The long credit crunch that began in the Atlantic world in August 2007 is strange in its extraordinary scope and intensity. Mainstream discourse, referring to a ‘sub-prime’ crisis, implies that the credit crunch has been caused, rather than triggered, by a bubble in the real economy. This is at best naïve: after all, the bursting of an equally large bubble in the Spanish housing market led to no such blow-out in the domestic banking system. The notion that falling house prices could shut down half of all lending in the US economy within a matter of months—and not just mortgages, but car loans, credit-card receivables, commercial paper, commercial property and corporate debt—makes no sense. In quantitative terms this amounted to a credit shrinkage of about $24 trillion dollars, nearly double US GDP. Erstwhile lenders were soon running not just from sub-prime securities but from the supposedly safest debt of all, the ‘super senior’ category, whose price by the end of 2007 was a tenth of what it had been just a year before.

An understanding of the credit crunch requires us to transcend the commonsense idea that changes in the so-called real economy drive outcomes in a supposed financial superstructure. Making this ‘epistemological break’ is not easy. One reason why so few economists saw a crisis coming, or failed to grasp its scale even after it had hit, was that their models had assumed both that financial systems ‘work’, in the sense of efficiently aiding the operations of the real economy, and that financial trends themselves are of secondary significance. Thus the assumption
that the massive bubble in oil prices between the autumn of 2007 and the summer of 2008 was caused by supply-and-demand factors, rather than by financial operators who, reeling from the onset of the crisis, blew the price from $70 a barrel to over $140 in less than a year, before letting the bubble burst last June; a cycle with hugely negative ‘real economy’ effects. Similar explanations were tendered for soaring commodity prices over the same period; yet these were largely caused by institutional investors, money-market and pension funds, fleeing from lending to the Wall Street banks, who poured hundreds of billions of dollars into commodities indices, while hedge funds with their backs against the wall pumped up bubbles in coffee and cocoa.5

Breaking with the orthodoxy that it was ‘real economy’ actors that caused the crisis carries a political price: it means that blame can no longer be pinned on mortgage borrowers for the credit crunch, on the Chinese for the commodities bubble, or on restrictive Arab producers for the sudden soaring of oil. Yet it may allow us to understand otherwise inexplicable features of the crisis; not least, as we shall see, the extraordinary growth of sub-prime itself. We will thus take as our starting point the need to explore the structural transformation of the American financial system over the past twenty-five years. I will argue that a New Wall Street System has emerged in the US during this period, producing new actors, new practices and new dynamics. The resulting financial structure-cum-agents has been the driving force behind the present crisis. En route,

2 The total debt owed by financial and non-financial private sectors in the US in 2008 has been calculated at $48 trillion. George Magnus, ‘Important to curb destructive power of deleveraging’, FT, 30 September 2008.
3 David Patterson, ‘Central Banks must find or become buyers of system risk’, FT, 5 February 2008.
4 For a useful survey of why most economists were completely incapable of grasping the crisis, see Chris Giles, ‘The Vision Thing’, FT, 26 November 2008.
5 Javier Blas, ‘Commodities have proved a saving grace for investors’, FT, 6 March 2008; Chris Flood, ‘Speculators give a stir to coffee and cocoa prices’ FT, 5 February 2008. That these financial operators were able to build and burst such bubbles derived, of course, from the fact that the markets for oil and commodities are organized in London, New York and Chicago, with rules made to match the interests of American and British capital. As Jeff Sprecher, CEO of Intercontinental Exchange (ICE), the London-based market whose rules enabled blowing the oil bubble, explained to the Financial Times, the market’s organizers could not understand why members of Congress should want to give up control over this sector by closing ICE down. ‘View from the Top’, FT, 6 August 2008.
it proved spectacularly successful for the richest groups in the US: the financial sector constituted by far the most profitable component of the American and British economies and their most important ‘export’ earner. In 2006, no less than 40 per cent of American corporate profits accrued to the financial sector. But the new structure necessarily produced the dynamics that led towards blow-out.

This analysis is not offered as a mono-causal explanation of the crisis. A fundamental condition, creating the soil in which the New Wall Street System could grow and flourish, was the project of the ‘fiat’ dollar system, the privatization of exchange-rate risk and the sweeping away of exchange controls—all euphemized as ‘financial globalization’. Furthermore, the system could not have risen and flourished if it had not offered answers—however ultimately pathological—to a range of deep-seated problems within American capitalism overall. There is thus a rational, dialectical kernel in the superficial distinction between financial superstructure and the ‘real’ US economy. In what follows, I will first sketch the main elements of the New Wall Street System, and briefly show how its crisis took such spectacular forms. I will then argue that, to understand the deeper roots of the malaise, we do indeed need to probe into the overall socio-economic and socio-political characteristics of American capitalism as it has evolved over the past twenty-five years. I will raise the possibility of systemic alternatives, including that of a public-utility credit and banking model. Finally, I will consider the international dynamics unleashed by the present crisis and their implications for what I have elsewhere described as the Dollar–Wall Street Regime.

I. THE NEW WALL STREET SYSTEM

The structure and dynamics of Wall Street banking changed dramatically in the quarter of a century after the mid-1980s. The main features of the new system include: (i) the rise of the lender-trader model; (ii) speculative arbitrage and asset-price bubble-blowing; (iii) the drive for maximizing

---

6 Lawrence Summers, ‘The pendulum swings towards regulation’, FT, 27 October 2008. The figure of 40 per cent actually understates the share of profits accruing to the financial sector, since these are in part concealed by being transformed into huge employee bonuses, to reduce headline profits data; one reason for the bonus system that is often overlooked.

7 For an earlier exploration of these issues see my Global Gamble, New York and London 1999.
leverage and balance-sheet expansion; (iv) the rise of the shadow banking system, with its London arm, and associated ‘financial innovations’; (v) the salience of the money markets and their transformation into funders of speculative trading in asset bubbles; (vi) the new centrality of credit derivatives. These changes mutually re-enforced each other, forming an integrated and complex whole, which then disintegrated in the course of 2008. We will briefly examine each of them in turn.

