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Finance and the State in the Housing Bubble

To what extent was the housing bubble a geo-political phenomenon? Most of the chapters in this volume analyze highly localized or specific phenomena. But the subprime mortgage fiasco and the housing bubble were more than the consequence of massive over-leveraging by investment and commercial banks or financial predation on American minorities. Every level of the global economy was marked by a combination of excessive leverage and extensive maturity mismatches. And at every level, the US state played a substantial role in arranging and supporting both leverage and maturity mismatch, often in ways that go beyond the creation of the global market for mortgage backed securities described in Gotham's chapter. A set of nested political concerns paralleled these leveraged positions. At the highest, geopolitical level, leverage enabled a resurgence of US economic power. At the local level, American political parties sought permanent majorities by delivering housing-based wealth to new, largely minority, constituencies. In the middle, connecting the other two levels, US financial firms sought to expand their control over global profit flows by marketing claims on this new housing wealth (Seabrooke, 2006).

Here I make four linked points. First, I argue that the US economy was losing global "market share" share during the 1970s and 1980s. US state elites changed policy to reverse this relative decline. These policy shifts inadvertently created the conditions for a housing led economic boom during the long 1990s (1991-2005). The Clinton administration's pursuit of fiscal balance accelerated disinflation, which in turn created fictitious capital by boosting housing prices. Second, the US state supported a global leveraging up of the US economy in which the US borrowed short term at low interest rates from the rest of the world, while investing back into the world on a long term, high return basis. Housing based securities and Treasury bonds were the major vehicles for this leveraging. The implicit guarantee for various forms of Agency (Fannie Mae and Freddie Mac) debt enabled the US to borrow in global markets at low interest rates. In turn, this generated above OECD-average GDP and employment growth in the United States, reversing relative decline. Third, financial deregulation enabled banks to create novel derivative products that re-packaged mortgages, as well as novel vehicles to hold those derivatives. The Bush administration's deliberate regulatory forbearance permitted banks to leverage their holdings of those new mortgage based products at levels well above prior practice. Fourth, narrower partisan considerations permitted a regulatory environment that encouraged excessive production of private, subprime mortgages and mortgage backed securities (MBS) as the raw material for these new derivatives. The Clinton administration expanded the Community Reinvestment Act and encouraged Fannie and Freddie to expand lending to poor urban areas in order to link those communities to the regulated banking industry in a politically visible way. Equally so, and put bluntly, the Republican party wanted to use increased rates of homeownership among blacks and latinos to lure a slice of these culturally conservative but economically excluded groups away from the Democratic party and towards themselves. The conclusion this notes that the housing boom and bust thus grew out of a set of intersecting geo-political and partisan political imperatives. This makes a re-run of the housing bubble unlikely. Nevertheless, housing and housing finance will remain at the center of efforts to restart the US economy, even though, or especially because, housing finance has now been resocialized.

1: Relative growth and global power

From the 1950s to the end of the 1980s, the United States suffered a decline in its relative geo-economic power, defined as its share of global output, its ability to escape the normal constraints economies face, and the control exerted by US based firms over global commodity chains. In some respects part of this decline was inevitable as other countries recovered from World War II. Nevertheless, this decline posed a substantial geo-economic policy problem for the US state. State actors sought to reverse this decline through a number of deliberate policy initiatives. These initiatives inadvertently created a temporarily virtuous cycle of housing-led growth for the United States and other countries with similar housing finance systems. This section defines geo-economic power and describes the decline and recovery of US power. Put simply, disinflation after 1989 filtered through the US housing finance system to generate differential growth – relatively faster economic growth – for the United States. Differential growth both generated large volumes of profit that could be used to take control of critical nodes in production chains, and encouraged and validated investment in new production processes related to those critical nodes. Control assured continued profitability. Differential growth attracted foreign capital inflows, removing the normal constraints on the US economy. Yet these processes were not fully independent, as foreign capital inflows – a substantial part of which came as purchases of MBS – also helped activate US differential growth.

From 1950 through 1982 the US share of gross world product fell from 27.7% to 20.9%, and its share of rich country GDP declined from 46.6% to 37.8% (Groningen database).[1] Both shares then stabilized at roughly those levels through 1990. US multinational firms (MNCs) continuously expanded their control over global production into the 1980s, sparking a range of alarmed books about the American Challenge and widening dependency in the third world. Yet the emergence of MNCs from other rich countries, and the sharp increase in their direct investment into the US economy in the 1980s relatively diminished US firms' control. While US-based MNCs accounted for nearly all global foreign direct investment (FDI) in 1950s, by the early 1980s they accounted for only 28.1% and by the late 1980s they accounted for only 14.3%, well below the US share of the global economy (UNCTC, 1991:10). Finally, the ability of the United States to escape the normal economic constraints also diminished through the 1960s, culminating in President Nixon's 1971 decision to go off the gold standard. Normally an economy experiences a trade-off across consumption, domestic investment, and foreign investment. The only way to escape this constraint is to borrow. Foreign willingness to hold a net position in dollar denominated assets – the essence of an escape from constraint and a pre-condition for use of the as an international reserve dollar currency – wavered in the 1970s and 1980s. By the end of the 1980s, the US

[1] Rich countries are defined here as the high income constituents of the Organization for Economic Cooperation and Development (OECD) net of the eastern European countries, Greece, Korea, Mexico, and Turkey.

share of global official reserves had fallen below 50% and the dollar's position as a reserve currency was in question.

