



How finance globalized: A tail of two cities

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Abstract

This paper argues that the unique historical and economic circumstances of the United Kingdom and of the United States underlie the development of global finance as we have it today. These circumstances, rather than primitives such as technological change or the information revolution, explain the current shape of globalized financial institutions and practices. The apparent technological necessity of a super-leveraged, risk-shifting global financial complex is a mirage; this complex, anchored in the cities of London and New York, has emerged due to unique circumstances, most notably, these cities' host nations' sponsorship of gold-based global currency systems, and more recently the 30-years'-long current-account deficit/capital-account surplus that has made the US a global liquidity sink. The chapter presents some empirical evidence suggesting that this turn toward globalized finance has been associated with reduced development-finance capability, in these two nations.

Keywords: Globalized finance, City of London, Wall Street, mega-banks, shadow banking, financial deregulation, subprime crisis, development banking, financial functionality and dysfunctionality.

JEL Codes: E44, G01, G18, N20

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How Finance Globalized: A Tail of Two Cities

We had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way – in short, the period was so far like the present period, that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only.

(Charles Dickens, *A Tale of Two Cities, Book the First – Recalled to Life*)

Has anyone bothered to study the cumulative effect of all these things [the new regulations on capital adequacy, mortgage standards, and so on, being considered after the 2008 subprime crisis]? Do you have a fear, like I do, that when we look back and look at them all, that they will be a reason it took so long that our banks, our credit, our businesses and, most importantly, job creation started going again?

(Jamie Dimon, CEO of J.P. Morgan Chase, questioning Federal Reserve Chair Ben Bernanke at an Atlanta monetary conference on June 7, 2011)

Introduction

Many economic historians and development economists have recognized that a step-change in income and employment growth – that is, successful national or regional development – requires an effective means of financing investment.¹ This means, almost invariably, a functional system of finance. As this chapter is written, Europe (including the UK), the US, and Japan all are suffering through prolonged periods of stagnant growth and recession. Each of these growth slowdowns was triggered by a major collapse in these countries' financial systems. Japan's stagnation commenced with the 1990 collapse of an asset bubble fed by the speculative behavior of its financial institutions, including the largest and most sophisticated. The economies of the US and Europe, on the other hand, were laid low by financial practices that treated the securitization of high-risk mortgages and other credit instruments, as well as unregulated and unrestrained zero-sum derivative bets on these instruments' market valuations, as virtually riskless – until the possibility of revaluation without crisis was already foreclosed.

A profound irony of the current fix is that these national areas' positions of global leadership in per-capita income and wealth stems from periods of extended industrial and commercial development that depended on the capacity to successfully finance large-scale investments in infrastructure and industrial development. So what went wrong? How did once-successful systems of finance become so dysfunctional?

¹ Among the most insightful works on the relationship between financial development and economic growth are Cameron (1960, 1967), Cassis (1994, 2006), Demirgüç-Kunt and Levine (2004), Gerschenkron (1962), and Goodhart (1988). These works have the added virtue of recounting national banking histories in far more depth than is possible here.



We argue here that this turn to dysfunctionality can be attributed to the deregulation and globalization of financial practices in an era of declining national governmental power. This decline has, in the past century and a quarter, been the most profound for the UK and the US, both of which have laid claim to having the world's strongest economy, and both of which had hegemonic currencies – that is, currencies valued above all others for stability and dependability. Each nation's currency has in this time frame been strong enough to be fixed in value relative to gold. And these nations' periods of global currency dominance had transformative institutional implications – these periods witnessed the growth of firms that could broker deals and arrange payments in different currencies, that could underwrite cross-border risks, store reserves, and so on; and alongside them grew a set of national regulatory agencies whose scope of authority ended with national borders, but whose actions affected the character and volume of financial transactions in many nations.

In effect, global currency hegemony required the creation of the elements of a financial center, or *hub*; these hubs' principal players were well positioned to spread innovative practices and instruments along their global networks, even after those national currencies were no longer as good as gold; and these innovative practices and instruments have sometimes entailed net transfers from the rest of the world to these hubs' principal players. These transfers were enabled by the protections these players enjoyed because of their privileged access to globally-hegemonic currencies.

We not only focus on the US and the UK because they issued the hegemonic currency of their times, but also because the scope and reach of these two centers' activities has shaped financial-system evolution around the world. It is their financial hubs, the City of London and Wall Street, that have been driving globally integrated finance in its purest form. Both have uniquely operated with hegemonic power in global currency markets, for extended periods of time; and both have been progenitors of the deregulation and marketization that have swept much of the global economy.²

In some fundamental sense, then, the Great Financial Crisis, as some have called it, was a tale of two cities. Our analysis, like many of Dickens' novels, is a cautionary tale. Our analysis of these two hubs suggests that financial innovations arising in global financial hubs not subject to the same regulator are difficult, if not impossible to control. It follows that these regulatory difficulties will only multiply as the number of global financial hubs under different regulatory regimes expands. But even in the current post-crisis period, new generations of aggressive young bankers are itching to transform their home cities – into new hubs which can 'insist,' as Dickens puts it in the passage cited above, 'on its being received, for good or for evil, in the superlative degree of comparison only.' The fact that the way to stake out such a claim is to take tail risks that more prudent players have shied away from or overlooked only adds to the challenge.

Finally, we show the overall impact of these two nations' financial evolution on their systems' functionality and on development banking therein. We define development banking as the provision of the finance needed to build and sustain the asset base required for robust industrial and commercial activity, and for secure residential life. A financial system is *functional* when it carries out the textbook functions of finance efficiently, and *also* makes adequate provisions for development banking. This financial function can be performed in different ways, but it must be performed. Bank

² These are not the only financial hubs: others include Singapore, Tokyo, Hong Kong, and Frankfurt. However, New York and London are globally dominant: in part, because of the reach of their financial practices (Wójcik (2013)); and in part, because the integrative global practices they invented or expanded led directly to the global financial crisis of 2007–08.



credit is just one of the possible forms of development banking. It can also be supplied by public authorities, private enterprises, and individuals. In effect, every sustainably growing region or nation needs development banking, as defined here. A system is *dysfunctional* when it systematically creates systemic risk and when its operational failure or collapse generates costs that must be borne, directly or indirectly (through the intermediation of government bailouts) by citizens.

We proceed as follows. The next section describes the growth of globalized finance in the United Kingdom, focusing on the City of London; the following section does the same for the United States and Wall Street. These two sections, which go as far as the crisis of 2007–08, also discuss the implications this growth had for system functionality. The next section then considers whether these two financial hubs' behavior and structures have changed in the post-crisis period. The final section briefly concludes.

Evolving financial practices and structures in the United Kingdom

In recent financial history, only the UK and the US have had currencies that anchored gold-linked global currency systems – the British gold standard (1816–1914) and the US Bretton Woods system (1946–71) – and then became global reserve currencies. Both nations have long traditions of intertwined military and industrial development. And each has hosted one of the two dominant global financial hubs in the twentieth and now twenty-first centuries. It is these hubs that host the megabanks and now shadow banks that are driving the pace of cutting-edge financial innovation in this industry's organizational forms, technologies, and practices.

British economic development, based on the twin pillars of overseas trading/resource-extraction ventures (especially via joint-stock companies, often with Royal charters) and domestic industrialization based on coal and rail, featured the pursuit of public purposes through privately-held enterprises. The Bank of England itself was privately-owned until 1946. Soft-touch regulation among privileged 'gentleman' stakeholders prevailed as the preferred behavioral norm in British banking. English high-street banking has been dominated by a small number of institutions – five in 1918, four today – for the past 100 years. For example, whereas US banking was transformed by a series of banking laws in the 1930s, British banking survived those years via a series of publicly-guided mergers and acquisitions of distressed banks, without significant changes in banking laws. Only in 2012 did parliament pass the Financial Services Act, which established the Financial Conduct Authority and the Prudential Regulation Agency as 'twin peaks' agencies to look after the safety, soundness, and competitiveness of UK financial institutions.

