The "Mortgage Consensus" and the Housing Bubble: Revisiting the Post-Fordism Debate

By Luis Flores Jr.

Abstract

Over half a decade after the collapse of home prices in 2006, and with no shortage of books and essays on the ensuing crisis, the place of the housing bubble in political economic remains contested. Preoccupations of scholars have been high levels of income inequality as well as the increased role of finance in the global economy and at the domestic household level. While not proposing a definitive model, through this brief essay I hope to highlight the usefulness of a debate that preoccupied geographers between the 1970s and 1990s, and suggest how theoretical and empirical work since, as well as the illuminating shock of the Great Recession, should compel us to interpret the political economic function of the housing bubble. A reconsideration of post-Fordist regulation debates, I contend, not only contextualizes much of the great work on the crisis written in the past few years, but also helps us make sense of the place of speculative asset inflations in a financial economy.

The Post-Fordism Debate: Geographers in Search of Missing Links

Writing in the mid-1990s, geographers Jamie Peck and Adam Tickell synthesized long-standing debates about the nature of capitalist restructuring following "the crisis of Fordism," which began in the early 1970s. The framework of Fordism and post-Fordism stems from the 1970s "Regulation School," a type of umbrella term for research in Marxist political economy that shared the following two characteristics: one, the adoption of a method of "articulation in constructing theory and, secondly, a concern with changing forms and mechanisms (institutions, networks, procedures, modes of calculation and norms) in and through which the expanded reproduction of capital as a social relation is secured" (Jessop 1990, 154).

By the 1990s, the post-Fordism debate concentrated on the search for a successor to Fordism, as a historic bloc characterized by an ensemble of "technological, market, social and institutional" practices that enabled the spectacular growth of the postwar US economy (Amin 1995). Conjuring images of Henry Ford's industrial production line, the regulationists'

interpretation of Fordism referred not merely to an industrial model but to a phase of US accumulation that entailed coupling between a "system of accumulation" (the mediation between mass production and mass consumption by high wages) and a deeply interconnected "mode of social regulation," a concept that meant more than Keynesian institutions and welfare spending, but encompassed "social norms and habits, state forms ... customs and networks, and institutionalized compromises, rules of conduct and enforceable laws ... [that together represent] a set of codified social relations which have the effect of guiding and sustaining the accumulation process" (Peck and Tickell 1995, 285). In Peck and Tickell's synthesis, Fordism was characterized by the coupling of "mass production and consumption underwritten by [a] social democratic welfare state ..." (1992). In plain words, Fordism was production line manufacturing, Ford's five-dollar-a-day promise, and unionism, but also the norms and habits of Lizabeth Cohen's "consumers' republic," government spending on infrastructure (which indirectly subsidized construction, auto, and appliance industries), FHA subsidies and HOLC loans that promoted redlining and racial covenants, VA home loans, and welfare programs, all of which entered a period of crisis in the mid-1970s, as the industrial postwar economy began to stagnate and social crisis erupted.

The mode of social regulation, or MSR, was key to a regulationist conception of Fordism, and thus any analysis of post-Fordism. Peck and Tickell's critique of the state of post-Fordist debates at the time zeroed in on what they identified to be a disproportionate focus on a post-Fordist mode of production (with conversations around the nature of "flexible accumulation" at the forefront) and inadequate attention to consumption, and importantly, the MSR. They concluded that the MSR had been subordinated to "productionist" debates (1995). The search for post-Fordist regulation entailed a search for these mediating features in a somewhat stable period of capitalist development. But as they warned:

> *the integration of the MSR is not just a matter of adding a new piece to the regulationist "jigsaw". This would imply, first that the accumulation system can be conceived and studied independently of the MSR and secondly, that the theorization of the MSR is of subsidiary importance to that of the accumulation system... After all, one of the principal contributions of regulation theory has been to suggest a theoretically grounded alternative to economism and economic determinism (1992).*

As the post-Fordism debate became stumped by the search for "missing links" in the mid-1990s, significant expansions in the financial participation of households began to take shape. Propelled by technological and statistical innovations (embodied in the credit score and discriminatory pricing[1]), as well as decades of financial deregulation, the mid-1990s witnessed the steepest rise in the rate of homeownership

since the postwar years as well as an expansion in credit card usage, the rise of a speculative bubble in Internet technology, and the glimmers of value inflation around homes (Shiller 2007; Johnson 2007). Not long after the start of the twenty-first century, geographer Elvin Wyly observed the establishment of a "mortgage consensus," the widespread commitment among policymakers to mortgage lending to low- and moderate-income families (Wyly 2002). Wyly and Jason Hackworth noted about the 1990s, "Not since the immediate postwar period had there been such a widespread effort by policymakers to increase homeownership, and never before had there been as much of an effort to increase the rate among non-whites" (2003, 150). Yet as I will suggest, it wasn't only policymakers who contributed to this mortgage consensus of the turn of the century. While the coherence of the Fordist period between 1940 and 1970 was historically unique, in great part because of the geopolitical rise of American military power, it is worth exploring if in the period between the mid-1990s and the collapse of the Great Recession, we witnessed a decade-long moment of regulation after Fordism, in which money-finance at different scales, but grounded in homeownership's wealth effect, played a crucial role both in mediating between production and consumption and in anchoring a mode of social regulation—if only for a brief moment. Peck and Tickell's 1992 paper resolves around five "missing links," which they identify must be clarified in the search for a stable cycle of macroeconomic and social regulation.[2] In this paper, I will elaborate on how the "mortgage consensus" relates to three of their missing links: consumption, the mode of social regulation, and the terms of historical transformation.

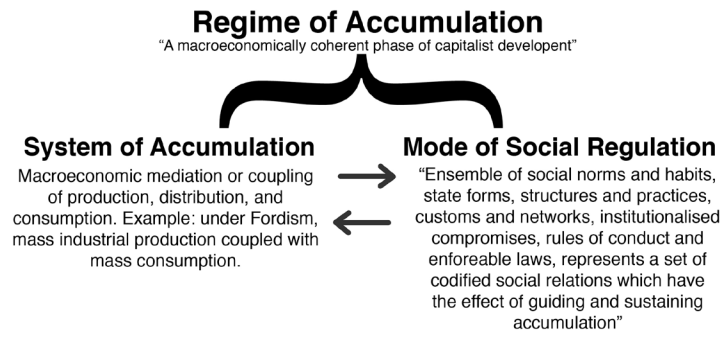

Figure 1: Explaining the regulationist model. Quotations from Peck and Tickell 1992 and 1995.

1. Discriminatory pricing is an economics term that describes a seller's ability to price the same product or service differently for different groups of consumers. The credit score, for example, offered low-income populations access to financial services yet at remarkably high interest rates.

Missing Link 1: Consumption

"Thirty years of wage stagnation made paying off those [household] debts through anything but accidental asset inflation—home and home equities—impossible."

—Louis Hyman (2011)

To assert that debt has increasingly subsidized American consumption appears evident. But to place this assertion about a trend of consumption and credit demand alongside the post-1970's financialization of the domestic economy, alongside the decline of average income since the 1970s, and the manner in which rising home values were leveraged for credit during the bubble, and we may begin to find the mediation between production and consumption that regulation theorists were searching for. But what type of production are we talking here?

