio-economic dynamics.

Not only did this process of change increase inequality in the Valley, it

2. For example, the overview chapter of the 1998 *Human Development Report* includes this passage: "The new human poverty index (HPI-2) shows that some 7-17% of the population in industrial countries is poor. These levels of deprivation have little to do with the average income of the country...The United States, with the highest average income of the countries ranked, has the highest population share experiencing human poverty." UNITED NATIONS DEVELOPMENT PROGRAM, *Human Development Report, 1998*, 2 (May 1998) (Principal Coordinator, Richard Jolly).

3. See generally JAMES K. GALBRAITH, *CREATED UNEQUAL: THE CRISIS IN AMERICAN PAY* (The Free Press 1998).

4. See Brian K. Bucks, Arthur B. Kennickell & Kevin B. Moore, *Recent Changes in U.S. Family Finances: Evidence from the 2001 and 2004 Survey of Consumer Finances*, FED. RES. BULL., 2006, A-1.

5. See James K. Galbraith & Travis Hale, *Income Distribution and the Information Technology Bubble, Working Paper 27*, (January 14, 2004), (unpublished manuscript, on file with the University of Texas Inequality Project, LBJ School of Public Affairs, The University of Texas at Austin).

6. See BAY AREA ECONOMIC FORUM, *From Boom to Recession: Assessing the Bay Area's Prospects for Recovery and Growth*, 3 F. REP. 2, 3-9 (2001).

accelerated the growth of concentrated poverty. According to a 2003 Brookings Institution study, concentrated poverty was generally declining in the U.S., but increasing in the Valley.⁷ Indeed, this study found that of the fifteen American metropolitan areas with the fastest population growth in their high-poverty areas, three were in the San Joaquin Valley: Fresno, Bakersfield, and Visalia-Tulare-Porterville.⁸ In light of these changes, we can see that the San Joaquin Valley represents a new ground-zero in American struggles against poverty.

Inequality, rapid urban growth, and increasing impoverishment are often intertwined. Because of the contrast between low rural incomes and higher urban incomes, many lower-income rural households, or working-age members of those households, migrate to urban centers – only to fall into unemployment and chronic poverty.⁹ John Harris and Michael Todaro explained this relationship in one of their articles.¹⁰ They pointed out that if a potential migrant's expected income in an urban center (the amount she would earn if she found work, multiplied by the probability of obtaining work) exceeded the rural wage, there was an incentive to migrate to the city. Thus, the faster and more dynamic urban growth, the more rural migrants are pulled in: which helps explain why unemployment remains a feature of ever rapidly-growing developing-world cities with substantial rural populations.¹¹

The Harris-Todaro thesis explains some aspects of the U.S. experience, in particular, the impetus for the continued migration of job-seekers from Mexico, Central America, and other countries to the U.S. However, this migration of foreign-born job seekers has not caused or been closely linked with rapid domestic urban development. While U.S. cities seldom contain huge physical expanses of informally-built and unlicensed communities, they often have large populations of sub-groups of undocumented workers constituting cohesive communities based on shared ethnic or national identities.¹²

Historically, rapid urban growth in the U.S. was associated with the migration of residents from lower-wage rural areas in the World War I and II periods. The large-scale African-American migrations to Northern and Western cities during World War I and World War II occurred during periods of war-time

7. Paul A. Jargowsky, *Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s*, at 9 (Brookings Institution's Center on Urban and Metropolitan Policy, The Living Cities Census Series, May 2003).

8. *Id.*

9. Two historically prominent examples of this phenomenon in U.S. history were the two "great migrations" of rural African-Americans to northern cities during and after World War I and World War II. See generally EMMETT J. SCOTT, *NEGRO MIGRATION DURING THE WAR* (1920); NICHOLAS LEMANN, *THE PROMISED LAND: THE GREAT BLACK MIGRATION AND HOW IT CHANGED AMERICA* (Vintage Books Edition 1992).

10. See generally John R. Harris & Michael P. Todaro, *Migration, Unemployment and Development: A Two-Sector Analysis*, 60(1) AM. ECON.C REV. 126 (1970).

11. For empirical evidence linking unemployment in developing-world cities to rural in-migration, see generally Subbiah Kannappan, *Employment Problems and the Urban Labor Market in Developing Nations*, 33(4) ECON. DEV. & SOC. CHANGE 699 (1985); see also Conversation with Aloysio Asti, Director of Planning, Banco Nacional de Desenvolvimento Econômico Social (BNDES, translated into English as the Brazilian Development Bank) (Dec. 2005) (describing the urban growth process as follows: "If Brazil grows 4%, São Paulo grows 10%; if Brazil grows 0%, São Paulo grows 6%").

12. See Ellie Vasta, *Informal Employment and Immigrant Networks: A Review Paper* (Centre on Migration, Policy and Society, Working Paper No. 2, WP-04-02, University of Oxford, 2004).

employment booms and labor shortages in cities. These migrants enjoyed some measure of prosperity until returning white soldiers reclaimed many higher-wage industrial jobs, displacing a large number of migrant workers. Similar migrations from Appalachia to mid-western cities such as Chicago and Indianapolis also occurred in these years.

In the past three decades, as inner-city areas became subject to economic stagnation and social problems, many households moved away, in a pattern often described as "white flight."¹³ Within American regions, metropolitan growth has often taken the form of suburban sprawl into rural areas that were previously lightly inhabited.¹⁴ Upper-income, better-educated families were especially likely to move out.¹⁵ Beginning in the late 1950s, many families left cities in the Northeast and Midwest, moving both to non-metropolitan areas and to other regions, especially the South and Southwest.¹⁶

William Julius Wilson argued that the root problem of African-American unemployment was increasingly residential segregation in inner-core areas combined with isolation from primary flows of jobs and commerce.¹⁷ This notion was embodied in the spatial-mismatch literature, which showed that because minority job-seekers are disadvantaged by racial segregation and the shift of jobs to suburban areas, minorities were left seeking work in markets with lower levels of employment growth than white job-seekers.¹⁸ This pattern of minorities being left behind was identified as a public-policy issue because federal policies (including tax subsidies) were implicitly subsidizing these racially non-neutral shifts.¹⁹

Regional relocation continued into the 1980s, fueled by a new set of factors: an increasing number of older, upper-income households interested in relocation for lifestyle or climate reasons; a boom in energy production in southern portions of the United States due to rapidly-rising oil prices; a redistribution of employment growth to more widely dispersed locations; and an overall process of population deconcentration.²⁰ Analysts celebrated the rise of rapidly growing "sunbelt cities" in

13. See generally William H. Frey, *Central City White Flight: Racial and Nonracial Causes*, 44(3) AM. SOC. REV. 425 (1979) (showing that both the departure of residents from central cities can be attributed to both racial and nonracial factors).

14. See generally ANDRÉS DUANY & ELIZABETH PLATER-ZYBERK, *SUBURBAN NATION: THE RISE OF SPRAWL AND THE DECLINE OF THE AMERICAN DREAM* (2000).

15. See William H. Frey, *Status Selective White Flight and Central City Population Change: A Comparative Analysis*, 20(1) J. OF REGIONAL SCI. 71 (1980).

16. See William H. Frey, *The Changing Impact of White Migration on the Population Compositions of Origin and Destination Metropolitan Areas*, 16(2) DEMOGRAPHY 219 (1979).

17. See generally WILLIAM JULIUS WILSON, *WHEN WORK DISAPPEARS: THE WORLD OF THE NEW URBAN POOR* (1996).

18. Summaries exist of the "spatial mismatch" literature, and empirical evidence in support of the claims made in this article. See Michael A. Stoll, *When Jobs Move, Do Black and Latino Men Lose? The Effect of Growth in Job Decentralization on Young Men's Jobless Incidence and Duration*, 35(12) URB. STUD. 2221 (1998); Michael A. Stoll & Steven Raphael, *Racial Differences in Spatial Job Search Patterns: Exploring the Causes and Consequences*, 76(3) ECON GEOGRAPHY 201 (2000).