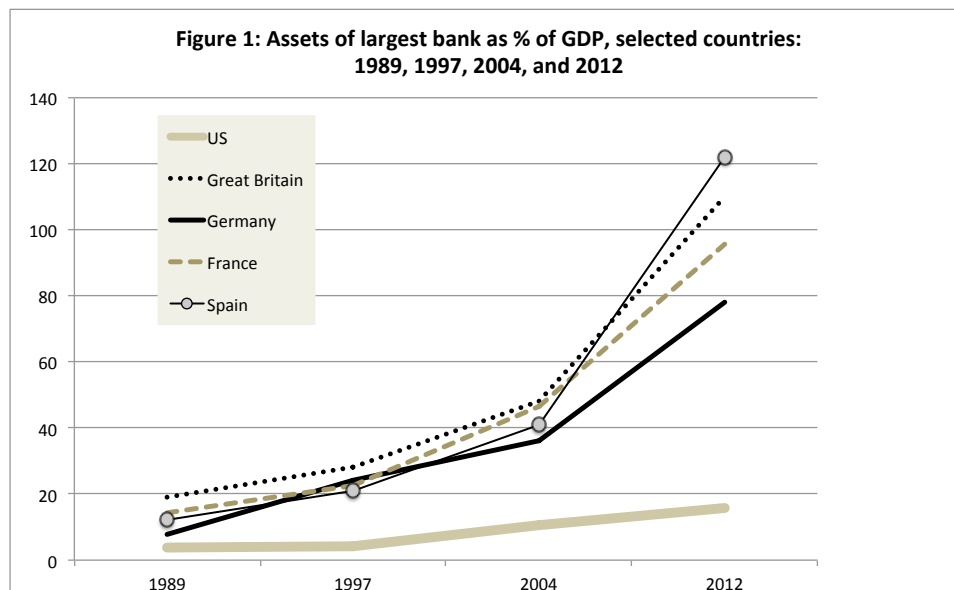
The international experience and relationships of many of the core institutions in what has become known as the City of London – the nexus of domestic and foreign banking and non-bank financial institutions centered in London – have a long history, rooted in the management of the far-flung British empire (Sutherland, 2013). These commercial and financial linkages were deepened during Britain's century administering its gold standard. Britain's key geopolitical position after World War II permitted it to bolster its position as a dominant global financial hub despite the fading importance of British industry and the struggles of the pound sterling. There have been three crucial steps in the contemporary emergence of the City of London. The first was the creation of an active Eurodollar (offshore money) market in the early 1960s. London became the preferred global hub for what Machlup (1970) famously termed 'stateless money.' And as Coakley and Harris (1983) pointed out, by the late 1960s the City of London had become a supra-national enclave managing the Eurocurrency (offshore) financial system, largely independently of domestic industry. The Eurocurrency business, most denominated in dollars, created risk for the banking entities involved

and undercut the global competitiveness of British industry.³

The second definitive step for the City was the ‘big bang’ deregulation of the London Stock Exchange – including the ending of fixed commission charges and of traditional trading practices – in October 1986. As Lambie puts it:

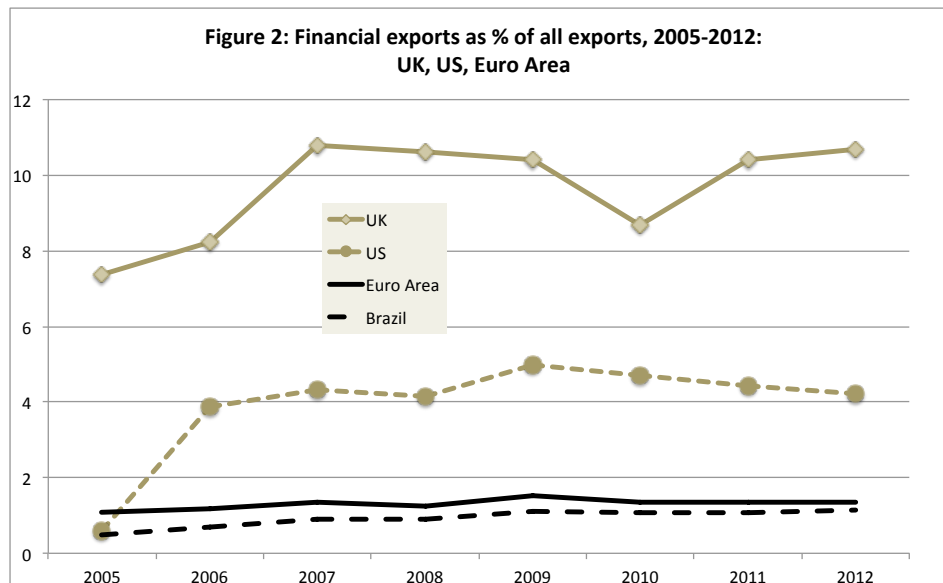
the USA became the world's ‘hegemon’ after the Second World War, but London retained its power in finance; well placed to challenge the post-war Keynesian regulatory consensus in favor of globalizing interests, theoretically and politically served by the rise of neo-liberal ideology.

(Lambie, 2013, p. 239)



The combination of the tradition of ‘soft touch’ regulation, experience in managing the exchange-rate and other risks of off-shore financial relationships, and the deregulation of activities and roles, proved a boon in the 1970s and 1980s, during which Great Britain (and other European nations) found it impossible to maintain quasi-fixed exchange rates with the chronically strong German economy. As Warsh (2011) recounts, Europeans’ continually frustrated efforts to maintain their integrity as an economic bloc without exchange-rate slippage

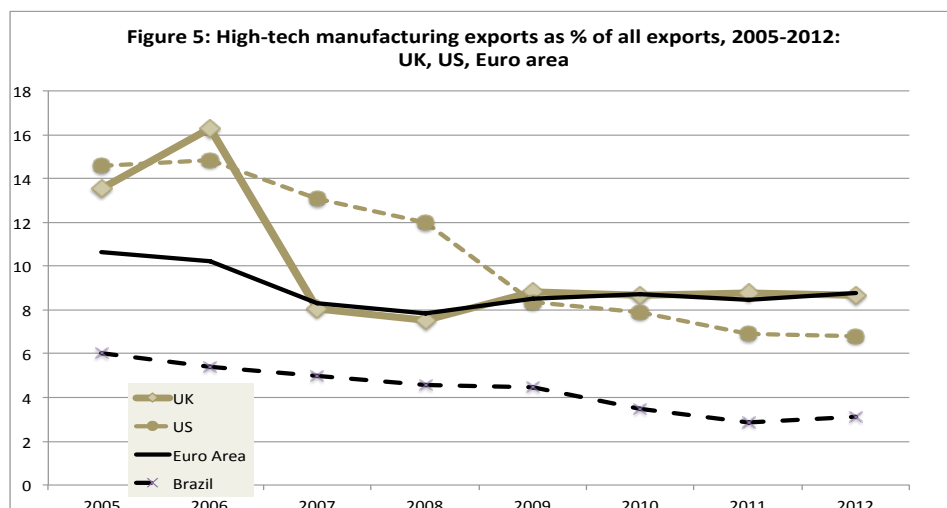
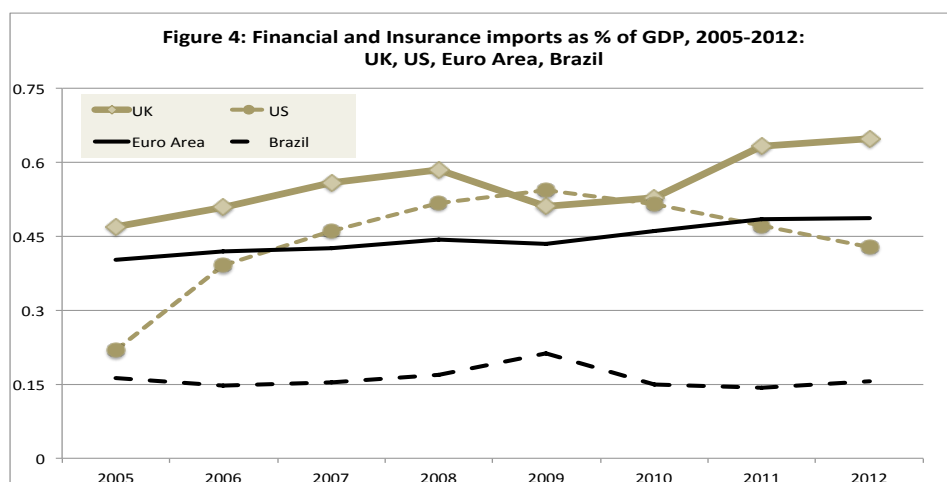
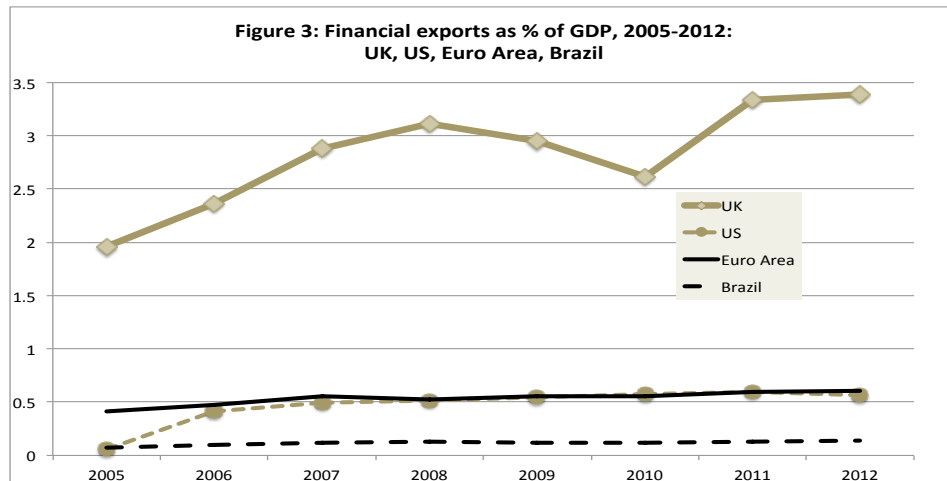
³ Making financial transactions denominated in dollars in a pound-sterling home-base in an economy that was experiencing chronic current-account deficits put the interests of British industry and international finance into direct conflict. The City had to maintain a high pound-sterling to maintain its margins, exactly the opposite of what industry needed.