Before outlining the ways that mortgage wealth enabled credit consumption during the recent housing bubble, an elaboration on post-1970's production is necessary. Post-Fordist debates in the 1990s focused heavily on identifying a system of production, out of the rusting of postwar industrialism. Influenced by David Harvey, many debates focused on elaborating the system of "flexible" as opposed to intensive production (unions and managerial stability) that emerged in the post-Fordist period. Certainly a move away from this form of structured production is an element of increased part-time employment and the flexibility of manufacturing and capital investment, but we can now see that the most significant transformation occurring in the domestic economy was the growing reliance on financial profits both by financial and nonfinancial firms. Illustrative of this productive shift is the change in relative shares of corporate profits between manufacturing and FIRE (finance, insurance, and real estate) sectors. While in 1950, financial firms claimed just above 10 percent of corporate profits in the United States and manufacturing just below 50 percent, by 2001 FIRE industries held nearly 45 percent of corporate profits and manufacturing 10 percent (Krippner 2012, 33). Yet as Krippner stresses, this figure underestimates the financialization of the economy, as it only measures the prominence of *financial* firms, not the increased reliance of *nonfinancial* firms on their portfolio income.[3] Krippner's focus on how and where *profits* are produced allows us to avoid getting lost in the conversation of whether financial profits truly entail "production." Certainly financial investment was necessary at the height of postwar manufacturing, but as Peter Gowan pointed out, "the transformation of relations between the money-

2. Peck and Tickell identify the following five "missing links": the mode of social regulation, historical transformation rules, spatial scales of analysis, propulsive industries, and consumption (1992). In this essay, I will focus on the MSR, on consumption, and on historical transformation rules.

capital pole and the productive sector of national capitalisms has been a central feature of what has come to be known as 'neo-liberalism' over the last quarter of a century" (1999). The growing centrality of money-finance in the US economy to produce wealth and profits captures the fundamental transformation of the post-1970's domestic economy.

Readers might note that the emphasis on changes in regimes of capitalist growth have been elaborated from the dizzying heights by world/capital systems theory. Indeed, scholarship since the mid-1990s has highlighted the rising prominence of financialization at different scales, with Giovanni Arrighi and historian William Sewell casting some of the widest nets (Arrighi 1994, 2005; Sewell 2005, 2008, 2012). Arrighi and Sewell's writings are both preoccupied with the internal dynamics of capitalism as a historical system. Arrighi's analysis of "cycles of accumulation," cycling between epochs of material and financial expansion, shares the ambition of Sewell's analysis of the "temporalities of capitalism," the convergence of structural and eventful dynamics that propel capitalism development (more on this later). Narrower international analyses have focused on the expansion of global finance through the "New Wall Street System,"[4] the leveraging of US monetary seigniorage and uses of foreign debt (Gowan 1999, 2009; Schwartz 2009, 2012a, 2012b).

These perspectives focus on the manner in which US hegemony was protected through innovations in money-finance.[5] Moving down the scales from the international to the domestic process of financialization in the United States, Greta Krippner's 2012 political history stands out. In addition to presenting an empirical definition of financialization by tracing the shares of sector profits in the postwar United States, Krippner's

3. The portfolio income of nonfinancial firms (like General Electric and Sears) includes income from dividends, interest, investments, royalties, and capital gains.

4. According to Gowan, the "New Wall Street System" had six main features: "(i) the rise of the lender-trader model; (ii) speculative arbitrage and asset price bubble-blowing; (iii) the drive for maximizing leverage and balance-sheet expansion; (iv) the rise of the shadow banking system, with its London arm, and associated 'financial innovations'; (v) the salience of the money markets and their transformation into funders of speculative trading in asset bubbles; (vi) the new centrality of credit derivatives," (2009, 7–8).

5. Gowan's distinction between the "two poles of capitalism" is as follows: (i) money-dealing capital, which originates as money, is "locked to a project for a certain time," and makes claims to profits but is not necessarily derived from production during that time; (ii) productive capital, on the other hand, is often produced through the production process (though loans from money-capital do occur). Productive capital begins as the surplus of labor and capital, profits, that are then reinvested into a particular part of the production process;, when profits are reaped from this round of production some money-capitalists are paid off and other profits are reinvested as productive capital. For more on this, see chapter two of Gowan (1999).

historical analysis shows how the deregulations that unleashed capital flows were the result of policymakers' attempts to avoid the distributive decisions brought about by stagnation, inflation, and urban crisis in the 1970s. In recent years, historians under a school proclaimed by the media and university centers as "Study of Capitalism"[6] have fleshed out the domestic histories of debt, risk, public stockholding, and the rise of neoliberalism (Hyman 2012; Levy 2012; Ott 2011; Burgin 2012).[7] Geographers have elaborated on the financialization of regions and populations (Walker and Bardhan 2010; Wyly et. al. 2012) and illuminating work has been done by urban scholars to uncover the postwar "spatial fixes" (Harvey 2001; Walker 1981)[8] that proved to be central to post-1970's increased financial dependence of tax-starved urban centers and to the foreclosure crisis (Sugrue 1996; Self 2003; Schafran 2013).

This attention to financialization from the heights of World Systems Theory down to neighborhood-level analyses of gentrification offers a sense of the numerous and interconnected scales through which the generation of financial-based profits occurs. While the narratives that explain why and how this came to be are still contested, it is difficult to argue with the empirical evidence that shows the increased dependence by financial and nonfinancial firms alike on profits from financial and speculative services. Yet because it wasn't only firms who would come to depend on financial practices, the missing histories that explain how nonfirm entities like municipalities, households, and students became connected to and dependent upon money-finance present a vacuum of necessary critical research. However, increased reliance on finance to generate profits, alone, does not satisfy regulation theory's search for a system of accumulation. If accumulation is the mediation between production and consumption, then underexplored is the household's, or the consumer's, role in the rise of finance.

If a central characteristic of postwar Fordist accumulation was a high-wage labor model that enabled workers to purchase the products they produced, matching mass production with mass consumption, then the stagnation of household income seen since the 1970s signifies the

---

6. Jennifer Schuessler, "In History Departments, It's Up With Capitalism," New York Times, April 6, 2013.

7. Geographer Jamie Peck should be listed among these historians for his 2010 intellectual history of neoliberalism, yet he falls outside of this "Study of Capitalism" generation of historians.

8. Sociologist Beverly Silver usefully outlines how four types of "fixes" interact historically: the spatial fix, the technological/organizational fix, the product fix, and the financial fix (2003, 131). In this paper I outline the emergence of a financial fix yet, as Silver would point out, a financial fix with spatial and technological dimensions.

dissolution of a key pillar of Fordism. By the early 1970s, competition brought upon by domestic and international competitors caused a two-stage process deindustrialization, or rather increased industrial mobility, and brought along a almost unilateral attack on the part of businesses against labor organizations, contributing to the stagnation and decline of incomes for median earners.[9] Economists Michael Greenstone and Adam Looney found that "when we consider all working-age men, including those who are not working, the real earnings of the median male have actually declined by 19 percent since 1970."[10] Even when excluding unemployed male workers, Greenstone and Looney found a 4 percent decline in real wages during this same period.[11] Among working women, who experienced a rise in wages resulting from expanded employment opportunities, real wages began to stagnate and decline since 2009, according to Greenstone and Looney's data. Central to my argument is the claim that amid this context of declining wages a substantial group of Americans, homeowners, came to depend on connections to money-finance, enabled by their appreciating asset, for consumption and access to social services. To this subject I now turn.

The Entrepreneurial Homeowner

On the eve of the Great Recession, consumers in the United States carried over $800 billion in unpaid credit card balances and nearly 10 trillion in mortgage debt (Ekici, Dunn, and Kim 2007, 117; Brown, Haughwout, Lee, and van der Klaauw. 2013). Reality television shows of "house flippers" and "house hunters" filled channel guides while offers for low-to-zero interest introductory credit cards filled the mailboxes of homeowners—an average of four solicitations per month per US household (Ekici, Dunn, and Kim 2007, 117). Homeowners filling their homes with new appliances and furniture gave the impression that the postwar "consumers' society" had returned. And to a real degree, it had, but the basis of this momentary return was vastly different. In the 1990s, when both home prices and the homeownership rate first began to rise notably, methods of credit classification and price discrimination were enabling the expansion of credit to low-income populations. From 1989 to 2004, the increase in percentage of households with at least one credit card

9. Trends of household incomes show small increase in real wages between the 1997 and 2008 period, yet this represents the inclusion of women in the formal labor force. Tracing median male wages throughout the same time period shows a stagnation and marked decline in real wages.