19. See Janice Fanning Madden, *Jobs, Cities, and Suburbs in the Global Economy*, 572 ANNALS AM. ASS'N POL. & SOC. SCI. 78, 78-89 (2000). The "inner suburbs" are similarly at risk of stagnation. See Robert Puentes & David Warren, *One-Fifth of America: A Comprehensive Guide to America's First Suburbs* (The Brookings Institution's Survey Series, 2006).

20. See William H. Frey, *The Re-Emergence of Core Region Growth: A Return to the Metropolis?* 11(3) INT'L REGIONAL SCI. REV. 261 (1988); see also William H. Frey, *Migration and*

the South and Southwest, such as Phoenix and Las Vegas.²¹ This unbalanced growth pattern left behind sometimes devastated inner-city areas, and generated serious problems of economic stagnation in its wake. Subsequently, regional redistribution of population has continued, even as the overall population of the United States has continued to grow. The Census Bureau recently estimated that in the 1990s, 314,500 people migrated annually from Northeastern states to other locations in the United States, with another 73,000 leaving the Midwest. Between 2000 and 2004, out-migration from the Northeast to other portions of the United States fell to 246,800 annually, while net outmigration from the Midwest rose to 161,200 annually.²²

In some ways, recent population growth in the San Joaquin Valley fits the "sunbelt" growth pattern: it has been driven largely by migration from elsewhere;²³ the Valley's housing stock is growing rapidly;²⁴ and population growth has been occurring steadily for many years.²⁵

However, the population growth currently underway in the San Joaquin Valley differs from the "sunbelt" pattern in important ways. First, immigration to the Valley has been largely fueled by a different set of factors than those fueling the interregional population shifts that have powered the growth of cities such as Las Vegas and Phoenix. Specifically, a relatively high number of in-movers to the Valley are immigrants from outside the United States. And many other immigrants are relocating from coastal areas of California.²⁶ Various interlinked factors unique to California are fueling this intra-state shift: households' search for housing more affordable than that available in coastal areas; "equity migrants" who are cashing out smaller homes in coastal areas and moving into larger abodes inland; those seeking

Depopulation of the Metropolis: Regional Restructuring or Rural Renaissance? 52(2) AM. SOC. REV. 240 (1987).

21. See generally THE RISE OF THE SUNBELT CITIES (David C. Perry & Alfred J. Watkins eds., 1977). Books and articles using this phrase soon proliferated (see e.g. SUNBELT CITIES: POLITICS AND GROWTH SINCE WORLD WAR II (Richard H. Bernard & Bernard R. Rice, eds., 1984) (arguing Phoenix and Las Vegas represent paradigmatic examples of the "Sunbelt City" phenomenon highlighted by Perry and Watkins)). A number of academic reviews of this volume criticized Perry & Watkins for lacking an analytical core, see John Walton, *Review of 'The Rise of the Sunbelt Cities,'* 8(3) CONTEMP. SOC. 409 (1979); see also Ira Sharkansky, *Review of 'The Rise of the Sunbelt Cities,'* 73(3) AM. POL. SCI. REV. 883 (1979).

22. See Mark J. Perry *Domestic Net Migration in the United States, 2000 to 2004: Population Estimates and Projections* (U.S. Census Bureau 2006).

23. Some 58% of Valley population growth since 1970 has been attributed to migration. See Johnson & Hayes, *supra* note 1, at vi.

24. According to the Census Bureau, just under one quarter of the housing units in the Bakersfield, Fresno, and Visalia-Tulare-Porterville metropolitan areas have been built since 1990. See U.S. Census Bureau's Data Summary pages of the American Community Survey for 2003 Metropolitan Data, available at <http://www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/CA.htm> (last visited April 16, 2007); 2000 Metropolitan Data, available at <http://www.census.gov/acs/www/Products/Profiles/Single/2000/ACS/CA.htm> (last visited April 16, 2007).

25. The Valley's population exceeded 2 million by 1980. See Johnson & Hayes, *supra* note 1, at 8.

26. Perry, *supra* note 22, at 13-14 (showing coastal California counties such as Los Angeles, San Francisco, and Orange as among the nation's leaders in net out-migration in the 2000-04 period, while inland California counties - Riverside, San Bernardino, Sacramento, and San Joaquin - are among the national leaders in net in-migration in the same period).

employment opportunities associated with the region's growth, such as service-sector or construction jobs.²⁷ Many of the new residents of the Valley continue to work in or near coastal areas of California; because of the growing ranks of such "extreme commuters," roadway traffic congestion has reached critical proportions.²⁸ Another consequence of this "push" factor is that the Valley's population has grown faster than its housing supply: in the 2000-2003 period, population growth in the Valley's largest urban areas has outpaced the growth of housing units by 41%.²⁹

Second, the breakneck process of population growth in the Valley has been racialized. In 1980, a substantial majority of Valley residents were non-Hispanic whites; and a disproportionate number of those with lower incomes and less education were racial/ethnic minorities.³⁰ The population of the Valley encompasses a substantial share of minorities, and Latinos are an especially significant population. According to the Census Bureau's American Community Survey, these three metropolitan areas have large Latino populations (for Bakersfield, Fresno, and Visalia-Tulare-Porterville, respectively, 42%, 45%, and 54%).³¹ Overall, in all three cities, more than half of all residents are members of minority groups (respectively, 54%, 62%, and 61%).³² The Latino share of these three metropolitan areas' population is growing rapidly: between 2000 and 2003, the Latino population in Bakersfield grew 707% faster than the non-Latino population. To provide more context: in Fresno, the growth rate of the Latino population was 275% faster, and in Visalia-Tulare-Porterville, the non-Latino population fell in the 2000-03 interval.³³

A similar growth dynamic, fueled by similar forces, is currently at work in the Inland Empire of Southern California: where the San Joaquin Valley is receiving spillover growth due to extreme commuters and others from the Bay Area and Los Angeles, the Inland Empire is being fed by spillover growth from Orange County, Los Angeles, and San Diego. The result in both cases is extreme growth stress. According to the California Department of Finance, the Inland Empire and the Valley both had approximately 3.3 million residents in 2000; the former area is projected to have 5.1 million residents by 2020, and the latter, 5.0 million. The minority population of the Inland Empire is projected to grow by 133% between

27. William H. Frey, *Immigration and Internal Migration "Flight": A California Case Study*, 16(4) POPULATION & ENV'T 353 (1995) (arguing that a dual population shift is at work; lower-skill, lower-income households are locating to neighboring states, and to inland portions of California; and higher-skill, upper-income households are relocating elsewhere in the United States).

28. See generally GREAT VALLEY CENTER, *OUR VALLEY, OUR CHOICE: BUILDING A LIVABLE FUTURE FOR THE SAN JOAQUIN VALLEY* (2007).

29. This statistic is derived by summing the 2000-2003 data on housing units and population for the Fresno, Bakersfield, and Visalia-Tulare-Porterville metropolitan areas; specifically, population in these three Valley metropolitan areas grew by 6.2% from 1,895,800 in 2000 to 2,013,152 in 2003, while housing units grew by 4.4%, from 663,462 to 692,531. See *supra* note 24.

30. See Johnson & Hayes, *supra* note 1, at 8 (stating 3 of every 4 residents was non-Hispanic white; but this figure would overstate the white population for the San Joaquin Valley per se; their study encompasses the Upper and Lower Sacramento Valleys, sub-regions with fewer minority residents in their populations).

31. See U.S. Census Bureau, American Community Survey, Data Tables: Data Profiles 2003, available at <http://www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/CA.htm> (last visited April 16, 2007).