eventually led to two grand ideas: a single market, which would solidify Europe's status as a megamarket; and a single currency, which would require macroeconomic harmonization. In the end, Britain joined the single market – the European Union (EU) – but not the single currency – the European Monetary Union. This was the third element in solidifying the capital of post-hegemonic Britain as a global financial capital. Arnold and Fleming (2014) have reported that more than 250 foreign banks locate their main European subsidiaries there as a base for wholesale (investment and corporate banking) European operations in the EU single market – investment and corporate banking. Indeed, the combination of EU membership and Eurocurrency experience, in the era of deregulation, meant that London could function as an ideal base for offshore and onshore financial activities for large multinational firms and the banks that service them. As Palan (2002) and Palan *et al.* (2009) document, many small nations commercialized their sovereignty and teamed with City firms to create tax havens that permitted the creation of financial activities that could escape from regulation and taxation even while being conducted within the same physical space.

The special place of Great Britain's banking industry is readily seen when contrasted with global competitors. Figure 20.1 shows that whereas the size of the largest banking firm relative to gross domestic product (GDP), in the six nations shown, grew steadily in every case between 1989 and 2012, a UK bank was consistently at or near the top of this list.⁴ Figure 20.2 shows that the UK's export earnings from its financial/insurance industry are far greater as a share of its exports than for other nations. Figure 20.3 makes the same point, in terms of the contribution of financial/insurance exports as a share of British GDP. Figure 20.4 shows that Britain has a relatively high level of financial/insurance-related imports, illustrating its financial openness; however, the import ratio is far less than is the export ratio.

⁴ The banking statistics shown in Figure 20.1 are drawn from various issues of *Business Week* and *Forbes* magazine, featuring lists of the 1000 or 2000 largest business enterprises across the globe; the data for GDP in Figure 20.1, as well as the data shown in Figures 20.2–20.5, are taken from the OECD.



Whereas the UK's large banks thrived on the global operations facilitated by London's role as leading financial centre, development banking was left at the wayside.⁵ Britain's economic soft spot lay in the areas that had formed the basis of its industrial strength in an earlier day – its great Midland and Northern industrial cities, with their mines, mills, and shipyards. Britain had no development bank to

⁵ More than that, the existence of large systematically important institutions arguably undercut system functionality through creating competition for smaller, local players and exacerbating the risk of systemic contagion – most visible in the subprime crisis.

steer a renaissance for these areas.⁶ What passed for an industrial policy involved Northern relocations of City back-office operations and government bureaucracies, and a housing boom fuelled by the Building Societies Act of 1986, which de-mutualized Britain's building societies and opened the way to deregulated mortgage lending. The subprime lending and securitization methods perfected in the United States were adapted and spread throughout the United Kingdom by building societies, in competition with high-street British banks. The special competence of City bankers in using over-the-counter instruments to hedge exchange-rate and other risks came to the fore as subprime securitization instruments spread across borders. City of London firms thrived as the markets for global financial instruments expanded. London grew ever more prosperous (and its real-estate ever more pricey) on the back of its global financial industry, even while the remainder of the British economy stagnated (Chakraborty 2013). Figure 20.5 shows that British high-tech manufacturing declined substantially as a share of all exports in the 2005–12 period.⁷

While significant numbers of small loan-brokers and funds selling the undercollateralized, unpayable mortgages of the subprime era began failing early in 2007, the subprime crisis proper began with the failure of the Newcastle-based building society, Northern Rock. A significant number of UK building societies failed or were merged. Two of the UK's 'big five' banks – the Royal Bank of Scotland and Lloyds – needed huge infusions of public money to avoid insolvency. The Labor government of PM Gordon Brown, which was in power when the Shearson Lehman meltdown occurred, briefly considered nationalizing the problem banks; but instead opted to inject public funds without nationalization.⁸ So the central role accorded to megabanks in the UK contributed to the dysfunctionality of the financial system in two ways: first, by creating competition for smaller, regional banks; second, by generating contagion and requiring bailouts in the subprime crisis.

With the election of a Conservative government in 2010, led by PM David Cameron, any discussion of nationalization remained off the table. However, this was not due to the private-sector banks' lively reaction to the crisis. To the contrary: the big banks were not lending. This was due to the fact that they were riddled with bad loan problems, and concerned with recapitalization; initially, in the wake of the crisis, loan demand was low as well; but eventually this condition changed. Vince Cable, an influential politician and advocate for effective financing of business, proposed a business bank. This was eventually passed, but at a very modest scale of £300 million. Justin Welby, the Archbishop of Canterbury, called for establishing a set of regional development banks (Goodley, 2013). Meanwhile, the big banks didn't resume lending, and their monopolistic control of the market – 90 percent of business loans and 85 percent of business current accounts (Fleming, 2014) meant that business expansion was strangled in the UK.

Evolving financial institutions and practices in the United States

⁶ Britain's sole development bank, the Colonial Development Corporation, was established in 1948 to 'develop self-sustaining agriculture, industry and trade in the British empire' (*The Economist* 2001). The Blair administration transformed it into a public-private partnership that would raise capital from the private sector for developing-nation projects that could earn market returns. Its paltry budget of £2 billion (in 2002) made it at best an afterthought in financial markets and development planning alike.

⁷ Whilst manufacturing was in decline, Figure 20.6 shows that domestic credit to the private sector as a share of GDP – the majority of which was directed toward housing – rose until 2009 at a pace even faster than that in the US.

⁸ The 'big five' are HSBC, the Lloyds Banking Group (which includes the Bank of Scotland and TSB Bank), the Royal Bank of Scotland Group (which includes National Westminster Bank and Ulster Bank), Barclays, and Standard Chartered. Lloyds is 25% owned by the UK government, and the RBS Group is 84% owned by the UK government; both however remain active as private-sector entities.

As Ha-Joon Chang (2002) has reminded us, during the period of its geographic expansion, the US was a developing nation. Investments from abroad provided much of the financing for its railroads and its canals; and it capitalized on infant-industry protections to build the industries that made it rich, and permitted its growth into a continental giant. No federal development bank was established prior to the 1930s. Instead, however, the continual spatial expansion was undertaken in the context of state supervision of banks: between 1836 – the demise of the Second Bank of the United States – and 1914 – the Federal Reserve – states governed bank chartering, or in some cases permitted ‘free banking.’ The upshot was that financing – including whatever development banking was feasible – was provided through state-chartered, often unstable or unreliable banks. These provided the finance needed to continue the nation’s westward push.

The Great Depression brought two significant developments, for our purposes. One was a huge increase in the size and scope of federal expenditure. Among the purposes served by this expanded budget were aims associated above with development banking. In 1932, President Hoover sponsored the creation of the Reconstruction Finance Corporation (RFC), which provided subsidies and loans to distressed state and local governments, and which provided loans and capital to US non-financial businesses and banks threatened with insolvency. Under the New Deal, the RFC focused on bank recapitalization. It functioned until 1957.⁹ This entity was joined by a variety of federal vehicles for putting Americans to work and building public buildings, bridges, parks, and other needed infrastructure. Among these were the National Recovery Administration, the Tennessee Valley Authority, the Agricultural Adjustment Administration, and the Works Progress Administration. No one of these took the form of a bank: they were mixed entities that both generated needed aggregate demand, patient finance for businesses and farms, and investment financing for infrastructure projects. The second development stemming from the Great Depression was a new set of banking laws aimed at stabilizing the banks and removing the threat of destabilizing financial dynamics. These laws provided deposit insurance, split investment and commercial banking, restricted commercial banks’ geographic and product-line competition, set limits on rates, and so on.¹⁰

The demise of the New Deal initiatives was not followed by the creation of a US public DFI. Instead, specialized vehicles were used. Development banking support was provided for US housing expansion through federally-subsidized and underwritten financial entities.¹¹ The Nixon Administration created a modest Small Business Administration financing program, and the Clinton Administration an even more modest Community Development Financial Institutions program. As Mazzucato (2013) and Weiss (2014) have shown, the principal form of development financing support for industrial innovation came indirectly through a massive set of budgetary supports for nuclear laboratories and for research and development, operated by the US’s defense, energy, and national securities agencies.