US policymakers responded to American relative decline in a variety of ways. The Nixon administration famously terminated the Bretton Woods gold-dollar standard, and less obviously began reshaping the global trade regime. But it also responded to the erosion of US superiority in the manufacture of 'dumb' machinery through a whole range of largely covert policies designed to promote a shift towards an information technology and biotechnology based economy (Hurt, 2009). The Carter administration began a long process of service sector deregulation continued by the Reagan administration. Both also promoted a ferocious attack on inflation from 1979 forward and consolidated the shift towards an information technology economy. These facilitated the later supply chain revolution. The George W.H. Bush and Clinton administrations matched this with a process of fiscal consolidation later undone by George W. Bush. All these initiatives produced an upturn in the rate of productivity and thus output growth by the 1990s. While most of these gains – disinflation, the supply chain revolution, mobile telephony, etc – were shared by America's peer rivals, the US economy outperformed the OECD average in the long 1990s, from 1991 to 2005. This outperformance stabilized US economic power globally, and expanded it relative to its rich country peer rivals.

From 1991 onward, the United States escaped the usual economic constraints, and was able to expand consumption (including government consumption), domestic investment and investment overseas faster than the underlying expansion of the US economy. From 1991 to 2005 consumption expanded from 65% to 70% of US GDP. Simultaneously the share of domestic gross fixed capital formation in GDP also grew by 5 percentage points, from 14% to 19%. Theoretically this simultaneous expansion might be possible if the United States redirected capital flows that had gone overseas into domestic consumption and investment. But in fact, a cumulative and non-trivial $7 trillion dollars flowed out of the United States into overseas investments during this period. How did the United States escape the usual constraints on consumption, domestic investment, and foreign investment?

The United States escaped the usual constraints in the usual way – borrowing abroad. US net foreign debt expanded absolutely to roughly $3 trillion and relatively to about 25% of GDP during the long 1990s. How can this rising debt be squatted with the claim that US economic power rose during those years? Curiously, despite its rising net foreign debt, the United States – aggregated into one accounting identity – made money on its international investments. Rising US foreign debt enhanced US growth and power rather than diminishing it. Foreign borrowing financed both rapid US economic growth and expanded control over global commodity chains by firms headquartered in the United States.

During the long 1990s, the $7 trillion investment outflow from the United States increased US entities' control over foreign firms and global commodity chains. From 1994 to 2006, the US owned share of the Morgan-Stanley MSCI All Country World ex-US market index rose from 10% to 24% of total global market capitalization (Heckman, 2008). By contrast, foreign holdings of US equities rose more slowly from 5.1% to 9.7% of US market capitalization. US firms also grew faster overseas than foreign firms grew in the US market, 1995-2004. Despite a 10% increase in the dollar's exchange rate through 2004 (which diminishes measures of overseas activity), overseas value added by US based MNCs increased by 40%, while turnover nearly doubled to 7.8% of gross world product (UNCTC, 2006: 332-333; BEA, 2007:45; OECD, 2008:378, 382). Moreover, despite slower growth in other rich countries, the ratio of US MNCs' overseas sales to sales in the US by firms doing FDI into the US also rose from 1.3 to 1.5, 1995-2004, while the ratio of value added increased from 1.4 to 1.6. Finally, the share of global outward FDI controlled by US based firms recovered to 21.4% (UNCTC, 2008: 257).

Foreign capital inflows also accelerated US economic growth, enabling the United States to out-grow its rich country peers. Indeed, those rich country peers accounted for half of global lending to the United States, slowing growth in their own economies. Table **x.1** presents population adjusted for differences in population growth. Massive foreign lending to the United States provided between 10 and 20% of total lending in US credit markets annually after 1994; by 2005 it accounted for 25 percent (D'Arista and Griffith-Jones, 2006:64). Wily foreigners lent against collateral, or so they thought, buying huge volumes of MBS. With the nominal market value of US houses rising by about $14 trillion, and mortgage debt rising by nearly $7 trillion from 1991 to 2006, there was plenty of collateral to go around. This inflow of foreign capital helped the US economy maintain its share of global GDP at 20%, despite rapid contemporaneous economic growth in China, India and other developing countries. Equally important, the US share of OECD GDP increased by 4.2 percentage points to 42.7%, reversing the post 1950 fall.[2] The big relative losers in terms of shares of global output were Germany and Japan, even though they generated large export surpluses. These surpluses reflected domestic growth deficits and a growing reliance on external demand for growth.

Table x.1: Differential Growth among the United States, Germany and Japan, (population adjusted)				
% change in:	United States	OECD Average	Germany	Japan
GDP per capita*	33.5	28.1	17.3	13.3
Gross Fixed Capital Formation*	79.9	48.2	2.7	-13.5
Real output per hour in manufacturing**	106	71	68	64
Total manufacturing output**	74	52	16	15
Source: Schwartz, 2009a; * = 1991-2005; ** = 1991-2006				

Why did the United States outgrow its peer competitors? US policymakers responded to US decline with a variety of policy responses. These helped reverse US decline, but their effects were widespread and arguably should have helped other countries as well. Some Carter and Reagan era technology projects accelerated improvements in chip design and fabrication, lowering IT costs for the broad economy; other projects generated the digital signal processing chips at the heart of the mobile telephony revolution. Yet the roll-out of new technologies in the 1990s did not automatically guarantee relatively *faster* US growth as compared to its rich country peers. Everyone had access to new thinking about supply chain management, to mobile telephony, and to the internet. Arguably, European economies adapted to and utilized mobile telephony more quickly than did the US economy. Similarly, the Clinton administration's successful reduction of the US fiscal deficit led the US Federal Reserve Bank to lower interest rates. This too had positive externalities for all economies. Nominal long term interest rates fell from 8.7% to 4.0%, 1990 to 2003, in the United States (*OECD Factbook, 2005*). But they fell farther and lower in Europe, with Euroland nominal long term interest rates dropping from 11.2% in 1990 to 3.5% by 2005.