32. *Id.*

33. *Id.*

2000 and 2020, while the white population is projected to shrink 28%. The minority population of the San Joaquin Valley, by contrast, is projected to grow by 94%, while the white population is projected to hold steady.³⁴

The San Joaquin Valley growth pattern is distinct from that in the Inland Empire in three important ways. First, the Valley population explosion is occurring on a vast geographic scale, while most of the Inland Empire's growth is concentrated in a much smaller geographic area.³⁵ A second unique feature of the San Joaquin Valley is the remarkable conflict between its agricultural base and its emerging residential areas.³⁶ A third unique feature is the concentration of farmworkers in the San Joaquin Valley, in contrast to the Inland Empire. Some 45% of the estimated 732,100 migrant and seasonal farmworkers in California live and work in the eight-county San Joaquin Valley area from Stockton south to Bakersfield.³⁷ In sum, the way in which poverty and urban growth intersect in the San Joaquin Valley (and Inland Empire) of California is quite different from the isolated inner-core pattern that has been the focus of American social-science debate about urban poverty and race in the past twenty years. It also differs from the "sunbelt city" pattern.³⁸ The migrating population is economically diverse, with upper-income and lower-income households alike moving into the Valley. These households are not simply leaving the spaces where the poor and minorities live, they are moving into spaces that have historically had significant numbers of the poor and minorities. This migration is not incremental; it represents a jump across time-space borders at distances from workplaces that were previously regarded as impractical or even impossible. And these migrants are not moving onto a tabula rasa, they are landing in already-developed urban communities with established patterns of racial inequality, impoverishment, and social reproduction. The new migrants' moves into existing houses and into new housing developments (including custom homes) will complicate existing patterns of race, class, opportunity, and exploitation, with results that—like this settlement pattern itself—are likely to be unique.

II. MACRO ASPECTS OF URBAN DEVELOPMENT PROCESSES AND THE

34. See CALIFORNIA DEPARTMENT OF FINANCE, ECONOMIC RESEARCH, *California County Profiles* (Feb. 2002), available at http://www.dof.ca.gov/HTML/FS_DATA/profiles/profiles02.pdf (last visited April 18, 2007).

35. The two-county Inland Empire would be the 26th largest state in the U.S. in population size (fitting between Kentucky and Oregon); but vast sections of these counties are comprised of virtually uninhabited desert and mountain. The San Joaquin Valley encompasses an area spanning more than seven East-Coast states.

36. Agriculture accounts for 20% of the jobs in the Central Valley; this area's agricultural output exceeds that of any state in the United States. See GREAT VALLEY CENTER, *Assessing the Region via Indicators: The Economy 1999-2004*, at 28 (2005).

37. See Alice C. Larson, *Migrant and Seasonal Farmworker Enumeration Profiles Study for California*, at 16 (prepared for Migrant Health Program, Bureau of Primary Health Care and Health Resources and Services Information, September 2000), available at <http://www.co.monterey.ca.us/health/Publications/pdf/HPPdfs/Farmworker.pdf>.

38. See generally William H. Frey, *Three Americas: The Rising Significance of Regions*, 68(4) J. OF THE AM. PLAN. ASS'N 349 (2002) (arguing that the "sunbelt" pattern has fragmented: the states of California, New Mexico, Texas, Florida, New York, New Jersey, and Illinois constitute a "melting pot" pattern, whereas the states of Washington, Oregon, Nevada, Arizona, Colorado, Idaho, Utah, Tennessee, North Carolina, Virginia, South Carolina, and Georgia constitute the "new sunbelt").

GROWING VALLEY HOUSING MARKET

The development of new urban spaces is an example of what economists term “irreversible investment.”³⁹ The defining feature of this kind of development is that it involves putting unmovable, irreversible assets in the ground in an effort to generate either income flows or service flows. As such, it involves an encounter with both risk and uncertainty.⁴⁰

The shape of this risk and uncertainty depends on the macro conditions and micro choices of the different players—on one side, the developers, agents, financiers, and landowners, on the other, those seeking housing in the market. The players involved do what they can to minimize their perceived risk and maximize their potential gain. At times, the considerations of potential gain dominate, and the players move toward equilibrium at ever higher prices; at other times, considerations of safety dominate, and risk-minimization leads players to avoid liquidity risk and maximize flexibility.⁴¹ When caution ebbs away and uncertainty is disregarded, large investment mistakes can be made. Two housing-related examples are developers’ undisciplined overbuilding in Lancaster/Palmdale and Moreno Valley in the early 1990s. A current example is the large amounts being used to buy “investment houses” for prospective high short-term returns.⁴² Because housing investment is irreversible and costly relative to income levels, substantial time is required before mistakes and problems of this type can be worked out.

The fact that housing development can come to fiscal disaster does not mean that those in this market operate cautiously. Times of market downturn are, for long-term players, periods for acquiring new parcels of land and preparing for the next wave of housing demand. When downturn occurs, the race goes to the swift and the well-financed.

This brings us to the first of several doors through which racial/ethnic and other forms of bias can enter housing-market processes. Moving rapidly to exploit market opportunities does not leave developers a lot of time to think. In deciding what and where to build, developers use norms and coded behavior. As economist John Maynard Keynes pointed out, agents faced with uncertainty shape their own beliefs with reference to those of others.⁴³ This entails keeping pace with other

39. See generally e.g. Robert S. Pindyck, *Irreversibility, Uncertainty, and Investment*, 29(3) J. OF ECON. LIT., 1110 (1991).

40. The terms ‘risk’ and ‘uncertainty’ are used by contemporary Post-Keynesian economists; specifically, a situation of risk is one in which there are calculable odds, based on stable probability distributions, of taking a particular action; uncertainty, by contrast, arises when no odds can be meaningfully assigned to the likelihood of success, due to the non-repeatable character of the “experiment.” See Gary Dymksi, *Asymmetric Information, Uncertainty, and Financial Structure: ‘New’ versus ‘Post-’ Keynesian Microfoundations*, in NEW DIRECTIONS IN MONETARY MACROECONOMICS: ESSAYS IN THE TRADITION OF HYMAN P. MINSKY, 77-103 (Gary Dymksi & Robert Pollin, eds., Michigan University Press 1994).

41. Liquidity risk exists insofar as an agent has a wealth portfolio that cannot be readily converted into money without risk of loss; see Gary A. Dymksi, *A Keynesian Theory of Bank Behavior*, 10 J.L OF POST KEYNESIAN ECON. 499 (1988).

42. See Michael Corkery & James R. Hagerty, *Buyer’s Remorse: Speculators Helped Fuel Florida’s Housing Boom*, WALL ST. J., Jan. 8, 2007, at A1; see also David Streitfeld, *Home Equity at Risk*, L.A. TIMES, Aug. 28, 2005.

43. See JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT AND MONEY*

actors in the market—building housing developments which look like those other developers are building, and targeting developing to the same groups other developers have as prospective clients. This is not to say that developers design homes with the intention of excluding gay couples or African-Americans. However, norms come into play as a response to the risks and uncertainties involved in housing development. And the players in the development process are still human beings—each with a racial/ethnic identity and a gender—whose perceptions are racialized and gendered in complex ways.⁴⁴

California as a Chronic Growth Economy

The process of development, whether it involves creating farms and agricultural combines, housing developments, or business startups, has macro and micro aspects. The former can be defined, adapting the distinction common to economics textbooks, as the broad structural conditions that influence outcomes in individual markets, the latter, as consisting of the factors at play in the individual markets. Both are elaborated in this piece—this section deals with the macro processes of development, while Section 3 deals with the micro processes.

Since the last peg was nailed on the transcontinental railroad line, California has chronically imported people and capital, and may be seen as a chronic growth economy. Its population has been growing with few reversals, due not just to in-state births but to relatively steady inflows of migrants.⁴⁵ And these migrants bring financial assets with them. There is also a financial inflow as economic units located elsewhere seek financial and real investments in California; a flow, of course, is connected to the U.S. capital-account inflow. Money comes into the state from investors, looking for assets to buy, migrants to carry money, and seek not just assets (housing, in particular), but also goods and services. California's population tends to grow faster than other states, and its economy tends to grow faster as well.⁴⁶

In addition to this characteristic of vibrant growth, California is also a contiguous bordered space, which is open to flows of both money and goods across those borders. This means that California can be analyzed as an “open economy.”