These supports for industrial innovation through the federal-budgetary backdoor grew in significance with the Reagan Administration, just as a decade of high inflation and recession, along

⁹ For histories of the RFC and the New Deal, see Jones and Angly (1951) and Olson (1988).

¹⁰ See Dymski (1999) for a concise history of twentieth-century US banking. These restrictive new rules are viewed by some analysts, even in the wake of the 2008 subprime crisis, as having deleterious effects; for example, Neal and White argue that the Glass–Steagall Act limited small-medium enterprises’ access to credit and limited investment banks’ capital base.

¹¹ The main entities here were two government-sponsored enterprises – the Federal National Mortgage Association (Fannie Mae) and the Government National Mortgage Association (Ginnie Mae). Fannie Mae was privatized in 1968.

with rising interest rates, had put the fragmented, regulated US banking system under severe stress (Dymski 1999). The US entered the 1980s with 14,400 insured commercial banks. Deregulation and permissive regulatory oversight fed a bank merger wave that left the country with just over 6900 banks by September 2009. The largest US banks were heavily involved in consolidation: of the 24 largest US bank holding companies as of 1997, only 10 remained by September 2011. Further, the largest US banks grew at a much faster rate than did even mid-size banks, as restrictions on bank geographic locations and permitted activities fell through a series of deregulation laws in the 1980s and 1990s.

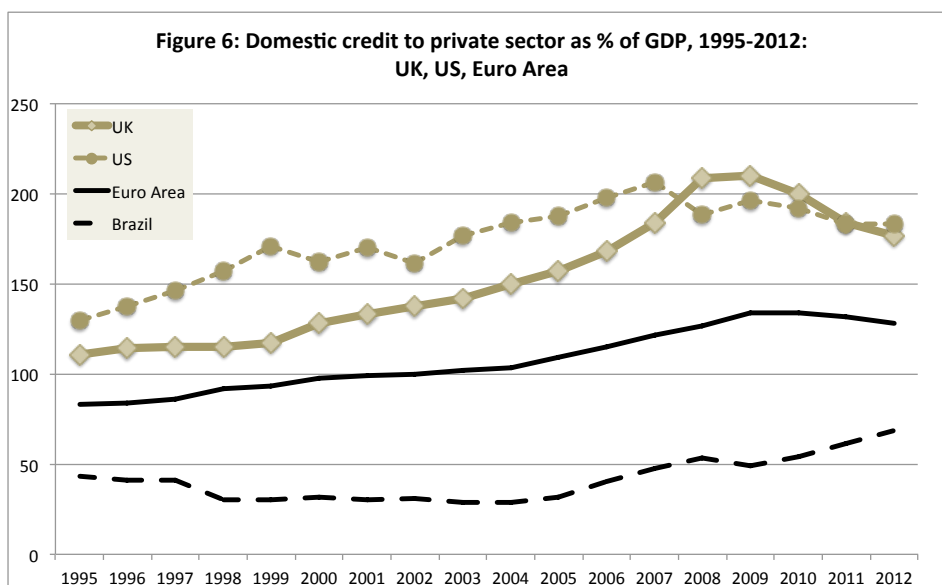
These large banks' growth was fueled by four additional intertwined factors (Dymski, 2009). One was the collapse of the US's thrift-based housing-finance system in the 1980s; it was replaced by a securitization-based system, in which mortgages were originated and then distributed to investors. Second, the expansion of securitization to encompass high-rate, high-risk, and predatory lending (including subprime mortgages), often to households formerly excluded from home ownership or credit extension. The third factor in large banks' growth was the rising competition between Wall Street and London, linked to the changing international monetary order. The fourth factor, in turn, was the US's steady capital-account inflow, a byproduct of its persistent current-account deficits throughout the neo-liberal period.

If the current-account deficits of the latter years of the Bretton Woods system foreshadowed the inability of the US to maintain (and reap the benefits from maintaining) an orderly global system, the current-account deficits from the 1980s onward marked a post-hegemonic interregnum. The US's contribution to global economic order was no longer to insure worldwide prosperity, but instead to provide residual aggregate demand for the increasing number of nations trying to export their way to renewed growth, especially after crisis episodes. In effect, the US current-account deficit became an entrenched part of global economic functioning – albeit a largely unacknowledged one, as this contradicted the policy orthodoxies of the IMF and of the increasingly dominant Classical approach to macroeconomics. As a crucial side benefit for the declining US economy, the dollar's role in currency reserves and cross-border transactions was thereby preserved. The Doobie Brothers' phrase, 'What were once vices are now habits,' could be reworked to capture this situation: 'What once undermined policy now reinforces policy.'

The broad-based deregulation and large bank holding companies' expansion put them into direct competition with large non-bank Wall Street firms. Given the ocean of reserves seeking investment outlets that was pouring systematically into the US financial markets, this competition focused on the bundling, holding, and sale of subprime paper and of CDOs – and, in turn, on the ancillary derivative and underwriting products that could be created in tandem with securitized credit. Enhancing the demand for these new products was the multiplication of largely unregulated investment funds, including hedge and private equity funds. Wall Street grew stronger by the year, as did the megabanks and shadow banks that dominated it.¹² Not coincidentally, large Wall Street firms moved into the lead in numerous areas of 'global financial services,' and indeed the Wall Street megaplex became seen as a key source of competitive advantage for the United States (Franko,

¹² Jane D'Arista began warning of the emergence of a 'parallel banking system' engaged in speculative loan-making in the late 1980s and early 1990s – a system which 'divided intermediation between two separate entities, each of which dealt directly with the public through only one side of the balance sheet' (D'Arista 1994, p. 418) – and thus escaped regulation as banks. The term 'parallel banking' is, of course, a precursor to the term 'shadow banking' in use today.

2004).



If the City of London's global-hub role was rooted in its cross-border relationships, Wall Street's role was securitization-based. Of course, each global hub competed to create financial products that complemented or competed with the other. Regarding the Eurodollar market, for example, Cassis has observed, 'While American banking legislation thus strengthened London's international role to the detriment of New York's, American banks took full advantage of the situation, dominating the Euromarkets and integrating them into their global strategy' (Cassis 2006, p. 227). Wójcik argues that 'the degree of commonality, complementarity and connectivity' between the two financial hubs is so profound as to justify the term, 'the New York–London axis' (Wójcik, 2013, p. 2736).

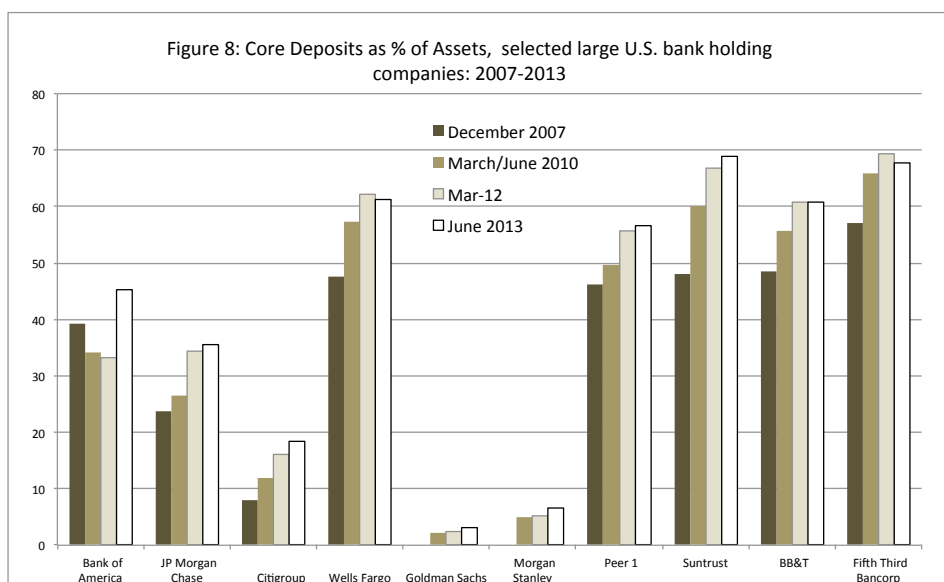
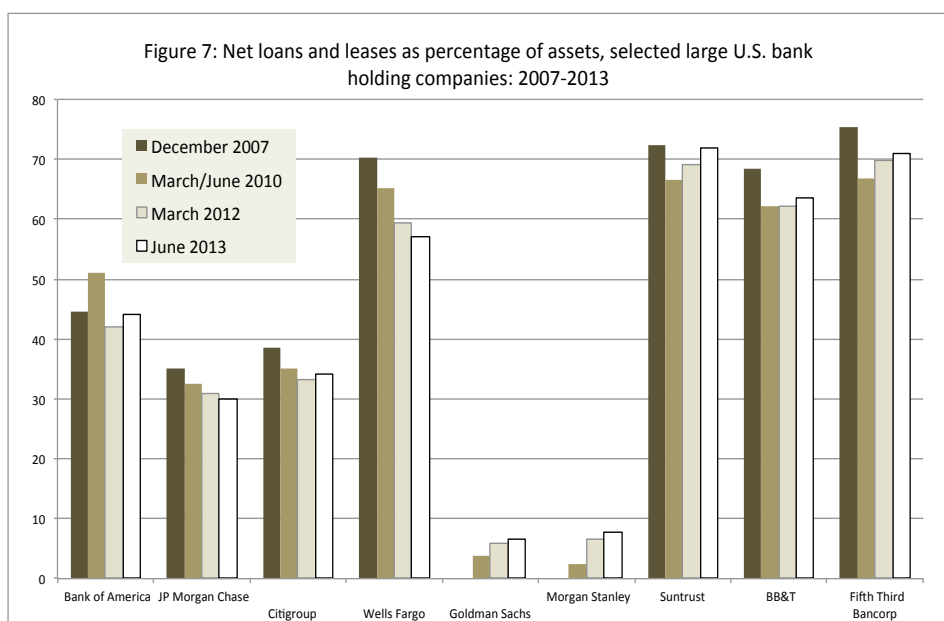
Figure 20.2 shows that US exports, like those of the UK, were proportionately very reliant on financial/insurance exports in the 2000s, though this reliance was far less relative to GDP (Figure 20.3). Figures 20.5 and 20.6 show that the US, like the UK, experienced a substantial relative decline in high-tech exports between 2005 and 2012, while domestic credit rose steadily as a share of GDP through 2007.

