International Journal of
Urban and Regional Research

Volume 33.2 June 2009 355–71
International Journal of Urban and Regional Research
DOI:10.1111/j.1468-2427.2009.00874.x

Creating Liquidity out of Spatial Fixity: The Secondary Circuit of Capital and the Subprime Mortgage Crisis

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Abstract

Since the classic work of Henri Lefebvre and David Harvey, the 'secondary circuit of capital' has been a focal point for debate among critical urban scholars. Against the background of contemporary debates on financialization, this article investigates the institutional and political roots of the subprime mortgage crisis. Empirically, the article situates the current turmoil of the US mortgage sector with reference to a series of ad hoc legal and regulatory actions taken since the 1980s to promote the securitization of mortgages and expand the secondary mortgage market. Securitization is a process of converting illiquid assets into transparent securities and is a critical component of the financialization of real estate markets and investment. Specifically, I examine the crucial role played by the US Treasury Department's Office of the Comptroller of the Currency (OCC) and the Department of Housing and Urban Development (HUD) in creating the polices and legal-regulatory conditions that have nurtured the growth of a market for securitizing subprime loans. Theoretically, the article examines the subprime mortgage crisis as an illustration of the contradictions of capital circulation as expressed in the tendency of capital to annihilate space through time.

Introduction

In recent years, financial turbulence within the US subprime mortgage market has caused profound disruptions across the housing and real estate sectors that have intensified uneven development and spread economic chaos around the world. Increasing housing foreclosures, bank failures and plummeting stock markets have imperiled the global financial system and intensified conflicts among political and economic elites over the appropriate government response. A collapse of stock prices for many subprime lenders such as New Century Financial Corporation, Countrywide Financial and Citigroup have prompted federal officials to call for coordinated bank interventions, government hearings and more effective regulatory oversight. To mitigate and control the spreading financial crisis, the European Central bank injected over US $205 billion into the European financial markets in August 2007. In March 2008, the US Federal Reserve engineered the sale of Bear Stearns by agreeing to take over $30 billion of the troubled bank's mortgage-backed securities. In September 2008, the US federal government seized control of the Federal Home Loan Mortgage Corporation (FHLMC, nicknamed Freddie Mac) and the Federal National Mortgage Association (FNMA, or Fannie Mae) in a dramatic bid to restore faith in the embattled mortgage agencies and halt a vicious cycle that has driven the nation's economy into a steep downward spiral. The International Monetary Fund (IMF) has estimated global losses triggered by the subprime crisis will total nearly $1 trillion before the financial disaster eventually runs its course. In September 2008, US President George W. Bush called for a massive $700 billion rescue plan and argued that failure to move immediately would 'inflict painful and lasting damage' on the US economy.[1] Overall, an acute and protracted financial crisis that began in the subprime mortgage market has metastasized to encompass a variety of debt markets and financial markets around the world.[2]

This article examines the current crisis within the US housing finance sector as an illustration of the contradictions of capital circulation as expressed in the tendency of capital to annihilate space through time. In his classic works Karl Marx argued that one of the distinctive logics of capital accumulation is the tendency by capital to eliminate the spatial and temporal barriers to the realization of exchange values, to reduce to a minimum the time that it costs to produce and sell commodities. One of the major obstacles or barriers to realization of profit, as Marx noted, is the time involved in producing commodities, transporting them to market and exchanging them for profit. In the case of land and housing, real estate's time in circulation can distend for months or years as capital is tied up for varying periods of time in the process of production and exchange, and thereby cannot immediately be returned back to the capitalist in its enhanced form, M'. The longer the turnover time of real estate capital, the smaller the amount of surplus value. Speeding up and increasing the velocity of the circulation of capital and reducing the turnover time derives from the logic of the accumulation process. According to Marx (1973: 539–40):

> While capital must on one side strive to tear down every spatial barrier to intercourse, i.e. to exchange, and conquer the whole world for its market, it strives on the other side to annihilate this space with time, i.e. to reduce to a minimum the time spent in motion from one place to another. The more developed the capital . . . the more does it strive for an even greater extension of the market and for greater annihilation of space by time.

Over the century Marx's ideas and theories have influenced countless scholars interested in understanding the growth-oriented, technologically dynamic, and crisis-prone nature of capitalism and its effects on urban space. During the 1960s and 1970s, Henri Lefebvre and David Harvey drew attention to the physical landscape and built environment as a source of and barrier to capital accumulation. For Harvey (2001: 247) capitalism is a contradictory totality whose 'crowning glory' is the creation of a built environment to further accumulation. At the same time, this built environment is a 'prison' which can stifle profit making as inherited networks and infrastructures can impede market formation, and erect barriers and impediments to capital circulation. As a contingent and volatile process of socio-spatial restructuring, capitalist development consequently has to negotiate a 'knife-edge path' between preserving the fixed social structures that underpinned and supported past capital investments and destroying these structures in order to create new opportunities for investment. As a result, according to Harvey, we 'witness a perpetual struggle in which capitalism builds a physical landscape appropriate to its own condition at a particular moment in time, only to have to destroy it, usually in the course of a crisis, at a subsequent point in time' (*ibid*.: 247). Thus, the built environment which capitalism creates is a locus of fragmentation, polarization and perpetual upheaval.

1 Candidates, Bush urge reviving financial bailout. Associated Press [WWW document]. URL http://m.www.yahoo.com/ (accessed 30 September 2008).

2 Subprime mortgage lending is a general term that refers to the practice of making home loans to borrowers who have blemished (or non-existent) credit records, low wealth and incomes to afford the house payment, or lack the ability to document their income or credit history. Subprime mortgages carry high interest rates, adjustable interest rates, or exotic payment options (e.g. interest-only loans) (Gramlich, 2008; Shiller, 2008; for an overview of subprime mortgages and their effects on markets and communities, see http://www.responsiblelending.org/issues/mortgage/subprime-mortgage-crisis.html, accessed 20 October 2008).