There are two distinct purposes for sending money across borders, as payment for goods or services imported from (or being sent) elsewhere, and in payment for an ownership claim on a financial or real asset. In any time period, the

147-64 (MacMillan & Co. 1951); see also John Maynard Keynes, *The General Theory of Employment*, 51 Q.J. ECON. S209, S209-23 n.2 (1937).

44. For specific examples of how the biases of home lenders and of other agents involved in the home acquisition process affect home-seekers, see the extensive statistical and case-study evidence compiled in two monumental Urban Institute studies of these phenomena. See Margery Austin Turner et al., *All Other Things Being Equal: A Paired Testing Study of Mortgage Lending Institutions - Final Report*, Urban Institute (April 2002); Margery Austin Turner et al., *Discrimination in Metropolitan Housing Markets: National Results from Phase I HDS 2000 -- Final Report*, Urban Institute (November 2002).

45. See Johnson & Hayes, *supra* note 1, at 1, 11 (estimating that half the residents of California and over half the residents of the San Joaquin Valley were born outside California).

46. This phenomenon was first pointed out by Hyman Minsky. See Hyman Minsky, *Commercial Banking and Rapid Economic Growth in California*, in CALIFORNIA BANKING IN A GROWING ECONOMY: 1946-1975, 79-134 (Berkeley: Institute of Business and Economic Research 1963):

flow of money for these two purposes necessarily adds up for any bordered space, including open economies. Because of the net positive flow of people and money into California, this state has a chronic surplus on its capital account. This has several implications. First, insofar as California experiences a capital-account surplus, its residents and businesses are able to buy more goods from outside their state's borders than they sell abroad.⁴⁷ Second, California's asset markets, especially its housing market, are constantly in danger of overheating.

To see this last point, note that money flowing into a bordered space, whether or not it is attached to a human body, has three possible destinations: it can seek goods that are made within the bordered space, goods brought in from other places, or assets. Assets can be divided into financial and real (tangible). The latter fall into two categories: existing and newly-built. Insofar as a chronic boom economy like California has a chronic inflow of asset-seeking money, it faces a very particular challenge. If new real assets are not built at a fast enough pace, then these money flows will bid prices up. In both the commercial and residential real-estate markets, California is susceptible to asset bubbles—increases in housing and/or commercial real estate prices far outpacing the overall rate of price inflation. In this sense California is a society that chronically lives beyond its means—it can be viewed (not pejoratively, but analytically) as a perpetual Ponzi scheme.⁴⁸

Tracking the Recent Growth of the San Joaquin Valley with Home-Purchase-Loan Data

The San Joaquin Valley has all the challenges facing any bordered space that is growing rapidly. Its asset prices have generally been pushed upward, as more and more people—and the money and capital they have brought with them—have sought to locate in the expanding valley. Housing developers have both reacted and contributed to the resulting boom. However, the empirical realities of this boom are not as simple as a steady upward thrust in population, developments, and housing prices. The growth has been nonlinear and stop-and-start, illustrating the fragility that characterizes all development processes, even the most robust.

There are a number of data sources that tell might tell the story of the

47. This was also true of Southeast Asia in the early 1990s, in the years preceding the Asian financial crisis. Overseas investors and lenders had designated the countries in this area as a hot-spot for industrial development and growth; so huge net sums of loans and other transfers came into this region. This meant that Southeast Asia had a surplus on capital account. The countries in this region were thus able to maintain deficits on their current accounts – to “live beyond their means,” a scenario dramatically uncovered when the inward asset flows reversed during and after the crisis period. See Gary A. Dymksi, *The International Debt Crisis*, in HANDBOOK OF GLOBALISATION, 90-103 (Jonathan Michie ed., Edward Elgar 2003) (providing an overview of historical experience with, and theoretical frameworks concerning, recent cross-border financial crises).

48. See Gary A. Dymksi, *Poverty and Social Discrimination: A Spatial Keynesian Approach*, in REIMAGINING GROWTH: TOWARDS A RENEWAL OF DEVELOPMENT THEORY, 230-57 (Silvana De Paula & Gary A. Dymksi eds., Zed Books 2005) (offering a formal presentation of the ideas about bordered economic spaces). This way of viewing the California economy throws an interesting light on the frequently-made observation that California taxpayers want lightened tax burdens but at the same time expect good public services. This political attitude is, in a sense, consistent with the structure of the state's cross-border flows. If new residents always need new services, at the same time they bring wealth with them.

growth of the San Joaquin. Here we use one consistent source, the Home Mortgage Disclosure Act (HMDA) of 1975, because it consistently reports and collects data at the Census-tract level for the Valley's housing market. This Act mandates that virtually all financial intermediaries that make home-mortgage loans report annually on every loan application in this category. As of 1992, lenders have been required to report the census tract of the property involved, as well as the loan amount requested, the disposition of the loan application, and some core social and economic data concerning loan applicants (including applicant race, gender, and income level). So these data provide both a consistent public data source on flows through home-mortgage markets and a vehicle for running some diagnostic tests regarding gender and racial/ethnic discrimination in these markets. HMDA data for the eight counties in the San Joaquin Valley was compiled for both uses in this study. HMDA data are seldom used to measure housing-market activity; data from private sources are typically cited. However, the virtue of using HMDA data both to describe overall housing-market activity and to run diagnostics for discrimination means that a consistent description of Valley housing-market activity is presented.⁴⁹

Figure 1: Home-Purchase loans, Selected San Joaquin Valley Counties, 1992-2004 (based on HMDA data)

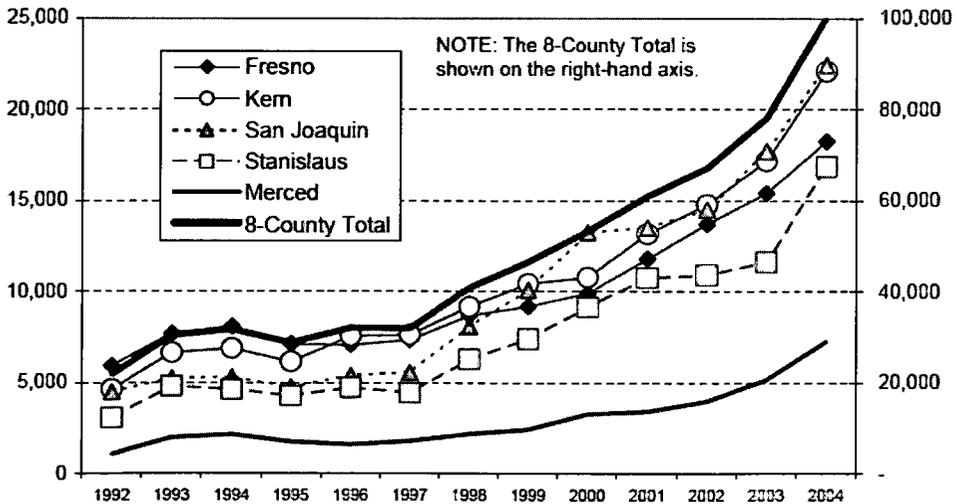


Figure 1 illustrates the annual level of home-purchase loans made from 1992 to 2004 for this eight-county area as a whole.⁵⁰ Figure 1 also shows data for

49. See Johnson & Hayes, *supra* note 1 (dividing the “Great Valley” into four parts, and denoting the counties examined here as consisting of the “lower” and “upper” San Joaquin Valley). A comprehensive discussion of the Home Mortgage Disclosure Act and of the role of credit markets in the housing acquisition process exists. See generally DANIEL IMMERSLUCK, CREDIT TO THE COMMUNITY: COMMUNITY REINVESTMENT AND FAIR LENDING POLICY IN THE UNITED STATES (2004).