10. Adam Looney and Michael Greenstone, "The Uncomfortable Truth About American Wages," The New York Times, October 12, 2012. The increasing trend for women is indicative of equal pay legislation and the female workforce assuming existing higher paying jobs, rather than increases in wages.

11. Ibid.

was overwhelmingly concentrated in the two bottom quintiles of income earning households, accounting for 53.7 percent of the increase compared to 1.4 percent by the highest income quintile (Johnson 2007, 16–17). As Federal Reserve economist Kathleen Johnson concluded, "much if not most of the rise in cardholding over the 1989–2004 period came from an expansion of supply to riskier households—those who would have not qualified for a card in 1989" (16). Borrowing from James Scott, sociologist Marion Fourcade identified the result of forms of credit classification to be "a society more legible in profit extraction."[12]

Evidently, the relationship between credit card debt and homeownership was related, with one enabling the other. Homeowners were offered credit lines with generous interest rates on the basis of their appreciating asset. Homeowners, research has found, were then more likely to use introductory credit cards, offering deceivingly low interest rates, to "switch balances"—a method of consolidating existing credit card debt under one interest rate (128). In addition to justifying increased (albeit predatory) credit card consumption and the movement of existing debts, rising home prices also enabled credit dependency in more direct ways during the 1990s and 2000s.

By 2007, the growth in the market for Home Equity Lines of Credit (HELOCs) had surpassed the growth of the credit card market, aided by tax deductions and low interest rates (Dey and Dunn 2007, 89). HELOCs represent one of two primary types of credit derived directly from housing value, the other being refinance cash outs. Yet while HELOCs were growing at a pace faster than credit card debt, they were deeply related. In a March 2007 paper, Alan Greenspan and James Kennedy sought to track the uses of equity extracted from homes between 1991 and 2005. Kennedy and Greenspan found the top three uses for HELOC funds to be "repayment of non-mortgage debt" at 34 percent and "personal consumption spending" and "home improvements" each at 27 percent (2007, 40).[13] The uses of closed-end home equity loans revealed a similar trend, with 45 percent of credit funds used to payment of existing nonmortgage debt, 17 percent going to personal consumption spending,

12. Marion Fourcade, "Classification Situations: Life Chances in the Neoliberal Era," presented at UC Berkeley Sociology's Departmental Colloquium, Monday October 21, 2013. For the paper connected to this presentation, see Fourcade and Healy 2013. In their paper, Fourcade and Healy suggest that "classification situations" in the neoliberal era are an arena of class formation and life-chance determination occurring "outside the sphere of production." But as the literature on financialization suggests, expansions in credit access enabled by methods of credit classification cannot be separated from the shift in the production of profits to rely on money-finance and expansions in the demand for credit.

13. Personal consumption includes spending for education, automobiles, medical and dental expenses, weddings, and vacations.

and 27 percent was used for home improvements (40). Greenspan and Kennedy's findings illustrate how inflating housing values were key to servicing the increases in debt necessary to maintaining consumption with declining real incomes since the 1970s. In historical comparative terms, "unlike the debt repayment of the postwar period, which relied on rising incomes, debt repayment of the 1990s relied on rising asset prices" (Hyman 2012, 219).

Distinct from lines of credit is the "cash out" refinancing of mortgages that were increasingly built into variable interest rate mortgages. Adjustable-rate mortgages (ARMs) provided homeowners two years of a low-fixed interest rate followed by 28 years of variable interest, placing homeowners at the mercy of monetary fluctuations. Inherently unstable, ARMs accounted for close to 20 percent of mortgages granted in the 1990s. Of Alt-A mortgages (classified between prime and subprime, and held by borrowers with clean credit histories but high debt-to-income ratios) granted between 2002 and 2006, 90 percent were ARMs (Schwartz 2009, 180). ARMs were promoted as sustainable based on the assumption of increasing property values—with rising prices, the prospect of quick access to liquidity justified the resetting, and enlargement of mortgage debt that refinancing entailed. At the end of the two-year, fixed-rate period, ARM holders were expected to refinance their mortgage, receiving a sizable "cash out" payment (or equity extractions) in exchange for a fixed interest rate, often just for another two years. The equity extracted by mortgage holders from this dangerous cycle was also analyzed in the Greenspan and Kennedy paper. Between 1991 and 2002, Greenspan and Kennedy concluded that 17 percent of equity extracted during refinancing was used to fund personal consumption expenditures, 27 percent to repay nonmortgage debt, and 34 percent going to home improvements (Greenspan and Kennedy 2007, 34; Canner, Dynan, and Passmore 2002).

The rise of household debt enabled sustained consumption expenditures amid rising inequality and falling wages. The financialization of the US economy did not enforce distributive constraint, but it postponed the 1970's distributive dilemma faced by a stagnating economy by enabling new forms of profitability under a system of low wages and sustained consumption enabled by a dramatic increase, and normalization, of high levels of household debt—buttressing the money-finance economy. As an alarming 2009 economic letter by the Federal Reserve Bank of San Francisco (FRBSF) concluded, "the U.S. household leverage, as measured by the ratio of debt to personal disposable income, increased modestly from 55% in 1960 to 65% by the mid 1980s. Then over the next two decades, leverage proceeded to more than double, reaching an all time high of 133% in 2007" (Glick and Lansing 2009: 1).

Uses of Equity Extracted From Homes

	Home Equity Lines of Credit (HELOCs) (1992-2005)	"Cash Out" Refinancing (1991-2002)	Home Equity Closed-End Loans (1991-2005)
Repayment of Non-mortgage Debt	34%	27%	45%
Personal Consumption (includes: education, automobiles, durables, medical expenses, etc)	27%	17%	17%
Home Improvements	27%	34%	27%

Figure 2: Uses of equity extracted from homes at different periods of the mortgage consensus.

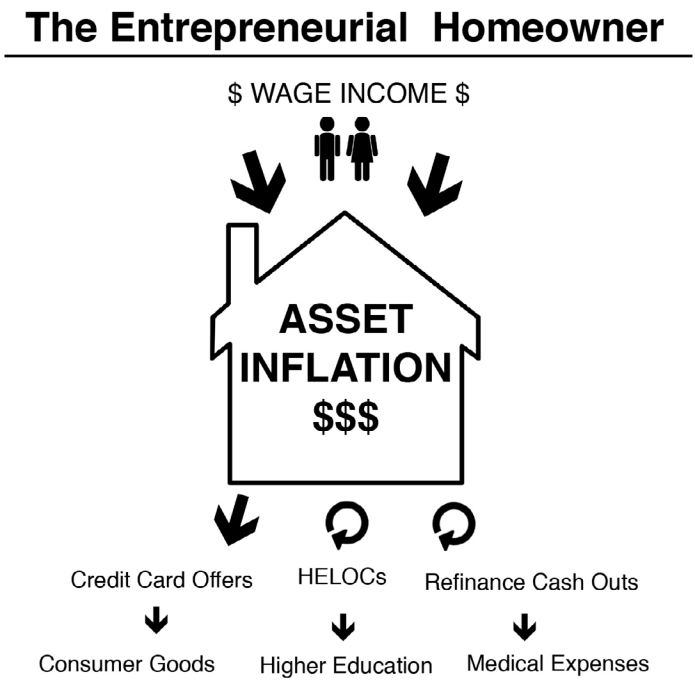

Figure 3: The entrepreneurial homeowner. Note the circular cycles, with different types of debts enabling the other—mortgage wealth enabling credit card debts that could then be consolidated in mortgage debt through refinancing and equity extractions, which were used for home improvements that would further raise the value of the home. During the mortgage consensus, homeowners leveraged wealth, assets, and income in exchange for credit that enabled or mediated access to commodities and services.

