# The Secondary Circuit of Capital Reconsidered: Globalization and the U.S. Real Estate Sector[1]

Kevin Fox Gotham
*Tulane University*

The author examines the U.S. real estate sector to show how the state shapes global real estate flows and networks of activity through the creation and control of liquid resources. The analysis focuses on the role of state laws and regulations in the expansion of the mortgage-backed securities markets and the development of real estate investment trusts (REITs). These institutional developments represent a series of ad hoc state efforts to "delocalize" residential and commercial property, and embed real estate financing within global capital markets. Rather than viewing globalization as weakening the state, the author argues that the U.S. state's capacity to influence the degree and development of liquidity is a powerful mechanism of globalization.

## INTRODUCTION

In this article, I examine the restructuring of the U.S. real estate sector to highlight the role of state regulatory actions and legal institutions in the development of economic globalization. A number of researchers maintain that nation-states are deeply implicated in the process of globalization, but they disagree over the extent and form. On the one hand, scholarship has encountered difficulty in validating claims that globalization weakens, disempowers, or bypasses the state (Guillen 2001; Held

[1] This article is based on research initially funded by a fellowship from the Tulane University Committee on Research. I wish to thank Robert Antonio, Christopher Chase-Dunn, Joel Devine, G. William Domhoff, Joane Nagel, Harland Prechel, Beth Rubin, William Sites, Arthur Stinchcombe, James D. Wright, and the *AJS* reviewers for comments on earlier drafts. I will be at the National Science Foundation until July 2008, after which I can be reached at Tulane University. Direct correspondence to Kevin Fox Gotham, National Science Foundation, Social and Political Sciences Cluster, 4201 Wilson Boulevard, Room 995, Arlington, Virginia 22230. E-mail: kgotham@nsf.gov

© 2006 by The University of Chicago. All rights reserved.
0002-9602/2006/11201-0006$10.00

and McGrew 2002; Sassen 1999, 2000, 2001). On the other hand, globalization studies lack specificity in analyzing how and under what conditions states facilitate the creation and extension of global flows and networks of economic activity. One major theme in the globalization literature concerns the process of deterritorialization whereby social actors and activities become disembedded or "uprooted" from local- or national-based social conditions and restructured across time and space (Brenner 1999*a*, 1999*b*; Cetina and Bruegger 2002; Giddens 1990, pp. 21–29; Sites 2000). Yet we know little about the determinants or mechanisms underlying this deterritorialization process. The significance of real estate is that it is an immobile and spatially fixed commodity that is subject to the fluid dynamics and anarchic character of capital investment.[2] It is this duality, or inherent contradiction, between nontransportable properties and fluid capital that makes the study of real estate especially important for analyzing and explaining globalization, particularly the process of deterritorialization. Once we clarify how commodity relations become disembedded from local conditions of financing and production, we can begin to understand the conditions under which social activities become globalized.

I draw upon work in institutional theory and economic sociology to explain how the state influences globalization through the creation and control of liquid resources. Cross-border flows and exchange depend on the creation of liquidity which is a product of an elaborate and complex set of rules, regulations, and institutions that are established by the state. Institutions do the legal and organizational work to enhance liquidity by homogenizing and standardizing knowledge of assets.[3] Scholars have yet to develop the theoretical implications of this state capacity for theories of globalization and state-economy relations. In this article, I focus on the state as an institutional structure and ensemble of actors to show how state actions have attempted to transform a highly localized, diverse, and complex commodity (real estate) into a standardized and transparent security that can be bought and sold on a global scale. I argue that while state and local governments embed the production and exchange of real

[2] Another significant feature of real estate is that it is one of the largest economic sectors in the United States. In 2000, it represented more than 11% of the U.S. GDP at $1.1 trillion (U.S. Department of Commerce, Bureau of Economic Analysis, 2002, "Gross Domestic Product by Industry," *Survey of Current Business*, November. http://www.bea.gov/bea/dn2/gpo.htm).

[3] By *institutions* I mean rules, including laws, collective understandings, and informal constraints, that provide the framework in which social action and market building takes place (Fligstein 2001; Hollingsworth and Boyer 1997; Immergut 1998; Dobbin 1994). This definition includes property rights, governance structures, conceptions of control, and rules of exchange (Fligstein 1996).

estate in particular locales, federal regulations and congressional statutes have attempted to deterritorialize real estate by enmeshing the financing of residential and commercial property within global capital markets. More broadly, I contribute to economic sociology by providing evidence for the increasing salience of finance for the nature of real estate (Helleiner 1994; Hollingsworth and Boyer 1997; Krier 2005; Krippner 2004; Vogel 1996). Over the years, Henri Lefebvre's ([1970] 2003, pp. 159–60) and David Harvey's (1978) seminal work on circuits of capital and the role of investment in property has prompted investigations of real estate as a "secondary circuit" of investment that is relatively autonomous from the primary circuit of manufacturing (Beauregard 1994; Fainstein 1994; Gottdiener 1994). In contrast to a long line of research that has studied real estate as a secondary circuit composed of producer markets, I argue that real estate has a *sui generis* quality that forms an independent sector of the economy (Charney 2001, 2003). My goal is to provide insight into the role of the state in creating the institutional conditions and legal mechanisms to transform real estate into a liquid financial asset that is abstracted from local conditions.

I begin with a general discussion of how the state as an actor and institutional structure shapes the development and degree of liquidity through the creation and enforcement of property rights, rules of exchange, and other regulatory laws. Next, I specify my research design and provide a set of empirical indicators of real estate globalization. I then document changing real estate flows and foreign direct investment in U.S. real estate. In the second half of the article, I focus on three institutional mechanisms the U.S. federal government has created to transform the spatial organization of real estate relations and increase the volume of real estate flows and foreign investment. First, I examine the development of the secondary mortgage market and the role of government-sponsored enterprises (GSEs) in restructuring the U.S. housing finance system. In particular, I explain how the two main GSEs, the Federal National Mortgage Association (FNMA, or nicknamed Fannie Mae) and the Federal Home Loan Mortgage Company (FHLMC, or nicknamed Freddie Mac), have developed a global investor base to finance housing in the United States, thereby channeling diverse forms of capital into housing finance. Second, I examine the development and expansion of securitization and the growth of the commercial mortgage-backed security market. Securitization is a major financial invention that allows real estate to be financed in global securities markets that are disconnected from local property markets. Third, I explore the role that state policy has played in encouraging the growth of real estate investment trusts (REITs). As I show, these three institutional developments represent a series of ad hoc state efforts to increase the liquidity of residential and commercial property and attract

new sources to finance real estate. In my analysis of real estate, I show the usefulness of thinking about globalization from a perspective that emphasizes the facilitative and constraining role of the state in the development of cross-border flows and the deterritorialization of social relations.

## REAL ESTATE, LIQUIDITY, AND GLOBALIZATION

Real estate stands at the nexus of global forces of transnational flows and networks of activity, and local forces of territorial embeddedness and place particularity. Unlike other commodities that people buy and sell in markets, real estate is a unique commodity that is immoveable, relatively durable, costly, and that has its own market. Because commercial and residential real estate involves a relatively high-risk and sometimes long-term investment, real estate itself is a "commodity in tension" that stands in sharp contrast to the "market ideal of an immediate-turnaround, high-return investment" (Bartelt 1997, pp. 126, 128). Hommels (2000) and Weber (2002) note that real estate has an obdurate quality that resists frequent modification and is therefore much more sensitive to devalorization than machinery and other forms of fixed capital. Unlike cash, which is liquid and homogeneous, real estate is illiquid and heterogeneous, involves high transaction costs upon sale, and lacks transparency. Several sources of illiquidity define the real estate commodity. First, real estate possesses a variety of residential use values. Different kinds of actors within the real estate sector—real estate agents, developers and builders, and owners and consumers—can use the same piece of land or house in a variety of ways depending upon the social context. While some individuals are interested in rapid profit and turnover (e.g., speculators and builders) others can wait years before making a profit by investing in real estate and housing (e.g., home owners). Households vary in the kinds of use values they want from residence, how committed they are to realizing capital gains exchange values from their home, and how much they can afford and want to spend on a home (Carruthers and Stinchcombe 1999, pp. 363–65). Second, multiple financial risks are associated with the buying and selling of different types of real estate, including fluctuations in capital availability for financing, competition in the local real estate market, limited liability protection, and changing tax laws (for an overview, see Geltner, MacGregor, and Schwann 2003).[4] Third, real estate markets vary by size,

[4] The real estate sector also possesses several distinctive features that attract investment. Real estate is considered to be a superior hedge against inflation, real estate assets are an investment opportunity for corporations to diversify out of stocks and bonds, and real estate assets provide greater tax benefits in comparison to other investments (Haila 1991, 1998; Downs 1986; Pyrke 1994; Coakley 1994).

volume of turnover, legislative and judicial regulations, differences in valuation methods, differing roles of professional property consultants, and differences in real estate training and practice (Charney 2001; Beauregard 1994).

The sociologically interesting problem concerns how a spatially fixed and opaque commodity like real estate is transformed into a transparent asset that diverse buyers and sellers, in different places, can easily understand and exchange. Determining a property's exchange value requires detailed knowledge of the local real estate market, systems of financing, and networks of activity. Foreign and domestic investors that operate in many places often lack in-depth knowledge and familiarity with specific real estate markets (Edgington 1995). This problem is exacerbated by the fact that the real estate sector is segmented into commercial and residential subsectors; differentiated by office, industrial, and retail property types; and segmented spatially as different cities experience different building cycles (Beauregard 1994; Charney 2001; Fainstein 1994). The distinguishing feature of real estate, local specificity and heterogeneity, makes it difficult to communicate information about assets, liabilities, and opportunities to a large audience of investors in a clear and credible manner. Given these problems, the creation of liquidity to facilitate cross-border exchange would seem to be a formidable obstacle. Sociologists and economists recognize that liquidity presumes that market actors understand and accept commodities as transparent, homogenized, and standardized (Bodie and Merton 1995; Carruthers and Stinchcombe 1999; Fisher 1907; Hayek 1945). Thus, creating liquidity out of spatial fixity is a problem of creating shared agreements and stable social relations that allow economic exchange to occur. These agreements and relations produce generalized knowledge so that a variety of market actors can comprehend value and risk, interpret the behaviors of other buyers and sellers, and act to control situations (Cetina and Bruegger 2002; Fligstein and Sweet 2002; Fligstein and Mara-Drita 1996). Consequently, explaining the ways in which real estate becomes a liquid commodity is essential for understanding the processes that create and reinforce global flows and networks of activity.

To explain these processes, one must account for the role of state structures and legal/regulatory actions in the creation and routinization of liquidity. As Carruthers and Stinchcombe (1999, p. 356) note, liquidity is not dichotomous but varies by degrees. Various legal regulations and organizational strategies can facilitate or impede liquidity. In the United States, the institutionally fragmented and decentralized structure of the U.S. state has fostered spatially distinct and segmented locations for different types of real estate activity (e.g., residential, industrial, and commercial land use), a condition that buttresses the illiquidity of real estate. National land-use planning and real estate development are restricted to

the extent that state and local governments exercise political authority within their own geographical areas. The existence of 50 separate governments combined with hundreds of municipalities in metropolitan areas has played an important role in the development of regional and local real estate markets. Indeed, the principle power through which local jurisdictions can regulate economic activity is through the control of land and real estate (Molotch 1976; Logan and Molotch 1987). For the most part, real estate law in the United States is locally based and refers to an amalgam of recording regulations, banking laws, zoning laws, subdivision regulations, private deed restrictions, land-use regulations, building codes, insurance laws, and property tax law. At the same time, real estate laws and regulations establish institutional practices and rules of exchange that coordinate local real estate activity among organizations in a particular real estate sector (residential, commercial, or industrial real estate), and, more important, create distinctive locations for investment and economic activity. The implication is that the decentralized and fragmented institutional structure of the state has influenced the development of legal forms that reinforce the place specificity and illiquidity of real estate, and, thus, constrain the development global real estate flows.

While federalism affords subnational governments great leeway in defining distinct locations for different real estate activities, states have also developed a series of institutions, regulations, and financing mechanisms to increase the liquidity of real estate. National-level state activities have included funding and legislation for large-scale slum clearance and urban renewal programs, home building and home ownership subsidies to engineer suburban development, deregulation of financial markets in the 1970s and 1980s, and support for new forms of real estate financing (Downs 1986; Florida and Feldman 1988; Florida 1986). State and local governments have been instrumental in passing legislation, establishing charters, and making other property rights decisions that have defined the legal infrastructure for regulating market transactions, enforcing contractual relations, and subsidizing property development. Zoning laws, building codes, and other local building ordinances shape and constrain the actions of builders and developers. State governments license real estate brokers and agents and regulate the actions of banks and other mortgage-lending and insurance agencies. Furthermore, the courts enforce all contractual agreements and arrangements in the sale or leasing of housing and real estate. Finally, public policies and regulations shape the spatial flow of money, constrain the availability of credit for some groups of people and businesses, and make it possible to extend credit to other groups to buy homes. As Weber (2002, p. 177) notes, because of the variety and obduracy of real estate, states attempt to “create a convergence of thinking” around such critical issues such as the economic prosperity of

commercial buildings, the relationship between investment and interest rates, sources of devaluation and disinvestment, and interrelationships between real estate prices and neighborhoods (Bryson 1997). A basic insight is that the state provides the political and legal framework that permanently shapes the production, regulation, and financing of real estate and other economic activities (Campbell and Lindberg 1990; Campbell, Hollingsworth, and Lindberg 1991; Prechel 2000). The state does this through the creation and enforcement of rules of exchange, property rights actions, and governance structures as both an actor and as an institutional structure.