50. HMDA reporting also encompasses refinancing loans, home-improvement loans, and multi-family loans, and distinguishes between FHA and conventional loans. In this paper, only home-

the four counties—San Joaquin, Kern, Fresno, and Stanislaus—that have accounted for most of this growth. This is a proxy measure for home purchases: excluded from these data are homes that were bought or acquired without any use of credit, and data for homes financed by lenders that did not report their transactions under HMDA. The picture shown is of explosive but punctuated growth. There were 21,864 home-purchase loans recorded in 1992, the worst year of a California housing downturn. The next year, home-purchases loans jumped 39% to 30,412, and remained at that plateau until 1997. In 1998 home-purchase loan volume jumped again by 28% to 40,829. Between 1999 and 2003, volume has grown by 10-14% annually each year; in 2004, volume took another jump of 28%, with 100,364 home-purchase loans reported. So in this period, market volume grew overall by 359%.

Figure 2: Median Real Income of Homebuyers, Selected San Joaquin Valley Counties, 1992-2004 \$000 (based on HMDA data)

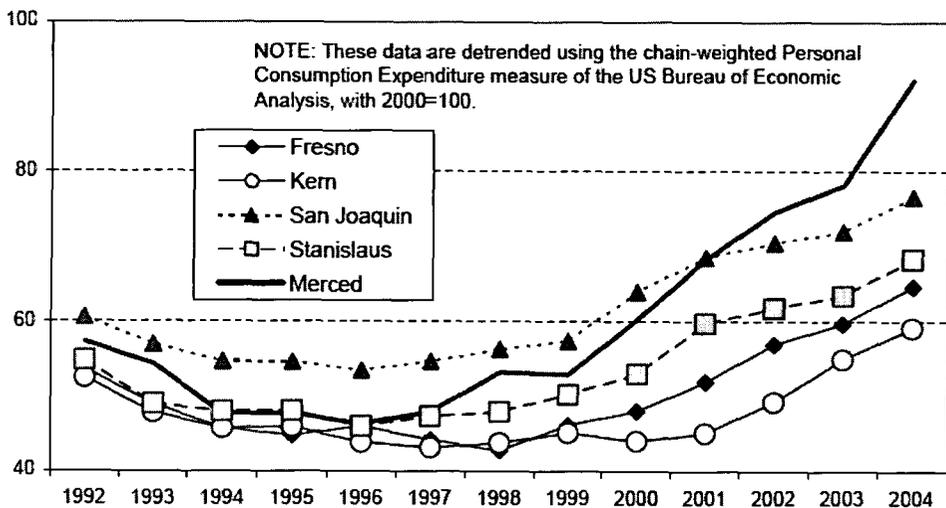


Figure 2 shows that the median real-income levels of households buying Valley homes follow a different punctuated pattern.⁵¹ Between 1992 and 2000, the median incomes of those obtaining home-purchase loans dipped and recovered slowly; in 2000, the median income for those obtaining Valley home-purchase loans was only 95% of the 1992 level (in real terms)—up slightly from the 85% level it

purchase loans are reported, and FHA and conventional loans are grouped together. Data for counties not shown here are available from the author.

51. These figures are adjusted for shifts in the price level, using the chain-weighted personal consumption expenditures component of the U.S. GDP; for details on this data series, see Bureau of Economic Analysis's Interactive Access To National Income and Product Accounts Tables, available at <http://www.bea.gov/bea/dn/nipaweb/> (last visited on April 17, 2007). All the Valley averages cited here are obtained by weighting individual county statistics by each county's share of total home-purchase loans. Data available from the author upon request.

reached in 1995 and 1996. From 1998 onward, median income began growing consistently. By 2004, real median income was 22% higher than the 1992 level (54% in nominal terms). Figure 2 shows a substantial variability between counties: San Joaquin, Stanislaus, and Merced were notably higher than other counties, possibly reflecting the proximity of Silicon Valley employment sites. Although HMDA data does not record the home addresses of loan applicants, this figure clearly reflects the in-migration of higher-income residents to the Valley.

Figure 3, in turn, presents data on (nominal) median loan value. This is a proxy measure for home prices, as there is a close but inexact correlation between loan values and home prices. As in Figures 1 and 2, loan values remained relatively stable until 1999 or 2000, after which they have moved aggressively upward. Between 1998 and 2004, median loan value increased by 80%, on average. As in Figure 2, San Joaquin, Stanislaus, and Merced were notably higher than other counties.

Taken together, Figures 2 and 3 suggest the possibility of increasing affordability tension in the Central Valley, for while the median incomes of homebuyers have increased steadily since 1998 or earlier (Figure 2), home prices have increased at least as fast. Figure 4 presents a measure of this tension by showing the ratio of median loan value to median income on a county-by-county basis. In all the counties shown in Figure 4, the loan-income ratio was stable or declining loan-income ratio between 1992 and 2000, with rapid upward shifts thereafter. This data indicates a boom—or even possibly a bubble—in home prices, particularly in San Joaquin, Stanislaus and Merced counties.

Figure 3: Median Loan Value for Homebuyers, Selected San Joaquin Valley Counties, 1992-2004 \$000 (based on HMDA data)

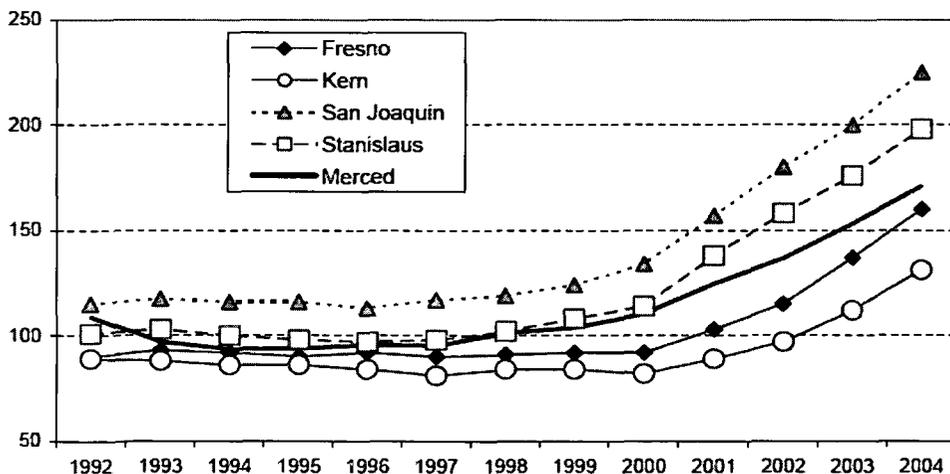
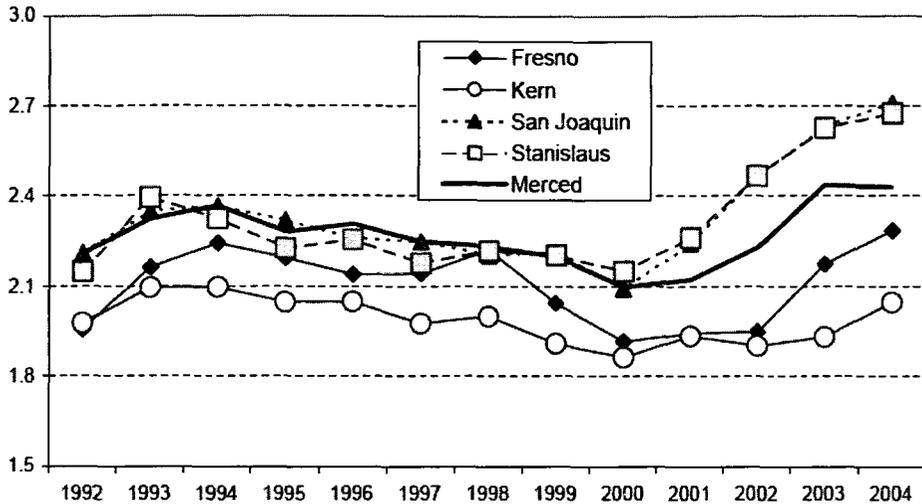


Figure 4: Median Loan Value-to-Median Income, Home-Purchase Loans, Selected San Joaquin Valley counties, 1992-2004 (based on HMDA data)



In sum, the story told by HMDA data about the 1992-2004 housing market in the Valley resembles that for the state as a whole: the housing market slumped in the early 1990s, and housing prices remained stagnant until the late 1990s, when they began growing rapidly. Accompanying this trajectory was a severe recession, followed by growth that ranged from modest in some areas to remarkable in others (the Silicon Valley IT “bubble”). The data shown in Figures 1-4 points toward the condition warned about in the beginning of this section: a situation in which inflows of money seeking real assets (notably housing) in bounded spatial areas exceed the growth rate of those assets, driving asset prices up and reducing their affordability.