[2] Calculated from the EU-KLEMS database at http://www.euklems.net/, using purchasing power parity GDP in constant 1990 Geary-Khamis dollars, which controls for fluctuations in exchange rates and inflation.

Arguably falling nominal interest rates should have propelled all economies forward. While real interest rates did not fall, studies show that housing prices are much more sensitive to nominal rates than real rates (Green and Wachter, 2007:9). Yet the United States and OECD economies with similar housing finance systems did better than OECD economies with housing finance systems unlike that in the United States. Different housing finance systems interacted with the same environmental decline in nominal interest rates to produce different growth outcomes. Four features characterize US style housing systems: high rates of private homeownership; high levels of mortgage debt relative to GDP; low transaction costs for obtaining mortgages, cashing out home equity, and transferring property; and high rates of securitization of new mortgages. These four institutional features determined the degree to which falling nominal interest rates could be translated into new aggregate demand (MacLennan, Muellbauer and Stephens, 1998).

The level of homeownership determines how many households are affected by changes in housing costs and housing prices. The scale of mortgage debt in relation to GDP determines how much purchasing power can be activated if debt payments are reduced. Low transaction costs for refinance and the possibility of securitization determine whether it is actually possible to reduce those payments. Thus these features can be thought of as the sources for the breadth, depth and likelihood of increased aggregate demand. When all four features were present, sometimes with an additional fillip from tax subsidies for mortgage interest, they enabled a relatively straightforward process of Keynesian demand stimulus to operate. When they were not present, the disinflation of the 1990s did not trigger increased aggregate demand. In the United States, the average new homeowner buying between 1999 and 2005 saw an increase in median net wealth from $11,100 to $88,000, mostly in home equity, while incumbent households' median net wealth nearly doubled from about $152,400 to $289,000. And Americans spent this fictitious wealth, withdrawing an average of $300 billion per year via home equity loans and the like. While prices also rose in many European countries, housing finance systems in those countries did not allow incumbent homeowners to tap into their nominally higher equity. Differences in housing finance structures thus explain much of the difference in growth rates – but not the absolute growth rate – among OECD economies in the 1990s (Schwartz, 2009a).

Rising housing prices allowed all levels of American society to indulge in leveraged investment at foreign expense. American households and firms used rising housing prices to leverage themselves up. Interest rates on US mortgages are usually pegged to the 10 year Treasury Bond, whose rates fell steadily through the 1990s. Americans used equity withdrawal to pay down much higher interest rate credit card debt, to avoid somewhat higher automobile purchase debt, and to pour money into domestic and international mutual funds. US firms borrowed cheaply in foreign markets and reinvested abroad; US based FDI increased by $2.76 trillion from 1990-2008, versus only $1.88 trillion of inward flows or reinvestment. US financial firms borrowed cheaply by issuing asset backed commercial paper to the money markets in order to fund purchases of longer term, higher yielding sub-prime mortgages. Finally, as noted above, the United States at a macro-economic level also leveraged up, creating new and low yielding housing based assets that could be exchanged with foreigners for higher yielding claims on those foreign economies. Housing related debt made all of this possible. This highest level aggregates all the other flows, so the next section explores how deregulation enabled the US to create massive amounts of marketable housing related debt, and in turn enabled US arbitrage in global markets.

2: Deregulation and securitization

As the Gotham and Aalbers chapters note, prior to widespread securitization, banks held mortgages to maturity and made money off the interest rate spread between deposits and loans. Absent a change in regulation and behavior, these illiquid loans could not be sold to anyone. Deregulation of US financial markets enabled these dead loans to become live securities. By 2007, Agency MBS and borrowing accounted for nearly half of outstanding US residential mortgage debt of $11.1 trillion. A further quarter of outstanding mortgage debt was privately securitized, leaving only 25% in the traditional, illiquid bank-held format (Credit Suisse, 2007; FNMA, 2006); FHLMC, 2006); Federal Reserve Bank, 2008). As the third section shows, overseas sales of these MBS helped energize the US economy, enabling the United States to maintain high rates of growth and positive net international investment income even as US net foreign debt was rising. Fannie and Freddie's securitization of mortgages thus played a crucial supply side role in the process of foreign debt financed, housing driven US growth. Securitization was not specifically aimed at enabling foreign capital inflows; by 2007 roughly 60% of all US credit was being securitized (Anderson, 2009). But securitization did enable overseas sales of mortgage assets to a wide range of customers, including central banks.