Before moving on, it is important to highlight debates about the specific income brackets that embody this entrepreneurial homeowner. In a 2013 working paper, Neil Fligstein and Adam Goldstein suggest that it is actually the upper middle classes who exemplify an embrace of what they call "financial culture" (which they identify with high credit spending, use of HELOC extractions, and open to "riskiness"). While they agree that "the evidence is also strong that in the face of a squeeze on their incomes, households at all levels of the income distribution felt it was legitimate to take on more debt to support their existing lifestyle," they suggest that financial culture only developed among the upper middle class, who spent to "keep up" with the wealthiest (20–36). The problem here isn't with Fligstein and Goldstein's data and observations, but in their interpretation of financial culture. In their 2014 book, economists Atif Mian and Amir Sufi broke down the leverage ratio[14] among homeowners by income quintiles in 2007. They found that the poorest 20 percent of homeowners had a leverage ratio of 80 percent, meaning 80 percent debt, less than 10 percent home equity, and approximately 5 percent in financial wealth (Mian and Sufi 2014, 21). The quintile just below the wealthiest 20 percent, where Fligstein and Goldstein's most financialized class likely rest, in contrast, had a 20 percent ratio (20 percent debt, approximately 40 percent home equity, and slightly over 40 percent in financial wealth).[15] In short, wealthier homeowners had much more equity and financial wealth and little debt, while poorer homeowners had almost no financial wealth (stocks and nonmortgage assets) and high levels of debt, simply meaning that they were financialized under different, much more predatory terms. Mian and Sufi show how these highly leveraged households were not only more vulnerable, but, remarkably, they found that higher debt ratios were correlated with a higher "marginal propensity to consume" (Mian and Sufi 2014, 43).[16] They suggest that a decline in asset prices disproportionally affected the consumption patterns of highly indebted homeowners (with little financial wealth), whereas comparable declines in stock values had a small effect on the consumption of those who has high levels of financial wealth, the top two quintiles (42–43). If this is so, the inverse should hold that increases in house values disproportionally stimulated the consumption expenditures of the most highly indebted, which were the poorest two quintiles of homeowners. While the volume

14. The leverage ratio is used to measure the debt obligations and wealth of an entity. For example if a household has $30 thousand in debt and $60 thousand in equity and financial wealth, their leverage ratio is 50 percent.

15. The wealthiest 20 percent had almost no debt, with approximately 5 percent debt, 10 percent home equity, and 85 percent financial wealth (Mian and Sufi 2014, 21).

16. The Marginal Propensity to Consume (MPC) is a Keynesian macroeconomic measurement of the effect of income shocks on consumption of goods and services, as opposed to saving.

of their consumption was smaller, the relationship between high indebtedness, homes prices, and the marginal propensity to consume reveals a different type of more precarious financial dependency.

Fligstein and Goldstein are correct that it was the wealthier middle class who openly embraced risk and held more financial (nonmortgage) wealth than the poor. However, by foregrounding their analysis on inequality, rather than production, Fligstein and Goldstein obscure that all income brackets, in fact, had to finanialize in divergent ways (the credit score comes to mind). Rather than one "financial culture," which Fligstein and Goldstein measure by number of credit cards, self-reported openness to risk, and the robustness of equity extractions, in the context of an increasingly financialized economy, of interest should be the terms of engagement with finance and thus distinctions in financial cultures, as opposed to a search for a "most" financialized income bracket. Mian and Sufi make it clear that what the United States had during the housing bubble wasn't exactly what Gerald F. Davis calls a "society of investors," but a society of debtors and investors, each of which depended on financial services but under vastly different terms (Davis 2009, 235; Mian and Sufi 2014, 17–45).

By the time the housing bubble took shape in the early 2000s, rising asset prices not only promised a source for money-finance investment, they offered millions of Americans, many low-income workers with low credit scores, the benefits of a "wealth effect." That was significant not only in buttressing household consumption amid declining incomes, but also in managing past and future debt spending. As we will see, these practices that connected homeowners to streams of money-finance, and allowed for the transformation of "underclass to entrepreneur," were also key in enabling access to social services like education and healthcare at a time when municipal and federal social services were shrinking (Katz 2012). Historian Louis Hyman writes, "Money invested in a house produced nothing. A house was not a farm or a factory, just an oversized consumer good" (Hyman 2012, 219). In the period between the 1990s and the crash, this oversized consumer good, through its connections to global money-finance as a mortgage-backed security, or as a home equity loan, or as a receptacle for debt-financed consumer goods, was deeply connected to a system of accumulation offering mediation between production, distribution, and consumption.

Missing Link 2: Mode of Social Regulation

"In an asset-based welfare state, what happens to families who lose their only substantial asset?"

—Michael Katz (2012)

Historical sociologist Monica Prasad in her 2012 book *The Land of Too Much* makes the remarkable observation that financial deregulation had notably different effects on the demand for and reliance on (household) credit in nations with well-developed welfare states than it did in nations with less well-developed welfare states (227). Prasad points out that in the United States the second highest category of personal consumption expenditures (a component of GDP) in 2007 was "health care" at 14.9 percent, "with housing and utilities" at 18 percent (Bureau of Economic Analysis 2012, *National Income and Product Accounts*, table 2.4.5, "Personal Consumption Expenditures by Type of Product"). She notes that average consumers spending on health care for other OECD countries is 2 percent of GDP, whereas Americans spend over 12 percent on health care. Prasad concludes that "the picture that arises ... is of Americans taking out loans backed by their homes to finance health-care spending" (237). Her observation of what she defines to be "mortgage Keynesianism" adds empirical depth to Katz's "asset-based welfare state"—"mortgage Keynesianism" suggesting both the use of mortgage finance as a mechanism for sustain economic growth *and* for providing households access to social services provided by the state in other developed nations (Prasad 2012, 93–95, 221). Certainly the decline of welfare state between 1990 and the 2000s has been interpreted as the concentration of "individual risk," with households no longer pooling to pay for social services. But as Herman Schwartz points out, this individualization of the welfare state also had the effect of exposing financial firms to increased systemic risk (2012b). "Deregulation permitted the reemergence of mismatched maturities, providing both a necessary and sufficient condition for the current financial crisis," explains Schwartz (2012b). This example illuminates how the demand for credit at the household level enabled and mediated expansions of money-finance at the national and global level. Moreover, this instance, like the previous section on the "entrepreneurial homeowner," illustrates the practical means through which homeownership enabled mediation in the face of declining incomes and social services.

Both Katz and Prasad suggest just how much was at stake in the appreciation of housing prices during the housing bubble and move us into a consideration of what post-Fordist regulation theorists called the mode of social regulation (MSR). To review, the *regime of accumulation* is composed of two "pillars," a *system of accumulation* (production and consumption) and the deeply interrelated *MSR*, which accounted for, importantly, not only government policies and subsidies, but also "cultures of consumption and social expectations" (Amin 1995, 8). The ability of appreciating home values to enable homeowners to deal with this concentration of risk by opening credit flows to fund education and

health expenses illustrates the emergence of an important aspect of social regulation under the mortgage consensus.

Homeownership as a Symbolic Practice

"The task is to study how the production of value entails the reproduction or transformation of social and cultural formations."