My basic argument is that the housing finance sector is permeated by significant contradictions and irrationalities that reflect the disruptive and unstable financial process of transforming illiquid commodities into liquid resources. In the sections below, I argue that over the past several decades the process of 'securitization' — i.e. converting opaque and illiquid assets into liquid and transparent securities — has become a critical financial innovation that has allowed private and public actors to finance local property development and housing in the national and international capital markets. As a process of financial globalization, securitization consists in large part of homogenizing diverse commodities and weakening the institutional buffers between local, national and global markets. Before the 1980s, consumer loans like home mortgage loans, automobile loans, student loans and credit card receivables had been held in commercial and savings bank portfolios. From the 1980s on, securitization has enabled lenders and banking institutions to repackage these relatively illiquid assets into standardized, transparent and interest-bearing securities for resale in global securities markets. As a process of converting illiquid commodities into liquid resources, securitization reduces the uncertainty of buying and selling atypical assets (leases, homes, loans, etc.) by transforming them into marketing investments that have common features and characteristics. Thus, the development and integration of securities markets, the formation of large pools of private investment capital, and the development of new real estate financing tools — e.g. adjustable rate mortgages (ARMs), mortgage-backed securities (MBS), real estate investment trusts (REITs), among others — suggests a profound institutional transformation in which the real estate sector has come to resemble an economic sector composed of finance markets and instruments rather than a sector defined by producer markets (Aalbers, 2009, this issue; Sassen, 2009, this issue).

As I point out, the securitization of real estate is a process of creating liquidity out of spatial fixity that is characterized by complex struggles and contradictory interests. I conceptualize spatial fixity as a condition of non-exchangeability, non-transferability, immobility, illiquidity and long turnover times between buying and selling. Spatial fixity also refers to a commodity that has diverse, idiosyncratic and inconsistent properties such that it is difficult for buyers and sellers to know the value and property of what they are exchanging. A liquid asset or resource, in contrast, has homogeneous, predictable and standardized features that enable financial actors to convert it into cash quickly and easily. Exchangeability and marketability define liquid commodities. Liquidity is neither a psychological phenomenon nor a static and immutable feature of an asset. As a social construction, liquidity is variable, contingent and dependent on state actions and legal and regulatory frameworks to support the standardization, homogenization and exchangeability of commodities. State policies, regulations and legal actions can impede or facilitate the development of market liquidity. More important, creating markets for liquid capital reflects the politics of regulation, including political struggles and conflicts over policy formulation and implementation.

In so far as possible, securitization attempts to standardize and rationalize non-transparent and localized commodities (like mortgages) so that different buyers and sellers in different places around the globe can understand their features and qualities and exchange them easily. The securitization of mortgages is driven by a deep tension between local social relations and networks of real estate activity that generate knowledge about a home and its distinctive characteristics, and the reach of markets to extract that knowledge, reduce its unpredictability, and routinize and commodify it. Yet the spread of securitization to mortgages and other commodities is not a one-way process, nor is it necessarily functional, rational or inevitable. Rather, securitization has developed as a result of substantial and ongoing legal and regulatory reforms that have been implemented on an ad hoc basis to remedy past economic crises. Such an account eschews a 'capital logic' argument and examines the ways in which state policies and legal/regulatory actions to create and enhance the exchangeability of otherwise illiquid commodities are historically contingent, conflictual and contradictory. Past legal/regulatory actions have fed back into the US housing system by creating new financial flows, exacerbating uneven development, destabilizing markets and bringing greater financial volatility — as recently revealed through the subprime mortgage crisis. Understanding the changing institutional linkages between housing finance, securitization and state policy not only provides useful insights into the causes of the current financial crisis but also presents an opportunity for theoretical development into the sociology of mortgage markets. The conflicts over the securitization of illiquid assets — i.e. the creation of liquidity out of spatial fixity — represent intense struggles over efforts to annihilate space through time within mortgage markets and the real estate sector more broadly.

Real estate, housing, and the secondary circuit of capital

My empirical interest in the housing finance system stems from a larger theoretical interest in understanding the links between recent regulatory reforms and structural changes within the 'secondary' circuit of capital investment. Initial work by Henri Lefebvre (2003) and David Harvey (1978; 1985) drew attention to the use-value and exchange-value of real estate and the crucial distinction between the primary and secondary circuits of capital investment. The primary circuit involves capital moving in and out of manufacturing and industrial production, while the secondary circuit refers to capitalist investment in land, real estate, housing and the built environment. Influenced by Karl Marx, Lefebvre and Harvey maintained that a central component of the overall dynamic of capitalist development lay in the production of the built environment and the process of city building. Both stressed the important influence of private and public financial structures in channeling capital into metropolitan development and the tendency towards crisis within the primary and secondary circuits. The secondary sector, according to Lefebvre, absorbs economic shocks that periodically affect capitalist societies. Harvey's oft-cited thesis attributed the growth of postwar US suburbs to the switching of capital out of the primary circuit, where crises of overaccumulation were emerging at mid-century, into the secondary circuit of real estate investment (Harvey, 1975). In particular, Lefebvre and Harvey drew attention to several theoretical components that laid the groundwork for understanding the importance of land and real estate in the production of space: the relation of the built environment to the sphere of production, the role of capital accumulation in the built environment, the mediation of financial institutions, and the cyclical nature of capital investment in the primary and secondary circuits (for an overview, see Gottdiener, 1994).