Trading models

For most of the post-war period, Wall Street investment banks engaged in very little securities trading on their own account, as opposed to trading on behalf of clients; while the big depository commercial banks shunned such activity. But from the mid-1980s on, proprietary trading in financial and other assets became an increasingly central activity for the investment banks, and for many commercial banks, too. This turn was connected, firstly, to the new volatility in foreign-exchange markets after the dismantling of Bretton Woods; and then to the opportunities created by domestic financial liberalization, above all the scrapping of capital controls and the opening of other national financial systems to American operators. These changes offered opportunities for a massive expansion of Wall Street trading activity, which would become a crucial source of profits for the investment banks. The turn towards speculative proprietary trading was pioneered by Salomon Brothers, whose Arbitrage Group was established in 1977 and acquired extraordinary profitability under John Meriwether during the 1980s.

As well as trading on their own account, the Wall Street banks became increasingly involved in lending funds for other bodies to use in their trading activities: hedge funds, so-called private equity groups (trading in

---

8 The bread-and-butter of Wall Street investment bank income had been fixed (cartelized) fees for trading securities on behalf of clients until 1975, when a change in the law limited such fees. At the start of the 1980s, this fee income was still greater for the investment banks than profits from trading on their own account. But from the mid-1980s, these banks plunged seriously into proprietary trading. By the end of the 1990s, trading income was a third bigger than income from commissions for trading on behalf of others. And some of the biggest banks earned over half their profits from such trading. See John Gapper, ‘The last gasp of the broker-dealer’, FT, 16 September 2008.

9 On Salomon Brothers and the subsequent career of John Meriwether’s team in the 1990s, when they constructed LTCM under the sponsorship of Merrill Lynch, see Roger Lowenstein, When Genius Failed, London 2001.
companies), or special investment vehicles (SIVs) and conduits, created by the investment banks themselves.\textsuperscript{10} Such lending, known in the jargon as prime brokerage, was also an extremely profitable activity for the Wall Street banks: for many, their single greatest earner.\textsuperscript{11} This turn to the lender-trader model did not mean that the investment banks ceased their traditional activities in investment banking, broking, fund management, etc. But these activities acquired a new significance in that they provided the banks with vast amounts of real-time market information of great value for their trading activity.\textsuperscript{12}

Trading activity here does not mean long-term investment, Warren Buffett-style, in this or that security, but buying and selling financial and real assets to exploit—not least by generating—price differences and price shifts. This type of ‘speculative arbitrage’ became a central focus, not only for the investment banks but for commercial banks as well.\textsuperscript{13} So, too, did the related effort to generate asset-price bubbles. Time and time again, Wall Street could enter a particular market, generate a price bubble within it, make big speculative profits, then withdraw, bursting the bubble. Such activity was very easy in so-called emerging market economies with small stock or bond markets. The Wall Street banks gained a wealth of experience in blowing such bubbles in the Polish, Czech or Russian stock markets in the 1990s and then bursting them to great profit. The dot.com bubble in the US then showed how the same operation could be carried through in the heartland without any significant loss to the Wall Street banks (as opposed to some European operators, notably insurance companies, eager to profit from the bubble but hit by the burst).

Both the Washington regulators and Wall Street evidently believed that together they could manage bursts.\textsuperscript{14} This meant there was no need to prevent such bubbles from occurring: on the contrary it is patently obvious that both regulators and operators actively generated them, no

\textsuperscript{10} After the Enron scandal, SIVs and conduits were initially not allowed to engage in active trading on their own account, but this restriction was soon lifted.


\textsuperscript{12} Philip Augar gives a vivid account of how key such informational centralization from all the main markets was in giving the investment banks a decisive competitive edge over their smaller or non-investment banking rivals. See his \textit{The Greed Merchants: How the Investment Banks Played the Free Market Game}, London 2006.


\textsuperscript{14} Alan Greenspan, ‘We will never have a perfect model of risk’, FT, 17 March 2008.
doubt believing that one of the ways of managing bursts was to blow another dynamic bubble in another sector: after dot.com, the housing bubble; after that, an energy-price or emerging-market bubble, etc. This may seem to imply a formidably centralized financial power operating at the heart of these markets. Indeed: the New Wall Street System was dominated by just five investment banks, holding over $4 trillion of assets, and able to call upon or move literally trillions more dollars from the institutions behind them, such as the commercial banks, the money-market funds, pension funds, and so on. The system was a far cry from the decentralized market with thousands of players, all slavish price-takers, depicted by neo-classical economics. Indeed, the operational belief systems of what might be called the Greenspan-Rubin-Paulson milieu seems to have been post-Minskian. They understood Minsky’s theory of bubbles and blow-outs, but believed that they could use it strategically for blowing bubbles, bursting them, and managing the fall-out by blowing some more.

Maximizing leverage

The process of arbitrage and bubble-blowing requires more of financial operators than simply bringing together the maximum amount of information about conditions across all markets; it also demands the capacity to mobilize huge funds to throw into any particular arbitrage play, in order to shift market dynamics in the speculator’s favour.

A striking feature of the New Wall Street System business model was its relentless drive to expand balance sheets, maximizing the asset and liabilities sides. The investment banks used their leverage ratio as the target to be achieved at all times rather than as an outer limit of risk to be reduced where possible by holding surplus capital. A recent New York Federal Reserve report demonstrates how this approach proved powerfully pro-cyclical in an asset-market bubble, driving the banks to expand their borrowing as asset prices rose. In their illustration, the report’s authors, Tobias Adrian and Hyun Song Shin, assume that the

---

15 Tobias Adrian and Hyun Song Shin, ‘Liquidity and Leverage’, Staff Report no. 328, Federal Reserve Bank of New York, May 2008. The term ‘leverage’ refers to the relationship between a bank’s ‘equity’ or ‘capital’ and its assets—the sum that it has lent out. It is usually expressed as a ratio, so that if we say that Lehman’s leverage at the time of its collapse was 25, this means that for every one dollar of capital the bank had 25 dollars of assets. But this figure of 25 also means that for every one dollar of capital, Lehman had 24 dollars worth of borrowings—i.e. liabilities.
bank actively manages its balance sheet to maintain a constant leverage ratio of 10. Suppose the initial balance sheet is as follows: the bank holds 100 worth of securities, and has funded this holding with an equity of 10, plus debt worth 90.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securities 100</td>
<td>Equity 10</td>
</tr>
<tr>
<td>Debt 90</td>
<td></td>
</tr>
</tbody>
</table>

The bank’s leverage ratio of security to equity is therefore \( \frac{100}{10} = 10 \).