The distinction between the state as an institutional structure and an actor is important for understanding the constraining and facilitative power of the state in the development of liquidity. State structures that reinforce local differences in real estate financing, laws, regulations, property rights, and contractual relations portend a variety of financial liabilities for buyers and sellers that stymie liquidity and, in turn, discourage extralocal exchange. Consequently, the creation of liquidity is a precondition for the development of cross-border transactions and interaction in global markets. I argue that the state's capacity to create and control liquid resources is a powerful mechanism of globalization. This argument is at odds with most accounts that emphasize the declining significance of the state in the global economy or the hypermobility of capital, or that posit a mutually exclusive relation between the national and the global (for overviews, see Guillen 2001; O'Riain 2000; Sites 2000).[5] As I point out, state actors have engaged in actions to direct real estate investment, alter perceptions of how real estate markets and financing operate, and establish new organizational forms to increase investment. These actions have encouraged the growth of global real estate flows and helped create new mortgage-backed and commercial-backed securities markets that connect real estate financing with broader capital markets. Rather than focusing on how globalization constrains state policy making, I investigate how the state's ability to transform property rights and other institutions

[5] Much of the conventional literature on globalization conceives of the state at the national level and embraces a territorial conception of the state, a "bordered power container" in Giddens's (1987, p. 120) terminology. Other conceptions point to the emergence of a "transnational state" (Robinson 2001) or "glocal state" (Brenner 1999*a*, 1999*b*) which subverts distinctions between the national and the global and shifts attention to linkages between the local and the global. An implicit consensus in this research is that globalization bypasses the nation-state or undermines its power (e.g., see Strange 1996; Castells 1996). More generally, state power and state sovereignty (conceived at the national level) have generally been the dependent variables in scholarship on globalization. This tendency to view the nation-state as a centralized and national-level actor tends to direct attention away from the ways in which state structures and institutions enable some forms of globalization and discourage other forms.

influences the organization of global capital flows, networks of activity, and patterns of global interconnectedness. Such an approach suggests that engagements with the international economy cannot be explained as manifestations of a global logic or responses to exogenous challenges.

My argument is that national and subnational governments operate both as structures that constrain the degree of liquidity and as actors that are reconfiguring the economic and social arrangements of global flows. A central aspect of state action in engaging globalization consists in policy and legal measures that disembed or uproot real estate activity from the structural conditions that impede liquidity. This process of delocalization involves the conversion of real estate into a liquid financial asset and a deepening enmeshment of institutional links between real estate and financial markets. My emphasis on the interplay of state action and institutional structure highlights not only the determination of the U.S. federal government to encourage foreign investment in residential and commercial real estate markets, but also the legal and regulatory methods U.S. agencies have used to achieve that end. The state comprises an ensemble of actors who undertake legal and regulatory actions to produce stable markets, disrupt some kinds economic activity, and create new markets by, for example, subsidizing industries, directing investment, and imposing price controls (for overviews, see Campbell and Pedersen 2001; Campbell 1997; Immergut 1998; Fligstein 1996). Explaining the ways in which state action and institutions constrain and engender liquidity is essential to understanding how real estate *financing* becomes globalized (e.g., spatially disembedded and supraterritorial) while real estate *production* remains localized and rooted in particular locales. This reciprocal process of embedding-disembedding of social activities draws attention to the state both as promoter and organizer of global real estate flows and networks of activity.

## RESEARCH STRATEGY

Many scholars have provided synthetic accounts of globalization theory, comprehensive inventories of various perspectives, and evaluations of various approaches (see, e.g., Guillen 2001; Dicken 1998; O'Riain 2000). In this article, I focus on a specific, rather than disparate, aspect of globalization. I use several indicators from Held et al. (1999) to explore the extent, intensity, and depth of global interconnectedness in real estate. Table 1 presents an analytical framework that shows the dimensions, conceptualization, and empirical measures and indicators of real estate globalization. I explain globalization in terms of three socioeconomic dimensions and two organizational dimensions. Such a framework provides

TABLE 1
Real Estate Globalization: Key Dimensions, Conceptualization, and Measures

| Key Dimensions | Conceptualization | Empirical Measures and Indicators |
|---|---|---|
| Socioeconomic dimensions: | | |
| Extension | Stretching of real estate activities across borders | Degree of FDI in U.S. real estate<br>Degree of real estate U.S. direct investment abroad (USDIA) |
| Intensity | Magnitude of real estate investment and flows | Degree of real estate activity and investment made in the United States by foreign companies<br>Degree of foreign real estate activity and investment by U.S. companies |
| Velocity | Speed of real estate flows, activity, and interchanges | Automation in commercial and residential mortgage loan origination, servicing, and portfolio management; automated underwriting systems; automated credit evaluation; electronic mortgage payments |
| Organizational dimensions: | | |
| Infrastructures | Norms, procedures, and networks that provide for the extension, intensification, and velocity of real estate activity and flows | Development of international real estate standards, financing mechanisms, and appraisal and licensing laws<br>Growth of international real estate organizations and networks |
| Institutions | Rules of exchange, governance structures, property rights, and conceptions of control that regularize patterns of real estate activity and interaction and facilitate their reproduction across time and space | Government-sponsored enterprises<br>Commercial mortgage-backed securities<br>Real estate investment trusts |

the basis for both a quantitative and qualitative evaluation of the extent, pervasiveness, and organization of real estate globalization. First, I analyze (1) the extension or stretching of real estate activities across borders; (2) the intensification, or magnitude, of real estate activities and flows of trade, investment, and finance; and (3) the velocity, or speed, of real estate flows, activity, and interchanges (Held et al. 1999, pp. 14–20). Acknowledging these dimensions suggests an interpretive schema for describing real estate globalization, assessing what is novel about the contemporary era, and defining precisely what is "global" about the globalization of real estate. Accordingly, real estate globalization can be thought of as a process that involves a transformation in the sociospatial organization of real estate relations and transactions that foster transnational flows and networks of real estate activity and financing. Real estate "flows" refer to the movement of commodities, money, people, and information across space and time, while "networks" refer to regularized patterned interactions between different real estate agents, organizations, and forms of activity (Castells 1996). In this sense, globalization involves increased international and interregional interconnectedness, a widening reach of networks of social activity and power, and the possibility that local events and actions (by individuals, corporations, and governments) can have far-reaching and long-lasting consequences for people in distant places.

Second, I analyze the organizational dimensions of real estate globalization: infrastructures and institutions. Charting the extension, intensity, and velocity of real estate activity and investment involves identifying how and to what extent infrastructures and institutions facilitate or constrain global flows, networks, and relations. *Infrastructures* refer to norms, procedures, and networks that provide for the extension, intensification, and velocity of real estate activity and flows. Real estate networks cannot exist without some kind of regulative or legal infrastructure. *Institutions* refer to rules of exchange, governance structures, property rights, and conceptions of control that regularize patterns of real estate activity and interaction, and that facilitate their reproduction across time and space. Property rights are state activities that define and enforce rules that determine ownership and control over the means of production (e.g., regulatory law, etc. [Campbell and Lindberg 1990]). Governance structures are "combinations of specific organizational forms, including markets, corporate hierarchies, associations, and networks" (Campbell and Lindberg 1990, pp. 635–36) that define relations of competition and cooperation (Fligstein 1996, p. 658). Conceptions of control refer to collective understandings or worldviews that organize actors' perceptions and interpretations of the form and function of a market. Rules of exchange define the social conditions under which actors can buy, sell, trade, and finance goods and services. States are essential to the creation and enforcement

of property rights, governance structures, conceptions of control, and rules of exchange (Dobbin 1994; Steinmo, Thelen, and Longstreth 1992).

The principle challenge for charting historical trends and measuring globalization is data availability. Data on the intensity of international real estate flows before the 1970s are sketchy at best. Lack of liquidity of real estate and limited financial infrastructure reflect low levels of foreign investment and cross-border trade. Systematic data on real estate finance and property markets commences in the 1960s and reflects the beginnings of a huge expansion of capital flows and the development of new mechanisms for financing property development. I use data from several sources to construct measures and indicators of real estate globalization. First, since the 1970s, the United States Bureau of Economic Analysis (BEA) has gathered comprehensive data on foreign direct investment in the United States and operations of U.S. firms abroad. These international transactions data include capital flows that measure the degree to which economic activity is becoming stretched across national borders. Within the BEA's reports and analyses, the "real estate" sector is composed of establishments that are primarily engaged in renting or leasing real estate to others; managing real estate for others; selling, buying, or renting real estate for others; and providing other real estate related services, such as appraisal services. In 1998, the U.S. Census Bureau, the Department of Commerce, and the Internal Revenue Service adopted a new industry classification system, the North American Industry Classification System (NAICS), to replace the 1987 U.S. Standard Industrial Classification (SIC) system. The BEA began using the NAICS in 2001. Most of the changes affecting real estate were minor at the sector level, although some industries left the real estate part of this sector and other industries came into the sector.[6]

I follow Held et al. (1999) in operationalizing the extension of real estate activity across borders as a ratio of real estate foreign direct investment (FDI) to real estate gross domestic product (GDP). The GDP of an economic sector is the contribution of that sector to the total GDP, which is the sum of all economic transactions within that country. A sector's GDP, often referred to as its "value added," is equal to its gross output (e.g., sales, income, etc.) minus its inputs (consumption of goods and services purchased from other industries or imported [Yuskavage 1996]). FDI refers to the ownership of, or investment in, foreign enterprises or productive assets in which the investor plays a direct managerial role. FDI is expressed as foreign inflows of real estate investment measured on a historical cost basis, which is "the *cumulative* value of net capital inflows from foreign direct investors" (Quijano 1990, p. 30, original emphasis).

[6] http://www.census.gov/epcd/www/97EC53.HTM.

The FDI to GDP ratio tracks the changing degree of foreign investment in the U.S. real estate sector. Maddison (1995) and Chase-Dunn, Kawano, and Brewer (2000) measure globalization as the degree of trade openness as expressed in the ratio of international exports and imports to GDP for particular countries. While this measure has limitations, it expresses the degree in which the total economy is or is not being enmeshed into the international system (Hirst and Thompson 1999, pp. 62–65). My conceptualization and operationalization of globalization follows Maddison (1995), Chase-Dunn et al. (2000), and Held et al. (1999) but measures globalization within a particular economic sector.

The degree of investment made in the United States by foreign-owned real estate firms and the degree of foreign real estate activity and investment by nonbank U.S. real estate firms provide two measures of the intensity or magnitude of real estate activities and flows. The BEA collects two types of data on foreign-owned firms and other multinational corporations: (1) balance of payments and direct investment position data, and (2) financial and operating data. The former include categories of income and economic transactions that may occur between parent companies and their affiliates as well as transactions between parent companies and third parties (Whichard 2003). These data provide measures of the scale of foreign-controlled real estate activity in the United States, and the impact of foreign activity and operations on the U.S. economy. The BEA's financial and operating data focus on the overall operations of U.S. multinational corporations and their foreign companies. These data provide indicators on the impact of U.S. investment abroad on the U.S. and foreign economies (Mataloni 1995).

Finally, I gather data from several GSEs, the Commercial Mortgage-Backed Securities Association, and the National Association of Real Estate Investment Trusts (NAREIT) to chart the organizational dimensions of real estate globalization. Global real estate activity and flows are built upon infrastructures and institutions. As I point out below, institutions create markets by establishing particular legal, social, and informational conditions for the exchange of commodities (Carruthers, Babb, and Halliday 2001). Thus, global markets are institutionalized on the basis of particular organizational and legal-regulatory foundations that enable actors in markets to organize themselves, to compete and cooperate, and to exchange.

## THE EXPANSION OF GLOBAL FINANCE AND UNEVENNESS OF REAL ESTATE GLOBALIZATION

The globalization of real estate fits into a broader story about the globalization of financial markets and the political and sociopolitical factors that contributed to the breakdown of the Bretton-Woods system (Arrighi 1994; Fourcade-Gourinchas and Babb 2002; Krippner 2004; Magdoff and Sweezy 1987). Before the 1960s, the Bretton-Woods financial system restricted cross-border flows and limited FDI by instituting strong capital controls that separated foreign exchange markets from domestic money markets (Helleiner 1994; Vogel 1996). During the 1960s and later, states passed several major regulatory reforms that spearheaded the globalization of finance. In the early 1970s, the United States eased administrative guidelines that prevented foreign access to U.S. financial markets, and in 1984 abolished the withholding tax on foreign holders of bonds issued by U.S. citizens. In 1979, Great Britain removed restrictions on foreign participation in domestic markets, liberalizing cross-border trade using the pound. During the 1970s, Germany lifted exchange controls and eliminated a withholding tax levied on foreign holders of domestic bonds. In the 1980s, Japan legalized participation by foreign firms in Japanese securities markets and eased restrictions on the ability for firms to make direct investment abroad. In 1984–85, both Australia and New Zealand abolished their capital controls. In 1986, the French government began liberalizing trade-related operations, borrowing in foreign currencies, and acquisition of foreign real estate by French residents (households, corporations, and banks). By 1989, all administrative restrictions regarding FDI in France had been eliminated. Although the United States, Britain, and France each separately considered reimposing capital controls in the 1970s and 1980s, none were introduced, and each country passed legislation to expand their financial sector (Helleiner 1994, pp. 122–24). By the end of the 1980s, all member countries of the European Community had formally committed to eliminating their controls on capital movements and initiating comprehensive financial liberalization programs. In short, regulatory reforms initiated in various states redefined rules of exchange and competition in financial markets by removing the restrictive capital controls and relations that had characterized the Bretton-Woods system. In the process, state actions provided for the extension, intensification, and increased velocity of global flows and activity.