Over the decades, the theoretical richness of Lefebvre's and Harvey's arguments have inspired scholars to investigate capital flows into and out of the real estate sector, identify the crisis tendencies and contradictions of the secondary circuit, and fashion new theoretical and analytical tools to examine real estate processes and their linkages with uneven metropolitan development. Early work by Feagin (1982; 1987) attempted to confront Harvey's thesis directly by examining the irrationality of accumulation and investment processes within the real estate sector. In her discussion of the 'relative autonomy' of the primary and secondary circuits, Haila (1998; 1991) pointed to the mobilization of particular organized interests — e.g. developers, local governments, financial institutions, and real estate brokers, among others — who are concerned not only with investing in property for speculative objectives but also in generating new investment opportunities distinct from those in the primary circuit. Beauregard's (1994) study of the 1980s building boom in the United States found little support for the capital switching thesis and, more important, pointed to the delinking of real estate investment from non-speculative investment criteria and use-value considerations.

Recent research on the secondary circuit eschews a conception of real estate as a by-product or outgrowth of 'industrial' capitalism and theorizes the real estate sector as having an intrinsic quality or *sui generis* character that forms an independent sector of the economy. Charney's (2001) case study of the Canadian real estate sector draws attention to how real estate companies attempt to capitalize on segmented real estate markets by using 'three dimensions of capital switching' within the secondary circuit. Real estate companies can switch between modes of operation, between property types, and between geographical areas (i.e. spatial switching). More recently, Aalber's (2007) examination of the Milan, Italy mortgage market suggests that capital switching does not necessarily reflect a post hoc response to economic crises per se. Capital switching can represent a proactive and consciously planned strategy taken by capital to exploit the lucrative opportunities that the built environment provides. Overall, the work of Charney, Aalbers and others views the real estate sector as a conceptually separate and analytically distinct circuit of capital investment that is organized by diverse networks of actors, organizations, and laws and public policies (Gotham, 2002; 2006). The secondary circuit is not the exclusive domain of separate real estate agents, but consists of a structure of banks, other financial conduits and diverse modes of agency, such as monopolistic and small real estate and financial firms, appraisers, public and private investors, and homeowners (Feagin, 1982; Gottdiener, 1994: 185–94).

Conceptualizing and analyzing the dynamics of the secondary circuit suggests a theory of circulating capital that emphasizes the irrationalities of the circulation process and the systemic crises that periodically affect real estate markets. In Volume 3 of *Capital*, Marx (1991: 78) argued that capital creates institutional and financial structures and networks that can become sources of ruinous competition and obstacles to future investment: 'The *true barrier* to capitalist production is *capital itself*', Marx theorized. From this perspective, real estate's time in circulation — i.e. the period of time from the production of value to the realization of value in commodity exchange — can be both an opportunity and constraint to profitability. On the one hand, real estate can aid capital accumulation, if it is a profitable avenue for commercial investment and a source of mass consumption in the case of homeownership. Investment in real estate, housing and land can be an important means of accumulating wealth and a crucial activity that pushes the growth of metropolitan areas in specific ways. Further, once built, residential real estate and housing provides access to other commodities, spatially embeds classes, races and ethnic groups, and channels the spatial growth and movement of industrial capital. On the other hand, real estate can be a barrier to capital accumulation, when its enduring qualities render it outdated and anachronistic, or when the financing needed to construct, sell, and rehabilitate it is unavailable. According to Gottdiener (1994: 191), investment in real estate generates bust-and-boom cycles of investment and 'propels the never ending process of property turnover and spatial restructuring whether an area needs it or not'. This process of 'creative destruction' and the destruction and demolition, expropriation and rebuilding, and rapid and incessant changes in use that it involves as a result of real estate speculation and obsolescence are the most recognizable signs of uneven metropolitan development in the United States.

In short, the analysis of the secondary circuit of capital reveals a basic contradiction. On the one hand, real estate is by definition illiquid, spatially fixed and immobile, relatively durable and costly, and defined by local particularities and idiosyncrasies. Geir Inge Orderud's (2006: 384) analysis of the Norwegian housing sector suggests that home building is 'a local business due to: a capacity restraint regarding local market knowledge; the interaction with local planning authorities; face-to-face meetings; and social relations'. On the other hand, capital is abstract, nomadic and placeless. As far as possible, capital seeks to eradicate local peculiarities and place distinctions that characterize the buying and selling of commodities and thereby eliminate the spatial barriers to the circulation of capital. It is this duality, or inherent contradiction, between immobile properties and mobile capital that defines modern capitalist urbanization and uneven development. In Lefebvre's (2003: 160) account of capitalist growth during the twentieth century, investment in the secondary circuit has assumed a life of its own as 'speculation henceforth becomes the principal source, the almost exclusive arena of formation and realization of surplus value. Whereas the proportion of global surplus value amassed and realized in industry declines, the amount of surplus value created and realized in speculation and property construction increases. The secondary circuit thus supplants the primary circuit and perforce becomes essential'. This tendency is echoed by Harvey (1985: 11) who argues that urban growth has changed 'from an expression of the needs of industrial producers to an expression of the power of finance capital over the totality of the production process'.

Harvey's points dovetail with recent debates on the 'financialization' of the economy and the impact of state legal-regulatory actions on the crisis tendencies of the real estate sector and mortgage markets. Knorr Cetina and Preda (2005: 1) note that 'financial activities are a defining characteristic not only of the corporate economy, but also of politics, the welfare and social security system, and general culture'. Financialization is a 'pattern of accumulation in which profit making occurs increasingly through financial channels rather than through trade and commodity production' (Aalbers, 2008: 151; see also Arrighi, 1994). As a multidimensional, contested and conflictual process, financialization refers to the growth of financial actors (banks, lenders, private equity corporations, etc.), new financial tools (mutual funds, asset-backed securities, hedge funds, etc.), and the increasing significance of financial firms in different areas of the economy such as real estate (Krippner, 2004; Gotham, 2006). In this sense, securitization is a critical component of the financialization process (Aalbers, 2009, this issue; Newman, 2009, this issue).