Suppose the price of the securities then increases by 1 per cent, to 101. The proportions will then be: securities 101, equity 11, debt 90. So its leverage is now down to \( \frac{101}{11} = 9.2 \). If the bank still targets leverage of 10, then it must take on additional debt \( ('d') \), to purchase \( d \) worth of securities on the asset side, so that the ratio of assets/equity is:

\[
\frac{101 + d}{11} = 10, \text{ i.e. } d = 9.
\]

The bank thus takes on additional debt worth 9, and with this money purchases securities worth 9. After the purchase, leverage is back up to 10. Thus, an increase in the price of the security of 1 leads to an increased holding worth 9: the demand curve is upward-sloping.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securities 110</td>
<td>Equity 11</td>
</tr>
<tr>
<td>Debt 99</td>
<td></td>
</tr>
</tbody>
</table>

The mechanism works in reverse, too. Suppose there is shock to the securities price, so that the value of security holdings now falls to 109. On the liabilities side, it is equity that bears the burden of adjustment, since the value of debt stays approximately constant.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securities 109</td>
<td>Equity 10</td>
</tr>
<tr>
<td>Debt 99</td>
<td></td>
</tr>
</tbody>
</table>
But with securities at 109, equity at 10, debt at 99, leverage is now too high: $\frac{109}{10} = 10.9$.

The bank can adjust down its leverage by selling securities worth 9, and paying down 9 worth of debt. Thus, a fall in the price of securities leads to sales of securities: the supply curve is downward-sloping.

A central mechanism through which the investment banks could respond to asset-price rises was borrowing in the ‘repurchase agreement’—or ‘repo’—market. Typically, the investment bank wishes to buy a security, but needs to borrow funds to do so. On the settlement day, the bank receives the security, and then uses it as collateral for the loan needed to pay for it. At the same time, it promises the lender that it will repurchase the security at a given future date. In that way, the bank will repay the loan and receive the security. But typically, the funds for repurchasing the security from the lender are acquired by selling the security to someone else. Thus, on the settlement day, the original lender to the investment bank is paid off and hands over the security, which is immediately passed on to the new buyer in exchange for cash. This kind of repo funding operation presupposes an asset-price boom. It has accounted for 43 per cent of leverage growth amongst Wall Street banks, according to the same New York Fed report. Repos have also been the largest form of debt on investment banks’ balance sheets in 2007–08.16

The question arises as to why the Wall Street banks (followed by others) pushed their borrowing to the leverage limit in such a systematic way. One explanation is that they were doing this in line with the wishes of their shareholders (once they had turned themselves into limited liability companies). ‘Shareholder value’ capitalism allegedly requires the ratio of assets to capital to be maximized. Surplus capital reduces the return on shareholder equity and acts as a drag on earnings per share.17 But there is also another possible explanation for borrowing to the leverage limit: the struggle for market share and for maximum pricing power in trading activities. If you are a speculative arbitrageur or an asset-bubble blower, financial operational scale is essential to moving markets, by shifting prices in the direction you want them to go. In assessing which of these

---

16 Adrian and Song Shin, ‘Liquidity and Leverage’.
17 The rewards of senior bank executives were often linked to changing earnings per share. See John Kay, ‘Surplus capital is not for wimps after all’, FT, 22 October 2008.
pressures—shareholder power or pricing power—drove the process, we should note how ready the Treasury, Fed and Wall Street executives have been to crush shareholder interests during the credit crunch, yet how resolutely they sought to protect the levels of leverage of the bulge-bracket banks during the bubble. By all accounts, Citigroup’s turn to maximum balance-sheet and leverage expansion for trading activities derived not from shareholder pressure, but from the arrival there of Robert Rubin after his stint as US Treasury Secretary.  

**Shadow banking**

The drive for scale and for increasing leverage leads on to another basic feature of the New Wall Street System: the drive to create and expand a shadow-banking sector. Its most obvious features were the new, entirely unregulated banks, above all the hedge funds. These have had no specific functional role—they have simply been trader-banks free of any regulatory control or transparency in their speculative arbitrage. Private equity groups have also been, in essence, shadow trading banks, specializing in the buying and selling of companies. Special Investment Vehicles (SIVs) and conduits are similarly part of this system. In the words of the director of regulation at Spain’s central bank, these SIVs and conduits ‘were like banks but without capital or supervision’. Yet, as a *Financial Times* report noted: ‘In the past two decades, most regulators have encouraged banks to shift assets off their balance sheets into SIVs and conduits.’

The shadow banking system was not in competition with the regulated system: it was an outgrowth of it. The regulated commercial and investment banks acted as the prime brokers of the shadow banking operators, thereby gaining very large profits from their activities. This increasingly central feature of official bank activity was, in reality, a way of massively expanding their balance sheets and leverage. To tap the Wall Street banks for funding, the hedge funds had to hand over collateral; but through a practice known as rehypothecation, a proportion of these collateral assets could then be used by the prime broker as its own collateral for raising its own funds. The result was the self-financing of hugely profitable prime brokerage activities by the Wall Street banks, on a vast scale, without any extra commitment of their own capital: an ingenious way of greatly

---

enlarging their leverage ratios. The debate about whether deregulation or reregulation in the financial sector has been occurring since the 1980s seems to miss the point that there has been a combination of a regulated and an unregulated shadow system, working dynamically together.