—Fernando Coronil (1997)

As homeownership during the housing bubble allowed Americans to finance their own educations, health care, retirements, and debt spending, the expansion of homeownership to "subprime" populations during the bubble also tapped deeply into the culturally symbolic dimensions of homeownership in America, which must be approached as related to the rise in asset prices on the side of the MSR.

By the late 1960s, women's and civil rights groups began to focus on the accessibility of credit as an arena for political contestation.[17] The immediate postwar boom that was characterized by growing suburbs, as well as expansions of consumer credit, white-collar jobs, and public services, was driven in large part by government spending in the form of tax incentives, mortgage programs, infrastructure spending, and urban renewal projects. But as David Freund concluded, these programs were "almost exclusively for white people, and thus accentuated the nation's racial and class inequities" (Freund 2006, 11). Symbolically, the image of American middle class stability that rested on homeownership and consumption framed the way some groups responded to political inequities. What I mean is that even as women's and civil rights groups mobilized against discrimination in access to homes and consumer credit, the articulation of the American Dream (which was produced by discriminatory practices) remained relatively intact. It is difficult to disentangle the emergence of cultural symbolism from the practice of homeownership. Certainly racial minorities were attracted to esthetics of homeownership that media outlets so cautiously crafted (Cohen 2003, 150), but the way suburban subdivisions emerged as enclaves of investment, wealth appreciation, and consumption equally appealed to many low-income workers and even immigrants (Jones-Correa 2006). Civil rights activism around credit and mortgage access embraced a Great Society liberalism, as opposed to black community organizations that rejected liberalism's (historically false) promise of jobs and homes, and instead demanded self-determination and community power (Self 2003).

17. See Greta Krippner, 2010, "Democracy of Credit: Economic Citizenship in U.S. Society, 1970–2010" presented at the Global Crisis: The Financialization of Economic Life conference at the University of Chicago.

Indeed, social and urban crises of the late 1960s were interpreted by some in the Lyndon B. Johnson Administration as a response to a lack of revolving and mortgage credit in urban centers (Hyman 2011, 173–280, 2012, 180–246). Heavily supported by the Johnson Administration seeking solutions to its "urban problem," the Housing Act of 1968 contained two important and related policies, the creation of the mortgage-backed security and the short-lived Section 235 program. Section 235 sought to shift funds for public housing to subsidizing interest payments for low-income homebuyers. The cultural dimensions to the programs were explicit in page one of the Housing and Urban Development's Section 235 handbook, which stated among its purposes "to enable lower income families to become owners of homes and thereby experience the pride of possession that accompanies homeownership" (quoted in Hyman 2011, 187).

While Section 235 lasted until only 1971, the accompanying practice of securitizing mortgages only grew, beginning first with government-initiated mortgages securitized by Fannie Mae to securitizing conventional mortgages in the 1970s by Freddie Mac (Hyman 2011, 232–3). By allowing the securitization of mortgages, officials turned long-term mortgage investments into short-term securities whose return was funneled up by interest and principal payments, resulting in a substantial inflow of liquidity into mortgage markets and enabling the expansion of lending to the formerly unbanked. Similarly, by the 1970s, credit cards began securitizing their debt, opening capital to extend lending. As Hyman summarizes, "Though the credit departments of department stores of the 1950s and '60s collapsed under their scarcity of capital, credit card and mortgage companies of the 1970s and '80s, faced no such obstacle because of a financial innovation that underpinned this debt expansion. Securitization had come to the credit card and, through its ability to repackage risk, facilitated this new group high-risk borrowers" (Hyman 2012, 226). Securitization, the credit score, and price discrimination allowed a liberal articulation of credit and homeownership as a symbol for American civil equality and the middle class to be claimed by many.

The new "mortgage consensus" of the 1990s had emerged among business and policy makers, seeking to be more racially inclusive than the postwar consensus, contributed to a 3.3 percent increase in the homeownership rate in the 1990s, the highest since the postwar period (Wyly and Hackworth 2003). In the decade after, the predatory underbelly of this "mortgage consensus" would spread on steroids, but the symbolic weight of homeownership, with its ability to repair histories of marginalization and turn the poor into entrepreneurs, aided in obscuring this. This appears a key dynamic in a post-Fordist

mode of social regulation, in which money-finance and entrepreneurial homeowners led accumulation.

This deeply symbolic value of homeownership was not lost on financiers. Speaking shortly after the 2007 crisis, Angelo Mozilo, cofounder and CEO of Countrywide, one of the country's largest mortgage lenders, characterized his company as "having helped 25 million people buy homes and prevented social unrest by extending loans to minorities" (Financial Crisis Inquiry Report 2011, 105). In his own words, "Countrywide was one of the greatest companies in the history of this country and probably made more difference to society, to the integrity of our society, than any company in the history of America" (105).[18]

The Breadth of the MSR

The "mortgage consensus," the "asset-based welfare state," and "mortgage Keynesianism" all illuminate the regulatory function of government institutions, social consensus, culture, and habits in complementing the accumulation of financial profits by money-finance and entrepreneurial homeowners. Though it is important to note that all also formed out of responses to the crisis of Fordism, respectively the social crisis produced by the racialized landscape of suburban policy, the decline of the welfare state, and the implosion of Keynesian management.

Studying the formation of institutions, norms, habits, policy frameworks, and class consensus that enables instances of social regulation offers rich opportunities of expanded research. Illustrating the creative breadth of research on the MSR is work that posits the epistemic impact of regimes of accumulation. In a compelling argument on the effect of production trends on professional social science as well as popular epistemology, Dylan Riley and George Steinmetz have written separate papers tracing the embrace of "methodological positivism"[19] in the human and social sciences to the Fordist arrangement of accumulation and society (Riley 2007; Steinmetz 2005). A systematically organized labor force and corresponding managerial society, they argue, necessitated epistemic boundaries of study, pushing the social sciences to be "acultural, ahistorical, and individualist with respect to its basic units of analysis and oriented toward general laws, replication, prediction, and value-freedom" (Steinmetz 2005, 309). "Social actors now seemed atomized, rational,

18. Acquired by Bank of America in 2008, Countrywide Financial has been embroiled in a federal lawsuit for allegedly defrauding investors of mortgage-backed securities by lying about the quality of the securities.

19. "Methodological positivism," Steinmetz explains, is a "combination of an empiricist ontology (no difference between essence and phenomena, a positivist epistemology), and a scientistic version of naturalism (physical science methods applied to social/human world)" (2005).

and interchangeable, lacking any distinctive cultural peculiarities; social practice was more predictable and controllable. In sharp contrast to the crisis conditions of the interwar years, orderly postwar Fordist societalization resonated with positivist notions of repetition," Steinmetz elaborated (2005, 296). The great irony, both Riley and Steinmetz stress, is that this methodological positivism, as a Fordist epistemology, became dominant in the 1960s, just at the crisis of Fordism would render it inadequate for studying a society in dissonance. The emergence of "methodological positivism," as the epistemic framework corresponding to Fordism, is precisely the type of social norms and institutionalized compromises (in the realm of epistemology) that compose the MSR. The recession has certainly shaken academic paradigms—a mainstream bestselling economist can now publish a book under bold inscription, "CAPITAL," and write in the style of political economy.[20] Yet to claim the dissolution of "methodological positivism," as universities are frantically restructuring to adapt to the needs of the Internet technology and financial industries, might be premature.

I haven't scratched the surface of the MSR, but unlike the period in which Peck and Tickell wrote we now have the shock of the housing crash as a position from which to turn back and reassess previously incoherent trends in relation to one another. This delicate process of historical detective work requires, as Peck and Tickell recognized, a well thought-out framework for dealing with social transformation.