State actions and modes of intervention to securitize mortgages and promote the financialization process do not follow a single 'logic' of capital accumulation. Rather, struggles between different fractions of capital, competition over the allocation of resources and conflicts among state managers and capitalists themselves all influence the selection of different policies and laws to enhance the exchangeability of mortgages, guide investment in real estate and transform illiquid commodities into liquid resources. Importantly, the rationale of state policymaking and implementation is historical and contingent rather than determined by the position of the state vis-à-vis the circulation of capital. The financial system and the financialization process interconnect with the state through fiscal and regulatory policies that impact housing markets and try to promote liquidity within the residential, commercial and industrial real estate sectors. The state plays a key role in the dialectics of spatial fixity and liquidity through a variety of policies, legal-regulatory actions and infrastructural investment that can reinforce territorial coherence and promote flows between cities and regions. In the case of state policy, it is important to understand just how certain policies and programs can play a crucial role in enhancing the liquidity and exchangeability of mortgages, contributing to and exacerbating crisis tendencies within the finance and real estate sectors.

Government-sponsored enterprises (GSEs) and the growth of securitization

The subprime mortgage crisis and its destabilizing impact on cities and metropolitan areas has institutional and political roots in a series of ad hoc policies passed since the 1980s to expand the secondary mortgage market and promote the securitization of mortgages. In the 'primary' mortgage market, borrowers obtain loans from mortgage originators. In the 'secondary' mortgage market, investment banks, financial institutions and the two major government sponsored enterprises (GSEs) — the Federal Home Loan Mortgage Corporation (FHLMC, nicknamed Freddie Mac) and the Federal National Mortgage Association (FNMA, or Fannie Mae) — repackage mortgages as securities to sell to institutional investors in national and global capital markets. While the secondary mortgage market originated during the 1930s, it was not until the 1980s that Congress passed several statutes to encourage the securitization of relatively illiquid assets, such as mortgages, and attract new sources of investment to finance real estate (for overviews, see MacDonald, 1995; 1996). In 1981, Fannie Mae began issuing the mortgage-backed security (MBS) — i.e. a bond whose payments are based on the payments of a collection of individual mortgages. In 1983, the US Congress permitted Freddie Mac to issue the first collateralized mortgage obligation (CMO), a multiple class security with each class having a different maturity. A year later, in 1984, Congress passed the Secondary Mortgage Market Enhancement Act (SMMEA) that removed statutory restrictions on investments in private MBSs by federal chartered depository institutions. Congress designed this legislation to expand the secondary mortgage market to increase the supply of funds available to mortgage borrowers, transform mortgages into liquid financial instruments and facilitate the trading of mortgages. The Tax Reform Act of 1986 authorized Real Estate Mortgage Investment Conduits (REMICs), a financial tool that separated groups of mortgages (i.e. mortgage pools) into different risk classes as well as different maturity classes, thereby insulating the financial performance of securities issued from the financial position of the issuer.

The Savings and Loan (S&L) crisis of the late 1980s and early 1990s caused major disruptions in the flow of mortgage capital and mobilized political and economic elites to pass legislation to increase the liquidity of mortgages through securitization and encourage the growth of the secondary mortgage market. The Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) established the Resolution Trust Corporation (RTC) to liquidate the assets of hundreds of failed banks and moved S&L regulatory authority from the Federal Home Loan Bank Board to the Office of Thrift Supervision (OTS) (US House of Representatives, 1989a; 1989b). One of the primary goals of the FIRREA, and later amendments, was to bolster the supply of mortgage credit by requiring S&Ls to sell mortgages held in portfolio to the secondary mortgage market. The FIRREA also created a board of directors to supervise Freddie Mac and appointed The Department of Housing and Urban Development (HUD) as the major oversight body of the GSE. The supervisory and regulatory structure of the FIRREA was further rationalized through the Federal Housing Enterprises Financial Safety and Soundness Act (FHEFSSA) of 1992. This legislation created the Office of Federal Housing Enterprise Oversight (OFHEO) as a new regulatory office within HUD with the responsibility to 'ensure that Fannie Mae and Freddie Mac are adequately capitalized and operating safely'.[3] The FHEFSSA established risk-based and minimum capital standards for Fannie Mae and Freddie Mac, and established HUD-imposed housing goals for the financing of affordable housing. Overall, the passage of legislation and the establishment of federal policies and regulations helped define a legal infrastructure for regulating market transactions and enforcing contractual relations to expand the secondary mortgage market.

By the beginning of the millennium, institutional conditions were in place to enhance the liquidity of mortgages, thereby providing incentives to domestic and foreign investors to invest capital in residential real estate (Gotham, 2006). By this time, securitization had become the primary vehicle for financing the buying and selling of mortgages in the United States. In 1970, all sources issued only $452 million dollars worth of mortgage-backed securities. By 2001, this figure had increased to more than $1.2 trillion (Colton, 2002). We can see the enormous growth in the residential mortgage sector in the United States from 1965 to 2000 in Table 1. The growth in mortgage debt outstanding in the United States has paralleled the mortgage market's increased reliance on securitization as seen in the increasing prominence of mortgage pools which are groups of securitized mortgages that are sold on the secondary mortgage market. As the table shows, the percent of mortgage debt held by depository institutions has declined dramatically over the decades. In contrast, the amount of mortgage debt held by mortgage pools increased more than tenfold from 1980 to 2000, going from $224.1 billion dollars to $2,425 billion.