### Extension of Real Estate Flows and Activity

The primary way in which property development connects to globalization is through the redefined nature of capital flows in real estate, in-

novations in financing, and the development of international real estate networks. From low levels before the 1970s, global real estate flows expanded rapidly in the 1970s and 1980s. Table 2 shows estimates of overall FDI and presents a baseline measure of real estate globalization. The table suggests a sizable increase in foreign contribution in the U.S. real estate sector after the 1970s with fairly steady investment in the late 1980s and 1990s. The ratio of real estate FDI to real estate GDP increased from .44 in 1973 to 4.21 in 1987, and peaked in 1989. While foreign penetration comprises less than 5% of real estate GDP, the enormous growth of real estate FDI suggests a widening reach of foreign activity and networks, and greater openness of the U.S. real estate market to foreign investment.

We can see the stretching of real estate activities across borders by considering more closely which countries have had higher or lower degrees of investment in the U.S. real estate sector. Table 3 provides a detailed look at foreign investment in U.S. real estate by showing a breakdown of estimates of FDI by country from 1973 through 2002 in millions of constant 2002 dollars. During the late 1970s and early 1980s, foreign real estate flows into the United States grew so that in 2002 the total investment by foreign real estate firms amounted to more than $50 billion. The table shows a rise in the annual investment and reflects the expanding size of the U.S. real estate market in the 1970s and later. Total real estate FDI from Europe grew from $335 million in 1973 to more than $16 billion in 1986, declined during the late 1980s, and rose slightly to $22 billion in 2002. Investment from Japan increased from $171 million in 1973 to about $21.8 billion in 1990 but declined dramatically in the 1990s, to $11.9 billion in 2002. Investment from the Middle East, Latin America, and New Zealand and Australia have been low compared with foreign investment from Europe, Canada, and Japan. The decline in the 1990s of foreign investment in U.S. real estate reflects slowdowns in economic growth in the Japanese economy and a number of European countries that had been important sources for foreign investment in the United States during the 1980s. During the 1980s, Japanese investors tended to invest in specific areas (mainly New York, Los Angeles, and Hawaii), and to have more focused investments in offices and tourist resorts than other Asian investors. In the 1990s, Japanese investors began to diversify geographically and into a broader range of real estate markets thereby remaining a major investor in U.S. real estate (Edgington 1995, 1998). The international flows of capital in the U.S. real estate market are very unequal and highly concentrated among the advanced industrial economies. Both tables 2 and 3 show a large increase in foreign penetration of the real estate sector between the late 1970s and early 1980s, years that coincide with the passage of extensive liberalization initiatives throughout advanced industrial nations.

TABLE 2
REAL ESTATE GROSS DOMESTIC PRODUCT AND CONTRIBUTION OF FOREIGN INVESTMENT TO THE U.S. REAL ESTATE SECTOR, 1973–2000

| | 1973 | 1977 | 1982 | 1987 | 1989 | 1991 | 1994 | 2000 |
|---|---|---|---|---|---|---|---|---|
| Total GDP | 5,370.16 | 5,771.10 | 6,311.80 | 7,185.60 | 7,623.75 | 7,567.89 | 8,193.15 | 9,824.60 |
| Real estate GDP | 524.40 (9.7%) | 556.30 (9.6%) | 633.2 (10.0%) | 810.61 (11.3%) | 884.30 (11.6%) | 879.52 (11.6%) | 931.80 (11.4%) | 1,123.7 (11.4%) |
| FDI in U.S. real estate | 2.33 | 2.41 | 20.54 | 34.11 | 42.2 | 39.92 | 36.70 | 49.99 |
| Ratio of real estate FDI to real estate GDP | .44 | .43 | 3.24 | 4.21 | 4.77 | 4.54 | 3.94 | 4.45 |

NOTE.—Dollar figures are in billions of constant 2000 dollars. Numbers in parentheses are the percentage of total GDP.
SOURCE.—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, November 2002, "Gross Domestic Product by Industry" (http://www.bea.gov/bea/dn2/gpo.htm); "Foreign Direct Investment Position on a Historical-Cost Basis" (http://www.bea.gov/bea/di/di1fdibal.htm).

Although there are no comprehensive data of U.S. real estate investment in specific foreign countries, there are less systematic data available on the foreign real estate activity of U.S. firms. One indicator of the overseas activity of U.S. real estate companies is U.S. direct investment abroad (USDIA), which measures the value of and returns on U.S. direct investment abroad. The BEA defines USDIA as the "ownership or control, directly or indirectly, by one U.S. resident of 10 percent or more of the voting securities of an incorporated foreign business enterprise or the equivalent interest in an unincorporated foreign business enterprises" (Mataloni 1995, p. 38). Figure 1 shows estimates of the growth of U.S. real estate investment in foreign countries from 1982 through 2003. The yearly position reflects the fluctuating level of U.S. real estate companies' net financial claims on foreign firms in the form of debt or equity. Following a slowdown of USDIA real estate flows in the early 1980s, USDIA boomed in 1987 to slightly less than $3 billion but stagnated and declined slightly over the next decade. Declining USDIA from 1982–86 reflects the negative consequences of the international debt crisis of 1982 that dampened U.S. opportunities for investment in foreign countries. The increase in USDIA in 1987 coincides with the opening of the London Stock Exchange to foreign securities in October 1986, the abolishment of the exchange's fixed commissions, the decision by Denmark and the Netherlands to eliminate their capital controls in 1984 and 1986, and the rise in value of the Japanese yen after 1985 (Helleiner 1994, pp. 149–56). The abolition of exchange controls and the opening up of European financial markets to foreign investment prefigured an enormous growth in USDIA in 1987 while stagnant economic growth abroad depressed USDIA from 1993 to 1997.

TABLE 3

Foreign Direct Investment Position in U.S. Real Estate, 1973–2002

| | 1973 | 1976 | 1980 | 1983 | 1986 | 1990 | 1993 | 1996 | 2000 | 2002 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total real estate FDI | 2,288 | 2,420 | 13,378 | 26,459 | 36,929 | 48,101 | 36,056 | 38,056 | 52,231 | 50,769 |
| Canada | 218 | 360 | 2,532 | 4,111 | 5,446 | 6,229 | 4,038 | 4,732 | 6,982 | 6,847 |
| Europe | 335 | 539 | 4,927 | 12,356 | 16,110 | 14,914 | 15,596 | 14,143 | 22,938 | 22,127 |
| France | 4.2 | 3.1 | 52 | 43.8 | 93 | 266 | 58.5 | 274.8 | 458 | 301 |
| Germany | 64.8 | NA | 1,077 | 1,614 | 1,859 | 1,804 | 1,306 | 1,844 | 4,929 | 5,549 |
| Italy | NA | NA | 8.4 | 10.4 | NA | 30.3 | NA | 79 | 83.6 | 89 |
| Netherlands | NA | NA | 2,184 | 4,075 | 4,288 | 6,789 | 7,274 | 7,205 | 57,237 | 5,358 |
| United Kingdom | 141 | NA | 1,243 | 5,777 | 8,549 | 4,944 | 5,592 | 2,429 | 4,608 | 5,455 |
| Sweden | 7.3 | 6.3 | 0 | 0 | 2.1 | 199 | 536 | 626 | NA | NA |
| Switzerland | 30.3 | 24 | 175 | 592 | 748 | 278 | 102 | 1,044 | 503 | 549 |
| Japan | 171 | NA | 577 | 931 | 4,824 | 21,824 | 12,583 | 10,942 | 12,237 | 11,997 |
| Australia and New Zealand | 11.5 | NA | 122 | 126 | 386 | 526 | 238 | 700 | 1,402 | 201 |
| Latin America | 1,274 | 1,102 | 4,326 | 7,354 | 7,851 | 3,293 | 1,609 | 4,138 | 5,341 | 4,705 |
| Other Western hemisphere | 931 | 823 | 5,875 | 6,758 | 7,314 | 2,922 | 1,406 | 3,792 | 5,143 | 4,218 |
| Middle East | 137 | 252 | NA | 1,089 | 1,565 | 1,318 | 1,285 | 2,930 | 987 | 1,031 |
| Other Africa, Asia, and Pacific | 41.8 | 48 | NA | 493 | 748 | 828 | 889 | 1,329 | 2,341 | 1,262 |
| Addendum: OPEC | 233 | NA | 656 | 1,109 | 486 | 1,397 | 1,394 | 2,908 | 948 | 957 |

Note.—Dollar figures are in millions of constant 2002 dollars.

Source.—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, "Foreign Direct Investment in the U.S. on a Historical Cost Basis," 1973–2002.

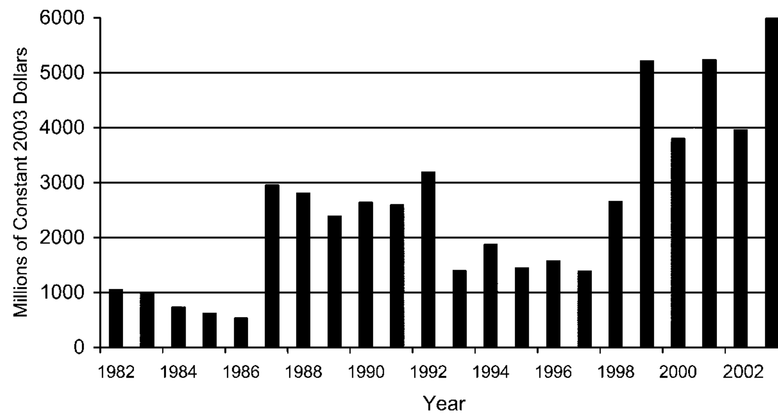


FIG. 1.—U.S. real estate investment in foreign countries, 1982–2003. Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Since 1997, foreign investment by U.S. real estate firms has increased dramatically, from only $1.3 billion in 1997 to almost $6 billion in 2003, measured in constant 2003 dollars. Since the mid-1990s, U.S. real estate firms have been partly motivated to expand investment abroad by the passage of several congressional statutes that allow U.S. depository institutions to diversify domestically and expand their diversified activities abroad (Borga and Mataloni 2001, p. 20).[7] Overall, figure 1 shows that direct investment abroad has risen significantly since 1982 when measured in constant dollars. While the figures do not show where U.S. real estate investment is taking place, other data suggest that over the last two decades USDIA as a whole has been concentrated in the United Kingdom, Canada, and the Netherlands. USDIA positions in emerging markets, such as China and Eastern Europe, are relatively small but are growing (Borga and Yorgason 2002, 2004; Borga and Mataloni 2001).

[7] The 1994 passage of the Riegel-Neal Interstate Banking and Branching Efficiency Act removed branching restrictions on depository institutions, allowing banks to expand geographically. In 1999, Congress passed the Gramm-Leach-Bliley Act repealing the Glass-Steagall Act of 1933, which prohibited banks from combining with securities firms, and the 1956 Bank Holding Act, which erected regulatory barriers to banks merging with insurance companies. The 1999 act allows banks to merge with securities firms and insurance companies and encourages the establishment of one-stop financial services institutions and cross-selling capabilities. The act also eliminates restrictions against banks expanding into real estate brokerage and property management activities (U.S. Senate 1999).

## Intensity of Real Estate Flows and Activity

The financial and operating data of U.S. affiliates of foreign companies and the foreign affiliates of U.S companies offer more detailed measures of the intensity of global real estate activity and investment. Table 4 shows estimates of the gross product, assets, and number of employees of foreign real estate affiliates of U.S. parent companies, and U.S. real estate affiliates of foreign parent companies from 1977 to 1999, the last year comprehensive data are available. This table measures the degree of investments made in the United States by foreign-owned real estate firms and the degree of U.S. real estate investment abroad. A "U.S. parent" is a U.S. business that undertakes FDI abroad; a "foreign affiliate" comprises the foreign operations of a U.S. parent over which the parent has a degree of managerial influence. A "U.S. affiliate" is a U.S. business enterprise in which there is an FDI. It is important to note that a U.S. affiliate is only one unit in a global network of corporate affiliations. The U.S. affiliate may have a foreign parent who may be owned by a direct investor of a third country or has affiliates in other countries. A U.S. affiliate's "foreign parent" is the first person outside the United States in the U.S. affiliate's ownership chain who has a direct investment interest in the affiliate. Gross product measures the "proportion of goods and services sold or added to inventory or fixed investment by a firm that reflects the production of the firm itself" (Borga and Yorgason 2004, p. 13). This measure reflects the intensity or magnitude of global interconnectedness and flows of investment across borders.

Since the 1970s, the gross product of U.S. affiliates and foreign affiliates has increased dramatically and reflects "value added" to the real estate sector in the United States and in foreign countries. During the 1970s and 1980s, gross product of U.S. real estate affiliates increased from $1.2 billion to $8.8 billion (see table 4). This pattern of rapid growth was followed by a decline in growth between 1989 and 1994, a trend that paralleled declines in FDI in the U.S. real estate sector during this time (see table 3). In the mid-to-late 1990s, the gross product of U.S. affiliates rebounded and increased almost 40%, from $6.5 billion to $9.0 billion. Table 4 also shows growth in assets of U.S. affiliates during the 1970s and 1980s, and a decline in assets and employees during the 1990s. The decline in assets and employees of U.S. affiliates during the late 1980s and 1990s followed a period of very rapid growth in foreign investment in the U.S. real estate sector that began in the 1970s (General Accounting Office 1991, 1989; National Association of Realtors 2002). In constant 1999 dollars, increases in gross product and declines in assets and employees of U.S. affiliates reflect variations in the extensiveness and magnitude of real estate activity and interconnectedness.