Absent securitization, foreign funds could only enter the US market if foreign banks established a presence in the market, or if US banks accepted exchange rate risks and borrowed offshore. In 2001, foreign holdings of Agency MBS amounted to $133 billion. By 2007 foreign holdings exceeded $1 trillion, with foreign official institutions – i.e. Asian central banks – holding the majority (Department of the Treasury, 2007: 11). Without a standardized product and liquid markets, foreigners would have been less willing to buy mortgage assets from the US, making it harder for the US to fund its trade deficit. (Non-Agency MBS did not become important until 2004-2007, and apparently were largely held by off-shore subsidiaries of US financial firms.) Treasury bonds alone could not supply enough assets on the scale observed in the 1990s, because the underlying fiscal deficit corresponding to that outflow of Treasury bonds would have spooked international investors, just as US fiscal deficits scared foreign (and domestic) investors in the late 1980s and early 1990s.

In other words, massive sales of Treasury debt would have undermined the conditions permitting massive sales of Treasury debt, by driving investors away from the dollar. Massive sales of corporate equities to foreigners would also have provoked a political backlash, as in the late 1980s when Japanese investment into the United States surged. Instead housing related debt filled the gap. Sales of GSE MBS and then privately generated MBS filled the gap. At mid 2007 total Agency debt amounted to nearly twice marketable Treasury debt, because Agency debt typically constitutes a third of all marketable US debt securities, public and private. Fannie and Freddie also played a crucial demand side role, absorbing new mortgages generated by the relentless upward trend in housing prices and the equally relentless extraction of home equity. Foreign holdings of Agency mortgage backed securities amounted to about $260 billion (or 7 percent of the outstanding amount) by 2000, and about $1.5 trillion (or 21 percent) by 2008. The foreign share of corporate bonds was similar at $2.8 trillion and 22.6 percent (US Treasury, 2009:5).[3]

Two waves of deregulation made securitization possible and profitable. The first wave of legal change came in the 1980s with the Depository Institutions Deregulatory and Monetary Control Act, which permitted banks to merge and freed them from interest rate controls, and the Garn-St. Germain Depository Institutions act which permitted savings and loan banks (i.e. thrifts, or *sparkassen*) to enter markets previously reserved for commercial banks. Newly merged banks competing in the national

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[3] Note that much corporate bond debt to 'foreigners' is actually holdings by US firms operating through subsidiaries chartered in tax havens.

savings market now had an incentive to sell their assets (loans) to the securities market in order to shift from generating profits through an increasingly narrower interest rate spread toward generating profits from increasingly larger fee and transaction income. Thus this wave of deregulation created a larger supply of securitizable mortgages. Fannie Mae and Freddie Mac provided the demand for these mortgages, securitizing $95 billion of mortgages in 1988 and $430 billion by 1993. In this phase, securitization performed a socially useful function by reducing maturity mismatches for banks. Banks otherwise would have had to fund long dated assets (mortgages) with short dated liabilities (consumer deposits). Instead, securitization allowed organizations like pension, insurance and mutual funds to match long term assets against long term liabilities to their clients.

The second wave of key legal changes occurred in the 1990s. The 1999 Gramm-Leach-Bliley Act (i.e. the Financial Services Modernization Act of 1999) repealed the Glass-Steagall act, breaking down barriers between depository institutions and securities firms. Gramm-Leach-Bliley connected the supply and demand side for MBS. Securities firms now potentially had direct access to the raw material for MBS; banks now had their own outlet for MBS and could bypass Fannie Mae and Freddie Mac. By 2004, private securitizers (i.e. not Fannie Mae, Freddie Mac, or Ginnie Mae) were creating more than half of the $1.8 trillion in MBS issued that year. This allowed them to use securitization for socially useless purposes, by deliberately creating maturity mismatches. Investment banks borrowed in short term money markets to fund purchases of collateralized debt obligations (CDOs) composed of long dated mortgages.

The George W. Bush administration gave financial firms even more running room. A series of well publicized events in 2001 showcased the head of the Office of Thrift Supervision (OTS), which is one of several federal government regulators of savings banks, and the Federal Deposit Insurance Company (FDIC) using a chainsaw to cut through a stack of regulatory manuals with the help of representatives of bank lobbying associations. In 2004 the Bush administration ordered the Office of the Comptroller of the Currency to pre-empt all nationally chartered banks from stricter state-level anti-predatory lending laws and other restrictions on their ability to issue mortgages (Ding, Quercia and White, 2009). These banks promptly took advantage of regulatory laxity to issue high interest rate loans even though borrowers most likely could not service these loans. The share of high costs loans in pre-empted states tripled from 16% to 46%, 2004 to 2007, creating the problems documented in other chapters in this volume. Deregulation and pre-emption freed banks to generate a cumulative $1.7 trillion in subprime and Alt-A loans from 2004 to 2007. Leonard Seabrooke has argued that the economic power of US financial institutions rests in part on their ability to transform incomes at the bottom of the income distribution into liquid assets. These assets enabled US financial firms to regain their prominence vis-à-vis the Japanese and German banks that went global in the 1980s (Seabrooke, 2006). While Seabrooke is undoubtedly correct about the period before 2004, the subsequent three years saw an unstable exaggeration of this process. Nevertheless, the steady stream of securitized assets over the entire long 1990s enabled the United States to engage in a global system of arbitrage, which is the subject of the next section.

3: US leverage in global markets: a house of cards or playing the housing card?