We defer here any discussion of the details of the subprime episode.¹³ We might simply note that the rise of subprime-linked securitization in the decade before the crisis set in cemented the integration of US megabanks, mortgage-brokers, underwriters, funds, and broker-dealers into a financial complex optimized to extract maximum fees from originating, selling, insuring, and taking highly-leveraged bets on an ever-expanding stream of securitized credit. The excessive leverage was especially distinctive; it was accomplished through the inter-mixing of contingent and spot commitments, facilitated by exchanges and multiple uses of the same 'safe' assets as collateral. This 'rehypothecation' formed just one method by which shadow banking emerged as a fundamental

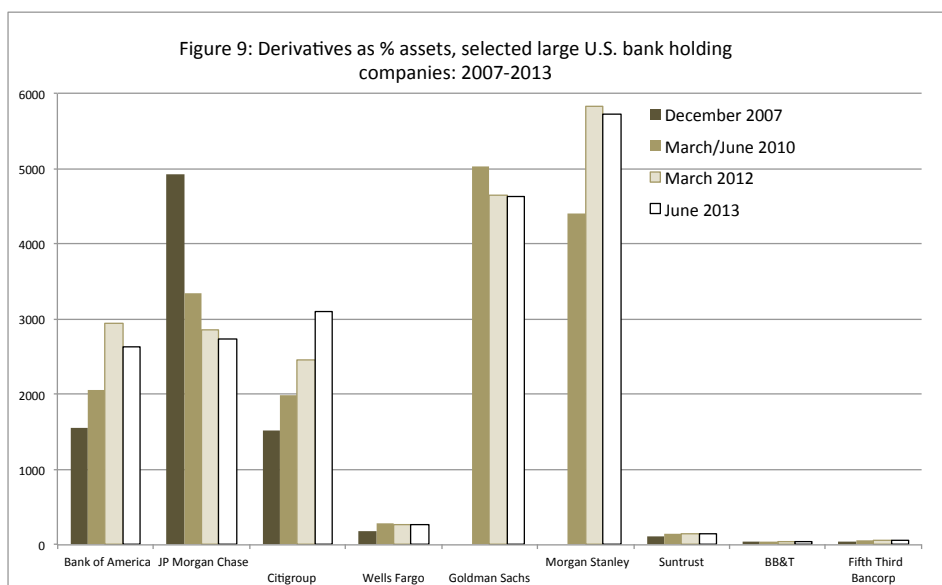
¹³ Sorkin (2010) gives a blow-by-blow insiders' account of the Wall Street crisis as it unfolded between September and November of 2008.

structural element in global financial centers.¹⁴

Once the subprime crisis hit home, the price of the dizzying financial competition of the 2000s was revealed: in 2008, three of the five largest Wall Street non-commercial-bank firms either failed or disappeared through merger (Lehman Brothers, Merrill Lynch, Bear Stearns); the other two were converted into bank holding companies. Federal Reserve and Treasury policy decisions in these weeks of crisis revealed that the Wall Street complex was fragile, and at the same time had to be maintained via any means necessary: its core institutions were too big to save, too intertwined with shadow banks and other global behemoths to untangle, and thus constituted the new reality of modern money and credit markets.



¹⁴ Pozsar *et al.* (2013) define shadow banking as consisting of ‘financial intermediaries that conduct maturity, credit, and liquidity transformation without explicit access to central bank liquidity or public sector credit guarantees.’



As of December 2009, six megabanks – Bank of America, J.P. Morgan Chase, Citibank, Wells Fargo, Goldman Sachs, and Morgan Stanley – stand alone as the commanding heights of US banking. The 2008 TARP program that preserved these megabanks’ existence was fully consistent with the broader design of US banking policy. The US government provided subsidies for large banks to buy failed savings and loan associations after the 1980s ‘thrift’ crisis, and then encouraged their transformation to megabanks through a series of financial deregulation acts. In effect, the emergence of the six largest US megabanks through the eventual intersection of Wall Street and super-sized commercial banks should be understood not as an accidental by-product of the 2007–08 subprime crisis, but as the endpoint of a lengthy period of intentional policy choices regarding the activities and market scope of a reshaped, more efficient US banking industry. What was unintended was that these megabanks’ final emergence should have required such huge public interventions to survive crises of their own making.

Also not intended was that the US, after a 30-year bank merger wave, would have two essentially distinct banking sectors: a megabanking sector at the hub of the Wall Street financial complex, and a community banking sector in which more than 9 of every 10 US banks have under \$1 billion in assets. The former sector securitizes at least a third (if not all) of what it lends, while the latter does virtually no securitization. And the six dominant megabanks represent an uneven mix of two former investment banks, two former retail banks, and two US versions of universal banks. Figures 20.7–20.9 show the dramatic differences among these six banks’ balance sheets, while comparing them with three representative large US regional banks.

The shift of US banking toward increasing dominance by a megabanking sector affected system functionality in several ways. These megabanks lent less to the non-financial sector, imposed systemic instability on the rest of the financial system and on the economy as a whole, and undercut the provision of productive finance via harmful competition, even while occupying a favored position in the US bank merger wave. The extent of the potential dysfunctionality of a megabanking/shadow-

banking led financial system would only become clear as the full scope of the subprime crisis became clear