TABLE 4
FOREIGN REAL ESTATE OPERATIONS OF U.S. COMPANIES AND U.S. REAL ESTATE OPERATIONS OF FOREIGN COMPANIES

| | FOREIGN REAL ESTATE AFFILIATES OF U.S. COMPANIES (U.S. Parents) | | | U.S. REAL ESTATE AFFILIATES OF FOREIGN COMPANIES (Foreign Parents) | | |
|---|---|---|---|---|---|---|
| Year | Gross Product (Billions of U.S. Dollars) | Assets (Billions of U.S. Dollars) | Employees (Thousands) | Gross Product (Billions of U.S. Dollars) | Assets (Billions of U.S. Dollars) | Employees (Thousands) |
| 1977 ... | .198 | NA | NA | 1.2 | 19.6 | 8.0 |
| 1982 ... | .21 | 2.4 | 2.2 | 4.5 | 72.2 | 25.7 |
| 1989 ... | .75 | 10.4 | 2.7 | 8.8 | 129.8 | 38.1 |
| 1994 ... | 1.5 | 9.2 | 6.5 | 6.5 | 118.9 | 28.7 |
| 1999 ... | 5.2 | 22.7 | 31.5 | 9.0 | 112.6 | 23 |

NOTE.—Figures are by industry of affiliate. Dollar figures are in constant 1999 dollars.
SOURCE.—U.S. Bureau of Economic Analysis, *Foreign Direct Investment in the United States*, final results from Benchmark Surveys, 1977, 1982, 1989, 1999; *U.S. Direct Investment Abroad*, final results from Benchmark Surveys, 1977, 1982, 1989, 1999; Washington, D.C.: Government Printing Office.

Investment by U.S. real estate firms in foreign countries has seen striking increases since the 1970s when measured by gross product of foreign affiliates. From less than $2 million in 1977, foreign affiliate gross product grew to $7.5 million in 1989, to more than $5.0 billion in 1999, in constant 1999 dollars. This immense jump in gross product was matched by increases in numbers of employees of foreign affiliates, especially during the 1990s. A slowdown in foreign affiliate asset growth after 1989 was followed by a boom in assets from 1994 to 1999. Overall, we can see that investments made in the United States by foreign-owned real estate firms are much greater than investments made by U.S. real estate firms in other countries. At the same time, the rate of growth in U.S. investment in foreign real estate is much greater than that of foreign investment in U.S. real estate. The gross product of foreign affiliates of U.S. companies, for example, increased more than 26 times from 1982 to 1999 (from $198 million to $5.2 billion) while gross production of U.S. affiliates of foreign companies increased 7.5 times during the same period (from $1.2 billion to $9.0 billion). The high level of involvement of both foreign financial institutions in U.S. real estate markets and domestic real estate firms and financial institutions in overseas financial and real estate markets suggests an uneven but growing intensity of real estate investment and connections across national borders.

Increases in cross-border real estate flows and FDI shown in the above tables and figure reflect government regulatory and institutional trans-

formations, including changes in rules of exchange aimed at creating and strengthening markets and removing disincentives to international investment. Table 5 shows changes in national regulations pertaining to FDI during the 1990s. The table shows the number of countries that have liberalized their foreign investment laws and regulations to facilitate foreign investment. The number of countries initiating regulatory reforms increased during the 1990s, from only 35 countries in 1991 to 69 countries in 2000. The number of regulatory changes to induce foreign investment increased dramatically during the decade, from only 80 legal changes in 1991 to 135 in 1997, and 147 in 2000. During this period, very few countries introduced legal and institutional changes to increase public sector control over markets or reduce incentives to foreign investment. While many Asian, Latin American, and former Soviet nations removed barriers to foreign investment, the economic downturn in Southeast Asia in 1997 caused many of these countries in this region to institute new controls on capital flows. Overall, between 1991 and 2000, a total of 1,185 regulatory changes were introduced around the world, of which 1,121 were in the direction of creating a more favorable environment for FDI.

In sum, a major trigger for foreign investment in the U.S. real estate sector and U.S. investment abroad is state legal and regulatory actions, a finding that resonates with Vogel's (1996) observation that regulatory reforms in advanced industrial countries expand rather than reduce the institutional reach of state activity. The trend toward relaxing restrictions on foreign investment enhances the liquidity of commodities, including real estate, by reducing information asymmetries between buyers and sellers. Like other capital controls, legal and regulatory barriers to foreign investment decrease the ease with which an asset can be bought and sold. Legal restrictions on foreign investment erect and reinforce nationally—and locally—specific distinctions and classifications about markets and commodities that hinder fluidity and exchangeability. The erosion of restrictions on foreign investment in the United States and in other countries has reduced partial and differential access to knowledge about commodity value and risk and thereby contributed to the growth of global financial flows. Two examples are noteworthy. First, in 1998, the California Employee's Retirement System agreed to invest $100 million in Security Global Realty, a Luxembourg-based private real estate company with affiliates in Europe, Asia and the Pacific, and Latin America. This cross-border transaction reflects the growth of international chains of finance so that U.S. investment in foreign real estate and foreign investment in the United States have grown. Second, since the early 1990s, the Japanese government has instituted several legal and regulatory reforms to encourage more foreign investment. These reforms include the Foreign Exchange and Foreign Trade Control Law in 1992, the formation of the

TABLE 5
Changes in National Regulations Pertaining to Foreign Direct Investment, 1991–2000

| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Number of countries that introduced changes in their investment regimes | 35 | 43 | 57 | 49 | 64 | 65 | 76 | 60 | 63 | 69 |
| Number of regulatory changes that favored growth of FDI[a] | 80 | 79 | 101 | 108 | 106 | 98 | 135 | 136 | 131 | 147 |
| Number of regulatory changes that did not favor growth of FDI[b] | 2 | | 1 | 2 | 6 | 16 | 16 | 9 | 9 | 3 |
| Total number of regulatory changes | 82 | 79 | 102 | 110 | 112 | 114 | 151 | 145 | 140 | 150 |

Source.—United Nations Conference on Trade and Development (2001). Data from national sources.
[a] Including legal changes to open markets to foreign investment (liberalization), institutional changes designed to strengthen market functions (including public subsidies), creating transparent standards for foreign investors, and lessening of state control over markets (privatization).
[b] Including legal and institutional changes to increase public sector control over markets, and reduced incentives.

Japan Investment Council in 1994, and revisions of the Japanese Commercial Code to allow foreign companies to choose different corporate governance systems. As a result of these reforms, U.S. companies have increased investment in the Japanese real estate, finance, and retail sectors (U.S. Department of State 2002). Overall, the unevenness of real estate globalization reflects country variability in the openness of real estate markets, degree of financial liberalization, and legal restrictions on foreign investment.

## Velocity of Real Estate Flows and Activity

Finally, advances in computing and communications technology have been central to the extraordinary volume and velocity of international real estate transactions. The past decade has witnessed a dramatic shift in the way lenders fund and service mortgage loans in the United States. In the 1990s, Fannie Mae and Freddie Mac, as well as lending mortgage insurance providers, adopted automated decision-making tools to expedite the loan approval process. Automated underwriting systems have resulted in faster loan qualifications and processing, reducing the time from mortgage application to approval to a matter of minutes instead of months. Other important 1990s innovations in mortgage servicing have been automated voice response, network integrated voice response, automated

credit evaluation, and electronic payments. These communication and information technologies have enabled lenders to offer a large volume and range of commercial and residential real estate finance products and services with transactions in real time, as trading occurs 24 hours a day across the globe. These instantaneous electronic impulses produce a "timeless time" (Castells 2000) and provide material support for the development of new social networks, with the instantaneous flows of information being the precondition for the growth of global relations. The increasing dominance of electronic technology and automation in commercial and residential mortgage loan origination, servicing, and portfolio management "delocalize" capital by reducing, or "compressing" (Harvey 1989), the temporal and spatial barriers to financial transactions. To quote Manuel Castells (2000, p. 13), the use of new information and communication technologies in real estate reflects a "relentless effort to annihilate time" through split-second global transactions while offering the technological and organizational possibility of organizing social activities simultaneously across time zones.

## INFRASTRUCTURE OF GLOBAL REAL ESTATE

Charting the extension, intensity, and velocity of global real estate flows and interconnectedness draws attention to the infrastructures that encourage and support globalization. In his discussion of the global information economy, Castells (2000) notes that globalization processes are enacted by organizational forms that are built upon information networks. The geographical extension of real estate activity, the increasing magnitude of real estate interconnectedness, and the speeding up of global flows is a state-driven project that is created through the development of different laws, regulations, and institutions. Property rights, governance structures, conceptions of control, and rules of exchange define the technological and legal-institutional infrastructure that shapes and organizes global flows and influences the overall level of "interactive capacity" of economic and political actors in different sectors and territories (Held et al. 1999, p. 190). Technological and legal infrastructures support some types of networks, discourage the development of other types, dismantle previous networks, encourage the formation of new networks, and institutionalize networks. In the banking and financial realm, for example, a supranational regime of common rules, procedures, and conceptions of control regulate a global information system for banking settlements, bank capital adequacy, and internationalized banking supervision (e.g., the Bank for International Settlements [Braithwaite and Drahos 2000, pp. 88–142; Sassen 1999; Scholte 2002; Vogel 1996]).

The U.S. federal government, through the United States Agency for International Development (USAID), has played a key role in encouraging the development of international real estate standards, housing policies, private property rights, and real estate financing mechanisms. Since 1992, the USAID has partnered with national groups such as the U.S.-based National Association of Realtors (NAR), the largest trade organization in the world, and European groups such as the European-based International Real Property Foundation (IRPF), the Eastern European Real Property Foundation (EERPF), and the Central European Real Estate Association (CEREAN) to support real estate privatization efforts in nations such as Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia, Moldova, Georgia, and Ukraine. Partnerships between the USAID and other groups also aim to establish professional ethical standards, appraisal standards, licensing laws, lending practices, mortgage finance systems, and regulatory institutions to attract and retain foreign real estate investment. These developments reflect a general shift toward forging international networks and global information channels. These developments also represent efforts to convince investors and other social actors that real estate markets and activity are transparent and conform to internationally agreed upon regulatory standards.[8]

Recent decades have witnessed the growth of international real estate councils and global networks of commercial and residential property finance organizations to encourage greater international cooperation in the regulation of cross-border real estate activities. In 1981, the NAR formed the International Policy Committee to expand its affiliation with real estate organizations in other nations and pursue a leadership role in global real estate. In 1992, the NAR formed the Certified International Property Specialist (CIPS) Network to provide real estate professionals in the United States and other countries with specialized services such as educational classes, networking events, and a member directory. In May 2001, 23 national and multinational organizations formed the International Consortium of Real Estate Associations to further the development of a legal and institutional framework for global real estate business transactions.[9] In 1994, several hundred firms and individuals created the Commercial Mortgage Securities Association (CMSA) as an international trade

[8] Don Pressley, "Remarks to the International Operations Committee, National Association of Realtors (NAR)," May 20, 2000, Washington, D.C.: Certified International Property Specialist (CIPS) Network, http://ww.cips.com; USAID, 2000, "United States Government Initiatives to Build Trade-Related Capacity in Developing Countries and Transitional Economies," Washington, D.C.: USAID, http://www.usaid.gov; USAID, 2001, "USAID's Global Development Alliance," Washington, D.C.: USAID, http://www.usaid.gov.

[9] http://www.cipsnetwork.com/cipshome.nsf.

organization to promote the liquidity of commercial real estate debt securities through access to capital markets. Over the past decade, the CMSA has set up chapters in Europe, Canada, and Asia to provide networks and educational opportunities to participants, and to establish loan documentation and reporting standards on a global level.[10] Over the past two decades, the International Union for Housing Finance (IUHF) has established business outreach chapters in more than 66 countries to provide consulting services and research information data on housing and housing finance to banking companies, international organizations, government bodies, and trade groups. In short, the movement of real estate firms, trade groups, and national associations to establish international coalitions reflects the development of extensive webs of transnational real estate relations and the increasing reach and penetration of global interactions relative to local or national networks.

The above conceptualization and analysis is important because it breaks with the idea that the "global" is a finished project or completed totality. The key feature of real estate since the 1970s is the unprecedented extensiveness of real estate networks, the high level of intensity of real estate activity, and the speed at which real estate transactions occur. These transformations do not reflect an evolutionary trend nor do they exhibit a developmental logic. The "compression" of time and space (Harvey 1989) through innovations in communication and information technology promotes time-space "distanciation" (Giddens 1990) as real estate activities and relations become stretched over long distances and controlled or coordinated over longer periods of time. While the data suggest a stretching of real estate activities across borders, they do not imply the development of a borderless world nor the formation of an integrated global real estate economy. The analysis also suggests that globalization is an uneven and multidimensional process rather than a singular condition. The spatial extension of real estate connections and activity combined with the development of complex webs and networks of relations between different groups and organizations reflect and reinforce contingency, openness, discontinuity, and unpredictability. On the one hand, the emergence of new real estate networks suggest the development of new legal or regulative supports, including rules, norms, and procedures that shape and constrain the actions of members. On the other hand, new real estate networks and connections define an emerging structure that destabilizes and undermines previously stable forms of real estate activity and finance, imposes constraints on current forms, and creates new forms that can have long-lasting and far-reaching consequences on states and societies.