Shadow banking refers not only to institutional agents, like hedge funds, but also to the practices and products which allowed the investment banks to expand their leverage. Since the late 1990s an increasingly important part of this side of shadow banking has been the ‘over-the-counter’ credit derivatives market, notably collateralized debt obligations (CDOS) and credit default swaps (CDSS). The most obvious attraction of these lay in the regulatory arbitrage they offered, enabling banks to expand leverage. Traditionally banks had to insure their credit operations and such insurance entailed supplying collateral. The beauty of CDSS lay in the fact that, as shadowy ‘over-the-counter’ products, they did not require the commitment of appropriate tranches of capital as collateral, and thus facilitated more leverage. CD expansion began on a major scale after derivatives specialists from JP Morgan Chase persuaded AIG to start writing them on CDOS in 1998.

CDOS were also a clever solution to leverage problems. By acquiring large quantities of securitized loans and thus greatly expanding their balance sheets, banks should have expanded their equity base. But CDOS famously bundled together dozens or hundreds of such loans, of very varied quality, enabling the banks to increase their leverage. The CDOS were typically written by the rating agencies, for a fee, and then given a Triple A rating by the same agency, for a second fee. Such ratings allowed the banks’ equity commitments to be minimized. These securitized loans—mainly from the housing market, but also from credit-card debt and car loans—offered investors far higher rates of return than they could get in the money markets. The crucial point about these so-called ‘structured securities’ was not that they were securitized loans: these could in principle be perfectly safe; after all, a bond is, in reality, nothing but a securitized loan. But bonds have a clearly identifiable source, in

---

an economic operator whose credit-worthiness and cash-flow capacities can be assessed; they also have clear prices in the secondary bond markets. The products bundled in CDOs, however, came from hundreds of thousands of unidentifiable sources, whose credit-worthiness and cash-flow capacity was not known; they were sold ‘over the counter’, without any secondary market to determine prices, far less an organized market to minimize counterparty risk. In short, they were at best extremely risky because more or less totally opaque to those who bought them. At worst they proved a scam, so that within a few months of late 2007 the supposedly super-safe super-senior debt tranches within such CDOs were being downgraded to junk status.

Leverage restrictions were also removed through public policy. Hank Paulson achieved a notable success in this area in 2004 when, as head of Goldman Sachs, he led the Wall Street campaign to get the Securities and Exchange Commission to agree to relax the so-called ‘net capital rule’, restricting leverage for large investment banks. Henceforth, firms were effectively allowed to decide their own leverage on the basis of their risk models. The result was a rapid rise in the big banks’ leverage ratios. Importantly it enabled them to transfer their capital base to new activities, such as collateralized debt obligations, which subsequently became such a significant element in their trading activities.

London’s role

All these shifts are grouped under the euphemistic heading of ‘financial innovation’—changes in institutional arrangements, products, oversight structures, enabling Wall Street banks to escape regulatory restrictions and expand their activities and profits. Dozens of shifts of this sort could be documented. But one of the most fundamental was the construction of a large, new shadow banking system in London, alongside the ‘official’ regulated sector. By the early 1990s the American investment banks had wiped out their London counterparts and dominated the Square Mile’s asset markets, with the City acquiring an increasingly ‘wimbledonized’

21 Stephen Labaton, ‘How SEC opened path for storm in 55 minutes’, International Herald Tribune, 4/5 October 2008. In a classic manoeuvre, this was dressed up as a turn by the SEC towards more regulation of the investment banks. From a formal point of view this was right: the SEC acquired regulatory jurisdiction over them; but it simultaneously removed basic capital-base restrictions. Furthermore, from 2004 onwards the SEC had seven staff to supervise the big five investment banks, which had combined assets of over $4 trillion by 2007.
role within the New Wall Street System. Gordon Brown institutionalized the new relationship in 1997 by creating the unified Financial Services Authority, which claimed to operate according to ‘principles’ rather than binding rules: one central principle was that the Wall Street banks could regulate themselves. London thus became for New York something akin to what Guantánamo Bay would become for Washington: the place where you could do abroad what you could not do back home; in this instance, a location for regulatory arbitrage.

The term ‘Wall Street’ should therefore be understood to include London, as a satellite for these American operators. Together London and New York dominate the issue of new shares and bonds. They are the centre of the foreign-exchange markets. Most significantly they have dominated the sale of over-the-counter derivatives, which make up the overwhelming bulk of derivatives sales. In 2007, the UK had a global share of 42.5 per cent of derivatives based on interest rates and currencies, with the US handling 24 per cent. In terms of credit-derivatives trading, the US handled 40 per cent in 2006, while London handled 37 per cent (down from 51 per cent in 2002).

**Funding speculation**

The enormous expansion in the activities of the Wall Street banks and their shadow system required ever-larger amounts of funding. Such funding was classically supplied by the recycling of retail savings sitting in deposit accounts and, even more importantly, by the commercial banks creating large supplies of credit money. But in post-1980s America such retail savings were minuscule—a point to which we will return—and credit money from the commercial banks, though significant, was soon hopelessly inadequate. In these circumstances the trader banks turned to the wholesale money markets. At the heart of such markets were the inter-bank markets, with interest rates on, or just a few basis points above, the Fed’s policy rates. Historically these markets

---

24 The annual tennis tournament in Wimbledon is widely considered, at least in the UK, to be the greatest in the world; yet for decades there has been no British finalist.
25 There are some very large British commercial banks, but these should be distinguished from the City of London because, while some have participated heavily in the New Wall Street System, others such as the Hongkong and Shanghai Banking Corporation (HSBC), by some measures the largest bank in the world, and the Standard Chartered Bank, have been heavily focused on activities in East Asia.
26 The Chicago Mercantile Exchange, however, dominates sales of exchange-traded derivatives.
were used to ensure that the banks were able to clear smoothly on a daily basis, rather than as a source of new, large-scale funding, let alone funding of a speculative nature. There was also the commercial-paper market, typically used by the big corporations for short-term funding, again principally to smooth their operations.