The New York–London ‘axis’ after the 2007–08 financial crisis

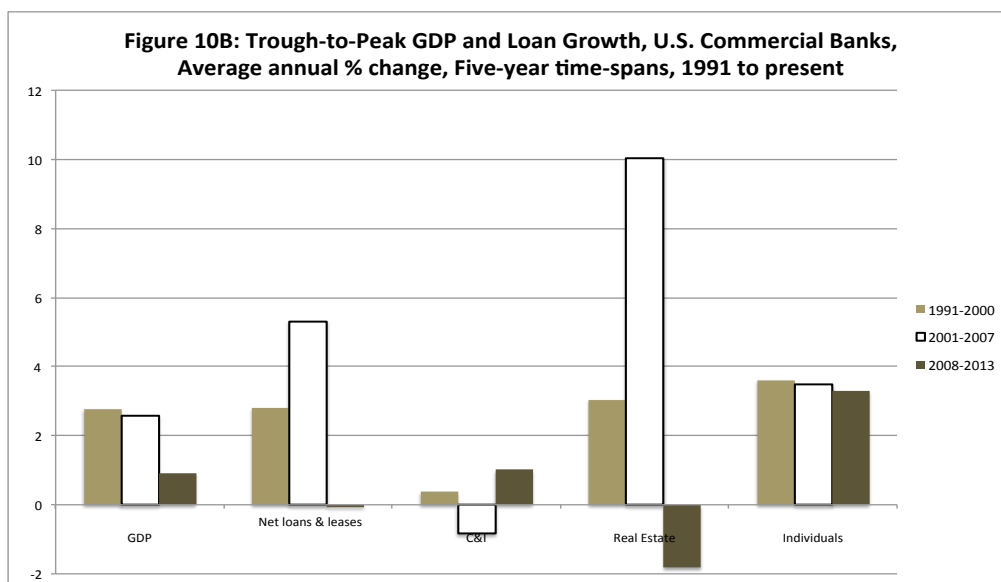
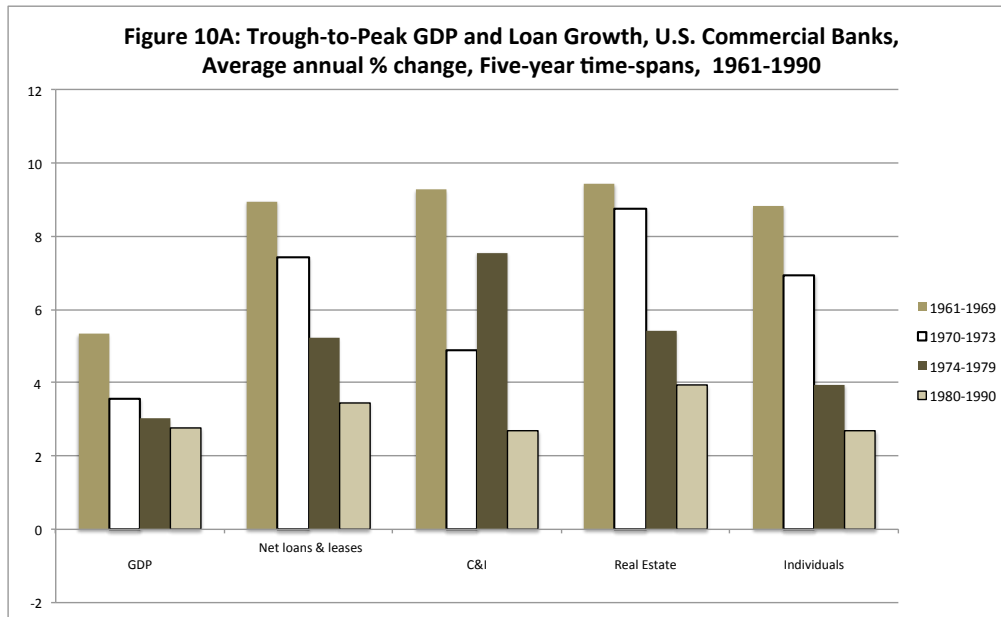
The two previous sections broke off as the Great Financial Crisis of the past several years began and then gathered momentum. There is little doubt that the mixture of deregulation, fragmented regulation, globally mobile finance, and misalignments between risk-origination and risk-bearing, all played their parts. So how much has changed for the New York–London ‘axis’ after the crisis? Has legal or legislative action transformed its behavior?

The effort to identify the causes of the subprime crisis has taken on a ‘Rashomon’-like quality: different analysts seem to have been witnessing completely different events.¹⁵ Some point the finger at excessively aggressive behaviors within the New York–London ‘axis’: hubris, excessive leveraging and complexity, the fragmentation between risk-creation and risk-bearing, the capacity to take zero-sum bets on real and synthetic securities, the asymmetric knowledge bases of broker-dealers and investors. Others blame government over-regulation, or the lack of adequate regulatory oversight. Still others blame greedy home-buyers whose reach exceeded their grasp. Others (including this author) have emphasized predatory lenders’ targeting of minorities and lower-income neighborhoods that had previously been denied access to mortgage credit. It is not important for our purpose to decide shares of blame. It is sufficient here to second the conclusion of Wójcik (2013, p. 2736): ‘the global financial crisis 2007–09 originated to a large extent in the [New York–London] axis rather than in an abstract space of financial markets. The dominance of the axis in global finance can be easily underestimated and evidence suggests that, contrary to expectations the axis is not in decline.’

The crisis itself was incredibly costly. Estimates of costs vary widely, depending on whether out-of-pocket costs to taxpayers is being considered, or overall impacts on economic growth and financial and non-financial wealth. An IMF report (2009) provided preliminary estimates of the costs of the crisis, reporting ‘upfront government financing’ at the following levels of GDP: United Kingdom, 18.9 percent; Norway, 15.8 percent; Canada, 9.8 percent; Austria, 8.9 percent; United States, 7.5 percent; Netherlands, 6.2 percent; Greece, 5.4 percent; Ireland, 5.4 percent; Sweden, 5.2 percent; Belgium, 4.8 percent; Spain, 4.6 percent; Germany, 3.7 percent; Portugal, 2.4 percent; Russia, 1.7 percent; France, 1.6 percent.¹⁶ Of course, subsequent reports indicated smaller eventual payouts, narrowly considered; for example, at the end of 2010, Her Majesty’s Treasury (2010) estimated an eventual out-of-pocket taxpayer cost for the UK of £512 billion, down from a £955 billion estimate made one year earlier. The figures for ‘all in’ estimates are remarkably higher, as they take into account lost GDP momentum, the destruction of equity value, and other factors. The IMF (2009) estimated ‘all-in’ global costs at \$11.7 trillion; and two recent estimates for the US economy put overall losses at \$10 trillion (General Accountability Office, 2013) and \$6 to \$14 trillion (Luttrell *et al.*, 2013).

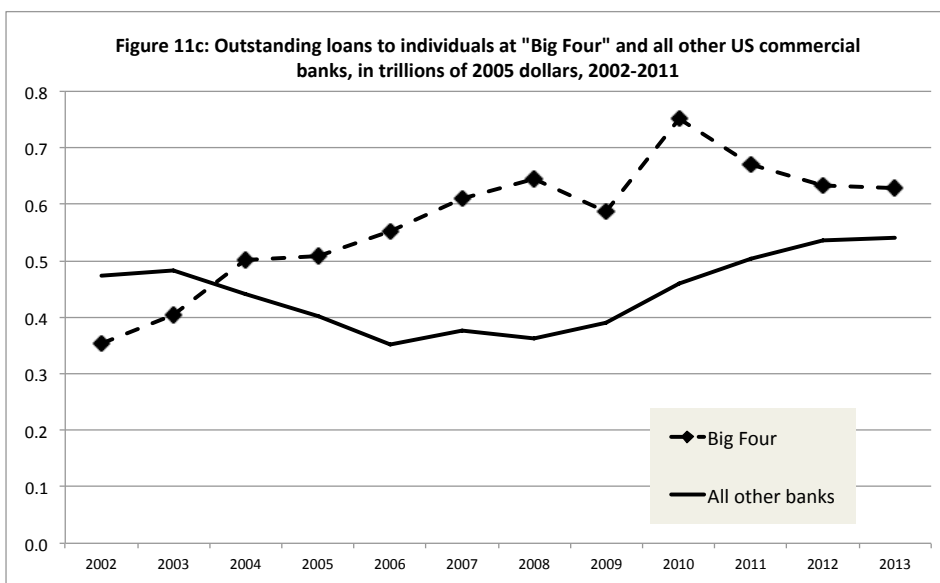
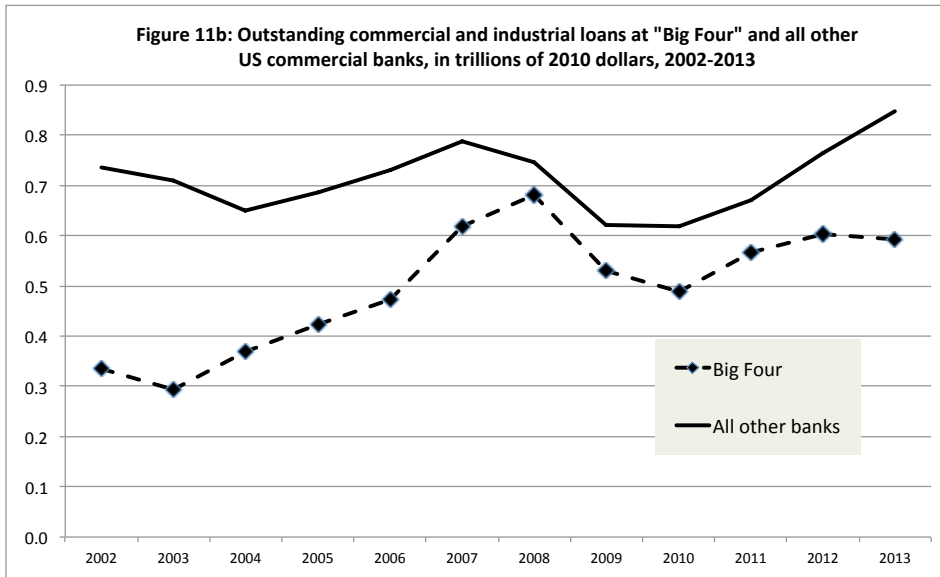
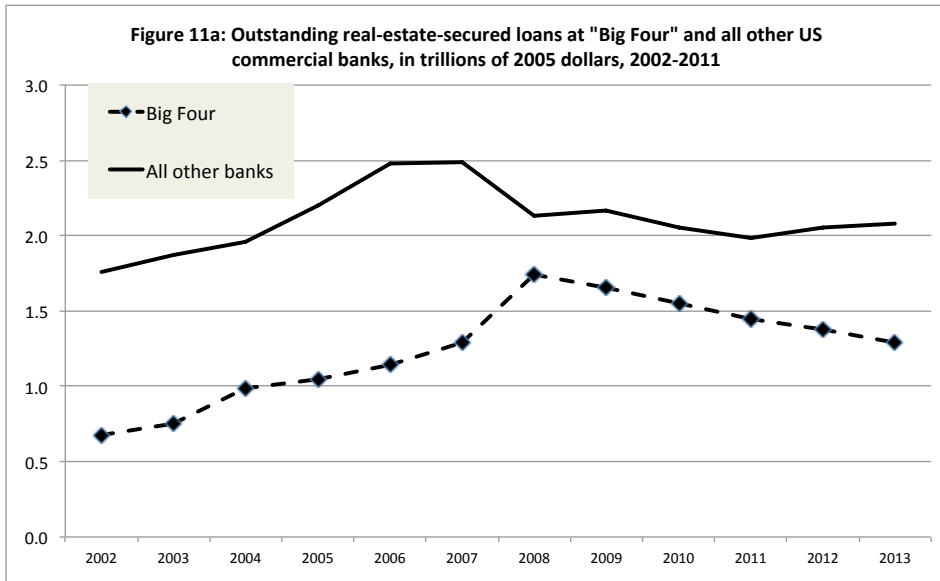
¹⁵ Dymski (2013) summarizes and provides citations to some of the contrasting views about the causes of the subprime crisis.