The extent to which the upward pressure on Valley home prices is due to a mismatch between the rate of increase in housing demand and housing construction cannot be determined with precision using public data sources. However, three indicators of housing supply suggest that this mismatch exists and is substantial. First, according to the California Department of Finance (Department of Finance, 2002), available housing units in the eight-county Valley area grew by 17% between April 1990 and January 2001.⁵² This figure contrasts remarkably with the 179% increase in home-purchase loans between 1992 and 2001, as measured by HMDA data. Second, 58,000 housing permits were taken out in the Great Valley in 2004.⁵³ This figure, for the entire Great Valley (including Sacramento and its surrounding area and the Chico area), falls far short of the 100,000+ home-purchase loans recorded for 2004 in the HMDA database. The third and perhaps most definitive data are shown in Table 1 below. The ratio of home-purchase loans to single-family

52. CALIFORNIA DEPARTMENT OF FINANCE, *supra* note 34.

53. GREAT VALLEY CENTER, *supra* note 36, at 12.

housing permits is computed for three time periods—1992-96, 1997-2001, and 2002-04—for three Valley metropolitan areas (Fresno, Bakersfield, and Visalia-Tulare-Porterville). The home-loan/new-home ratio increases dramatically in each area.

These three indicators, taken together, offer convincing evidence that while there is a housing-construction upswing in the Valley, there is a simultaneous housing-demand boom that has far outpaced the rate of construction in recent years. The mismatch between housing demand and availability pushes asset prices higher, threatening affordability in an area that—as noted above—has serious poverty problems.

Table 1: Ratio of HMDA-Reported Home-Purchase Loans to Single-Family Housing Permits, 1992-2004

	<u>1992-96</u>	<u>1997-2001</u>	<u>2002-04</u>
Fresno (Fresno County)	171.6	275.1	277.9
Bakersfield (Kern Co.)	214.1	355.6	333.2
Visalia-Tulare-Porterville (Tulare Co.)	216.7	292.9	346.3

Data: HMDA database for home-purchase loans; Department of Housing and Urban Development State of the Cities Data Series, Building Permits Database for housing permits (<http://socds.huduser.org>).

When housing demand exceeds supply, an urban growth challenge may emerge. Cruz Reynoso has described California cities as growing desperately in order to keep up with themselves.⁵⁴ The great weight of increased population in the Valley leads to a demand for new urban services: more seats in schools, improved and enhanced infrastructure, more fire and police protection, and so on. It is difficult for cities to keep up with this service and infrastructure demand. New housing units provide revenues for a good portion of this service/infrastructure demand, but the lag in housing-unit construction implies increasing stress on the services and infrastructures already in place.

The apparent solution is continued—”desperate” in Cruz Reynoso’s characterization—housing growth. But in turning almond groves into housing developments, growth-addicted municipalities are in danger of mortgaging tomorrow to pay for today.⁵⁵

54. Cruz Reynoso, Professor of Law, UC Davis, Keynote Address at the University of California Berkeley, Boalt Hall School of Law Symposium: The New Face of California: The Great Central Valley (Nov. 3, 2005).

55. The connection between municipal population growth and the need to finance infrastructure and other costs of building and sustaining communities is explored in several recent publications. Elisa Barbour explores contemporary community planning in California as a mutual adjustment process between public service providers and private developers; see Elisa Barbour, *Metropolitan Growth Planning in California, 1900-2000*, (Public Policy Institute of California, 2002). Historical experience with and practical ideas for growing residential developments in California are

III. WHAT IS HAPPENING AGAIN: MORTGAGE-MARKET DISCRIMINATION IN THE SAN JOAQUIN VALLEY

While Valley housing stock is subject to the same upward price-pressures as is coastal housing, the Valley arguably remains a haven for participation in the "ownership society" for those lacking access to the housing market closer to the California shore. We now move from the macro context to the micro to consider some evidence about entry into the ownership society via home-ownership in the Valley.

This section begins with a general discussion of the reasons behind discriminatory housing practices, followed by a look at specific discriminatory patterns in the San Joaquin Valley.

Discriminatory Housing and Home-Mortgage Practices: General Considerations

Prospective homeowners participate in several market micro-processes: the housing search, usually mediated via real-estate agents; the bargaining process over housing price; obtaining insurance and securing a home-mortgage loan. While this paper focuses on the last of these processes; each of these micro-processes is crucial in insuring that there is full and fair access to housing.⁵⁶ In an area like the Valley, which is becoming increasingly diverse, the question of full and fair access must consider the impact of race, in particular, on market outcomes.

Home-mortgage loans involve significant uncertainty. Households taking on these loans must generate income flows sufficient to generate required payments over a long period of time. Additionally, home ownership requires a commitment to the neighborhood in which that home is located. Thus, there is uncertainty over the future of any home-loan applicant's prospective neighborhood, and also about that applicant's income flows and income commitments. This uncertainly influences the behavior of home-loan lenders. Lenders making decisions about where and to whom to lend, much like housing developers deciding where and how to build, cannot predict the future and have limited perceptual abilities, as well as a fear of the unknown; so they, too, seek to follow others' leads by engaging in imitative behavior that is responsive to what they think their competitors are doing.

given a definitive treatment. *See generally* WILLIAM FULTON, GUIDE TO CALIFORNIA PLANNING (1999). A recent case study of greater Los Angeles includes some attention to the social consequences of the connections between municipal financing needs, land speculation, and population growth. *See generally* GREG HISE, MAGNETIC LOS ANGELES: PLANNING THE TWENTIETH-CENTURY METROPOLIS (1997).

56. Overviews of the literature on discrimination in housing credit markets are available. *See generally Mortgage Lending Discrimination: A Review of Existing Evidence* (Margery Austin Turner & Felicity Skidmore eds., Urban Institute 1999); Helen F. Ladd, *Evidence on Discrimination in Mortgage Lending*, 12 J. ECON. PERSP. S41, S41-62 n.2 (1998); Margery Austin Turner, Michael Fix, & Raymond J. Struyk, *Opportunities Denied, Opportunities Diminished* (Urban Institute Press, Urban Institute Report 91-9, 1991). For a review of both literatures, *see* Gary A. Dymski, *Discrimination in the Credit and Housing Markets: Findings and Challenges*, in HANDBOOK OF DISCRIMINATION, 215-269 (William Rodgers ed., Edward Elgar 2006).

Lenders' imitative behavior can generate racially biased outcomes both for areas in which borrowers seek loans and for individual borrowers themselves. Lenders' unwillingness to make loans in areas with many minority residents has been termed redlining. There is a large amount of literature on this topic.⁵⁷ The point of interest for this article is how redlining can arise from lenders' strategic interdependence.⁵⁸ The value of a home depends, among other things, on its liquidity—whether a homeowner who needs to sell can sell in a timely manner. When multiple banks are providing mortgage financing, the actions of each may affect the others by affecting the liquidity value of homes in different neighborhoods. A neighborhood with many sales is more attractive than one with few. To some degree, lenders are playing a game, wherein each tries to ascertain where the others will be lending. They are attempting to capture one another's spillover effects, which help to bolster housing prices and minimize potential losses from defaults.