Missing Link 3: Terms of Historical Transformation

"The conceptualization of the transition from one regime of accumulation to another, via an intervening period of structural crisis, stresses contingency, the indeterminacy of class struggle and 'chance discovery'. This means that theory is unable to provide any systemic accounts of change. It is necessary to develop a more robust understanding of the processes by which regime accumulation disintegrate and coagulate."

—Jamie A. Peck and Adam Tickell (1992, 208)

The usefulness of regulation theory is that it offers a fundamentally relational methodology, with no piece operating independently from others. This provides a noneconomistic, nondeterministic approach to studying changes in political economy. As many readers will note after reading this essay, there is "nothing new" about many of the practices and dynamics I outlined above. Monica Prasad has shown that the model American mortgage, which enabled "Americans to take on significant

20. See Picketty (2014). On the significance to the economics profession, see Paul Krugman, "Why We're in a New Gilded Age," New York Review of Books, May 8, 2014.

Regimes of Accumulation

	Fordist (1940-1970)	Mortgage Consensus (1990-2008)
System of Accumulation	Industrial mass production, distribution, and mass consumption, mediated by high wages.	Global money-finance, reliance on financial profits by financial and non-financial firms, mediated by high levels of indebtedness.
Mode of Social Regulation	Keynesian regulation; monopoly competition; government-funded spatial expansion: infrastructure, utilities, expansion of foreign markets; "Consumers' society" and corresponding civic consumer. Racial segregation; "Methodological Positivism" in social sciences.	Asset-Based Welfare State/Mortgage Keynesianism; pensions invested in commercial and residential real estate; continued habits of mass consumption; inclusion of minorities and women in credit markets; shift from "underclass to entrepreneur"; widespread entrepreneurial individualism.

Figure 4: While not as coherent as the Fordist regime of accumulation, during the mortgage consensus, there was a coupling of a system of money-finance accumulation and a MSR.

levels of debt," had been established as early as 1916, with the shift away from "balloon" mortgages (2012, 201–202).[21] Similarly, Louis Hyman reminds us of the high levels of consumer credit card debt in the postwar period (2011, 132–172). Finally, the homeownership rate, which rose to 69.2 percent in 2004, had hovered around 63 percent since the postwar period and was already at 40 percent by the start of twentieth century. While these individual dynamics are not new, they intersect with other policy, economic, or meaningful dynamics at certain moments in distinct ways. These intersections and relations are what lead to novel historically significant outcomes, and are precisely what I contend made up this decade-long period of somewhat stable post-Fordist regulation between the 1990s and the crash of the housing market. Below I will highlight some useful insights on the temporality of capitalism and the nature of social transformation elaborated by historian and social theorist William Sewell Jr. I will then, in general brush strokes, suggest how the

21. Balloon mortgages where short term mortgages where a borrowers would pay interest for 3 to 5 years then pay the full principal of the mortgage at the end of those 3 to 5 years.

dissonance of the crisis of Fordism shaped a temporary resolution during the housing bubble.

Multiplicity of Structures Punctured by Events

Peck and Tickell called for a sophisticated understanding of the dynamics of social transformation and the movements of historical temporality. They stressed an attention to "constraints, which are inherited from the decaying regime"; attention to "new collective subjects," who can resolve the crisis unlike their predecessors; and attention to models where participants act on the basis of "given ideals and values" (Peck and Tickell 1992, 208). Admittedly, their recommendations seem abstract and could use elaboration.

In a collection of densely complex essays spanning the author's own trajectory from social history, through the linguistic turn, and to what has been described as his "high cultural turn," William Sewell's *The Logics of History: Social Theory and Social Transformation* assumes the task of theorizing social transformation as interactions between structures and events. Structure, which he spends a third of the book describing, I will summarize as "the sets of mutually sustaining schemas and resources that empower and constrain action and that tend to be reproduced by social action" (2005, 143). Note the assumption of multiple and overlapping structures (economic, linguistic, cultural, etc.). He describes events as "happenings that transform structure," by departing from or joining and rearranging the relationship between structures (218). The key to understanding social transformations, Sewell suggests, is to at once grasp how events are produced by structures (think of the Great Recession) but how those events then go on to shape the way existing and novel structures are articulated (joined together and expressed in everyday life). I could go on, but I've outlined enough to show how Sewell provides an answer to Peck and Tickell's search for "historical change rules." Sewell provides a framework for tracing structures at different scales, for understanding crisis as disruptions to habits, and as transformation as contested moments of "transposability,"[22] when a solution to a crisis is fashioned from existing practices, as well as epistemic and historic "resources," applied to new contexts.

Since publishing his groundbreaking 2005 book, Sewell has made it clear that his interests lie in uncovering the logics of capitalist time. In two subsequent papers, "The Temporalities of Capitalism" and "Economic Crises and the Shape of Modern History," Sewell paints on a large canvas the contours of capitalist history, blending Schumpeterian analysis, world

22. For more on the concept of "transposability of schema" as a driver of social transformation, see Bourdieu (1977, 83); elaborated in Sewell (2005, 124).

systems theory, and a critical analysis of temporality, yet he remains less concerned with the unique way that homeownership linked individuals with money-finance at the top of the scale in the lead up to the recent crisis. Below, I will use Sewell's lucid framework to briefly sketch the contours of social transformation that resulted in a "conjecture" that took the shape of the housing bubble.

Fordist Disorder and the Housing Bubble

Peck and Tickell describe the Fordist regime of accumulation as "a macroeconomically coherent phase of capitalist development" (1992, 192). Yet, as they also show, this relative stability was achieved by a grouping of industrial productive practices with an ensemble of government forms, cultural habits, networks, and compromises, what Sewell would identify as multiple structures in a particular relationship. With this in mind, the crisis of Fordism can be understood as a series of disruptions on the reproduction of these structures and the habits and norms they entailed. At some scales, these disruptions were caused for economic and geopolitical reasons, but in others by social contestation of the uneven distribution of benefits under this particular grouping of "cultural habits, networks and [racial] compromises." To make this easier to outline, I will break up these disruptions by occurring in the "system of accumulation" and under the MSR.

The most significant productive disruption was the rise of domestic and international competition that forced the domestic economy to face the stagnation of postwar growth rates. Moreover, the intensification of production and the dramatic rise in productivity not only increased yield but also paradoxically necessitated fewer low-skilled workers who could double as consumers. At the first signs of competition in the 1950s, some domestic manufacturing firms first moved domestically, away from an emerging Rust Belt to suburbs promising more favorable business conditions, but eventually even this proved too expensive. As industrial wages declined and plants moved abroad, the key mediation between mass production and mass consumption that sustained the system of accumulation broke down. While this breakdown has left us with enduring structures, namely the political form of the labor union, this form has struggled to reposition itself as its basis for political leverage, domestic mass production, became eroded.