¹⁶ Smaller percentages are excluded here; for the full list of countries, see Table 2.1 (IMF, 2009).



The crisis was thus a demonstration of the dysfunctionality of the megabank-shadow-banking-led financial complex. This might be viewed as an exorbitant cost of transiting from an antiquated hold-to-maturity loan-based system to a modern originate-and-distribute securitization-based system more fully able to exploit the advances in information and communication offered by the technology revolution.¹⁷ In other words, beyond this demonstration of its dysfunctionality, the question is, is the new system providing needed credit – here, our criterion is the provision of credit for development – effectively? We have already alluded to the move in the UK to establish a business bank because Britain’s ‘big five’ banks were not able or not willing to lend broadly enough to the small and medium enterprises joining in the country’s nascent economic recovery.

¹⁷ Nobel laureate Robert Shiller expressed at the very commencement of the subprime crisis (Shiller, 2008) and has maintained it in subsequent writings (Shiller, 2012).



Figures 20.10 and 20.11 provide empirical evidence for the US case. Figure 20.10 contrasts GDP growth and credit growth, for several categories of loan, for economic cycles from 1961 to the present.¹⁸ Figure 20.10A includes data from the four full business cycles (measured trough to peak) between 1961 and 1990. Note that average loan growth exceeds GDP growth in every cycle, across all categories of credit (commercial and industrial loans (made to non-financial firms), loans secured by real estate, and loans to individuals) and for overall lending (net loans and leases). Note that average GDP growth declines across these cycles, a pattern reflected in the loan-growth data. Figure 10B shows data for the three subsequent business cycles, beginning respectively in 1991, 2001, and 2008 (as mentioned in note 35, cycles are measuring trough-first to permit the inclusion of the post-crisis period). The pattern is shockingly different. For one thing, GDP growth rates are successively lower, cycle after cycle. But with the exception of loans to individuals, there is no longer any systematic pattern of credit growth amplifying GDP growth. Real-estate loans, predictably, show the excessive lending of the 2000s, followed by the collapse of subsequent years. There is, however, virtually no cyclically-responsive growth of commercial and industrial loans.

Much was said above about the increasing dominance of US megabanks in US financial dynamics. Figure 20.11 isolates loan volumes for the 'Big Four' that have emerged from the extended bank-merger period – JP Morgan Chase, Bank of America, Citibank, and Wells Fargo – and contrasts this with the loan volumes for all other FDIC-insured banks. The period 2002–13 is depicted.¹⁹ Figure 20.11A shows that Big-Four real-estate-secured loans are almost equal to the total for the remainder of the banking system; and while other banks' real loan volumes have stabilized and even grown slightly in the current recovery, those for Big-Four banks have steadily declined. Figure 20.11B illustrates a very similar pattern for commercial and industrial loans; in this case, however, other banks' loan volumes are increasing noticeably, but Big-Four loan volumes are not. Figure 20.11C, depicting loans to individuals, shows the same Big-Four/other-bank contrast for the post-crisis years; note that Big-Four banks have accounted for over half this loan market since 2004.

In short, these data provide an empirical correlate to the conclusion that Minister Cable implicitly reached in the UK – the current intermediary structure lacks for something. Specifically, there is no strong commitment shown by the Big Four banks to support for development banking as a means of rekindling industrial and business activity. This sort of initiative at the parliamentary or Congressional levels is, further, ruled out the political power of lobbyists for the established banks. Further, there is reason to be skeptical about the possibility that the megabank/shadow-bank complex's tendencies toward dysfunctionality – and toward spreading costs to taxpayers, to the formerly and newly unemployed, and to those dispossessed of homes and businesses – will end soon.

¹⁸ The bank data depicted in Figures 10A and 10B are drawn from the historical banking series of the Federal Deposit Insurance Corporation (FDIC; see www.fdic.gov); the figures are for all FDIC-insured commercial banks. GDP deflator and GDP data are drawn from the Bureau of Economic Analysis (www.bea.gov). All data are annual. The deflator series is used to convert the nominal FDIC data into real terms. Since cycles include trough and recovery periods, and since there has been no trough since the end of the recession in 2009, cycles are measured from the beginning of a trough to the end of that cycle's recovery. Since cycles vary in length, only the first five years of any given cycle, measured from the trough forward, are used in the figures shown. Including full cycles has little effect on the patterns shown.

¹⁹ Since end-of-year figures are used, note that between 2007 and 2008, 'Big Four' balance sheets are swelled due to their acquisition of two large depositories that failed in Fall 2008. Washington Mutual, a savings bank with \$307 billion in assets as of June 2008, was acquired by JP Morgan Chase. Wachovia's substantial balance sheet (it was the fourth largest US bank holding company in June 2008, with \$812 billion in assets) was taken over by Wells Fargo. Washington Mutual's balance sheet is not included in FDIC totals prior to this acquisition; but Wachovia's is, explaining most of the 2007-to-2008 shift in loan totals shown.

In particular, efforts at financial reform have been stalled, watered down, and largely frustrated. The Big Four UK banks have fought aggressively against efforts by the European Union to strengthen financial regulation. As Arnold (2014) noted in the *Financial Times*, ‘The UK has already launched four legal challenges to EU financial services regulation including the power to ban short selling; the requirement that clearing houses handling euro transactions be based in the Eurozone; the financial transaction tax; and the bonus cap.’ US megabanks and shadow-banks, in turn, resisted the passage of the Dodd–Frank Act, even after their legal departments shaped many of its sections; they have taken measures to slow its implementation; and they have worked long and hard to limit its scope via the rule-making process (Bair, 2012; Eavis, 2014).²⁰ In both national capitals, and indeed in Brussels, passing effective reform legislation is rendered nearly impossible by the often definitive influence of lobbyists and experts working for financial interests.

The problem of the New York–London axis’ uncontrollability, in short, remains, due to its interconnectedness combined with multiple regulatory jurisdictions – a formula for insuring that whatever reforms are passed will be subject to Goodhart’s law.²¹ As Pozsar *et al.* (2013, p. 14) demonstrate, shadow banking itself is not external to the megabanks; rather:

The ‘internal’ shadow banking subsystem refers to the credit intermediation process of a global network of banks, finance companies, broker-dealers, and asset managers and their on- and off-balance-sheet activities—all under the umbrella of financial holding companies. ... the ‘external’ shadow banking subsystem refers to the credit intermediation process of diversified broker-dealers and a global network of independent, nonbank financial specialists that includes captive and stand-alone finance companies, limited-purpose finance companies, and asset managers.