How could the United States be both a large net foreign debtor and the recipient of net positive international investment income since the early 1990s? In 2007, removing six zeros, this was rather like a private investor, who owed $20,082 while holding investments worth only $17,640, somehow managing to pay out only $726 on her debts while earning $818 from her own investments, and thus receiving net income of $92. A smart or lucky individual might have net positive investment income despite net debt. It is perfectly plausible that a savvy individual investor might be able to borrow money, invest only part, and still net a positive return. But it is implausible that on average every US investor is smarter than every foreign investor. It is even less plausible that every US investor suddenly became even smarter after the US became a net debtor, as data from Pierre-Oliver Gourinchas and Hélène Rey (2005) suggest. They calculate that from 1960 to 2001, US overseas assets earned an annualized rate of return 2 percentage points higher than US liabilities to foreigners, at 5.6 percent versus 3.6 percent. Furthermore, the gap expanded after 1973, as US assets yielded 6.8 percent while liabilities cost only 3.5 percent. This is one reason why, despite 5 years of cumulating trade deficits, US net foreign debt was the same 20 percent of GDP in 2007 as it had been in 2002.

The United States generated net international income by operating a global system of financial arbitrage and leverage. Arbitrage occurs when an intermediary exploits price differences between similar commodities on two different markets, buying and selling that commodity at the same time. Differences in political, regulatory and housing market finance structures produced these price differences. The differences allowed the United States to leverage itself up and create a global maturity mismatch. At the macro-economic level, the United States systematically borrowed short term at low interest rates from the rest of the world, and then turned around and invested back in the rest of the world in longer term, higher risk, higher return, active investment vehicles. At the micro-economic level US financial institutions transformed cheap short term foreign borrowing into a huge variety of higher yield, longer term MBS and collateralized debt obligations (CDOs). Physically, US arbitrage transformed cheap overseas credit into outsized domestic investment and in particular into (literally) outsized housing. This mismatch between the US and foreign investment positions can be seen in Table x.2. About three-fifths of US outward investment is composed of high yielding equities and direct investment (columns 1 and 2), while over three-fifths of foreign investment in the United States is composed of bonds and loans (columns 3 and 4), which yield less income.

Table x.2 *International investment positions into and out of the United States, 2007, $ billions and percent*

	1	2	3	4	5
$ Billion	FDI [a]	Portfolio Equities	Portfolio Debt [b]	Loans	**Total**
United States to World	5,148	5,171	1,478	5,002	16,799
Rest of World to U.S.	3,524	2,833	6,965	4,982	18,304
Of which, Central Banks			2,931	406	3,337
% shares					
United States to World	30.6	30.8	8.8	29.8	100
Rest of World to U.S.	19.3	15.5	38.1	27.2	100
Of which, Central Banks			16.0	2.2	18.2

Notes

[a] Market Valuation

[b] omits trivial US holdings of currency and foreign holdings of US currency totaling $279 billion.

Source: Data from BEA, *International Investment Position*, http://www.bea.gov/international/index.htm#iip, date accessed 1 August 2008

Mortgage backed securities and GSE debt in general played two starring roles in this process. Foreigners overwhelmingly invested in US Treasury debt and Agency debt and MBS. The first by definition has low yields – Treasury debt provides the global reference rate – while the second is largely indexed against the first. By December 2006, foreign investors held 52 % of marketable US Treasury securities and 16.8 % of outstanding Agency debt (US Treasury, 2007: 3, 5). Asian central bank recycling of trade surpluses during the late 1990s and early 2000s depressed yields on 10 year US Treasury debt by about 90 basis points, or almost 1 percentage point, and as much as 150 basis points in 2005 (Warnock and Warnock, 2006; DFG). European and oil exporter acquisitions of dollar denominated portfolio assets should have had much the same effect in the early to mid 1990s, when those groups primarily funded the US trade deficit.

Consequently, foreign purchases of US MBS energized a giant circle: Foreign purchases of Treasuries depressed the reference rate for mortgage interest rates, causing the issue of new mortgages through refinancing or purchase; the new mortgages were then bundled into MBS and sold to foreigners; their eager purchases further depressed mortgage rates, helping banks to fund the roughly $7 trillion increase in US mortgage debt from 1991 to 2006. This debt corresponded to both an upward valuation of existing housing and a wave of new construction. The United States built 17.7 million units of housing 1990-2000, and an additional 10 million units through mid-2006, which helped the US create half of the OECD's new jobs 1991-2005. As Ronald MacKinnon notes, virtuous Asians provided much of this cash driving this cycle. Japan and China accounted for 46% of foreign Agency MBS holdings – plus more private MBS – and 51 % of foreign Treasury holdings at mid-2007 (MacKinnon, 2009). Why couldn't this virtuous cycle continue indefinitely? Ultimately all this debt had to be validated through payments on mortgages, yet new entrants to the housing market – the subjects of the chapters by Hernandez and Wyly, et al. – were increasing income constrained. The next section discusses how partisan political strategies intersected with financialization of the housing market to create the housing boom and bust.

4: The intersection of the micro-politics of race with the macro-economics of housing

4a: Why housing?