But in the New Wall Street System, these money markets were transformed. They remained centres of short-term lending, but they were increasingly funding speculative trading activity. On the supply side, the funds available for lending to Wall Street were expanding rapidly, especially through the expansion of pension funds during the 1980s and 1990s. In rather typical American style, a small change in the tax code through amendment 401K in 1980 opened the door to this development. This amendment gave a tax break to employees and employers if they put money into pension plans; the result was a massive flow of employee income into these plans, totalling nearly $400 billion by the end of the 1980s. By the late 1990s it had climbed to almost $2 trillion.27

At the same time as becoming key sources for the liabilities of the investment banks through short-term lending to them, the mutual funds, pension funds and so forth also became increasingly important targets for Wall Street’s efforts to sell asset-backed securities, and in particular collateralized debt obligations. Thus the New Wall Street System attempted to draw the fund managers into speculative bubble activity on both the funding (liability) side and on the asset side, enabling ever-larger balance-sheet expansion.

II. THE CAUSES OF THE CRISIS

It might, in principle, have been the case that the cluster of mutually reinforcing innovations which we have called the New Wall Street System,

---

27 Roger Lowenstein, Origins of the Crash, New York 2004, pp. 24–5. This expansion of bank funding for speculative trading through the transformation of the ‘whole-sale’ markets intersected, of course, with the ending of capital controls, enabling the growth of international wholesale borrowing by banks and the rise of ‘carry trade’ operations, such as that based on the yen: banks borrowing in yen, at 0.5 per cent or less, and taking the funds into the Icelandic krona, at 18 per cent. The funding of British commercial banks, overwhelmingly domestic at the start of the 1990s, had become largely based on overseas wholesale lending, to the tune of about £650bn, by 2007.
were responses to the emergence of a housing-market bubble in the US from 2001. If so, we would have had a classic Minskian crisis linked to housing. In fact, all the key innovations were set in place before the onset of the bubble. Indeed there is ample evidence that the Wall Street banks quite deliberately planned a house-price bubble, and spent billions of dollars on advertising campaigns to persuade Americans to increase their mortgage-related debt. Citigroup ran a billion-dollar campaign with the theme ‘Live Richly’ in the 1990s, designed to get home owners to take out second mortgages to spend on whatever they liked. Other Wall Street banks acted in a similar fashion, with a great deal of success: debt in second mortgages climbed to over $1 trillion in a decade.

But the bubble that generated the credit crunch of 2007 lay not only—or even mainly—in the housing market, but in the financial system itself. The crisis was triggered not only by the scale of the debt bubble, but by its forms. In a normal over-lending crisis, when banks have ended up with non-performing loans (as in Japan in the 1990s), both the location and scale of the problems can be identified without much difficulty. But in 2007 the debt bubble within the financial system was concentrated in over-the-counter derivatives, in the form of individual CDOs that had no market price or pricing mechanism—beyond the say-so of the ratings agencies—and which were distributed in their tens of thousands between the institutions at the summit of the financial system, as well as their satellite bodies such as SIVs. Once this set of debt-accumulation arrangements was shown to be junk, in the two Paribas cases in August 2007, the suppliers of credit funding, such as money-market and pension funds, grasped that they had no way of knowing how much of the rest of the CDO mountain was also worthless. So they fled. Their refusal to keep supplying the handful of opaque Wall Street investment banks and their spin-offs with the necessary funds to keep the CDO market afloat was what produced the credit crunch.

The investment banks had initially spread the word that the effect of their securitization of debt had been to disperse risk widely across a multitude of bodies. But this seems to have been false: the Wall Street summit institutions themselves had been holding on to the so-called super-senior debt tranches, in tens of thousands of CDOs.\footnote{Gillian Tett, ‘Misplaced bets on the carry trade’, FT, 17 April 2008.} They had been borrowing billions in the money markets to buy these instruments, gaining an interest rate on them some 10 basis points above their
money-market borrowing costs. To continue to turn that profit they had to keep going back to the money markets to roll over their debts. Yet now the money markets were shutting down. When investors in the money markets fled the recycling of short-term borrowing in the summer of 2007, the entire pyramid centred on the CDOs began to crumble. When the Wall Street banks tried to off-load their CDOs, they found there was no market for them. The insurance companies that had insured the CDOs with CDSS found their market collapsing, too.

Much remains obscure about the precise mechanisms through which the credit crunch acquired its scope and depth in 2007–08, mainly because the main Wall Street operators themselves sought to obfuscate both the nature of their plight and their survival tactics. But it is possible to trace a number of phases through which the crisis has passed. First, the attempt by the Fed and Treasury to defend the investment-bank model as the summit of the system, by acting as its lender of last resort. Second, with the fall of Lehman Brothers, the collapse of this effort and disappearance of the investment-bank model, producing a drive to consolidate a universal-bank model in which the trading activities of the investment banks would occur within, and protected by, the depository universal bank. In this phase, the Fed essentially substituted itself for the creditor institutions of the credit system, supplying loans, ‘money-market’ and ‘commercial-paper market’ funding for the banks. Between April and October 2008 this massive Central Bank funding operation involved about $5 trillion of credit from the Fed, the ECB and the Bank of England—equivalent to about 14 per cent of global GDP. Insofar as this state funding can continue without raising serious sovereign credit-worthiness problems, the most difficult and dangerous phase of the response to the crisis can get under way in a serious fashion. This will involve the deleveraging of the biggest banks, now in the context of negative feedback loops from deepening recessions. How and when this is achieved will give us a sense of the overall contours of the credit crunch.