3 About Fannie Mae. Our Charter. Available at http://www.fanniemae.com/aboutfm/charter.jhtml (accessed 30 September 2008).

Table 1 Total outstanding Residential Mortgage Debt*, 1965–2000 (by type of holder in billions of constant, inflation-adjusted, 2000 US $)

Owner	1965	1970	1975	1980	1985	1990	1995	2000
Household sector	83.9	87.5	58.3	101.7	146.6	170.4	100.3	83.1
%	7.5	7.1	4.0	5.0	6.0	4.9	2.4	1.6
Government sector	40.7	98.3	137.9	200.4	281.6	282.0	325.2	299.3
%	3.7	8.0	9.4	9.9	11.5	8.1	7.7	5.7
Mortgage pools	1.0	12.5	77.6	224.1	578.4	1,305.8	1,744.0	2,425.9
%	0.1	1.0	5.3	11.1	23.6	37.4	41.5	46.6
Depository institutions	788.0	862.9	1,066.8	1,346.4	1,261.9	1,459.7	1,350.7	1,686.4
%	71.7	70.2	72.8	66.7	51.4	41.9	32.1	32.3
Other financial institutions	166.3	135.9	86.1	77.3	79.2	121.1	109.6	136.5
%	15.0	11.1	5.8	3.8	3.2	3.5	2.6	2.6
Asset backed securities	N/A	N/A	N/A	0.0	38.4	73.0	253.4	499.8
%				0.0	1.6	2.1	6.0	9.6
Others	18.6	33.6	45.1	68.2	67.4	75.0	318.9	78.4
%	1.7	2.7	3.1	3.4	2.7	2.2	7.6	1.5
Total mortgage debt	1,098.5	1,228.8	1,465.3	2,018.2	2,453.6	3,487.0	4,202.0	5,209.4

*Residential Mortgage Debt includes debt on single-family and multifamily residential mortgages. 'Depository institutions' include commercial banks, savings and loan associations, mutual savings banks and credit unions. 'Other financial institutions' include life insurance companies, private pension plans, state and local government retirement funds, finance companies and real estate investment trusts (REITs). 'Government sector' includes federal, state and local governments.
Source: Author's calculations based on data from the Board of Governors of the Federal Reserve System *Flow of Funds Accounts 1965–2000*

Over the last two decades, the creation and institutionalization of new financial instruments such as the MBS, structured investment vehicles (SIV), the collateral mortgage obligation (CMO), the collateral debt obligation (CDO) and others have uprooted or disembedded the financing of real estate from local networks of accumulation and enmeshed real estate financing within global capital markets. Unlike the MBS, which permits the bundling of homogenous risks in the securitization process, SIVs combine many forms of debt and risk to sell to different investors. CMOs are a more complex and sophisticated variation of the MBS that differs in the temporal structure of the expected payments. With a CMO or a CDO (collateralized debt obligation), payments are divided into tranches, with the first one receiving the first set of payments and the later ones taking their turn in the receipt of payments. CDOs and CMOs are assets and bonds that represent pools of MBSs and other securities that banks and lenders have collected and resecuritized. Mortgage companies and financial institutions can structure CDOs in a variety of ways and can include complex 'multi-tranche' structures that complicate refinancing and expose different investors to different degrees of risk. CDOs can be securitizations or re-securitizations of commercial loans, corporate bonds, other types of residential MBSs, commercial MBSs and debt. The development of structured securities such as the SIV, MBS, CMO and CDO is a process of enhancing the liquidity and exchangeability of mortgages by dividing and subdividing the cash flows into separate 'strips' or 'tranches' with different yields, maturities, and credit quality and risks (for overviews, see Green and Wachter, 2005; Dymski, 2007).

We can view the 'tranching process' of dividing and subdividing securities, securitizing and re-securitizing securities ad infinitum, and creating multi-tranche securities as a complex and unpredictable process of commodity rationalization, differentiation and fragmentation. The assumption underlying securitization and tranching is that the partitioning of a commodity into separate securities can enhance the liquidity or exchange-value of the overall mortgage. Yet mortgages have maturities that are non-standardized, unpredictable and uncertain. As illiquid commodities, mortgages require messy maintenance and labor-intensive upkeep to maintain their value. Collecting monthly payments, making sure real estate taxes are paid, keeping track of slow-pay and no-pay borrowers, and sending out annual statements of interest and taxes paid all require a costly infrastructure of institutions and networks of organizations. Transforming mortgages and other long-term debt into securities is an attempt to bring greater liquidity, rationalization and standardization to the process of buying and selling complex commodities that have a variety of use-values and exchange-values, a process that is fraught with difficulty, conflict and struggle. Thus, the development of securitization and other financial tools to transform illiquid assets into liquid securities — e.g. MBSs, CDOs, CMOs and so on — represent attempts by economic actors and financial institutions to minimize and eliminate the obscurity and opaqueness of the mortgage commodity and enhance the transparency and understandability of exchange. SIVs, CMOs, CDOs and so on transform risk in unique ways by generating exposures to different 'slices' or tranches of the securitized mortgage. The major contradiction is that these financial tools reflect and reinforce the cyclical dynamics of overaccumulation and devalorization that are a *sine qua non* of capitalism. As the subprime mortgage crisis illustrates, the process of securitization has become a barrier to profit making and investment wherein volatility and ephemerality are endemic.