The disruptions to the MSR provide a dynamic illustration of how social transformation entails rearrangements and continuities of the past to face novel circumstances. Peck and Tickell characterize the MSR as being anchored around Keynesian social management. Government regulation, expenditures, and foreign intervention were all key to the functioning of the Fordist system of accumulation. Government subsidized the roads

and utilities that enabled suburbs to form as receptacles for industrial manufacturing goods. The VA and FHA spending that sustained home prices and racial homogeneity not only encouraged homeownership, but also formed the basis of a homeowner populism that would have dramatic consequences in the 1970s. The postwar Marshall Plan and ensuing Cold War development regime provided markets for domestic mass production, and would eventually also serve as the policy interstates on which money-finance would move. The collapse of Keynesian management was like that of the system of accumulation, in part a result of overexhaustion. Great Society social programs continued subsidies provided to industry, but the growing financial and social costs of foreign intervention opened the gates of distributional conflict when the economy began to stagnate (Krippner 2012). As Krippner lucidly shows, government financial deregulations, including the creation of mortgage-backed securities and the elimination of interest rate controls, were often attempts to stave off distributional decisions. Noteworthy as an overlooked dimension are also the tax politics that placed great strains on Keynesian macroeconomic management. Monica Prasad shows that income-based taxation, because of its visibility, became fiercely politicized during times of stagnation and distributional conflict. She suggests that a government funded on income-based taxation, which generates lower revenues than sales or value added taxes, was sustainable only under remarkable postwar growth (2012, 166–171). The partisan tax opportunism she describes that propelled the rise of neoliberalism set long-lasting resource constraints (disruptions) on Keynesian government spending habits (Prasad 2006). The tax revolt that caped and constrained property values across the country would later have municipalities welcoming dramatic rises in home prices, in their efforts to channel property taxes to municipal social services. An equally profound set of disruptions on Fordist Keynesian management came from civil rights activists, whose disruption also focused on the uneven access to a broad set of practices (homeownership, schooling, employment, leisure, credit consumption) and their connected symbolic forms, like the American Dream and the promise of postwar liberalism.

Analyses of the crisis of Fordism should seriously also engage the profound disruptions on the cultural consensus of Lizabeth Cohen's "consumer's society," brought on by civil rights groups, women's rights activists, community organizations, and urban unrest.[23] As I've suggested before, the "consumer's society" as a type of social compromise was fundamentally exclusionary. Yet women and minorities weren't just excluded from the material process of mass consumption but from the profound symbolism it carried. Notably, this disruption

23. Which can be understood as expressions of "movements beyond movements," which are nonetheless political (used in different context by Hart 2014).

exposes articulations of nationalism and liberalism, which underpinned Fordist accumulation. As Cohen explains, "mass consumption in postwar America would not be a personal indulgence, but rather a civic responsibility designed to provide 'full employment and improved living standards to the rest of the nation'" (2003). As postwar nationalism turned into Cold War nationalism, the "civic consumer" became a privileged articulation of US nationalism and symbol of social inclusion to minority groups. Both tax politics and civil rights liberalism made claims to access to consumption and ownership, and did not protest the effects of trying to maintain and grow a homeownership-based consumer society. The ability of expansions in homeownership to extend access to this symbolic practice and repair histories of marginalization and discrimination would be key to mediating the disruption of the crisis of Fordism that erupted in the 1960s and 1970s.

These disruptions at different levels produced the crisis of Foridsm, and attempts to reinstate Fordist practices and articulations have shaped the development of post-Fordist forms of accumulation and social regulation. As Greta Krippner has shown, it was government's indecision at the face of distributional conflict (and the Johnson Administration's unwillingness to choose between guns or butter), which led to the marginal liberation of money-finance. While it was unclear at the time, these deregulations enabled the reinstatement of competitive profits in finance, insurance, and real estate (FIRE) sectors, necessitating mediation by mass credit demand. By the 1990s, eventful innovations in information and computer technology, as well as different forms of securitization, offered increased resources to financial sectors as well as classification methods that opened new populations, many who had fought for access to the promise of postwar liberalism embodied by the American Dream. By the 2000s, expansions of homeownership promised to plug most of the holes in the fabric of post-Fordist dissonance. The new "mortgage consensus," fueled by capital from securitization dating back to 1968, enabled the temporary return of a stable consumer society, but it now was driven by entrepreneurial and highly indebted homeowners who leveraged increasing asset values for access to credit card consumption, home equity for health care and education, and investments in retirements and additional assets. This process was circular, as much of the equity extracted from appreciating homes went to home improvement, thus fueling new rounds of value appreciation and sustained access to social services and consumption. That the home, which Hyman referred to as simply an oversized commodity, assumed this regulatory function and connected mass credit demand with money-finance profits at the global level, is the key innovation of this moment of post-Fordist regulation. The access to social service spending, everyday habits of consumption, and promise to repair histories of marginalization were key to encouraging

a dependency on increasing home prices in the 2000s. At work is an interaction between enduring structures, at different scales, and attempts to reinstate key habits after a period of dissonance. The period between the mid-1990s and the Great Recession illustrates a moment at which key postwar structures were reinstated around a new from of financial accumulation, and centered around the appreciation of homes and the entrepreneurial actions of homeowners.

Conclusion

"We must use the tools of historical analysis to reconstruct the complex articulations of trends, routines, and events—unique in each case we examine—that sustain or undermine profitability, construct more or less durable ecological niches, advantages one sector of capital or labor over another, create new opportunities for profitable investment, forge political protections for certain forms of enterprise, or otherwise shape and reshape the field of production and exchange."

—William H. Sewell Jr. (2005)

What I have offered is a painfully incomplete attempt to situate the housing bubble in contemporary political economy. Instead, this paper should be approached as an invitation for geographers, historians, sociologists, and historically minded planners to pursue a set of questions under a particular framework. I have suggested that it would be of great use to revisit 1990's geography debates about the nature of post-Fordist regulation, as they offer a framework for steering clear of both production-centric approaches and non-economic social analysis. As a framework that stresses social relationships and the centrality of historical convergence, it necessitates careful historical analysis but also equally cautious theoretical framings to bring its many moving parts into view.

Acknowledgements

I am indebted to Gillian Hart for her generous and engaging mentorship and for lending her critical ear to just about every argument I've developed over the last two years. For comments on this draft I owe thanks to participants of the "Financialization and Markets" session of the Sociological Research Symposium at Berkeley and to Robert Wihr Taylor. Finally, Greta Krippner kindly read and commented on a painfully rough draft of this paper.

Luis Flores is a doctoral student in sociology at the University of Michigan. A 2013-2014 recipient of the Judith Lee Stronach Baccalaureate prize, he worked in Oakland and San Francisco on issues of housing vulnerability, credit dependency, and property investments. Luis graduated from UC Berkeley in 2012 with degrees in history and political economy.

References

Amin, Ash. 1995. "Post-Fordism: Models, Fantasies and Phantoms of Transition." In *Post-Foridism: A Reader*, edited by Ash Amin, 1–40. Oxford: Blackwell Publishers.

Arrighi, Giovanni. 1994. *The Long Twentieth Century: Money, Power and the Origins of Our Times.* New York: Verso.

Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.

Brown, Meta, Andrew Haughwout, Donghoon Lee, and Wilbert Van der Klaauw. 2013. "The Financial Crisis at the Kitchen Table: Trends in Household Debt and Credit." *Federal Reserve Bank of New York: Current Issues in Economics and Finance* 19 (2).

Burgin, Angus. 2012. *The Great Persuasion: Reinventing Free Markets Since the Depression*. Cambridge, MA: Harvard University Press.

Canner, Glenn, Karen Dynan, and Wayne Passmore. 2002. "Mortgage Refinancing in 2001 and Early 2002." *Federal Reserve Bulletin*, December.

Cohen, Lizabeth. 2003. *A Consumers' Republic: The Politics of Mass Consumption in Postwar America*. New York: Vintage Books.

Coronil, Fernando. 1997. *The Magical State: Nature, Money, and Modernity in Venezuela*. 1st Ed. Chicago: University of Chicago Press.

Davis, Gerald F. 2009. *Managed by the Markets: How Finance Re-Shaped America*. Oxford: Oxford University Press.

Dey, Shubhasis, and Lucia Dunn. 2007. "Collateral and Sorting: An Empirical Investigation of the Market for HELOCs." In *Household Credit Usage: Personal Debt and Mortgages*, edited by Sumit Agarwal and Brent W. Ambrose, 79–91. New York: Palgrave Macmillan.