A similar kind of game occurs when lenders are deciding which loan applicants should be funded, and if funded, on what terms and conditions. If lenders that are active in a number of different areas make the same kinds of loans to the same kinds of people in each area, then they will help to establish communities in which the relationships of residents to housing assets are broadly homogeneous. This could be justified as "rational discrimination," sometimes supported by the existence of "cultural affinity" between different groupings of lenders and borrowers.⁵⁹ Until quite recently, such considerations together with residential segregation led to the problem of credit starvation in many minority, inner-core communities, since these communities had high proportions of residents who would be denied credit, and were themselves sometimes subject to redlining.⁶⁰ More recently, formerly excluded households and neighborhoods have been provided access to credit via subprime loans that carry extra fees and risk-adjusted interest rates. Now the coordination problem among banks involves the question of whether it is rational to make "mainstream" loans to borrowers whose homes are in areas in which most lenders are making subprime loans.

Apart from these strategic considerations, the lending decision requires that lenders confront and attempt to neutralize the effects of asymmetric information about prospective borrowers—the fact that they are at a disadvantage in terms of knowing how capable and how hard-working any given applicant will be as a borrower. Lenders confront this problem by collecting and verifying relevant information about borrowers. Since the mid-1980s, it has become more and more

57. See Geoffrey M. B. Tootell, *Redlining in Boston: Do Mortgage Lenders Discriminate Against Neighborhoods?* 111(4) Q. J. OF ECON. 1049 (1996); see also *supra* note 56.

58. Obviously, redlining behavior and credit-market discrimination itself can arise from blatant racism on the part of lenders. We focus here on other factors that can also lead to racially non-neutral results.

59. See William C. Hunter & Mary Beth Walker, *The Cultural Affinity Hypothesis and Mortgage Lending Decisions*, (Federal Reserve Bank of Chicago, Working Papers Series: Issues in Financial Regulation, July 1995).

60. See Michael Reibel, *Geographic Variation in Mortgage Discrimination: Evidence from Los Angeles*, 21(1) URB. GEOGRAPHY 45 (2000) (offering an example of such credit patterns in Los Angeles).

common for lenders to sell off mortgages to secondary markets. Consequently, lenders will pay attention to the criteria that secondary-market buyers use.⁶¹

While more and more is known about loan decisions and the data that informs them, lenders are at the same time extremely protective about their decision rules. As such, there can be no *prima facie* guarantee that minorities, women, and other applicants who are drawn from socially-excluded categories are being treated fairly in credit-market processes. This is especially the case because of the emergence of subprime lending as a means of providing access to credit for “risky” applicants. Prior to the late 1990s, very risky borrowers were likely to be denied access to credit for housing-related purposes. But as lenders increased information-processing and computational capacity, and increasingly were able to sell loans off to secondary markets, while insuring against such loans’ credit risks, borrowers in “high-risk” classes increasingly obtained access to credit. Such loans were called “subprime” due to the highly risky characteristics of the borrowers being served; of course, whether perceived risk on the part of lenders corresponded with “actual” risk was hotly disputed. Many forms of subprime lending have emerged in the past decade. In the area of housing-related credit, subprime lending has involved two phenomena: first, mortgage loans with onerous terms and conditions made to existing homeowners in vulnerable personal circumstances or lower-income areas; second, requirements that some borrowers pay higher fees and interest rates due to their higher risk characteristics. As with the earlier disputes over unfair denial of credit and over redlining, the question of who is considered risky has been the subject of debate among academics and policy-makers, as well as an object of scrutiny by fair-housing advocates and community-based groups.

HMDA data are well suited for doing provisional estimates of whether outcomes are discriminatory in any given set of credit markets. These data include some of the factors that lenders consider, including borrower income, loan amount, loan type, and property location. Thus a simple regression equation can be set up that controls for these factors and then considers whether race or gender might matter in the loan-market decision. The statistical model used is the probit model, which asks what factors affect the probability of loan approval (or denial).⁶² If the model included all the factors that lenders consider, it should predict perfectly who should and should not receive a loan. A good statistical model includes as complete a set of decision-relevant data as possible. The more complete this set, the more

61. More discussion of the emergence of subprime and predatory loans available. See IMMERGLUCK, *supra* note 49; Dymski, *supra* note 56, at 233-36.

62. The probit model is a form of statistical regression analysis, that is, it is one of the class of models that attempts to link empirical observations about some characteristics of a given social or natural phenomena (which can be collectively termed Y, where Y can be vector-valued) to a distinct characteristic (termed X). That is, statistical regression analysis attempts to “explain” variability in the values of Y via patterns in the variability of X, so that $Y = f(X)$. The terminology deployed is that the model investigates whether the independent variables (X) can ‘explain’ the observed patterns in the dependent variable (Y). There are many forms of statistical regression analysis. In the probit model, the dependent variable is binary, and is usually assigned the value ‘0’ or ‘1’. It is convenient to use the probit model to depict situations in which there are two outcomes for a given process – for example, a situation in which a loan is approved or denied, a job application is successful or not, etc. With appropriate restrictions, the outcomes of a loan application process can be restricted to just two values, “approved” and “denied”; thus, a probit model can be used to attempt to explain sources of variation in approvals and denials.

confident modelers can be that factors such as race, gender or area racial characteristics matter and indicate discriminatory behavior.

Racial Disadvantage in San Joaquin Valley Home-Loan Markets

We now consider the data on racial diversity and the possibility of systematic racial disadvantage or discrimination in San Joaquin Valley home-purchase credit markets. HMDA data on the racial/ethnic composition of home-purchase loan applicants in the eight Valley counties show that racial minorities comprise half or more of all home-purchase loan applicants in the 1992-2004 periods. Latino applicants are by far the most numerous segment of minority borrowers, followed by Asian applicants. Further, the share of minorities among all home-purchase loan applicants increased consistently throughout the entire 1992-2004 period. In addition, minorities are underrepresented among applicants for homes in census tracts in which the median home age is more recent than 1990.

The author put together and ran a base-line probit equation for loan approval and denial that permits one to test whether race, gender, and high-minority areas significantly affect the probability of approval for home-purchase loans. This equation, as mentioned above, also controls for applicant income, loan value, area median income, area homeownership percentage, and area density. This equation is incomplete, but has the virtue of providing a baseline indicator of whether there is reason to further investigate the existence and possible sources of discrimination and unfairness in area housing credit markets.

These equations were run first on a county-by-county basis, pooling together data for the years 1992-2003 (significant changes in 2004 variables and coverage occurred, so that year is excluded). Next, these equations were run on a year-by-year basis, pooling data by counties. Here, the results of these equations are summarized for race, gender, and area racial composition using a summary measure called an odds ratio.⁶³ An odds ratio indicates whether or not a given status—such as being African-American—has a statistical effect on the probability of being approved for a loan. An odds-ratio score of 1 indicates zero impact: the applicant's probability of approval is multiplied by '1', that is, it is unaffected. An odds-ratio score of 0.5, by contrast, indicates that the probability of approval is multiplied by half for an African-American applicant, all else equal (and given the control variables being measured).