The subprime mortgage crisis and the role of the US federal government

One popular view shared by many journalists and researchers is that the subprime mortgage crisis can be explained with reference to 'deregulation' or lax regulation by federal and state agencies (Knox, 2007; Toplin, 2007; CBS News, 2008; Weissman, 2008). The problem with such terms is that they only capture the withdrawal of the state from regulating the real estate and finance sectors and do not register the ways in which different state institutions and agencies formulate and implement various policies, statutes and legal-regulatory frameworks to encourage and facilitate subprime lending. Two major regulatory agencies of the US Federal Government, the US Treasury Department's Office of the Comptroller of the Currency (OCC) and the Department of Housing and Urban Development (HUD), have played a catalytic role in the growth of subprime lending and the evolving financial crisis. In the case of the OCC, in 2001 federal regulators pre-empted state consumer protection laws that had previously policed and regulated the operating subsidiaries of national banks. Through this intervention, federal laws immunized the subsidiaries from state regulatory and banking laws and thereby opened up a fertile market for firms to invest in the fast-growing but opaque world of MBS, CMOs, CDOs and other exotic instruments involving subprime mortgages. In addition, by allowing Fannie and Freddie to count subprime securities toward federally set goals for encouraging mortgage lending to allow low-income borrowers to become homeowners, HUD helped nurture an exploitative market for subprime lending organized and sustained by predatory lending practices. In the examples of both the OCC and HUD, state policy to speed up and extend real estate and financial flows between regions and communities helped exacerbate the crisis tendencies of capital circulation leading to the subprime mortgage crisis that now affects the US financial system and is spreading globally.

Before the mid-1990s, the vast of majority of mortgages bundled into securities were traditional prime loans that lenders sold to consumers who could prove they could afford to buy homes. Beginning in the late 1990s, however, lenders began bundling subprime mortgages into private-label MBSs that did not have the federal government's backing and contained little if no credit enhancement. To create a market for their products, many lenders engaged in a variety of deceptive and 'predatory' lending practices to sell mortgages to borrowers with poor credit. Some were misrepresenting the terms of loans, making huge loans to people who could not repay, making loans with deceptive 'teaser' rates that later ballooned, packing loans with undisclosed charges and fees, or even paying illegal kickbacks (Newman, 2009, this issue). In one publicized case, EMC Mortgage, a subsidiary of Bear Stearns, serviced hundreds of thousands of subprime mortgages and hit customers with unauthorized fees, misrepresented how much money homeowners owed, harassed consumers with property inspections, neglected to keep track of loan balances, escrows and payment histories, and failed to tell national credit report bureaus that borrowers were disputing false reports (Harney, 2008). To combat the surge in predatory lending, several state legislatures passed anti-predatory legislation. In 1999, the state of New York sued Delta Funding Corporation for predatory lending. In 2002, attorneys general from all 50 states entered into a settlement with Household Finance that resulted in restitution of $484 million to victims of predatory lending. In 2006, attorneys general and banking regulators in 49 states settled a $325 million lawsuit with Ameriquest Mortgage Company for engaging in predatory lending practices. During these years, state legislatures in North Carolina (1999), Georgia (2002) and New York (2003) passed anti-predatory lending laws to curb exploitative banking practices (Bagley, 2008; Day, 2008; Spitzer, 2008).

National banks and their lending subsidiaries bitterly fought these new state regulations and embarked on an aggressive campaign to prevent state governments from passing and enforcing laws to halt predatory lending practices. In 2001, the US Treasury Department's Office of the Comptroller of the Currency (OCC) ruled that banks' 'operating subsidiaries' should not be subject to state control. Two years later, the OCC issued a series of formal opinions and new rules that negated all state predatory lending laws, thereby rendering them unenforceable. With state laws nullified, national banks and their state subsidiaries could engage in a variety of exploitative lending practices that states had hoped to stamp out. In response, all 50 state attorneys general, and all 50 state banking superintendents, actively fought the new rules and launched suits against the

Table 2 Mortgage originations, 2001–06

Year	Total Mortgage Orginations (Billions)	Subprime Originations (Billions)	Subprime Share in Total Originations (% of $ value)	Subprime Mortgage Backed Securities (Billions)	% Subprimes Securitized (% of $ value)
2001	$2,215	$190	8.6	$95	50.4
2002	$2,885	$231	8.0	$121	52.7
2003	$3,945	$335	8.5	$202	60.5
2004	$2,920	$540	18.5	$401	74.3
2005	$3,120	$625	20.0	$507	81.2
2006	$2,980	$600	20.1	$483	80.5

Source: US Congress, Joint Economic Committee (2007: 18)

OCC. The national banks and their allies maintained that an unduly burdensome patchwork of state rules and regulations was stifling profits and denying access to credit for consumers. The states argued that their role was lawful and necessary to protect consumers from predatory lending practices and other potential violations. In the end, in 2007, the US Supreme Court ruled in a 5-to-3 decision that states could not regulate the mortgage-lending subsidiaries of national banks (Barnes and El Boghdady, 2007). By this time, however, the OCC had successfully created the legal conditions to encourage predatory lending and permit the aggressive mass marketing of unaffordable and exploitative mortgage products to vulnerable consumers.

The creation of a market for securitizing subprime loans received added impetus with the transformation of HUD's mortgage policies during the 2000s. Early on, HUD restricted Fannie and Freddie's purchase of subprime mortgages, maintaining that the federal government would not credit the GSEs for loans they purchased that had high costs or that lenders granted without regard to the borrower's ability to repay. By 2004, HUD had revised its housing policy and allowed Fannie and Freddie to count billions of dollars they purchased in subprime securities as fulfilling their government mandate to help encourage homeownership among low-income people. From 2001 to 2004, Freddie and Fannie's purchase of subprime securities skyrocketed from $38 billion to $172 billion. The subprime-mortgage-backed securities bought by the two GSEs as a percentage of the total subprime-mortgage-backed securities market increased from 22% to 44% during these years. 'The market knew we needed those loans', according to Sharon McHale, a spokeswoman for Freddie Mac. The higher goals 'forced us to go into that market to serve the targeted populations that HUD wanted us to serve' (Leonnig, 2008). Encouraged by HUD mortgage policy and aided by Fannie and Freddie's purchases of subprime loans, lenders eased credit standards for riskier subprime loans to take advantage of burgeoning profit-making opportunities. In 2000, only 22% of loans originated by lenders were loans that did not require proof of ability to pay. By early 2007, approximately 60% of all loans were 'low/no document' loans. As a result of HUD mortgage policy and the actions of Freddie and Fannie, profits in the subprime market exploded during these years, going from $190 billion in 2001 to $625 billion in 2005 (see Table 2).