Prevailing theories

Much of the mainstream debate on the causes of the crisis takes the form of an ‘accidents’ theory, explaining the debacle as the result of contingent

---

29 For a useful mainstream (and apologetic) account of the risks involved in CDOs and over-the-counter derivatives like CDSS, see the IMF publication by Garry Schinasi, Safeguarding Financial Stability: Theory and Practice, Washington, DC 2006.
actions by, say, Greenspan’s Federal Reserve, the banks, the regulators or the rating agencies. We have argued against this, proposing rather that a relatively coherent structure which we have called the New Wall Street System should be understood as having generated the crisis. But in addition to the argument above, we should note another striking feature of the last twenty years: the extraordinary harmony between Wall Street operators and Washington regulators. Typically in American history there have been phases of great tension, not only between Wall Street and Congress but also between Wall Street and the executive branch. This was true, for example, in much of the 1970s and early 1980s. Yet there has been a clear convergence over the last quarter of a century, the sign of a rather well-integrated project.30

An alternative explanation, much favoured in social-democratic circles, argues that both Wall Street and Washington were gripped by a false ‘neo-liberal’ or ‘free-market’ ideology, which led them astray. An ingenious right-wing twist on this suggests that the problematic ideology was ‘laissez-faire’—that is, no regulation—while what is needed is ‘free-market thinking’, which implies some regulation. The consequence of either version is usually a rather rudderless discussion of ‘how much’ and ‘what kind’ of regulation would set matters straight.31 The problem with this explanation is that, while the New Wall Street System was legitimated by free-market, laissez-faire or neo-liberal outlooks, these do not seem to have been operative ideologies for its practitioners, whether in Wall Street or in Washington. Philip Augar’s detailed study of the Wall Street investment banks, *The Greed Merchants*, cited above, argues that they have actually operated in large part as a conscious cartel—the opposite of a free market. It is evident that neither Greenspan nor the bank chiefs believed in the serious version of this creed: neo-classical financial economics. Greenspan has not argued that financial markets are efficient or transparent; he has fully accepted that they can tend towards bubbles and blow-outs. He and his colleagues have been well aware of the risk of serious financial crisis, in which the American state would have to throw huge amounts of tax-payers’ money into saving the system. They also grasped that all the various risk models used by the Wall

---

30 There were tensions between Wall Street and New York state regulator Eliot Spitzer after the dot.com bubble burst, but this simply highlighted how strong was the consensus at a higher level.

31 References to these kinds of debates can be found in Andrew Baker et al., *Governing Financial Globalization*, London 2005.
Street banks were flawed, and were bound to be, since they presupposed a general context of financial market stability, within which one bank, in one market sector, might face a sudden threat; their solutions were in essence about diversification of risk across markets. The models therefore assumed away the systemic threat that Greenspan and others were well aware of: namely, a sudden negative turn across all markets.  

Greenspan’s two main claims were rather different. The first was that, between blow-outs, the best way for the financial sector to make large amounts of money is to sweep away restrictions on what private actors get up to; a heavily regulated sector will make far less. This claim is surely true. His second claim has been that, when bubbles burst and blow-outs occur, the banks, strongly aided by the actions of the state authorities, can cope with the consequences. As William White of the BIS has pointed out, this was also an article of faith for Bernanke.

### III. SYSTEMIC OPTIONS

The real debate over the organization of financial systems in capitalist economies is not about methods and modes of regulation. It is a debate between systemic options, at two levels.

- A public-utility credit and banking system, geared to capital accumulation in the productive sector versus a capitalist credit and banking system, subordinating all other economic activities to its own profit drives.

- An international financial and monetary system under national-multilateral co-operative control versus a system of imperial character, dominated by the Atlantic banks and states working in tandem.

We can briefly look at each of these in turn.

---

32 See Greenspan, ‘We will never have a perfect model of risk’; Alan Beattie and James Politi, ‘Greenspan admits he made a mistake’, FT, 24 October 2008.

A public-utility model?

All modern economic systems, capitalist or not, need credit institutions to smooth exchanges and transactions; they need banks to produce credit money and clearance systems to smooth the payment of debts. These are vital public services, like a health service. They are also inherently unstable: the essence of a bank, after all, is that it does not hold enough funds to cover all the claims of its depositors at any one time. Ensuring the safety of the system requires that competition between banks should be suppressed. Furthermore, policy questions as to where credit should be channelled are issues of great economic, social and political moment. Thus public ownership of the credit and banking system is rational and, indeed, necessary, along with democratic control. A public-utility model along these lines can, in principle, operate within capitalism. Even now the bulk of the German banking system remains in public hands, through savings banks and Landesbanken. The Chinese financial system is overwhelmingly centred on a handful of huge, publicly owned banks and the Chinese government does indeed steer the credit strategies of these banks. It is possible to envisage such a public-utility model operating with privatized banks. The post-war Japanese banking system could be held to have had this character, with all its banks strictly subordinated to the Bank of Japan's policy control via the ‘window-guidance system’. The post-war British commercial bank cartel could also be viewed as broadly operating within that framework, albeit raking off excessive profits from its customers.

But a private capitalist credit system, centred on banks, would operate under the logic of money capital—in Marx’s formula, $m\cdot m'$: advancing money to others to make more money. Once this principle is accepted as the alpha and omega of the banking system, the functional logic points towards the Greenspan apotheosis. This has been the model adopted in the US and the UK since the 1980s: making money-capital king. It entails the total subordination of the credit system’s public functions to the self-expansion of money capital. Indeed, the entire spectrum of capitalist activity is drawn under the sway of money capital, in that the latter absorbs an expanding share of the profits generated across all other sectors. This has been the model that has risen to dominance as what we have called the New Wall Street System. It has been a generator of extraordinary wealth within the financial system and has actually transformed
the process of class formation in the Anglo-Saxon economies. This model is now in deep crisis.

The second debate centres around the underwriting of financial systems. Whether public or private, banking and credit systems are inherently unstable in any system where output is validated after production, in the market-place. In such circumstances, these systems must be underwritten and controlled by public authorities with tax-raising capacities and currency-printing presses. Insofar as they are minimally public bodies—not utterly captured by the private interests of money capital—these authorities will aim to prevent crises by trying to bring the behaviour of the financial system roughly into line with broad (micro as well as macro) economic goals. At present, only states have the capacity to play this role. Rule books like Basel I or II cannot do it; neither can the EU Commission or the ECB.