Consider the evidence of interconnection provided by Wójcik (2012) in his description of the pre-crisis period: AIG originated credit-default swaps that were viewed by their purchasers as providing insurance against the non-performance of securitized credit bundled into CDOs (collateralized debt obligations) created, in part, from mortgages created by Northern Rock in Britain and (say) Countrywide Financial in the US, which in turn were invested in vehicles registered in offshore tax havens by hedge funds. We can extend Wójcik’s string of interconnections further: short and long options were created on the basis of these CDOs in New York, leading to options swaps in London, and now to new emergent indices and zero-sum hedging instruments not yet defined in law.

It must be acknowledged that many of these instruments are being forced into trading on exchanges in the wake of post-crisis regulatory reforms. However, the game cannot be considered frozen into place just yet. With so many financial hubs and offshore centers and vehicles involved, Goodhart’s Law remains very much in effect – efforts to regulate one financial instrument invite innovations that escape whatever regulatory umbrella was established. To get an idea of how this game is being played, consider this passage from a recent *Financial Times* article. The authors, Alloway and Mackenzie (2014), describe the emergence of two new instruments, total return swaps and ‘swaptions’, as follows:

²⁰ Legal challenges to provisions of Dodd-Frank, including the consumer finance protection agency it establishes and its orderly liquidation procedure, have also delayed its implementation.

²¹ Goodhart’s formulation of this ‘law’ is as follows: ‘Any observed statistical regularity will tend to collapse once pressure is placed upon it for control purposes’ (Goodhart, 2004, p. 96). Alloway and Mackenzie (2014), in the same recent *Financial Times* article quoted below, inadvertently invoke Goodhart’s law in that same article when they observe, ‘in fighting the vanguard of the last financial crisis, regulators have missed new areas of danger in the system.’

A total return swap enables an investor to receive a payment based on the performance of an underlying basket of assets. Such a strategy in this case enables an investor to leverage their exposure to the performance of credit, without owning an actual asset. The downside is that any sharp deterioration in the value of credit means an investor would need to compensate the other party in this transaction, usually a bank that arranged the deal.

‘The new TRS product is really, really interesting in that you do now have a number of TRS products referencing credit indices,’ says Andrew Jackson, chief investment officer at Cairn Capital. ‘We’re even starting to see options on TRS.’ ...

The use of options tied to CDS indices, known as ‘swaptions’, has grown sharply, buoyed in part because the instruments are not required to be centrally cleared. Such swaptions allow investors to protect their portfolios from large movements in markets, known as ‘tail risk’.

More than \$60bn of CDS index options currently exchange hands each week – up from just \$2bn traded **per month** back in 2005, according to Citigroup analysts.

A further problem in reining in and regulating the ‘axis’ is the transformation of international law in the Neoliberal years.²² What Machlup might have called ‘stateless interests’ have increasingly been asserting, establishing, and protecting their legal rights over the disposition of contracts that extend beyond domestic borders.²³ The problem in the case of securitized credit transactions resides in the fact that two contracts are made on the basis of the same cash-flow. Offshore purchasers are increasingly asserting their prior rights over financial promises to pay based on securities they purchased, regardless of the status of payment by the original borrower on the original credit contract.²⁴ Wójcik notes that these securities take the form of IVs and SPEs that are protected by a phalanx of ‘financial, legal and accountancy firms’ (2012, p. 333) He writes: ‘the advanced business services hold considerable power, which they exercise by operating legal and financial vehicles designed to escape the control of governmental or intergovernmental organizations through the use of offshore jurisdictions’ (2012, p. 330).

The fact that the sovereigns engaged directly (in the case of the US) or indirectly (in the case of the nation-state members of the European Union) are now often treated as unworthy borrowers, to be disciplined by markets, adds to the difficulties of reform efforts. Can an entity that can be disciplined by market forces also shape markets and their forces? Consider, for example, that the not-yet-fully-implemented Dodd–Frank Act was passed in July 2010, four years from the time of this writing. The asymmetric pace of regulation and innovation leads some to despair. For example, Alloway and Mackenzie (2014) quote Janet Tavakoli, president of an eponymous Tavakoli Structured Finance, as follows: ‘We’ve reformed nothing.... We have more leverage and more derivatives risk

²² Glinavos (2008) argues that this effort has been systematic; he points to the ‘current promotion of law reform by international institutions like the World Bank as the product of neoliberal economic theory;’ in his view, ‘the use of law reform to impose what neoliberalism considers ‘rational’ solutions undermines the legitimacy of democratic institutions in developing and transitional countries’ (p. 1087). Also see Chiong, Dymski, and Hernandez (2014).

²³ Supranational authority over otherwise domestic economic activity, of course, is increasingly being asserted via international treaties. The North American Free Trade Agreement (NAFTA) and the EMU provide the outstanding examples of such action to date. Such treaties, while not the topic of this study, are relevant insofar as they serve to reduce the authority of domestic law over economic transactions.

²⁴ The use of legal action by hedge funds NML and Aurelius Capital Management, in their holdout against accepting a debt write-down on outstanding Argentinian debt, and the New York court’s upholding of these funds’ claim, provides dramatic evidence of the importance of this new terrain of globalized legal rights.

than we've ever had.' Others hold out hope of using market discipline to rein in excess. For example, Ingo Walter (2012, p. 114) argues:

Improving the financial architecture in a disciplined, consistent, internationally coordinated and sustained manner with a firm eye to the public interest should ultimately be centered on market discipline. By being forced to pay a significant price for the negative externalities SIFIs generate – in the form of systemic risk – managers and boards will have to draw their own conclusions regarding optimum institutional strategy and structure in the context of the microeconomics and industrial organization of global financial intermediation. If this fails, constraints on their size, complexity and interconnectedness will be a major part of the policy reaction to the next financial crisis.

The challenge for such an approach is for regulators to keep pace with market participants' creation of innovations that create systemic risk, not to mention anticipating the scope of this risk before its implications have been fully understood. Pozsar *et al.* (2013, p. 1) argue that, in any case, 'increased capital and liquidity standards for depository institutions and insurance companies will likely heighten the returns to shadow banking activity.' Therefore, they conclude, 'Shadow banking, in some form or another, is therefore expected to be an important part of the financial system for the foreseeable future.' These reflections amplify the point made by Wójcik: 'if global finance is to change, the New York–London axis has to change' (2013, p. 2736).

Conclusion

This chapter has provided an account of how the unique historical and economic circumstances of the United Kingdom and of the United States and their hegemonic position in the world economy underlie the development of global finance as we have it today. Starting with national economic circumstances, rather than with primitives such as technological change and/or the information revolution, permits us to see that the current shape of globalized financial institutions and practices have evolved from historically specific circumstances. As Thomas Piketty (2014) has emphasized in his opus on income inequality, empirical patterns that appear to be characteristic of long-term trends in capitalist development have political roots. The apparent technological necessity of a super-leveraged, risk-shifting global financial complex is a mirage; this complex has emerged, anchored in the cities of London and New York, due to a series of events, circumstances, and decisions. Opportunities and crises have both played their part. The formation and then dismemberment of gold-based global currency systems played a role, as have the 30-years'-long current-account deficit/capital-account surplus that has made the US a global liquidity sink (Dymski, 2011).

Having highlighted the importance of historical events and institutional developments, including the transformation of the global monetary order, it must immediately be acknowledged that the dynamics of global finance include far more than has been captured in this analysis of two financial hubs. Hubs in France, Germany, Switzerland, Japan, China, and São Paulo, among other global cities, do follow the tail-return possibilities left by the cauldrons of innovation in New York and London; one example is large German banks' purchases of subprime securities from Wall Street houses in the waning days of the US housing boom (Lewis, 2010). But beyond this follower behavior, these financial hubs have independently created – and continue to create – new instruments and practices, triggering further behavioral responses in the New York–London axis.

This last insight makes it all the more clear that acknowledging the historical contingency

that brought about the current fix – the world of the 1 percent of the 1 percent, as Piketty (2014) and his numerous co-authors have emphasized – does not mean that this path-dependent path is easily undone. To the contrary; because things are done as they are in this sector – because the politicians now understand they must bail out or make special arrangements for ‘systematically important institutions,’ because the megabanks circulate and recirculate short-term securities to support their speculative position-taking, because credit can easily flow only when there are ‘investors’ willing to absorb securitized loans sold by ‘banks’ – then behaviors in virtually every other sector in the economy and society have had to make adjustments. The core question at hand – ‘what precisely are the economic functions that the banking system performs for the other agents in the economy?’ – is out of bounds for any polite policy discussion. Yet if this question is not asked, then policy discourse will be the equivalent of intermission chatter until the audience gathers for the coming of the next systemic, global-economy-threatening crisis. We conclude then by paraphrasing Wójcik’s insight: if global finance is to change, the New York–London axis and the governments and non-financial firms and households that have adjusted to the reality of coercive and unproductive global finance has to change. And as Jamie Dimon has suggested, in the quote that begins this essay, the place to start is to ask the right questions.

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