Ekici, Tufan, Lucia Dunn, and Tae Hyung Kim. 2007. "Introductory Credit Card Offers and Balance Switching Behavior of Cardholders." In *Household Credit Usage: Personal Debt and Mortgages*, edited by Sumit Agarwal and Brent W. Ambrose, 117–31. New York: Palgrave Macmillan.

Financial Crisis Inquiry Commission. 2011. *The Financial Crisis Inquiry Report*. Washington, DC: National Commission on the Causes of the Financial and Economic Crisis in the United States.

Fligstein, Neil, and Adam Goldstein. 2013. "The Emergence of Financial Culture in American Households, 1989–2007". Working Paper.

Fourcade, Marion, and Kieran Healy. 2013. "Classification Situations: Life-Chances in the Neoliberal Era." *Accounting, Organizations and Society* 38: 559–72.

Freund, David M. P. 2006. "Marketing the Free Market: State Intervention and the Politics of Prosperity in Metropolitan America." In *The New Suburban History,* edited by Kevin M. Kruse and Thomas J. Sugrue, 11–32. Chicago: University of Chicago Press.

Glick, Reuven, and Kevin J. Lansing. 2009. "U.S. Household Deleveraging and Future Consumption Growth." *FRBSF Economic Letter* 16 (May).

Gowan, Peter. 1999. *The Global Gamble: Washington's Faustian Bid for World Dominance*. New York: Verso.

———. 2009. "Crisis in the Heartland: Consequences of the New Wall Street System." *New Left Review* 55 (February): 5–29.

Greenspan, Alan, and James Kennedy. 2007. "Sources and Uses of Equity Extracted from Homes." *Federal Reserve Board*, Finance and Economics Discussion Series: Division of Research & Statistics and Monetary Affairs.

Hart, Gillian. 2014. *Rethinking the South African Crisis: Nationalism, Populism, Hegemony.* Athens: University of Georgia Press.

Harvey, David. 2001. *Spaces of Capital: Towards a Critical Geography*. London: Routledge.

Hunt, Robert M. 2012. "Working Paper No. 02-21: The Development and Regulation of Consumer Credit Reporting in America". Federal Reserve Bank of Philadelphia.

Hyman, Louis. 2011. *Debtor Nation: The History of America in Red Ink*. Princeton, NJ: Princeton University Press.

———. 2012. *Borrow: The American Way of Debt*. New York: Vintage Books.

Jessop, Bob. 1990. "Regulation Theories in Retrospect and Prospect." *Economy and Society* 19: 153–216.

Johnson, Kathleen W. 2007. "Recent Developments in the Credit Card Market and the Financial Obligation Ratio." In *Household Credit Usage: Personal Debt and Mortgages*, edited by Sumit Agarwal and Brent W. Ambrose, 13–35. New York: Palgrave Macmillan.

Jones-Correa, Michael. 2006. "Reshaping the American Dream: Immigrants and the Politics of the New Suburbs." In *The New Suburban History*, edited by Kevin M. Kruse and Thomas J. Sugrue, 183–204. Chicago: University of Chicago Press.

Katz, Michael. 2012. *Why Don't American Cities Burn?* Philadelphia: University of Pennsylvania Press.

Krippner, Greta. 2012. *Capitalizing on Crisis: The Political Origins of the Rise of Finance*. Cambridge, MA: Harvard University Press.

Levy, Jonathan. 2012. *Freaks of Fortune: The Emerging World of Capitalism and Risk in America*. Cambridge, MA: Harvard University Press.

Mian, Atif, and Amir Sufi. 2014. *House of Debt: How They (and You) Caused the Great Recession, and How We Can Prevent It from Happening Again*. Chicago: University of Chicago Press.

Ott, Julia. 2011. *When Wall Street Met Main Street: The Quest for an Investor's Democracy*. Cambridge, MA: Harvard University Press.

Peck, Jamie A. 2010. *Constructions of Neoliberal Reason*. Oxford: Oxford University Press.

Peck, Jamie A., and Adam Tickell. 1992. "Accumulation, Regulation and the Geographies of Post-Fordism: Missing Links in Regulationist Research." *Progress in Human Geography* 16 (2): 190–218.

———. 1995. "Searching for a New Institutional Fix." In Post-Foridism: A Reader, edited by Ash Amin, 280–315. Oxford: Blackwell Publishers.

Picketty, Thomas. 2014. *Capital in the Twenty-First Century*. Translated by Arthur Goldhammer. Cambridge, MA: Harvard University Press.

Prasad, Monica. 2006. *The Politics of Free Markets: The Rise of Neoliberal Economic Policies in Britain, France, Germany, and the United States*. Chicago: University Of Chicago Press.

———. 2012. *The Land of Too Much: American Abundance and the Paradox of Poverty*. Cambridge, MA: Harvard University Press.

Riley, Dylan. 2007. "The Paradox of Positivism." *Social Science History* 31 (1): 115–26.

Schafran, Alex. 2013. "Origins of Urban Crisis: The Restructuring of the San Francisco Bay Area and the Geography of Foreclosure." *International Journal of Urban and Regional Research* 37 (2): 663–88.

Schwartz, Herman M. 2009. *Subprime Nation: American Power, Global Capital, and the Housing Bubble*. Ithaca, NY: Cornell University Press.

———. 2012a. "Finance and the State in the Housing Bubble." In *Subprime Cities: The Political Economy of Markets*, edited by Manuel B. Aalbers. Hoboken, NJ: Wiley-Blackwell.

———. 2012b. "Housing, the Welfare State, and the Global Financial Crisis: What Is the Connection?" *Politics & Society* 40 (1): 35–58.

Self, Robert O. 2003. *American Babylon: Race and the Struggle for Postwar America*. Princeton, NJ: Princeton University Press.

Sewell Jr., William H. 2005. *The Logics of History: Social Theory and Social Transformation*. Chicago: University Of Chicago Press.

———. 2008. "The Temporalities of Capitalism." *Socio-Economic Review* 6 (3): 517–37.

———. 2012. "Economic Crises and the Shape of Modern History." *Public Culture* 24 (2): 303–28.

Silver, Beverly J. 2003. *Forces of Labor: Workers' Movements and Globalization Since 1870*. Cambridge: Cambridge University Press.

Steinmetz, George. 2005. "Scientific Authority and the Transition to Post-Fordism: The Plausibility of Positivism in U.S. Sociology Since 1945." In *The Politics of Method in the Human Sciences: Positivism and Its Epistemological Others*, edited by George Steinmetz. Durham, NC: Duke University Press.

Sugrue, Thomas J. 1996. *The Origins of Urban Crisis: Race and Inequality in Postwar Detroit*. Princeton, NJ: Princeton University Press.

Walker, Richard. 1981. "A Theory of Suburbanization: Capitalism and the Construction of Urban Space in the United States." In *Urbanization and Urban Planning Under Advanced Capitalist Societies*, edited by Michael Dear and Allen Scott, 383–430. New York: Methuen.

Walker, Richard, and Ashok Bardhan. 2010. "California, Pivot of the Great Recession." *Institute for Research on Labor & Employment Working Paper*. University of California, Berkeley.

Wyly, Elvin. 2002. "Mortgaged Metropolis: Evolving Urban Geographies of Residential Lending." *Urban Geography* 23: 3–30.

Wyly, Elvin, and Jason Hackworth. 2003. "Social Polarization and the Politics of Low Income Mortgage Lending in the United States." Geogr. *Ann* 85 B (3): 149–65.

Wyly, Elvin, C. S. Ponder, Pierson Nettling, Bosco Ho, Sophie Ellen Fung, Zachary Liebowitz, and Dan Hammel. 2012. "New Racial Meanings of Housing in America." *American Quarterly* 64 (3): 571–604.