The establishment of international real estate networks and connections

[10] http://www.cmbs.org.

represent as much a response to the lessening of national controls as they do a direct cause of real estate globalization. Although national governments, international real estate organizations, and other financial interests are working to create an institutional framework to encourage the expansion of real estate flows, no one group controls the organization or magnitude of global real estate activity. While global financial markets enable investors in any country to trade freely across time zones and national borders (Cetina and Bruegger 2002; Sassen 2001, chap. 7), many property markets around the world do not have a transnational character given that laws and practices concerning tenants' rights, real estate taxes, income taxes, liability protection, and foreign ownership vary considerably from one country to another.[11] These local differences translate into financial risks that can impede liquidity and discourage the development of cross-border exchange and global flows. It seems essential, if we are to understand the involvement of both foreign institutions in the U.S. commercial and residential real estate markets and U.S. real estate firms in overseas markets, to examine state activity directed toward reducing the legal restrictions on international real estate transactions. This means focusing attention on changes in laws, policies, and regulations that encourage liquidity and facilitate the formation of global flows and networks of activity.

## INSTITUTIONS OF GLOBALIZATION: THE STATE AND THE RESTRUCTURING OF THE U.S. REAL ESTATE SECTOR

Several scholars have argued that states shape global processes, but they disagree over the causal impact, consequences, and trajectory of state

[11] Unlike the United States, foreign ownership of real estate in Mexico is subject to strict regulations. While many countries limit tenant rights to residential real estate, Brazil has established early lease termination and automatic renewal rights on commercial real estate deals. Taxation varies widely between national real estate markets and within national borders. In Switzerland, for example, the 24 cantons or states of the Swiss Confederation control property rights. In some countries, real estate income falls under a different set of laws than non–real estate income. Hungary, for example, taxes non–real estate income at a progressive rate and real estate income at a flat rate (Ernst and Young 2003). Furthermore, many finance companies in the United States and Canada use loans connected to the value of the property, referred to as "nonrecourse loans." Yet these loans and other types of sophisticated lending practices are rarely used in Japan (Edgington 1998). In addition, amortized mortgages, adjustable rate mortgages (ARMs), and convertible mortgages are not common in many Asian and Eastern European countries.

involvement in the global economy.[12] In the subsections below, I focus on three institutional mechanisms that the federal government has created to increase and channel flows of investment into real estate in the United States. I first examine the efforts of Fannie Mae and Freddie Mac in creating a market for mortgage-backed securities (MBSs). Second, I focus on the role of congressional legislation in promoting the growth of commercial mortgage-backed securities (CMBSs). As I show, state action, in the form of public creation of institutions and legal regulation, has created and enhanced the liquidity of residential and commercial real estate assets. As a result, domestic and foreign investors have been persuaded to invest in real estate once commercial and residential mortgages could be standardized and pooled together as securities for sale in global markets. In both cases, the state has deliberately created pressures for governance transformations as an actor by redefining property rights and establishing rules of exchange within the residential and commercial securities sectors. Finally, I examine the role of federal statutes in fostering the development of a new type of investment vehicle, the REIT, that delocalizes the financing of residential and commercial real estate.

These three forms of state activity are important for understanding globalization because the organizations, groups, and institutions that comprise the state make and enforce rules governing economic action (Fligstein 1996, p. 660; Dobbin 1994; Evans 1995). Even global flows of economic activity could not operate without collective sets of rules governing market exchange, interaction of firms, and conceptions of control. Reflecting Steinberg (2003), all exchange relations, including those that take place in global markets on a supranational level, occur within institutional contexts that define conceptions of rights, property, and relations of competition. While most discussions of globalization have focused on the demise of the nation-state, modern capitalist states continue to be constructed in interaction with the regulation of their economies and with the development of global connections and flows (Braithwaite and Drahos 2000, pp. 475–55l; Hollingsworth and Boyer 1997; Held and McGrew 2002; Robinson 2004). This is because state actions that alter regulatory law and institutional conditions help assist, lead, or constrain the transformation of governance structures in different economic sectors (Camp-

[12] Sassen (2000, p. 379) maintains that states provide the "legal encasements" that facilitate and constrain the expansion of global networks and the formation of global financial markets. Fligstein (2001, p. 210) argues that states provide legal institutions and monetary systems that allow economic actors and firms to make investments in economies of scale and scope that can have global reach and effect. What has not been the subject of empirical investigation is what particular forms of legal innovation have helped facilitate an extension of global networks, an intensification of global interconnectedness, and a speeding up of global flows.

bell and Lindberg 1990, pp. 634–66; Fligstein 1996, p. 658; O'Riain 2004). I argue that the capacity to establish and influence the degree and development of liquidity gives the state a generally unrecognized source of strength insofar as it enables state actors to alter the extensiveness and intensity of global flows.

## Mortgage-Backed Securities and the Government-Sponsored Secondary Mortgage Market

Both Fannie Mae and Freddie Mac have played a catalytic role in the growth of global financial markets and networks of housing finance. Since the 1960s, these two principle GSEs have been the main secondary market conduits providing funds for conventional mortgage lending in the United States. The purpose of the secondary mortgage market is to increase market liquidity and attract capital to finance housing. In the "primary" mortgage market, borrowers obtain loans from mortgage originators. In the "secondary" mortgage market, GSEs repackage mortgages as mortgage-backed or debt securities to sell to institutional investors. Both Fannie Mae and Freddie Mac buy home mortgages in bulk from the lending institutions that "originate" them. In turn, they sell bonds based on the value of the mortgages, attracting capital from a variety of investors. Congress reorganized Fannie Mae in 1954 as a public/private corporation with a federal charter. In 1970, Congress authorized the GSE to buy conventional as well as FHA/VA insured loans. The Federal Home Loan Bank Board (FHLBB) supervised Freddie Mac until 1989 when Congress transferred the GSE to the Department of Housing and Urban Development (HUD), Fannie Mae's overseer (MacDonald 1995, 1996). Both Fannie Mae and Freddie Mac are federally chartered, private, shareholder-owned corporations with their stock traded on the New York Stock Exchange. Fannie Mae is the nation's third-largest corporation, in terms of assets, and the nation's largest provider of funds for home mortgages.

Over the last two decades, these two GSEs have pioneered the development of national and global markets for MBSs that have expanded the investor base for financing housing. Securitization implies the transformation of illiquid financial assets into liquid capital market securities and has been the critical financial innovation that has allowed private and public actors to finance local property development and housing in the national and international capital markets (Logan 1991, 1993; Sassen 2001, pp. 71–74). In 1988, the GSEs securitized one-third of outstanding home mortgage debt; by 1993, they securitized nearly half of all mortgage debt; and by the late 1990s, they securitized almost two-thirds of mortgage debt (MacDonald 1996, p. 1179). To supply capital for mortgage financing, Fannie Mae issues liquid fixed-income investment products, including

Benchmark Notes, Benchmark Bonds, Benchmark BillsSM, and Benchmark SecuritiesSM, to global capital markets. As of 2002, European investors had purchased 18% of the $2.5 billion total outstanding Benchmark Notes and Benchmark Bonds.[13] In 2000, Freddie Mac established the EuroReference NoteSM Program, a debt program denominated in euro, to expand its global investor base. Approximately 30% of the $110.5 billion of U.S. dollar reference notes and bonds are sold overseas, to more than 500 different investors in more than 20 countries. These bonds are intended to provide liquidity, transparency, and regularity to euro investors. They trade on EuroMTS, the electronic trading platform previously the exclusive domain of European sovereign debt.[14] Importantly, the GSE's share of foreign central bank portfolios invested in GSE obligations grew from 2% in 1995 to 5% in 2000, whereas the share of U.S. Treasury securities in those portfolios fell from 63% to 59% (OFHEO 2003, pp. 58–59). In 2001, foreign and international monetary authorities held $133.1 billion in GSE securities.[15]

Since the early 1970s, there has been a tremendous growth in the amount of funds flowing into the mortgage market from broader capital markets. Figure 2 shows new issues of residential MBSs from 1971 to 2001 in constant 2001 dollars. The figure lists the value of MBSs issued by the Government National Mortgage Association (GNMA or Ginnie Mae), Fannie Mae, Freddie Mac, and the private sector.[16] Figure 2 also lists the total annual growth of security issuances.

As figure 2 shows, there has been a huge increase in the volume of MBSs since the early 1970s. In 1971, all sources issued only $2.06 billion worth of securities. By 2001, this figure had increased to more than $1.2 trillion. In the 1970s, Ginnie Mae controlled the vast majority of security issuances but saw a decline during the 1980s and 1990s. In 2001, Ginnie Mae issued only 13.7% of all securities. These trends reflect legislative changes that expanded the securitization activities of Fannie Mae and Freddie Mac to enhance the liquidity of mortgages. The years after 1980

[13] http://www.mbaa.org/industry/news/02/0315a.html.

[14] Freddie Mac Debt Securities, *Reference Point*, September 2000, p. 1; Freddie Mac Selected Speeches: Leland C. Brendsel at the UBS Warburg Global Finance Services Conference, April 24, 2002 (http://www.freddiemac.com).

[15] Board of Governors of the Federal Reserve, Statistical Release Z.1, "Flow of Funds Accounts of the United States," March 7, 2002, "Agency Securities"; Statistical Release H.4.1, "Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks," January 3, 2002 and January 4, 2001.

[16] In 1968, Congress partitioned Fannie Mae into two separate entities, one known as the Government National Mortgage Association (Ginnie Mae), the other retaining the name Federal National Mortgage Association, which became a privately owned company. Since 1968, Ginnie Mae has operated as a government-owned association within HUD.

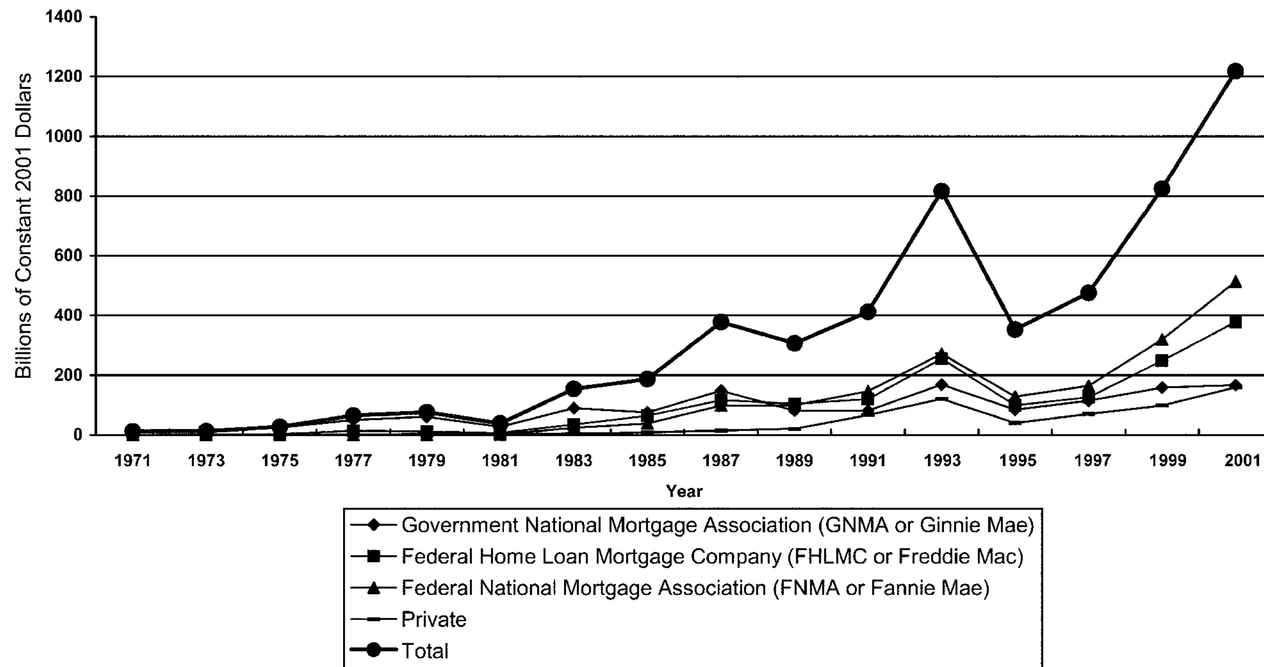


FIG. 2.—New issues of residential mortgage-backed securities, 1971–2001. Source: GNMA, FNMA, FHLMC; Salomon Brothers, Inside Mortgage Securities, 2000/2001, "Inside MBS and ABS," February 8, 2002; Colton 2002, p. 39.

have seen much growth in the volume and distribution of MBSs issued by Fannie Mae, from zero in 1980 to more than $513 billion in 2001. By 2001, Fannie Mae controlled more than 42% of new issues of MBSs. In 2001, both Fannie Mae and Freddie Mac issued more than 73% of all residential MBSs. In short, Freddie Mac's and Fannie Mae's participation in the U.S. mortgage market and the global securities market shifts the locus of credit risk away from local lenders and provides a conduit for linking home buyers with global finance. Before the expansion of the secondary mortgage market, investment in home mortgages was low because of the lack of standardization and uniformity in underwriting, appraisal, and legal documentation for conventional mortgages. In establishing a secondary mortgage market, Freddie Mac and Fannie Mae spearheaded efforts to create uniform mortgage documentation, and each corporation developed underwriting guidelines that private lenders have applied throughout the nation.