Logics of state – restoring US global economic power – intersected with narrower party-political strategies precisely over housing finance. Partisan struggles over housing provision in the United States thus helped to both accelerate the US housing boom and then tip it into a bust. Put simply, both Democrats and Republicans respectively sought increased homeownership to cement or attract the votes of parts of the black and latino populations. While US politicians did not promote homeownership with quite the same vigor as British politicians (Watson, 2009), they did embark on partisan policies promoting home ownership, particularly for poor black, latino and white voters. Democrats used the Community Reinvestment Act to try to cement black voters' loyalty and secure latino voters' loyalty though increased access to bank-originated mortgages. Republicans similarly tried to detach some – not all – black and latino voters from the Democratic coalition by tolerating a huge expansion of subprime lending by non-depository institutions. (Unlike a bank, a 'non-depository' financial firm is not covered by federal deposit insurance, and consequently is not required to hold the same level of reserves.) Both strategies tried to address the underlying problem, namely stagnant incomes, by boosting homeownership and thus financial assets for the poor.

These competing housing policies reflected the state of play in US presidential elections. By the 1990s, the Republicans had succeeded in taking nearly all southern white Protestants and many northern urban Catholics out of the Democratic Party's coalition, leaving the parties evenly balanced. Generally speaking, US elections have been won by the party that captures most of the votes of the one-third of white US families that have incomes over $100,000, as the Democrats did twice in the 1990s and the Republicans did twice in the 2000s. Yet both parties sought to turn tenuous majorities into permanent majorities. The Democrats – whose hold on the well-to-do slice of America has always been more tenuous than their hold on poorer, darker slices of America – sought a permanent majority by removing the race issue. Reforming social assistance programs while moving more blacks into the middle classes through housing policy would defuse white voters' fears that redistribution inevitably favored blacks.

For their part, Republicans had a firmer grasp on the white electorate, winning 54 and 58 percent of white votes in 2000 and 2004. But Republican strategist Karl Rove sought to create a permanent Republican majority by taking away part of the Democratic party's non-white base. Republicans had captured 44 percent of latino votes in the 2004 election, and swelling immigrant populations in all states and especially the southwest made this bloc even more attractive. If the Republicans could capture an additional 10 or 20 percentage points of this vote, the Democrats faced electoral doom in the southwest. Equally so, shaving 10 percentage points off the Democrats' share of the black vote would endanger the Democrats' majority in crucial states like Florida, Ohio and Michigan. In Rove's analysis, latinos and blacks were cultural conservatives and thus halfway to the Republican party. Economic issues, though, drove them towards the Democrats. Like Thatcher, Rove reasoned that turning some latinos and blacks into homeowners would transform into them economic conservatives as well. Indeed, the drop in the Democrat's latino vote share from 62 to 53 percent, 2000 versus 2004, indicated that this group was biddable.

Homeownership was a plausible lever to move these groups because real wages stagnated for the bottom 60-70 percent of the US workforce from the 1980s onwards. Homeownership thus became an increasingly important part of people's current consumption and retirement security; homeowners typically had 5 to 10 times the net worth of non-homeowners (Gramlich, 2007:80-2). Housing wealth also provided Americans with a cushion against unforeseen medical or accident expenses not covered by insurance, by allowing them to borrow against their home equity. Even in the bottom quartile of US households by income, the median family had $80,000 of home equity in 2007, almost as much as the next two quartiles (Harvard JCHS, 2009:14). Yet homeownership was unevenly distributed. Among elderly households (65 to 74 years old), in 1980 only 59 percent of black households owned their home, versus 76 percent of white households. By 1990 both groups had moved up to 64 and 82 percent, but the gap persisted (Masnick, 2001:29). Moreover, among younger households the rate of ownership was falling and the gap was expanding. Whereas 57 and 30 percent of white and black households aged 25 to 34 owned (mortgaged) homes in 1980, by 1990 only 52 and 24 percent did (Masnick, 2001:29). Housing policy thus became an important lever to capture biddable voters. Moving non-homeowners into homeownership, and moving owners at the bottom of the housing ladder upward, seemingly bestowed huge financial rewards on those groups. The party that could take credit for these rewards would win votes.

4b: Democratic Party initiatives

The Clinton administration tried to expand minority homeownership and close the ownership gap. While lower relative income among blacks and latinos was a continuing cause for lower ownership rates, so too was outright discrimination. Housing finance in the post-war period had produced and reproduced standardized, predominantly white, suburban households and housing products. Government agencies like the Federal Housing Administration and Fannie Mae, as well as private banks, had 'redlined' black neighborhoods, meaning that they simply refused to make loans to potential black owners regardless of their income or creditworthiness. They also explicitly sought to preserve the character of existing neighborhoods by refusing loans to blacks seeking to move into white neighborhoods. The 1968 Fair Housing Act made these practices illegal, requiring banks to lend on the basis of objective measures like credit scores and documented income. De facto, though, both practices continued up into the 1970s.

The Carter administration thus passed the 1977 Community Reinvestment Act (CRA) to force banks to behave, first by applying the same lending criteria to all borrowers and second by recycling depositors' money back into depositor neighborhoods. The CRA bound only depository institutions – i.e. those whose deposits were covered by federal deposit insurance. The CRA produced a modest improvement in minority homeownership, which reached 42.3 percent of all black households and 41 percent of latino households by 1994 (Harvard JCHS, 2009:37).

