2 | The Rise of Finance: Origins

This chapter begins by establishing a common understanding of financialization in Section 2.1. In Section 2.2, it underscores the important point that is often missed in the discourse on reining in finance. Its rise was part of the neoliberal agenda that began to be assembled in the 1980s. Section 2.3 traces the rise and growth of financialization in the twentieth century to the onset of economic stagflation in the 1970s in much of the developed world. That propelled many forces that have dominated and shaped the world economy in unforeseen ways. Globalization of trade and financialization are two important forces that the economic troubles of the 1970s spawned. In Section 2.4, we show that deregulation propelled and strengthened financialization and made it inexorable even though finance is far less amenable to the free and untrammelled play of market forces compared to other economic activities. In Section 2.5, we establish that financialization went global, thanks to the hegemony of the US dollar and the dependence of the rest of the world on American economic growth.

2.1 What is financialization?

The most comprehensive analysis or a more formal treatment of financialization comes from Thomas Palley. For him, financialization is 'a process whereby financial markets, financial institutions, and financial elites gain greater influence over economic policy and economic outcomes'.[1] He identifies three principal impacts – elevation of the significance of financial sector relative to the real sector, transfer of income from the real sector to the financial sector and increase in income inequality and contribution to wage stagnation. He also points to three different conduits – changes in the structure and operation

[1] Thomas I. Palley, 'Financialisation – What It Is and Why It Matters', The Levy Economics Institute of Bard College Working Paper no. 525, December 2007.

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of financial markets, behaviours of non-financial corporations and economic policy. [2]

Donald Tomaskovic-Devey and Ken-Hou Lin of the University of Massachusetts in Amherst (the alma mater of one of us)[3] go one step further than Palley. They define financialization as consisting of two interdependent processes: the increasing importance of financial services firms to the American society in economic, political and social terms and the increased involvement of non-financial firms in financial activity. So, they view financialization as a process that placed financial services firms at the centre of American society and not just at the centre of the American economy. We lean towards this formulation. Financialization not only influenced the economy but also had social consequences through its impact on wages and compensation. For instance, the rise of finance shaped students' preferences for skills and higher educational qualifications.

Ewa Karwowski, Mimoza Shabani and Engelbert Stockhammer investigated[4] empirically the dimensions and determinants of financialization in seventeen Organisation for Economic Co-operation and Development (OECD) countries between 1997 and 2007. They estimate correlations between five indicators of financialization – household debt, gross financial income of non-financial corporations, debt of non-financial corporations, value added in the financial sector and debt in the financial sector – and seven hypotheses of financialization. These hypotheses may be causal factors for financialization or simply associated with financialization. The hypotheses are that real investment slowdown precedes financialization, financial deregulation leads to financialization, financialization is associated with market-based as opposed to bank-based systems, financialization occurs in debt-driven as opposed to

[2] In this context, Greta Krippner argues that unlike other long-term structural shifts in the economy, the signatures of financialization cannot be found in the changes in employment or the mix of goods and services produced. Instead, she suggests looking at where profits are generated and the changes in the respective shares of different sectors. See Greta R. Krippner, 'Financialisation of the American Economy', *Socio-Economic Review* 3 (2005): 173–208.

[3] Donald Tomaskovic-Devey and Ken-Hou Lin, 'Income Dynamics, Economic Rents, and the Financialisation of the U.S. Economy', *American Sociological Review* 76, no. 4 (1 August 2011): 538–539.

[4] Ewa Karwowski, Mimoza Shabani and Engelbert Stockhammer, 'Financialisation: Dimensions and Determinants. A Cross-country Study', Post Keynesian Economics Study Group Working Paper no. 1619, December 2016.

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export-driven aggregate demand in the economy, financialization is associated with strong foreign investment inflows and that asset price inflation is a feature of financialization.

What they find is that rising debt and rising asset prices are associated with financialization because there is strong correlation between these two and at least one indicator of financialization across all the three sectors – households, non-financial corporations and the financial sector. Interestingly, financialization of the non-financial sector is strongly associated with market-based (vs. bank-based) financial systems. In other words, the more a country relies on capital markets for financial intermediation, the more financial activities play an important role in the businesses of non-financial corporations (Figure 2.1). One would have expected financial deregulation to be correlated with the increasing financialization of the non-financial sector. They did not find evidence of it in their sample. They rule out real investment slowdown and foreign investment flows as causal or associated factors for financialization. Debt and asset price dynamics are the subjects of extensive analysis in Chapters 4 and 5.

Figure 2.1 Spearman rank-order correlation coefficients for financialization hypotheses and economic sectors (1997–2007)

	Household debt	*NFC gross financial income*	*NFC debt*	*Financial sector value added*	*Financial sector debt*
Investment slowdown	–0.358	0.282	0.081	–0.762	–0.521
Financial deregulation	0.423**	0.266	0.042	0.43**	0.669***
Market-based/ bank-based systems	–0.032	0.473**	0.536*	–0.476	–0.385
Debt-driven/ export-driven demand regimes	0.598**	–0.097	0.379*	0.531**	0.194
Foreign financial inflows	0.174	0.227	0.2	0.27	0.833***
House price inflation	0.371*	0.176	0.455*	0.27	0.436*

Source: Ewa Karwowski, Mimoza Shabani and Engelbert Stockhammer, 'Financialisation: Dimensions and Determinants. A Cross-country Study', Post Keynesian Economics Study Group Working Paper no. 1619, December 2016.