Intriguingly, the Atlantic projects grouped under the name of ‘economic globalization’—the fiat dollar system, ending of capital controls, free entry and exit of big Atlantic operators in other financial systems—have ensured that most states have been deprived of the capacity to underwrite and control their own financial systems: hence the endless financial blow-outs in the South over the last thirty years. Atlantic business interests benefited from these crises, not only because their losses were fully covered by IMF insurance—paid for later by poor people in the countries hit—but also because they were used as occasions to sweep open the product and labour markets of these countries to Atlantic penetration. But now the blow-outs have hit the metropolitan heartland itself. Obviously the Atlantic economies will want to keep this system going: the practices covered by ‘financial globalization’ constitute their most profitable export sector. But it is not so clear that the rest of the world will buy a formula for more of the same. The alternative would be some return to public control, along with public underwriting. This could only be achieved by individual national states regaining effective control, via new multilateral co-operative systems comparable to those that existed before 1971, implemented on a regional if not fully international scale.

Here, however, we will focus on the question of why the financial model centred on the New Wall Street System has achieved such complete

\[34\] Though this does not mean that they are all equally unstable.
hegemony within American capitalism over the past few decades. This takes us, finally, back out of the financial sphere into the wider field of socio-economic and socio-political relations in the US since the 1970s. Within this broader context, we can begin to understand how the New Wall Street System’s rise to dominance within the US could have been seen as a strategic idea for tackling the problems of the American economy.

Financial dominance as national strategy

From the 1970s through to the early 1980s, the American state waged a vigorous battle to revive the industrial economy, partly through a mercantilist turn in external trade policy, but above all through a domestic confrontation with labour to reduce its share of national income. This was the vision of such leaders as Paul Volcker; it was assumed that these measures would return American industry to world dominance. Yet the hoped-for broad-based industrial revival did not take place. By the mid-1980s, non-financial corporate America was falling under the sway of short-term financial engineering tactics, geared towards the goal of enhancing immediate ‘shareholder value’. What followed was wave after wave of mergers and acquisitions and buy-outs by financial operators, encouraged by Wall Street investment banks who profited handsomely from such operations. The legitimating argument that this was ‘enhancing industrial efficiency’ seems scarcely credible. A more convincing case would be that these trends were driven by the new centrality of the financial sector within the structure of American capitalism.35

A full explanation of this development is, I think, not yet available. But the trend produced some structural features of American capitalism that have been present ever since. On the one hand, a protected military-industrial sector remains intact, funded from federal and state budgets. Some high-tech sectors, especially in ICT, were also strongly supported by state subsidies in the 1980s and 90s, and have involved real new industrial investment, without as yet playing a transformative role in the overall economy: the main impact of ICT has been in the financial sector and retail. But the bulk of the American economy, on which growth depends, has been marked by stagnant or even declining incomes amongst the mass of the population and no growth motor from new

35 This is not to say that American industrial production disappeared: it remained large, notably in the defence-budget related sector as well as in cars, aerospace, ICT and pharmaceuticals.
investment, whether public or private. With the partial exception of ICT investment in the late 90s, GDP growth in the US has not been driven by new investment at all. As is widely recognized, it has come to depend upon the stimulus of consumer demand; yet such household consumption was itself inhibited by stagnant mass incomes.

This circle was famously squared in two ways. First and most important, the problem of stimulating consumer demand was tackled through the sustained supply of credit from the financial system. Secondly, cheap commodities could be bought on an endless basis from abroad—especially from China—since dollar dominance enabled the US to run up huge current-account deficits, as other countries allowed their exports to the US to be paid for in dollars. The supply of credit from the financial system to the mass of consumers through the usual mechanisms of credit card, car debt and other loans and mortgages was, however, supplemented by the distinctive mechanism of asset-price bubbles, which generated so-called wealth effects among a relatively broad layer. The stock-market bubble of the 1990s raised the paper value of the private pensions of the mass of Americans, thus giving them a sense that they were becoming richer and could spend (and indebt themselves) more. The housing bubble had a double effect: it not only made American consumers feel confident that the value of their house was rising, enabling them to spend more; it was reinforced by a strong campaign from the banks, as we have seen, urging them to take out second mortgages and use the new money for consumption spending.

Thus the New Wall Street System directly fuelled the 1995–2008 consumer-led American boom, which ensured that the US continued to be the major driver of the world economy. This was backed by a global campaign to the effect that the US boom was not the result of debt-fed growth aided by highly destructive trends in the financial system, but of American free-market institutions. Here, then, was the basis in the broader social relations of American capitalism for the rise to dominance of the New Wall Street System: it played the central role in ensuring debt-fed growth. This Anglo-Saxon model was based upon the accumulation of consumer debt: it was growth today, paid for by hoped-for growth tomorrow. It was not based upon strengthening the means of value-generation in the economies concerned. In short, it was a bluff, buttressed by some creative national accounting practices which
exaggerated the extent of the American boom and productivity gains in the US economy.\textsuperscript{36}

The role of China and other Asian exporting economies in this growth model extended beyond their large export surpluses of consumer goods to the US. These export surpluses were recycled back into the American financial system via the purchasing of US financial assets, thus cheapening the costs of debt by massively expanding ‘liquidity’ within the financial system. The results of these trends can be summarized in the following figures. Aggregate US debt as a percentage of GDP rose from 163 per cent in 1980 to 346 per cent in 2007. The two sectors which account for this rise were household debt and internal financial-sector debt. Household debt rose from 50 per cent of GDP in 1980 to 100 per cent of GDP in 2007. But the really dramatic rise in indebtedness occurred within the financial sector itself: from 21 per cent of GDP in 1980 to 83 per cent in 2000 and 116 per cent in 2007.\textsuperscript{37}