63. The odds ratios shown here are linear transformations of the coefficients obtained in the baseline probit runs.

Figure 5: Odds Ratios for Home-Purchase Loan Approval, Selected San Joaquin Valley Counties, 1992-2003

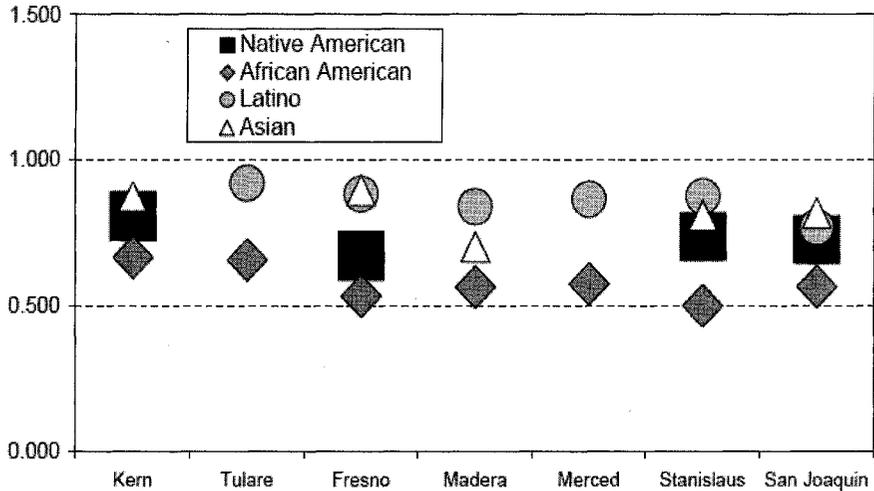


Figure 5 shows statistically-significant odds ratios for four categories of racial-ethnic minorities, odds ratios are not shown for coefficients that do not pass at least a 5% statistical significance threshold.⁶⁴ One striking finding is that African-American applicants have statistically-significant odds-ratio scores of 50% to 60% in each Valley county. This is evidence that is consistent with the presence of widespread discrimination against African-Americans in Valley home-loan markets. These figures indicate the existence of statistically-significant disadvantage of 10% to 25% (that is, odds-ratio scores in the range of 0.75-0.9) in every county except Kern County. Asian-American applicants have statistically-significant odds ratios in the same range as Latinos in every county except Merced and Tulare. Odds-ratio scores for Native Americans are shown, at levels mid-way between African-American and Latino/Asian levels, in five of the eight counties (not in Madera, Merced, or Tulare). In sum, in most Valley counties, Latino, Asian, and Native American applicants are at a statistically-significant disadvantage of 10%-40% relative to white applicants.

64. Kings County is excluded because of incomplete data coding.

Figure 6: Odds Ratios for Home-Purchase Loan Approval,
Eight-County San Joaquin Valley Area, 1992-2003

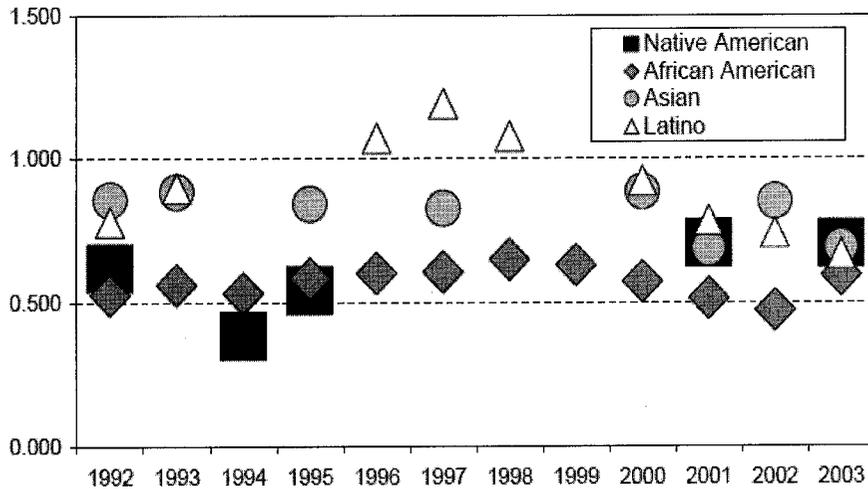


Figure 6 then shows the results of the year-by-year probit equation for the Valley as a whole. Note first that African-American disadvantage of close to 50% is found for each year in the 1992-2003 interval. Asian disadvantage is found for eight of these 11 years, and Native American disadvantage in five years. The results for Latino applicants show trend reversion. In 1992 and 1993, statistical disadvantage is found. Between 1994 and 1999, either no disadvantage or some statistical advantage is found for Latino applicants. However, in the 2000-03 period, consistent statistical disadvantage for Latinos is found in each of these four years. What is especially remarkable is that in the four most recent years (during which Valley housing markets have been especially heated), heightened levels of statistical disadvantage for each minority applicant group is found. This is a remarkable pattern—especially so in light of experience elsewhere. Aldana and Dymski, for example, found that Latino disadvantage weakened and then disappeared between 1992 and 2002 in the five-county Southern California region. They also found that Asian-American applicants are at a statistical advantage relative to whites in that same region.⁶⁵

65. Carolyn Aldana & Gary A. Dymski, *Urban Sprawl, Racial Separation, and Federal Housing Policy*, in UP AGAINST THE SPRAWL: PUBLIC POLICY AND THE MAKING OF SOUTHERN CALIFORNIA, 99-119 (Jennifer Wolch, Manuel Pastor, Jr., & Peter Dreier eds., University of Minnesota Press 2004).

Figure 7: Odds Ratios for Home-Purchase Loan Approval,
Selected San Joaquin Valley Counties, 1992-2003

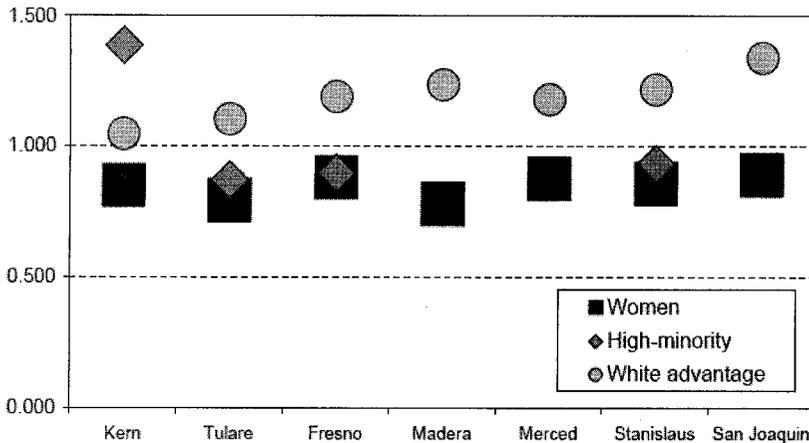


Figure 7 presents the picture for loan applications by women and for homes in high-minority areas. Women are at a statistically significant disadvantage of 10%-20% relative to men in each Valley county. There is only inconsistent evidence that high-minority areas are at a statistical disadvantage. These figures also compute the extent of white advantage, asking whether white applicants are at a systematic advantage or disadvantage relative to all minority applicants. The answer is yes—whites' advantage ranges from 5% to 35%, and is statistically significant in every Valley county.

CONCLUSION: WHAT HAS NEVER HAPPENED BEFORE MAY BE HAPPENING AGAIN

In sum, we have reviewed evidence that the San Joaquin Valley is becoming a crucial vehicle for maintaining all Californians' access to affordable housing. We have argued that the interaction of urban inequality and population growth in the Valley (and in the Inland Empire) is historically new and that this leads to new social challenges. We also found evidence that among these challenges is the fact that housing-supply growth has not kept pace with housing demand, accentuating housing-price pressures in a region built on its housing affordability. Even while empirical evidence suggests that housing credit-market discrimination by race and gender may be diminishing in other California markets,⁶⁶ we have reviewed evidence here suggesting that it remains alive and well throughout the San Joaquin Valley.

66. *Id.*

If these trends continue to shape the macro and micro development of the Valley, then those households who are moving to the Valley to find their piece of the American dream are not going to find it. When they come into the Valley, they will be participating in housing and credit markets characterized by substantial discrimination. If the inequalities in asset ownership and market access that discrimination causes are not addressed, then Valley inequalities will persist and worsen over time. Nobody wants to see the sons and daughters of the disenfranchised, who could not get a fair hourly-wage deal on Valley farm fields, squeezed out of their fair share of the American dream.

In order to counter suggestive evidence of market and fiscal stress and housing credit-market discrimination, it is necessary to first understand more about what is happening in Valley market processes; and second, to initiate collective processes and organizations that can systematically address these sources of social stress and economic unfairness. The core data on Valley home-loan markets used here are the result of a well-organized community movement that put pressure on lenders to be socially accountable by reporting their actions. Now, as in the 1970s, every day people can use their organizing ability to demand access to information and access to resources that can reduce social stress, and help ensure that economic processes in the Valley promote affordability and justice.