From the late 1990s through 2005, rising housing prices contributed to a liquid mortgage market characterized by low loan-default rates, increasing homeownership and escalating subprime lending. The actions of the OCC and HUD encouraged lenders to increase their supply of subprime loans and thereby create new outlets for securitizing mortgage debt. The Achilles heel for subprime lending was the optimistic assumption that home values and prices would increase indefinitely. Nationally, average housing prices peaked in the second quarter of 2006 and entered into a period of decline that resulted in the failure of 80 subprime mortgage companies in the first half of 2007 (Dymski, 2007: 23). Once housing prices stopped rising, subprime borrowers could not refinance their homes to pay off their loans before they reset to higher and unaffordable interest rates, a condition that produced a vast supply of foreclosed, vacant and unsold homes. By 2008, the United States was facing huge increases in loan delinquencies and housing foreclosures, a perilous situation that has contributed to widespread bank losses and declining tax revenues and major budget deficits for local and state governments.[4] The crisis in home lending reached a major milestone in March 2008 with a report from the Mortgage Bankers Association (MBA) finding that 2.04% of outstanding mortgages were in foreclosure in the fourth quarter of 2007, an all time high. The announcement came shortly after a Federal Reserve study showing that the ratio of owner equity to debt in US homes fell below 50% in 2007, a first since 1945 (Merle and Murakami Tse, 2008). Today we witness a crisis of overaccumulation and devaluation in the financial and real estate markets, in which the consumers cannot afford homes to own or rent, and banks and mortgage companies have reduced their lending in times of uncertainty.

These points resonate with Harvey's famous thesis in the *Limits to Capital* (1999: 83) that capital 'as value in motion' is always under the threat of devaluation through decelerated turnover time. Production and realization of profits through real estate takes time: entrepreneurs and firms have to invest capital prior to the production of the built environment, and they can only realize profits after the completion of production and the selling of the spatially fixed commodity. Thus, there is always a time lag between investment and payoffs in real estate. On the one hand, the long-turnover time of real estate can provide an attractive linchpin for capital at times when the average rate of profit is low, due to its long amortization, diverse use-values and heterogeneous markets. On the other hand, the long turnover time of real estate increases its risk due to the unpredictability and uncertainty of the economic and political environment. As capital immobilized in space, real estate always faces intersecting and multiple crises of realization, repayment and falling rates of profit. To solve this contradiction, the state must liberate capital from its spatial fixity, reduce the uncertainty and unpredictability of exchange, raise the rate of profit to make room for new investments and promote flows between territories.

The above points suggest that creating liquidity out of spatial fixity is an uneven, multidirectional and open-ended restructuring process that is frequently associated with crisis-generating breakdown and instability. While the logic of capital creates opportunities and obstructions for change, various actors and organized interests interpret and construct the rules of the game through politics, policies, socio-legal regulations, organizational procedures and other contingent ways. The interpretations of, and responses to, accumulation crises create new openings and prospects for transformation as well as legitimating calls for new policies to extend and enhance existing institutional structures of profit making. State policies and interventions ultimately create a 'catch 22 loop' whereby 'old' policies produce crises of liquidity that inevitably bring forth calls for 'new' policies that, once implemented, create further contradictions and unforeseen crises, a situation that then generates a new round of calls for 'reform', as we see with the subprime mortgage crisis and its spread to global capital markets. Thus, the politics of liquidity takes place on an aggressively contested institutional landscape in which past socio-spatial inequalities and regulatory arrangements interact with current political conflicts and struggles to control investment and accumulation. The establishment of new governance structures, state policies and socio-legal arrangements to create liquid resources then provides a political arena in and through which class fractions and other organized interests battle to dominate and exploit markets and control the accumulation process.

4 For information, data sources and analysis of housing foreclosures and subprime lending, see Center For Responsible Lending. http://www.responsiblelending.org/index.html (accessed 15 October 2008); see also Wyly *et al.* (2006).

In short, the development of the MBS, CDO, CMO, SIV and other mortgage financing instruments underscores capital's relentless drive to annihilate space by time, to increase the liquidity of illiquid assets like mortgages. As active participants in promoting new financial innovations, banks and financial institutions have created new liquidity enhancement tools to reduce the turnover time of capital by increasing the fluidity and velocity of market transactions. In buying the original mortgages and then buying the tranches for the CDOs, powerful banks and lending institutions could leverage diverse kinds of investments and profit enormously. Financial giants such as Bear Stearns, Leman Brothers, J.P. Morgan, Merrill Lynch and other lending institutions originated, packaged and sold subprime mortgages to diverse buyers including British hedge funds, German savings banks, oil-rich Norwegian villages and Florida pension funds, among others. While securitization and the tranching process multiplied investors' options and flexibility, they offered only a short-term temporal fix to the crisis-prone nature of capitalism. The negative consequences of securitization include greater instability and volatility in the mortgage market, greater speculative investment and increased levels of indebtedness. In the United States, the rise and fall of the subprime mortgage market has followed a conventional boom–bust lending trajectory, in which intense growth and profit making leads to market paralysis, financial sector imbalances and accelerating inequalities (Leyshon and Thrift, 1995; Brenner, 2002). Fears over MBSs, CDOs, CMOs and SIVs are raising doubts about the resilience and robustness of mortgage markets and fueling a contagion effect, with investors now shy of a wide range of securitized products. Thus, the subprime mortgage crisis is instructive in the impact state laws and financial regulations have on exacerbating the economic problems that they were supposed to remedy.