\textbf{IV. IMPLICATIONS}

The ideological effects of the crisis will be significant, though of course far less significant than imagined by those who believe financial regimes are the product of intellectual paradigms rather than power relations. Yet the cant dished out in the past by the US Treasury and IMF is over. American-style financial-system models are now grasped as being dangerous. No less risky is the EU banking and financial-system framework, which the crisis has shown to be a house of cards, even if still standing at the time of writing. The EU’s guiding notion is that banking systems are secured by good rules rather than by authoritative states with tax-raising powers. This has been shown to be a dangerous joke. The whole EU–EMU project has encouraged banks to grow too big for their national states to save them, while offering no alternative at EU or even Eurozone level. Absurdly, the Single Market and Competition rules in the financial sector insist on free competition between banks at all costs, and proscribe any state aid for them; while if the stability criteria were respected, any

\textsuperscript{36} A series of changes in US national accounting rules from 1995 onwards exaggerated both growth and productivity figures. Notable here was the use of so-called ‘hedonic indicators’.

\textsuperscript{37} Martin Wolf, ‘Why Paulson’s Plan was not a true solution to the crisis’, \textit{FT}, 24 September 2008.
full-blown credit crisis would necessarily be transformed into a 1930s-style depression. Obviously these rules are for the birds, yet they are simultaneously the principal planks of the EU political economy.\textsuperscript{38}

This crisis of the American and European set-ups will no doubt have two intellectual effects. Firstly, to raise the credibility of the Chinese model of a state-owned, bank-centred financial system. This is the serious alternative to the credit models of the Atlantic world. The maintenance of capital controls and a non-convertible currency—which China has—are essential for the security of this system. Secondly, as the crisis unfolds, broader discussion of the public-utility model seems likely to return to political life, re-opening a debate that has been silenced since 1991.

Some predict much more sweeping short-term changes, such as the replacement of the dollar as the global currency or the collapse of Western leadership institutions within the world economy. A complete debauching of the dollar by the Obama Administration could, perhaps, lead to a stampede to dump it globally, along with a retreat into regional or narrow imperial trading blocs.\textsuperscript{39} But no less likely could be a temporary strengthening of the use of the dollar over the next decade: a long stagnation in the US may well be combined with very low interest rates and a low dollar. This could produce a new dollar carry trade, in which everybody borrows in dollars to take them across the exchanges into higher value assets. This would produce a strong trend towards a decoupling of other exchange rates from the dollar, but it would not necessarily undermine the central element in dollar dominance: the readiness of other states to accept payments for their goods and credits in greenbacks.

We are also likely to see the intensification of the two basic structural trends in long-term credit-debt relations in the world economy. First, the creditor relations between the Atlantic world and its traditional South in Latin America, Africa and elsewhere, historically policed by the IMF. This relationship weakened over the last decade but is likely to be re-inforced

\textsuperscript{38} In addition, Western EU states made an unstated but real precondition for Eastern enlargement that the new entrants hand over the bulk of their commercial banks to their Western counterparts; a remarkable imperial move. These Western banks will now wish to starve the Eastern EU members of credit, as they seek every trick to deleverage and survive. Will the EU political authorities intervene in the market to block this? If so, how?

\textsuperscript{39} A trend in this direction is evident in the US decision to give special treatment to Mexico, Brazil, Singapore and South Korea in terms of dollar-funding support.
in the present crisis. Second, the contrary debtor relations between the United States and the East Asian New Growth Centre economies, which are also likely to deepen and tighten, particularly between China and the US. This is a power relationship in which China (and other creditors) can exercise real political leverage over Washington. We have seen this operating in both the timing and the form of the renationalization of Fannie Mae and Freddie Mac.\textsuperscript{40} We will see it again as the US Treasury seeks buyers of its large new tranches of debt in 2009. The East Asian economies, above all China, will likely become ever more critical to global macro-economic trends, while the erstwhile centrality of the US will weaken during its long stagnation. The strengthened financial clout of China and other East Asian states could impinge upon the old imperial credit-debt relationships between the Atlantic world and the South, by offering the latter alternative sources of financial support. This threat is already prompting warnings in the Atlantic world for Washington to soften the predatory conditions it has traditionally imposed on Africa, Latin America and elsewhere.\textsuperscript{41}

But whether this will mean that East Asia will start to build new market institutional arrangements for the world economy, challenging those of the Anglo-American world, remains unclear, for two reasons: first, the internal divisions within East Asia; and second, the question of China’s strategic priorities at the present time. Thus, East Asia has an obvious rational collective interest in building its own, centralized commodity and oil markets and promoting them to world leadership, ending the dominance of London and Chicago. Such new market frameworks have sprung up, but they are divided: one in Hong Kong, one in Japan and one in Singapore. As for China, it is currently overwhelmingly concentrated on maintaining domestic growth and carrying through the leap of dynamic capital accumulation from the coast to the interior. At present, it is showing not the slightest interest in challenging the Americans for leadership in shaping the institutions of the world

\textsuperscript{40} The \textit{Financial Times} reported that US Treasury Secretary Paulson confronted the fact that ‘the Bank of China had cut its exposure to agency debt over the summer’ and thus: ‘found himself with a \textit{fait accompli}. The federal government had to give reassurance to foreign investors in agency debt if it wanted to avoid chaos in financial markets and a run on the dollar. It smacks of debt crises past in Latin American countries, where the ultimate pressure for a bail-out came from foreign investors.’ John Gapper, ‘A US government bail-out of foreign investors’, \textit{FT}, 8 September 2008.

economy. Thus the US has some breathing space. But such is the social and political strength of Wall Street, and the weakness of social forces that might push for an industrial revival there, that it would seem most likely that the American capitalist class will squander its chance. If so, it will enjoy another round of debt-fed GDP growth funded by China and others while the US becomes ever less central to the world economy, ever less able to shape its rules and increasingly caught in long-term debt subordination to the East Asian credit matrix.