Some globalization theorists use terms such as "deregulation," "financial and trade liberalization," and "privatization" to describe increasing dominance of transnational capital over state policy and the subsequent decline of the nation-state. The problem with such terms is that they only capture the withdrawal of the state from regulating its economy and do not register the ways in which different state institutions and agencies participate in setting up new institutional and regulatory frameworks for global finance and trade.[17] In 1984, Congress passed the Secondary Mortgage Market Enhancement Act (SMMEA) which removed statutory restrictions on investments in private MBSs by federal chartered depository institutions. This legislation, combined with the relaxing of other regulatory constraints during the 1980s, aimed at encouraging participation in the secondary mortgage market by investment banks, mortgage bankers, private mortgage insurance companies, pension funds, depository institutions, and credit unions. In 1992, Congress passed the Federal Housing Enterprises Safety and Soundness Act which amended the statutory charters of Fannie Mae and Freddie Mac and established several broad public policy purposes for the two GSEs. Specifically, the charters designate the GSEs to

[17] Privatization and deregulation do not represent a reduction or diminution of state power. Rather, these policies reflect an application of state power to transform property rights, conceptions of control, and rules of exchange to enable actors in markets to engage in profitable exchange. The extension of state power through privatization and deregulation was noted by Antonio Gramsci (1971, p. 160) in his observation that laissez-faire and free trade are forms state intervention: "It is asserted that economic activity belongs to civil society, and that the State must not intervene to regulate it. But . . . it must be made clear that laissez-faire too is a form of State 'regulation,' introduced and maintained by legislative and coercive means. It is a deliberate policy, conscious of its own ends, and not the spontaneous, automatic expression of economic facts."

provide stability in the secondary mortgage market, increase the liquidity of mortgage investments, improve the spatial distribution of investment capital available for residential mortgage financing, and provide assistance to residential mortgages on housing for low- and moderate-income families. The charter acts also specify the corporate form and statutory powers of Fannie Mae and Freddie Mac. The 1992 act also established the Office of Federal Housing Enterprise Oversight (OFHEO) as an independent office within HUD. The OFHEO oversees and regulates the GSEs for capital adequacy, safety, and soundness. OFHEO also has the power to issue regulations necessary to ensure they carry out their public mission (MacDonald 1995; Temkin, Quercia, and Galster 2000; OFHEO 2003).

Congressional legislation, charters, and policies that regulate the activity and structure of the GSEs represent the political and institutional conditions that enable economic actors to leverage capital from other capital markets to finance housing in the United States. Fannie Mae and Freddie Mac are hybrid organizations that contain elements of both private- and public-sector organizations. Like private companies, they issue equity and debt instruments to the investing public and have compensation packages that reward top executives for increasing shareholder value. On the other hand, the GSEs receive exemption from all state and local government taxes except property taxes, exemption from securities registration requirements of the Securities and Exchange Commission (SEC) and the states, and conditional access to $2.25 billion worth of credit from the U.S. Treasury (Congressional Budget Office 2001). This hybrid, government-sponsored status allows the GSEs to offer several different financial instruments that provide predictability and transparency in the global MBS market, thereby facilitating a growing and increasingly institutionalized participation of foreign investors in the U.S. residential real estate sector.

### Resolution Trust Corporation and the Securitization of Commercial Property

Over the last two decades, securitization has extended to other domains thereby transforming the institutional structure through which funds flow to real estate. Securitization spread to collateral mortgage obligations (CMOs) in 1983, commercial mortgage debt in 1984, and real estate mortgage investment conduits (REMICs) in 1987. In the 1990s, securitization expanded to include asset-backed securities (ABSs) such as car loans, student loans, credit card debt, equipment leasing, and manufactured housing. One of the most profound changes in the commercial real estate sector in the past two decades has been the expansion of the public debt

segment, mainly in the form of CMBSs. Commercial mortgage-backed securities are a form of debt security, the terms of which are influenced by the Internal Revenue Service's provisions regarding REMICs and financial asset securitization investment trusts (FASITs). Issues of CMBSs are subject to the regulatory jurisdiction of the SEC. Like the MBS, the CMBS is the outcome of a state-led process of transforming a relatively illiquid commodity (a commercial mortgage) into a liquid and tradeable security. Financial institutions unbundle, repackage, and pool commercial mortgages into securities that investors can buy in capital markets. What investors buy is a share in the value of the income flow due to the bank from the pooled set of commercial mortgages. In this process, the illiquid property is pooled with millions of others to become a mortgage bond, itself an abstract object but one that is capable of ready conversion into an understandable exchange value (Dinsmore 1998; Braithwaite and Drahos 2000, pp. 143–44, 154, 160, 172–73).

The development of CMBSs first appeared in the United States as an extension of the residential MBS to increase liquidity in the commercial real estate market. Yet the federal government's role in transforming commercial mortgages into liquid commodities has been less direct than in the MBS market where Fannie Mae and Freddie Mac operate. Initially, the development and expansion of the CMBS market came from the efforts of the Resolution Trust Corporation (RTC) in responding to the insolvencies of hundreds of thrifts during the savings and loan crisis of the late 1980s and early 1990s. In 1989, the U.S. Congress passed the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA), which abolished the Federal Savings and Loan Insurance Corporation (FSLIC), switched thrift regulation to the newly created Office of Thrift Supervision, and established the RTC to sell assets of failed savings and loans and pay insured depositors (U.S. House of Representatives 1989*a*, 1989*b*). One of the primary goals of the FIRREA and later amendments was to bolster the supply of credit by requiring thrifts to sell residential and commercial mortgages held in portfolio to capital markets (U.S. House of Representatives 1990; Barth and Brumbaugh 1992). In 1991, the RTC initiated its first residential securitization program to convert mortgage loans into securities. Over the next two years, the RTC established an infrastructure to securitize commercial mortgages. This infrastructure included the creation of a risk-rating system, and formal standards and uniform protocols for legal documentation, underwriting, and servicing requirements within the commercial real estate market. In 1995, the RTC stopped accepting newly failed savings and loans, and its duties were transferred to the Federal Deposit Insurance Corporation (FDIC).

By the mid-1990s, institutional conditions were in place to enhance the liquidity of commercial mortgages thereby providing incentives to do-

mestic and foreign investors to put capital into commercial real estate. The initial regulatory actions taken by the RTC shaped the development of the CMBS market because they produced a "cultural template" (Fligstein 1996, p. 661) that affected investor understandings and perceptions of how the market works and how they should act to control investment. The agency's actions promoted a standardized framework for understanding commercial mortgages as units of a large class of comparable assets, and promulgated a formalized understanding and category system through which commercial mortgages became more easily transparent, more homogeneous, and less idiosyncratic. In the residential real estate market, Fannie Mae and Freddie Mac have been the main institutional vehicles for enhancing the liquidity of housing, thus increasing the flow of capital into home mortgages. In the commercial real estate market, no centrally planned and government-sponsored enterprise engineers the creation of liquidity. Informal institutional practices, IRS and SEC regulations, and laws governing competition between CMBS insurers constitute a peculiar "regulatory style" (Dobbin 1994) for enhancing the liquidity of commercial mortgages.

Over the last decade, the CMBS market has developed from a temporary measure to resolve the insolvent thrifts to an active means of accessing capital markets as a source of funding commercial property development. In 2002, CMBS insurers represented 16.7% of the $1.8 trillion commercial mortgage debt market in the United States, a market share surpassing that of insurance companies and second only to that of commercial banks (Lend Lease Real Estate Investments and PricewaterhouseCoopers 2003). Until recently, securitization was not common in the commercial mortgage market because of legislative and regulatory barriers imposed at the state level. The recent enactment of the Final Recourse and Residual Interests Capital Markets Rule removes state government restrictions against the securitization of commercial mortgages and now allows banks to invest in the CMBS market. More broadly, securitization of commercial mortgages has quickly developed to become one of the most important financial mechanisms linking local, national, and global capital markets. The concept of packaging cash flows and/or risks and splitting them into marketable securities (e.g., transforming risk into a commodity) has found a wide variety of applications and users in the United States and is spreading in Europe, Asia, and other parts of the world. Figure 3 shows the growth of CMBS markets in the United States and around the world. Outside the United States, few CMBS markets existed until the mid-1990s. The introduction of the euro has helped stimulate the growth of CMBSs in the form of Pfandbrief-style products (mortgage bonds) in many European countries. In 2001, European CMBS issuance reached a record $18.7 billion. The United Kingdom and Italy

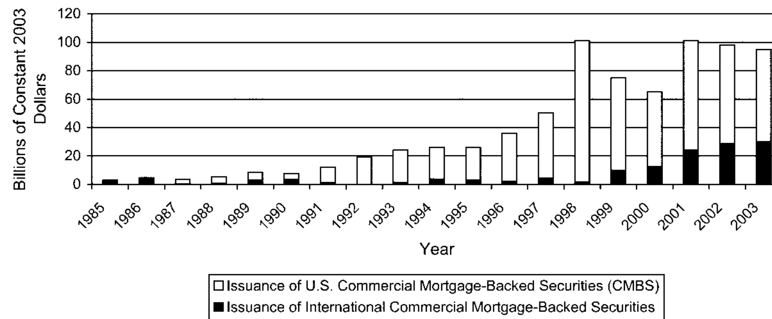


FIG. 3.—International and U.S. commercial mortgage-backed securities markets, 1985–2003. Source: Morgan Stanley, Commercial Mortgage Alert, May 2004; Urban Land Institute (ULI), August 6, 2003, "Capital Market Trends, New Products, and the Quest for Expanding Opportunities"; Centro de Covencoes, SECOVI-SP, Sao Paulo.

posted the strongest growth from 1995 to 2001, increasing by 60% and 280%, reaching $2.8 billion and $7.3 billion in CMBS issuance (Zhu 2002, p. 62).

## Real Estate Investment Trusts and the Delocalization of Real Estate

The liquidation of real estate capital through securitization has received added impetus in the 1990s with the growth of REITs. A REIT is a shareholding company that invests in different types of real estate including shopping centers, office buildings, apartments, and hotels (Block and McDavid 1998). REITs were established by the U.S. Congress in 1960 but did not play a large role in real estate investment until the passage of the Tax Reform Act of 1986, the Technical and Miscellaneous Revenue Act of 1988, and the REIT Modernization Act of 1999. These three acts removed the regulatory barriers for qualifying and sustaining REIT status and empowered REITs to own, operate, and manage many different types of income-producing properties. Since the early 1990s, REITs have transformed the commercial real estate market in several ways. First, REITs spread investor risk over a portfolio of different and diverse property investments through securitization. Investors can diversify their assets by allocating investments in mixed portfolios of properties and geographic areas. Second, like mutual funds, REITs pool different investments and distribute taxable income as dividends to shareholders. Investors are able to invest in real estate properties without the major commitment of time and money needed for direct ownership of real estate. The fact that REIT shares are traded on major stock exchanges sets REITs apart from traditional real estate, most of which is privately

owned. Third, REITs contribute to the financial fluidity of property (fixed capital) by disembedding the process of investment from the procuring of local knowledge necessary to assess risk (Clark and Lund 2000, p. 469). In doing so, REITs help to transform real estate into a liquid commodity by enabling investors to buy and sell interests in diversified portfolios of properties on an instantaneous basis.

Recent decades have witnessed much growth in the number of REITs and capital invested in REIT institutions. As figure 4 shows, the total number of REITs increased by more than four times from 1972 to 2003, reaching a peak of 226 in 1994. Figure 5 shows the growth in market capitalization of REITs from 1972 to 2002. In the late 1990s, the total number of REITs declined while the annual market capitalization outstanding at year's end increased. In the 1972, the market capitalization of the entire REIT industry was only $1.5 billion; in 2003, it was almost $195 billion. Since 1990, the market capitalization of REITs has increased by more than 16 times.

Increasing market capitalization and declining numbers of REITs represent a movement toward industry consolidation through mergers and acquisitions, and global expansion. As of January 2004, 19 countries had enacted or proposed legislation to create REIT institutions (Ernst and Young 2003). Large REITs are today a major factor in converting historic and dilapidated hotels into luxury apartments, redeveloping river and canal waterfronts, and preserving or reconverting old buildings (adaptive reuse). Currently, REITs operate in nearly every U.S. metropolitan area and in several international countries, including Great Britain, France, Belgium, and Japan (Zhu 2002). Thus, GE Capital Real Estate, a unit of General Electric, has expanded into Europe and Asia in the 1980s and 1990s. In 2000, GE Capital Real Estate acquired Great Britain's MEPC, the fourth-largest publicly traded real estate operating firm, and owner and operator of a dozen business parks. In 2002, GE Capital Real Estate acquired Security Capital, an international real estate operating company with controlling interests in three REITs: Storage USA, Regency Centers Corporation, and ProLogis. The acquisition also brought GE Capital Real Estate an interest in Security Capital European Realty, a foreign holding company that owns and operates automobile parking garages, self-storage facilities, and offices for multinational corporations in Europe. Today, GE Capital Real Estate operates 38 offices in 18 countries and has assets of $100 million in North America, $55 million in Asia, and $70 million in Europe (Fickes 2003). What is important is that large REITs like GE Real Estate can tap a range of national and international capital markets to finance their activities and fund cross-border real estate transactions. Moreover, the financial intermediaries of large REITs can raise funds and

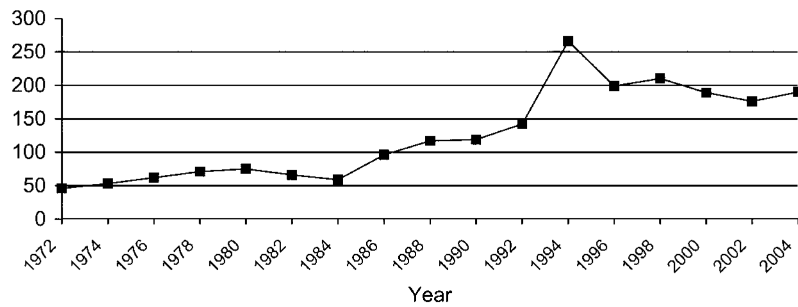


FIG. 4.—Number of real estate investment trusts, 1972–2004. Source: National Association of Real Estate Investment Trusts (NAREIT), http://www.nareit.org.

manage risk by accessing markets and diverse pools of capital in international financial centers.