In 1994, the Clinton Administration publicly committed to raising homeownership rates to 67.5 percent of households by 2000, and amended the CRA in 1995 to force banks to stop limiting lending in 'redlined' communities. These amendments did not force banks to make high risk loans, and the amended CRA did not have specific lending targets. However, statistically speaking residents of poorer neighborhoods were more likely to have insecure incomes, shaky credit histories, and smaller down payments. Banks consequently scrutinized these borrowers carefully, knowing that the resulting loans would have to stay on their books, and thus constitute a credit risk for the bank. Given that the CRA contained no penalties for non-compliance (aside from the normal anti-discrimination issues), why did banks comply with CRA? Regulators could use non-compliance to block the bank mergers that proliferated in the wake of financial deregulation in the 1990s. The CRA thus motivated banks to extend credit to low income households. In addition, the Clinton administration pressed Fannie Mae and Freddie Mac to securitize a wider range of loans – though not 'subprime.' By 2000, homeownership rates among blacks and latinos reached 47.6 and 46.3 percent respectively, versus an average rate of 67.4 percent (Harvard JCHS, 2009:37). The Clinton policy created a tight nexus between banks, the community groups that monitored their CRA compliance, and Democratic party politicians in Congress. It thus tied minority elites more firmly to the Democratic party, by showing that the party could deliver jobs and wealth to minority communities. To an extent this was a cyclic phenomenon: in the 1990s gently falling interest rates, gently rising incomes at the bottom, and a robust employment market created a virtuous cycle in which successful homeownership and income stability reinforced each other.

To what extent did this expansion of credit and homeownership create the conditions for the later crisis? While the 1995 CRA revisions permitted securitization of subprime loans, non-depository institutions – those not covered by depositors insurance – were already securitizing these loans in 1995, and CRA securitizations did not start until 1997. The CRA unquestionably facilitated growth in this market, but largely at the margin. CRA lending accounted for only 6 percent of the total volume of outstanding subprime lending in 2007, and CRA loans did not default at rates above the entire pool of subprime loans, indicating that they were not excessively risky (Duke, 2009). Instead, the problems with subprime clearly emerged from the Republican party's deregulation of depository institutions and <u>non-regulation</u> of non-depository financial firms and national bank after 2000.

<u>4c: Republican Party initiatives</u>

Like the Democrats, the Republicans used housing policy for partisan purposes. George W. Bush publicly set a goal of 5.5 million more minority homeowners, subsidizing first time purposes by low income buyers through the American Dream Downpayment Act of 2003. Despite this, and unlike the Democrats, the Republicans sought a market based policy that would reward their campaign contributors with lavish profits. As noted above, the Bush administration eased regulation of financial firms in 2001 and pre-empted stricter state-level laws in 2004. Lenders used this permissive environment regulated to originate and securitize a vastly expanded volume of subprime loans, as well as a vastly expanded and increasingly risky range of mortgage products. Thus, for example, OTS supervised banks originated about $255 billion in so-called Option ARM loans in 2006, which amounted to one-sixth of the entire stock of subprime loans at the time the crisis hit (Appelbaum and Nakashima, 2008). In an Option ARM, the borrower is free to reduce his payment in any given month and have the shortage added to the principal of the mortgage debt. These borrowers were thus vulnerable to both the risk that interest rates might rise (because the loan was an ARM, or adjustable rate mortgage), as well as the risk that their payment would rise to amortize the new, larger principal. Banks could market Option-ARMs, and ARMs in general, as having very low 'teaser' interest rates to customers whose income was too low to qualify them for a prime or conforming Fannie Mae mortgage. On the other side, the Bush administration pressured Fannie Mae and Freddie Mac to securitize more subprime mortgages as a way of rescuing increasingly troubled private mortgage originators.

Similarly, the Bush administration made a conscious decision in 2005 not to regulate the rapidly proliferating non-depository financial institutions that were originating the bulk of the subprime and Alt-A (intermediate between prime and subprime) loans, even though voices in the Office of the Comptroller of the Currency (OCC – another bank regulator) and the Federal Reserve were warning that rising defaults on these loans posed a considerable threat to the financial system (Gramlich, 2007). The pattern of subprime lending explains part of this non-decision. Subprime lending was concentrated in areas rich in presidential electoral votes as well as rich in poor minority voters. Latinos account for at least 30 percent of the electorate in Arizona, California, Texas and New Mexico, 25 percent in Nevada, and 20 percent in Florida. By 2006, roughly one half of all mortgages made to blacks and latinos were in the subprime categories. Nevertheless, Fannie Mae estimated that roughly half of those subprime loans could have qualified for lower interest rate prime or near prime loans (Squires and O'Connor, 2001).

The flood of easily available, but expensive, mortgage money these policies made possible easily exceeded that of the Clinton administration, but with more modest results. Under Clinton, subprime originations rose from $65 billion in 1995 to $138 billion in 2000, and produced an increase in homeownership rates of 3.4 percentage points (Chomsisengphet and Pennington-Cross, 2006: 37). Under Bush, subprime originations rose to $332 billion in 2003 and then peaked at $625 billion in 2006 and increased their share from 8.6 percent to 20 percent of originations.[4] But this produced only an additional 1.6 percentage point gain in homeownership before round-tripping back down to the Clinton era level. Among blacks, the 5.1 percentage point increase under Clinton was succeeded by a temporary 2.1 percentage point gain under Bush. Only among latinos did a similar 5.1 percentage point gain give way to a more durable 2.8 percentage point gain (Harvard JCHS 2009:37). These gains came at an extremely high macroeconomic cost. Unlike the more sustainable Clinton boom, where rising incomes validated house price increases, the flood of mortgage money in the 2000s caused house prices to rise unsustainably (Schwartz, 2009b). From 2000 to 2007 the ratio of the median price for owner-occupied housing to median family income rose from 2.4 to 3.2 – a 32 percent jump – across the entire United States. But these increases were even greater in the politically salient states: 108 percent to 8.3 for California, 84 percent to 5.1 for Nevada, 64 percent to 4.2 for Arizona, and 83 percent to 4.2 for Florida (Lucy and Herlitz, 2009). Unsurprisingly, these states led the pack in terms of the percentage of homes in foreclosure in 2008, with California, Florida, Nevada, and Arizona accounting for 62 percent of all foreclosures that year.