Conclusions

The subprime mortgage crisis has exposed the inability of securitization to address the long-running problems of uneven development and the tendencies toward market instability, uncertainty and volatility in capitalist economies. Over the last few years, the subprime crisis has mushroomed into a worldwide financial crisis; vast quantities of capital are being devalued as financial firms cannibalize and liquidate each other in a battle to undermine competition and dominate mortgage markets. We cannot deduce the specific regulatory arrangements and policy outcomes in advance because they are the product of inter- and intra-class conflicts over the formulation and implementation of state policy. Today, the combination of increasing concern with exploitative loan practices, housing foreclosures, bank failures and persistent housing affordability problems are igniting a new round of regulatory battles over housing finance. In 2008 the Federal Reserve proposed new rules to curtail abuses in mortgage lending, including barring lenders from penalizing subprime borrowers who pay their loans off early, forcing lenders to make sure that subprime borrowers set aside money to pay taxes and insurance, restricting loans that do not require proof of a borrower's income (Aversa, 2008).

Mortgage industry officials, on the other hand, have bitterly fought these rules and proposed alternative plans and policies. Thus, current battles pit housing activists and advocates for victims of subprime and predatory lending against powerful corporate banking interests bent on shaping new regulations to promote free markets and entrepreneurialism. Speculative investments, untraceable financial schemes and complex international financial networks make up this entrepreneurialism and, when combined with an increasingly global investment environment and deregulated system, exacerbate the potential for an even deeper crisis in housing finance than what we have seen in recent years.

The empirical analysis and theoretical arguments I have laid out in this article provide a challenge to accounts that maintain that mortgage finance policy and securitization strategies have been successful in promoting efficient markets and optimal economic development. Mainstream economics assumes the existence of market equilibrium, harmony and optimization; promotes the idea that market forces of supply and demand promote efficiency and overall social betterment; and views land-use and metropolitan development as resulting from individual self-maximizing behavior operating a 'free market' that is unfettered by the actions of power groups or elites. Yet the subprime mortgage crisis and the spreading financial chaos suggest that disequilibrium, instability, volatility and cycles of boom and bust (overaccumulation and devalorization) are more valid for explaining the dramatic and chaotic transformations that are affecting cities and metropolitan areas. In contrast to mainstream work in economics, which has sought to discover the stable and progressive aspects of capitalism, the account I have offered here exposes the limits and contradictions of the securitization process. Thus, the subprime mortgage crisis reveals the intense destructive power that lurks behind the facade of societal progress and economic affluence. Just as capital continually renders obsolete and irrelevant the built environment and socio-spatial structures it creates, capital continually mobilizes new territories and spaces as sources of investment and profit. In this sense, the creation and destruction of mortgage markets and financing tools are premised upon the 'production of space' (Lefebvre, 1991).

Finally, my conceptualization of securitization as a process of creating liquidity out of spatial fixity dovetails with theoretizations that emphasize the conflictual, contested and deeply contradictory nature of uneven geographical development. Many scholars have noted that uneven development is endemic to capitalism and represents a key expression of capital's insatiable drive to mobilize spaces, places and territories as forces of production (Smith, 1984; Harvey, 1985; Brenner and Theodore, 2002). Uneven development is both a medium of intercapitalist competition and class struggle, and an evolving socio-spatial organization through which the process of securitization has unfolded. At the same time, securitization is permeated by tensions, antagonisms and conflicts that are destabilizing the process of capital accumulation and circulation within the real estate sector. Just as capitalist regulation and profit making occur as systems of rules, habits and norms that constrain action, securitization is a set of socio-legal relations that define mortgages and tranches as standardized and exchangeable commodities. As a result, securitization has developed through the production of historically specific patterns of socio-spatial organization, uneven development and legal-regulatory policy. Today, the profitability and efficacy of securization is being questioned as the specter of devalorization rattles financial markets, and financial firms and banks raise doubts about the long-term resilience and robustness of market liquidity. Thus, securitization has become contested terrain, a political arena in and through which struggles over the regulation of housing finance and real estate, and their associated contradictions, are being articulated and fought out both domestically and internationally.

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Résumé

Depuis les travaux de référence d'Henri Lefebvre et de David Harvey, le 'circuit secondaire des capitaux' a suscité de nombreuses discussions entre spécialistes critiques de la ville. Avec en toile de fond les débats contemporains sur la financiarisation, cet article étudie les racines institutionnelles et politiques de la crise des subprimes*. Sur le* *plan empirique, il situe le bouleversement actuel du secteur américain des prêts hypothécaires par rapport à une série de mesures de Droit et de réglementations spécifiques adoptées depuis les années 1980 pour promouvoir la titrisation et le marché secondaire des crédits hypothécaires. La titrisation, qui permet de convertir des actifs peu liquides en valeurs mobilières transparentes, est une composante essentielle de la financiarisation de l'investissement et des marchés immobiliers. Une attention particulière est accordée au rôle crucial qu'ont joué, aux États-Unis, l'autorité de surveillance des banques relevant du ministère des Finances (OCC), ainsi que le ministère du Logement et de l'Urbanisme (HUD), dans la création des cadres et des conditions juridico-réglementaires qui ont nourri l'essor du marché de la titrisation des prêts hypothécaires à risque. Sur le plan théorique, l'article analyse la crise des* subprimes *comme une illustration des contractions de la circulation des capitaux, ces derniers tendant à anéantir l'espace par le temps.*