Federal laws that have promoted the growth of REITs have helped guide and harmonize investor perceptions so that they know enough about mortgages to be able to view them as transparent and liquid investments. Social transparency and liquidity is contingent on generalized knowledge and information being traded among participants (Cetina and Bruegger 2002, p. 915). The fact that real estate assets are localized and heterogeneous undercuts liquidity. Specific organizational activities, legal regulations, and institutional conditions provide a repertoire of possible courses of action to create liquid commodities. Thus, liquidity is the outcome of an institutionalization project that is the equivalent of developing a conception of control that allows actors to understand the organization of a market and interpret the actions of others. In this way, market liquidity is a social construction. Making legal and institutional projects successful is a political project. REITs seek to transform localized and opaque knowledge about specific real estate markets and types of property into generalized and transparent knowledge. Pooling large numbers of heterogeneous mortgages is a process of standardization and homogenization that establishes predictability in the buying and selling of real estate, thereby enhancing exchangeability. If, as Karl Marx ([1867] 1977, p. 163) argued, a commodity is a "very strange thing, abounding in metaphysical subtleties and theological niceties," then REITs can be seen as institutional agents that interpret and clarify that "strangeness," motivate and shape courses of action for investors, and provide a rationale for the action taken. The significance of REITs is that they are a financial vehicle that links diverse actors and organized interests within real estate to one another even though these actors and interests may be geographically distant and, at the same time, disengaged from local settings.

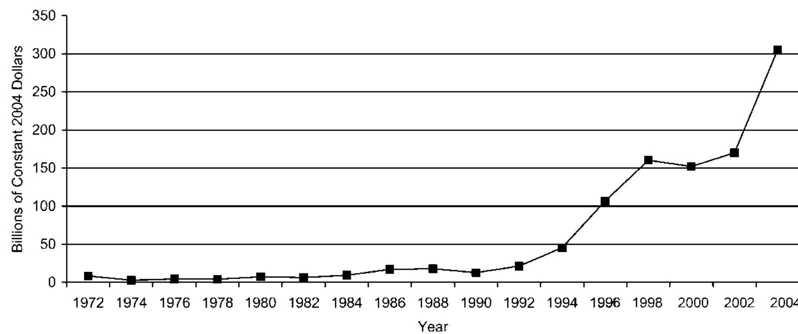


FIG. 5.—Market capitalization of real estate investment trusts, 1972–2004. Source: National Association of Real Estate Investment Trusts (NAREIT), http://www.nareit.org.

## CONCLUSION

To date, most theoretical research on global finance has remained distinct from empirical research on the real estate sector. Few scholars have examined the transformed nature of real estate financing and development or investigated the links between the restructuring of the real estate sector and the globalization of the economy. As my empirical analysis has shown, the last few decades have witnessed an increasing extension of real estate connections across national borders, a growing magnitude of real estate flows and levels of activity, and an increasing velocity of real estate interchanges. I explain these transformations by calling attention to three institutional developments that have been ignored in the sociological literature on real estate and global finance. First, legislative action has expanded the role and function of the secondary mortgage market to attract a diverse base of individual and institutional investors to supply capital to finance housing. Second, the actions of the Resolution Trust Corporation and other federal regulations have transformed commercial mortgages into liquid commodities. In both cases, the development of securitization has broadened the investor base to finance residential and commercial real estate, allowing more funds to flow into the real estate sector from broader capital markets. Finally, state policy has spurred the growth of REITs by eliminating many restrictions on investing in commercial property, thus weakening the institutional buffers between local real estate markets and the global economy. As the data in this article show, foreign investment in the U.S. real estate sector and U.S. investment in overseas real estate markets are highly uneven in scope and nature. Transformations in real estate activity, flows, and networks are not merely inherent structural properties of an unevenly developed global real estate system. They reflect national patterns of real estate development (tax

systems, trade regulations, law and legal regulations) as well as countries' evolving responses to international socioeconomic changes.

My findings resonate with recent discussions of the rise of finance in the U.S. economy by highlighting the role of U.S. state agencies and regulatory organizations in the creation of liquid capital and the development of financial instruments (Arrighi 1994; Fourcade-Gourinchas and Babb 2002; Helleiner 1994; Krippner 2004; Krier 2005; Sassen 2001). Popular phrases such as "privatization," "dismantling welfare state apparatuses," and "retreat from regulation" do not mean the elimination of regulatory regimes and institutions of governance. Legislation and policies that have promoted the growth of securitization, the secondary mortgage market, and REITs involve a reconfiguration of state involvement in the real estate sector, rather than a reduction. State actions that encourage the growth in extensiveness of real estate activity, intensity of interconnectedness, and velocity of capital flows also serve to clear the ground for new kinds of economic development, investment strategies, and technological innovations that are uneven, partial, and incomplete. One implication is that institutional changes can shape capacities for economic action, policy formulation, and implementation. These changes can also create new political and economic conditions that allow powerful class segments to tap into new sources of capital available for market transformation and market building. A third implication is that state structures and institutions are the mechanisms or building blocks of global real estate flows, networks, and activities. As Schumpeter (1934, 1939, p. 613) stressed, the transformation of illiquid assets into liquid resources (money being the exemplary case) is the epitome of capitalist financial practice (see also Arrighi 1994). Thus, the state's capacity to create and control liquid resources is a powerful vehicle of globalization insofar as it allows state actors to assist, lead, or constrain the development of global economic flows and networks of activity. In short, we cannot explain globalization in terms of market forces and technological change alone without addressing questions about the deeper institutional conditions that yield those circumstances.

Much of the discussion of real estate and globalization that I have addressed is specific to the U.S. case. We need comparative research on how different political infrastructures, institutional forms, regulatory mechanisms, and national cultures facilitate and impede the development of securitization, REITs, and secondary mortgage markets outside the United States. The issuance of MBSs and mortgage bonds has expanded in recent years, facilitating access to funds for housing and providing a mechanism for cross-border investment in housing (Lea 1999). Legislation expanding the role and function of REITs has further contributed to the securitization of residential and commercial real estate markets and

thereby enhanced the permeability of real estate for different types of domestic and foreign investors. Yet as Logan (1991, 1993) points out, the global restructuring of real estate markets is not a one-way process, nor is it necessarily rational or functional.[18] Increased enmeshment of real estate into global financial flows has created greater volatility in local economies as crises such as those that started in Thailand, Russia, and Argentina spread across the world. These perturbations have had significant effects on finance systems by drying up finds for mortgage lending, destabilizing markets, and exacerbating regional imbalances. Even residential and commercial real estate markets in the United States face unforseen consequences of globalization. In the future, these consequences probably will be felt most strongly by the least-protected classes of people and places, for whom funds are typically only marginally available. As Giddens (2000, p. 30) has argued, globalization is not just an "out there" phenomenon that refers to macrolevel transformations. Globalization is also "in here" phenomenon that affects the intimacies of personal decision making and local contexts of action. In this sense, the enmeshment of real estate into global financial markets and flows suggests that the local impact of global-level developments is amplified, while ostensibly remote and localized events can have prodigious global consequences.

[18] Much of the U.S. real estate and banking scholarship implies a "convergence" of policy and structure of housing finance systems across nations as other states attempt to establish MBS markets and GSEs (Lea 1999; Stephens 2000). While securitization has developed elsewhere, however, the extent of securitization in the United States arises from the distinctive legal-institutional structure of the state. Outside the United States, conditions for securitization are less favorable because of the dearth of GSEs and credit institutions. The high fixed costs of securitization have also impeded the growth of securitization in other nations (Lea and Bernstein 1995). Moreover, much debate surrounds whether GSEs would be permitted under European competition law (Hardt 2002; Stephens 2003).

## REFERENCES


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

Bartelt, David W. 1997. "Urban Housing in a Era of Global Capital." *Annals of the American Academy of Political and Social Science: Globalization and the Changing U.S. City* 51:121–36.

Barth, J. R., and R. D. Brumbaugh. 1992. "Turmoil among Depository Institutions: Implications for the U.S. Real Estate Market." *Housing Policy Debate* 3:901–26.

Beauregard, Robert A. 1994. "Capital Switching and the Built Environment: United States, 1970–89." *Environment and Planning A* 26:715–32.

Block, Ralph, and Veronica J. McDavid, eds. 1998. *Investing in REITs: Real Estate Investment Trusts*. Princeton, N.J.: Bloomberg.

Bodie, Zvi, and Robert C. Merton. 1995. "The Informational Role of Asset Prices: The Case of Implied Volatility." Pp. 197–224 in *The Global Financial System*, edited by D. B. Crane et al. Boston: Harvard Business School Press.

Borga, Maria, and Raymond J. Mataloni 2001. "Direct Investment Positions for 2000: Country and Industrial Detail." *Survey of Current Business*, July. U.S. Department of Commerce, Bureau of Economic Analysis.

Borga, Maria, and Daniel R. Yorgason. 2002. "Direct Investment Positions for 2001: Country and Industry Detail." *Survey of Current Business*, July. U.S. Department of Commerce, Bureau of Economic Analysis.

———. 2004. "Direct Investment Positions for 2003: Country and Industry Detail." *Survey of Current Business*, July. U.S. Department of Commerce, Bureau of Economic Analysis.

Braithwaite, John, and Peter Drahos. 2000. *Global Business Regulation*. Cambridge: Cambridge University Press.

Brenner, Neil. 1999*a*. "Globalization as Reterritorialization: The Re-scaling of Urban Governance in the European Union." *Urban Studies* 36 (3): 431–51.

———. 1999*b*. "Beyond State-Centrism? Space, Territoriality, and Geographical Scale in Globalization Studies." *Theory and Society* 28 (1): 39–78.

Bryson, John R. 1997. "Obsolescence and the Process of Creative Reconstruction." *Urban Studies* 34 (9): 1439–58.

Campbell, John L. 1997. "Recent Trends in Institutional Political Economy." *International Journal of Sociology and Social Policy* 17:15–56.

Campbell, John L., J. Rogers Hollingsworth, and Leon Lindberg. 1991. *The Governance of the American Economy*. Cambridge: Cambridge University Press.

Campbell, John L., and Leon N. Lindberg. 1990. "Property Rights and the Organization of Economic Activity by the State." *American Sociological Review* 55:634–47.

Campbell, John, and Ove K. Pedersen. 2001. "Rise of Neoliberalism and Institutional Analysis." Pp. 1–22 in *The Rise of Neoliberalism and Institutional Analysis*, edited by John L. Campbell and Ove K. Pedersen. Princeton, N.J.: Princeton University Press.

Carruthers, Bruce, Sarah Babb, and Terence C. Halliday. 2001. "Institutionalizing Markets, or the Market for Institutions? Central Banks, Bankruptcy Law, and the Globalization of Financial Markets." Pp. 94–125 in *The Rise of Neoliberalism and Institutional Analysis*, edited by John L. Campbell and Ove K. Pedersen. Princeton, N.J.: Princeton University Press.

Carruthers, Bruce, and Arthur Stinchcombe. 1999. "The Social Structures of Liquidity: Flexibility, Markets, and States." *Theory and Society* 28:353–82.

Castells, Manuel. 1996. *The Rise of the Network Society*. Cambridge: Cambridge University Press.

———. 2000. "Materials for an Exploratory Theory of the Network Society." *British Journal of Sociology* 51 (1): 5–24.

Cetina, Karin Knorr, and Urs Bruegger. 2002. "Global Microstructures: The Virtual Societies of Financial Markets." *American Journal of Sociology* 107 (4): 905–50.

Charney, Igal. 2001. "Three Dimensions of Capital Switching within the Real Estate Sector: A Canadian Case Study." *International Journal of Urban and Regional Research* 25 (4): 740–58.

———. 2003. "Local Dimensions of Global Investment: Israeli Property Firms in Central Europe." *International Journal of Urban and Regional Research* 27 (2): 441–47.

Chase-Dunn, Christopher, Yukio Kawano, and Benjamin D. Brewer. 2000. "Trade Globalization since 1795: Waves of Integration in the World-System." *American Sociological Review* 65 (1): 96–116.

Clark, Eric, and Anders Lund. 2000. "Globalization of a Commercial Property Market: The Case of Copenhagen." *Geoform* 31:467–75.

Coakley, J. 1994. "The Integration of Property and Financial Markets." *Environment and Planning A* 26:697–713.

Colton, Kent W. 2002. "Housing Finance in the United States: The Transformation of the U.S. Housing Finance System." Harvard University, Joint Center for Housing Studies.

Congressional Budget Office. 2001. *Federal Subsidies and the Housing GSEs*. Washington, D.C.: Congressional Budget Office. http://www.cbo.gov.

Dicken, Peter. 1998. *The Global Shift: Transforming the World Economy*. 3d ed. New York: Guilford.

Dinsmore, Clement. 1998. "The Impact of Public Capital Markets on Urban Real Estate." Working Paper. Brookings Institution, Center for Urban and Metropolitan Policy.

Dobbin, Frank. 1994. *Forging Industrial Policy*. Cambridge: Cambridge University Press.

Downs, Anthony. 1986. *The Revolution in Real Estate Finance*. Washington, D.C.: Brookings Institution.

Edgington, D. W. 1995. "Locational Preferences of Japanese Real Estate Investors in North America." *Urban Geography* 16:373–96.