5: Conclusions

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[4] By contrast, the total volume of securitized mortgages in Europe for 2005 was roughly €326 billion, and the cumulative volume 2000-05 was roughly €1072 billion, versus a cumulative $1690 billion in securitized subprime and Alt-A mortgages and $6691 billion in securitized prime mortgages in the United States (Aalbers, 2009:402-3; Schwartz, 2009a:103).

We can now close the loop between what we observed at the macro-level (US differential growth), the meso-level (securitization) and the micro-level (subprime). The US housing finance system more readily translated the disinflation of the long 1990s into increased aggregate demand. This increased demand created a temporarily self-sustaining upward cycle. Falling nominal interest rates lured new homebuyers into the market, putting gentle upward pressure on housing prices. Incumbents cashed out their gains with home equity loans and spent this money, increasing aggregate demand further. A buoyant economy drew more people into the labor market, creating more new homebuyers. As the US economy began to outpace its peer competitors, capital flowed from those economies into the US to capture higher returns than local markets offered and to fund the US trade deficit. A substantial portion of this capital purchased the ever growing pool of securitized mortgages.

What broke this virtuous cycle? Like all such economic cycles it eventually would have exhausted its raw materials – disinflation, a steady stream of new homebuyers at the bottom, and foreign willingness to fund an ever increasing US trade deficit. This would have produced the normal recession. Yet the 2007-09 global financial crisis presents more than the normal cyclical recession. US policy decisions under the G. W. Bush administration clearly exaggerated the normal cycle, by combining fiscal incontinence with excessive regulatory forbearance at a time when interest rates were low. This supercharged the housing market, producing the flood of subprime and Alt-A mortgages that investment banks packaged into MBS and then repackaged into collateralized debt obligations (CDOs). As the inevitable recession moved many of the underlying mortgages into default, these CDOs unraveled, bringing down the financial system, rather than simply tipping the economy into a normal recession.

What now? Deliberate deregulation of finance and other sectors helped propel the United States in front of its peer rich country rivals, while preventing erosion relative to the rapidly growing developing country giants. Deregulation enabled the US housing finance system to provide the US economy with extra growth. But going forward it is unlikely that housing finance will play the same role it played in the long 1990s. That role was contingent both on environmental, social and political factors – disinflation, household receptivity to increased debt, and deregulation – that are unlikely to recur together. Instead, regulators are tightening lending standards and households are deleveraging. Though many prognosticators fear inflation from the massive bailouts and liquidity injections of 2007-09, deflation remains a significant problem in a global economy plagued by overcapacity and a US economy with far too many empty housing units.

Instead, housing finance is likely to remain the province of the state for some time. Both Fannie Mae and Freddie Mac have returned to state ownership. Along with the Federal Home Loan Banks, they were the primary providers of new money to the US mortgage market from 2007 to 2009. In 2007, the two GSE accounted for 75% of new mortgage money; adding in the FHLBs increased that share to 90%. From 2006 to 2009, FHLB advances to their member banks nearly doubled to $1 trillion (*Economist*, 2009). For their part, the two GSEs relied heavily on the Federal Reserve to absorb their MBS and allow them to finance those new mortgages. In 2009, the Fed was the primary buyer of MBS, adding nearly $700 billion in MBS to its balance sheet. Consequently, the subprime market has returned to its formerly marginal place in the larger mortgage market, constraining the number of new buyers stepping onto the housing ladder. Instead, vanilla mortgages conforming to the GSE underwriting standards dominate the market.

This pattern implies that the layered pattern of leverage and maturity mismatch characterizing the housing market and global economy at all levels will disappear. Regulators and firms alike will fear overextension. While maturity mismatches necessarily occur – this is the province of banking after all – securitization seems likely to return to its original function of reducing rather than amplifying mismatches. Decreased consumption by deleveraging US households will reduce the inflow of foreign capital to the United States, limiting the potential for the US arbitrage described in the third section. Smaller inflows flow mechanically from lower consumption because imports have been and will be shrinking in volume.

All this tells us what is gone, rather than what will be. Nevertheless, it has clear implications for the housing market and housing finance. Housing debt comprises the single largest chunk of private debt in the United States, and the overwhelming majority of household debt. Conversely, housing wealth typically exceeds corporate equity holdings for the average household. Both sorts of households can no longer rely on rising housing prices to build retirement or other savings. Instead, they will have to build savings out of income. If incomes grow, these savings will keep real mortgage rates low for years. If deflationary pressures persist, these savings might keep nominal rates low as well. If incomes don't grow, deflationary pressures will exert considerable downward pressure on housing prices, bank balance sheets, and US economic growth. A geo-economic perspective thus suggests that the US state should be looking for ways to restart income growth and shift some income back down to the bottom of society. 'Should,' however, generally bows to power in politics – and the nature of state responses to the 2007-09 crisis suggest that it the financial sector that has the power. Will they give up short-term income to restart long-term growth?

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