———. 1998. "The Search for Paradise: Japanese Property Investors in North America." Pp. 153–78 in *Japan and the West: The Perception Gap*, edited by K. Nagatani and D. W. Edgington. Aldershot: Ashgate.

Ernst and Young Company. 2003. *Real Estate: The Local Global Economy: An Ernst and Young Guide to Real Estate Markets around the World*. http://www.ey.com/global.

Evans, Peter. 1995. *Embedded Autonomy: States and Industrial Transformation*. Princeton, N.J.: Princeton University Press.

Fainstein, Susan S. 1994. *The City Builders: Property, Politics, and Planning in London and New York*. Cambridge, Mass.: Blackwell.

Fickes, Mike. 2003. "Imagination at Work." *Real Estate Portfolio*, March/April. http://www.nareit.com.

Fisher, I. 1907. *The Rate of Interest*. New York: Macmillian.

Fligstein, Neil. 1996. "Markets as Politics: A Political-Cultural Approach to Market Institutions." *American Sociological Review* 61 (4): 656–73.

———. 2001. *The Architecture of Markets: An Economic Sociology of Twenty First Century Capitalist Societies*. Princeton, N.J.: Princeton University Press.

Fligstein, Neil, and Iona Mara-Drita. 1996. "How to Make a Market: Reflections on the Attempt to Create a Single Market in the European Union." *American Journal of Sociology* 102 (1): 1–33.

Fligstein, Neil, and Alec Stone Sweet. 2002. "Constructing Politics and Markets: An Institutional Account of European Integration." *American Journal of Sociology* 107 (5): 1206–43.

Florida, Richard L. 1986. "The Political Economy of Financial Deregulation and the Reorganization of Housing Finance in the United States." *International Journal of Urban and Regional Research* 10 (2): 207–31.

Florida, Richard L., and Marshall M. A. Feldman. 1988. "Housing in U.S. Fordism." *International Journal of Urban and Regional Research* 12 (2): 187–210.

Fourcade-Gourinchas, Marion, and Sarah L. Babb. 2002. "The Rebirth of the Liberal Creed: Paths to Neoliberalism in Four Countries." *American Journal of Sociology* 108 (3): 533–79.

Geltner, David, Bryan D. MacGregor, and Gregory M. Schwann. 2003. "Appraisal Smoothing and Price Discovery in Real Estate Markets." *Urban Studies* 40:1047–64.

General Accounting Office (GAO). 1989. *Foreign Investment: Trends in Ownership of U.S. Farmland and Commercial Real Estate*. Washington, D.C.: General Accounting Office.

———. 1991. *Foreign Investment: Concerns in the U.S. Real Estate Sector during the 1980s*. Washington, D.C.: General Accounting Office.

Giddens, Anthony. 1987. *The Nation-State and Violence*. Vol. 2 of *A Contemporary Critique of Historical Materialism*. Berkeley and Los Angeles: University of California Press.

———. 1990. *The Consequences of Modernity*. Cambridge: Polity.

———. 2000. *Runaway World: How Globalization is Reshaping Our Lives*. New York: Routledge.

Gottdiener, M. 1994. *The Social Production of Urban Space*. 2d ed. Austin: University of Texas Press.

Gramsci, Antonio. 1971. *Selections from the Prison Notebooks*. Edited and translated by Quintin Hoare and Geoffrey Nowell Smith. New York: International.

Guillen, Mauro F. 2001. "Is Globalization Civilizing, Destructive or Feeble? A Critique of Five Key Debates in the Social Science Literature." *Annual Review of Sociology* 27:235–60.

Haila, A. 1991. "Four Types of Investment in Land and Property." *International Journal of Urban and Regional Research* 15:343–65.

———. 1998. "The Neglected Builder of Global Cities." In *Cities in Transformation: Transformation in Cities*, edited by O. Kalltopr, I. Elander, O. Ericsson, and M. Frazen. Aldershot: Ashgate.

Hardt, J. 2002. "Recent Developments in European Mortgage Markets." Pp. 161–74 in *Housing Finance in Transition Economies*. Paris: OECD.

Harvey, David. 1978. "The Urban Process under Capitalism: A Framework for Analysis." *International Journal of Urban and Regional Research* 2:101–31.

———. 1989. *The Condition of Postmodernity*. New York: Free Press.

Hayek, F. A. 1945. "The Use of the Knowledge in Society." *American Economic Review* 35 (4): 519–30.

Held, David, and Anthony McGrew. 2002. *Governing Globalization: Power, Authority, and Global Governance.* Cambridge: Polity Press.

Held, David, Anthony McGrew, David Goldblatt, and Jonathan Perraton. 1999. *Global Transformations: Politics, Economics, and Culture*. Stanford, Calif.: Stanford University Press.

Helleiner, Eric. 1994. *States and the Reemergence of Global Finance: From Bretton Woods to the 1990s*. Ithaca, N.Y.: Cornell University Press.

Hirst, Paul, and Grahame Thompson. 1999. *Globalization in Question: The International Economy and the Possibilities of Governance*. 2d ed. Cambridge: Polity Press.

Hollingsworth, J. Rogers, and Robert Boyer. 1997. *Contemporary Capitalism: The Embeddedness of Institutions*. Cambridge: Cambridge University Press.

Hommels, A. 2000. "Obduracy and Urban Sociotechnical Change: Changing Plan Hoog Catharijne." *Urban Affairs Review* 35:649–76.

Immergut, Ellen. 1998. "The Theoretical Core of the New Institutionalism." *Politics and Society* 26 (19): 5–34.

Krier, Dan. 2005. *Speculative Management: Stock Market Power and Corporate Change*. Albany: State University of New York Press.

Krippner, Greta. 2004. "The Financialization of the American Economy." *Socioeconomic Review* 3:173–208.

Lea, Michael J., ed. 1999. *Secondary Mortgage Markets: International Perspectives*. New York: International Union of Housing Finance.

Lea, Michael J., and S. Bernstein. 1995. *Housing Finance Sourcebook*. London: International Union for Housing Finance.

Lefebvre, Henri. (1970) 2003. *The Urban Revolution*. Minneapolis: University of Minnesota Press.

Lend Lease Real Estate Investments and PricewaterhouseCoopers. 2003. *Emerging Trends in Real Estate*. New York: Lend Lease Real Estate Investments and PricewaterhouseCoopers.

Logan, John R. 1991. "Gambling on Real Estate: Limited Rationality in the Global Economy." *Sociological Perspectives* 34 (4): 391–401.

———. 1993. "Cycles and Trends in the Globalization of Real Estate." Pp. 33–54 in *The Restless Urban Landscape*, edited by Paul L. Knox. Englewood Cliffs, N.J.: Prentice Hall.

Logan, John, and Harvey Molotch 1987. *Urban Fortunes: The Political Economy of Place*. Berkeley and Los Angeles: University of California Press.

MacDonald, Heather. 1995. "Secondary Mortgage Markets and Federal Housing Policy." *Journal of Urban Affairs* 17 (1): 53–79.

———. 1996. "The Rise of Mortgage-Backed Securities: Struggles to Reshape Access to Credit in the USA." *Environment and Planning A* 28 (7): 1179–98.

Maddison, Angus. 1995. *Monitoring the World Economy, 1820–1992.* Paris: OECD.

Magdoff, Harry, and Paul M. Sweezy. 1987. *Stagnation and the Financial Explosion*. New York: Monthly Review Press.

Marx, Karl. (1867) 1977. *Capital*. Vol. 1. Translated by Ben Fowkes. New York: Vintage.

Mataloni, Raymond J. 1995. "A Guide to BEA Statistics on U.S. Multinational Companies." *Survey of Current Business*, March. U.S. Department of Commerce, Bureau of Economic Analysis.

Molotch, Harvey. 1976. "The City as a Growth Machine: Toward a Political Economy of Place." *American Journal of Sociology* 82:309–30.

National Association of Realtors (NAR). 2002. *Foreign Investment in U.S. Real Estate: Current Trends and Historical Perspective*. Washington, D.C.: National Association of Realtors.

Office of Federal Housing Enterprise Oversight (OFHEO). 2003. *Systemic Risk: Fannie Mae, Freddie Mac, and the Role of OFHEO*. Washington, D.C.: Office of Federal Housing Enterprise Oversight.

O'Riain, Sean. 2000. "States and Markets in an Era of Globalization." *Annual Review of Sociology* 26:187–213.

———. 2004. *The Politics of High-Tech Growth: Developmental Network States in The Global Economy*. Cambridge: Cambridge University Press.

Prechel, Harland. 2000. *Big Business and the State: Historical Transitions and Corporate Transformation, 1880s–1990s*. Albany: State University of New York Press.

Pyrke, M. 1994. "Urbanizing Capitals: Towards an Integration of Time, Space, and Economic Calculation." Pp. 218–52 in *Money, Power, and Space*, edited by S. Corbridge, R. Martin, and N. Thrift. Oxford: Blackwell.

Quijano, Alicia.1990. "A Guide to BEA Statistics on Foreign Direct Investment in the

United States." *Survey of Current Business*, February. U.S. Department of Commerce, Bureau of Economic Analysis.
Robinson, William I. 2001. "Social Theory and Globalization: The Rise of the Transnational State." *Theory and Society* 30 (2): 157–200.
———. 2004. *A Theory of Global Capitalism*. Baltimore: Johns Hopkins University Press.
Sassen, Saskia. 1999. "Making the Global Economy Run: The Role of National States and Private Agents." *International Social Science Journal* 51 (3): 409–16.
———. 2000. "Territory and Territoriality in the Global Economy." *International Sociology* 15 (2): 372–93.
———. 2001. *Global Cities: New York, London, Tokyo*. 2d ed. Princeton, N.J.: Princeton University Press.
Scholte, Jan Aart. 2002. "Governing Global Finance." Pp. 189–208 in *Governing Globalization*, edited by David Held and Anthony McGrew. Cambridge: Polity Press.
Schumpeter, Joseph. 1934. *Capitalism, Socialism and Democracy*. New York: Harper & Row.
———. 1939. *Business Cycles*. New York: McGraw-Hill.
Sites, William. 2000. "Primitive Globalization: State and Locale in Neoliberal Global Engagement." *Sociological Theory* 18 (1): 121–44.
Steinberg, Marc W. 2003. "Capitalist Development, the Labor Process, and the Law." *American Journal of Sociology* 109 (2): 445–95.
Steinmo, S., K. Thelen, and F. Longstreth. 1992. *Structuring Politics*. Cambridge: Cambridge University Press.
Stephens, Mark. 2000. "Convergence in European Mortgage Systems Before and After EMU." *Journal of Housing and the Built Environment* 15:29–52.
———. 2003. "Globalization and Housing Finance Systems in Advanced and Transition Economies." *Urban Studies* 40:1011–26.
Strange, Susan. 1996. *The Retreat of the State: The Diffusion of Power in the World Economy*. Cambridge: Cambridge University Press.
Temkin, Kenneth, Robert G. Quercia, and George Galster. 2000. "The Impact of Secondary Mortgage Market Guidelines on Affordable and Fair Lending: A Reconnaissance from the Front Lines." *Review of Black Political Economy* 28 (2): 29–53.
United Nations Conference on Trade and Development (UNCTAD). 2001. *World Investment Report 2001: Promoting Linkages*. New York: United Nations.
U.S. Department of State. 2002. *U.S.-Japan Economic Partnership for Growth: U.S.-Japan Initiative Report.* Washington, D.C.: U.S. Department of State. http://www.state.gov/p/eap/rls/rpt/11438/htm.
U.S. House of Representatives. 1989*a*. *Financial Institutions Reform, Recovery, and Enforcement Act of 1989, Pts. 1 and 2.* Committee on Banking, Finance and Urban Affairs, Subcommittee on Financial Institutions Supervision, Regulation and Insurance. 101st Congress. 1st Session. Washington, D.C.: Government Printing Office.
———. 1989*b*. *Administrative Plan to Resolve the Savings and Loan Crisis*. Committee on Banking, Finance and Urban Affairs. 101st Congress. 1st Session. Washington, D.C.: Government Printing Office.
———. 1990. *Financial Institutional Reform, Recovery and Enforcement Act of 1989, FIRREA, and Its Impact on the Federal Home Loan Bank System*. Committee on Banking, Finance and Urban Affairs, Subcommittee on General Oversight and Investigations. 101st Congress. 2d Session. Washington, D.C.: Government Printing Office.
U.S. Senate. 1999. *The Financial Services Modernization Act of 1999.* Committee on Banking, Housing, and Urban Affairs. 106th Congress. Washington, D.C.: Government Printing Office.

Vogel, Steven K. 1996. *Freer Markets, More Rules: Regulatory Reform in Advanced Industrial Countries*. Ithaca, N.Y.: Cornell University Press.
Weber, Rachel. 2002. “Extracting Value from the City: Neoliberalism and Urban Redevelopment.” Pp. 172–93 in *Spaces of Neoliberalism: Urban Restructuring in North American and Western Europe*, edited by Neil Brenner and Nik Theodore. Malden, Mass.: Blackwell.
Whichard, Obie G. 2003. “Measuring Globalization: The Experience of the United States of America.” Paper presented at the annual meeting of the European Advisory Committee on Statistical Information in the Economic and Social Spheres (CEIES), Copenhagen, June. Available online at http://www.bea.gov.
Yuskavage, Robert E. 1996. “Improved Estimates of Gross Product by Industry, 1959–1994.” *Survey of Current Business*, August. U.S. Department of Commerce, Bureau of Economic Analysis.
Zhu, Haibin. 2002. “The Case of the Missing Commercial Real Estate Market.” Quarterly report, *Bank for International Settlements* 7:56–66.