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Delivering the Per Jacobsson Memorial Lecture in 2012,[5] Dr Y. V. Reddy, the former governor of the RBI, who earned plaudits for keeping India out of the harm's way during the GFC in 2008, made a distinction between optimal financialization and excessive financialization. In his view, optimal financialization referred to a situation where the financial sector is allowed to intermediate credit and savings at the right price without the interference of the state that results in financial repression. He then defined excessive financialization as not just the rise in importance of the financial sector, financial markets or the financial institutions in the economy. They are important. But what constitutes excessive financialization, according to him, is the (disproportionate) influence of financial considerations and the influence and role of finance in commodities markets, in corporate balance sheets and in household budgets. Throughout this book, when we refer to 'financialization', we mean the 'excessive financialization' that Dr Reddy had in mind.

2.2 Financialization and the neoliberal agenda

Financialization grew on the ideological soil of neoliberalism. James Montier of GMO, an asset management firm, wrote a thoughtful long essay[6] on the recent rise of popular politicians (populists) in western economies and its causes. He attributes it to the public anger against the neoliberal economic agenda pursued by the United States and other advanced nations. What is the neoliberal economic agenda?

According to him, it has four pillars:

1. Shareholder value maximization
2. Inflation targeting and the concept of non-accelerating inflation rate of unemployment (NAIRU)
3. Globalization and free trade
4. Flexible labour markets

It is important to note that Montier and Pilkington use 'financialization' and 'neoliberalism' interchangeably in their paper (Figure 2.2). However,

[5] Y. V. Reddy, 'Society, Economic Policies and the Financial Sector', The Per Jacobsson Foundation Lecture 2012, Basel, Switzerland, 24 June 2012, available at http://www.perjacobsson.org/lectures/062412.pdf (accessed on 17 March 2017).

[6] James Montier and Philip Pilkington, 'The Deep Causes of Secular Stagnation and the Rise of Populism', *GMO*, March 2017, available at https://www.gmo.com/docs/default-source/research-and-commentary/strategies/asset-allocation/the-deep-causes-of-secular-stagnation-and-the-rise-of-populism.pdf (accessed on 17 March 2017).

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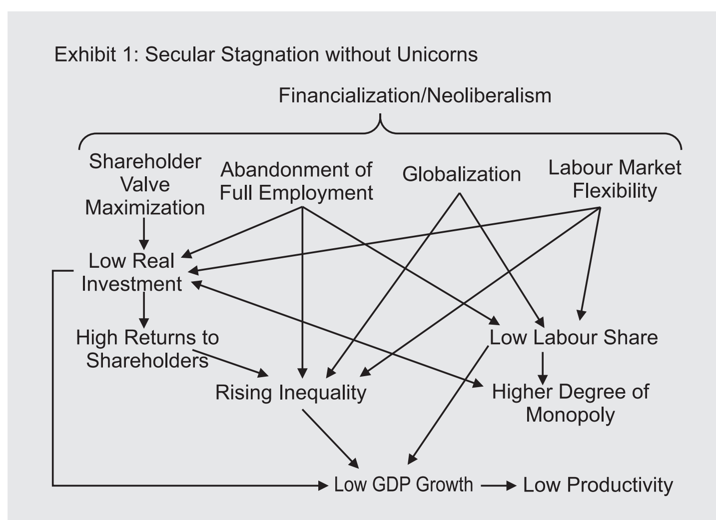
as Tomaskovic-Devey and Lin did, we see financialization as an important component of the neoliberal agenda. 'Financialization was rooted in a series of political decisions to deregulate existing finance activities, which took place during an era of emerging neoliberal corporate and state governance ideologies'.[7] Indeed, if neoliberalism was a policy and intellectual movement away from state regulation, financialization was its most important product.[8] We explore the theme of 'movement away from state regulation' as the progenitor of financialization later in this chapter.

Figure 2.2 The model of 'financialization'



Source: James Montier and Philip Pilkington, 'The Deep Causes of Secular Stagnation and the Rise of Populism', *GMO*, March 2017, available at https://www.gmo.com/docs/default-source/research-and-commentary/strategies/asset-allocation/the-deep-causes-of-secular-stagnation-and-the-rise-of-populism.pdf (accessed on 17 March 2017).

Central bankers are the architects of the second pillar in Figure 2.2. Their focus on inflation as a measure of economic stability before the crisis of 2008

[7] Ken-Hou Lin, 'The Rise of Finance and Firm Employment Dynamics, 1982–2005', *SSRN*, 24 June 2013, available at https://ssrn.com/abstract=2284507 or http://dx.doi.org/10.2139/ssrn.2284507 (accessed on 18 March 2017).

[8] Donald Tomaskovic-Devey and Ken-Hou Lin, 'Income Dynamics, Economic Rents, and the Financialization of the U.S. Economy', *American Sociological Review* 76, no. 4 (2011): 538–559.

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led them to ignore the signs of imbalances and instability building up through credit markets and various other channels. These imbalances were threats to the sustainability of full employment but not to price stability. Hence, the Federal Reserve ignored them. In remarks made in a public discussion at the University of Michigan in March 2017,[9] Janet Yellen, the former chairperson of the Federal Reserve, said that the Federal Reserve was doing pretty well in meeting the twin goals of low and stable inflation and full employment. Ms Yellen's remarks were a reminder that the economic models of the Federal Reserve have barely mutated in response to the crisis, which could have spelt the end of the dominance of the western alliance. Indeed, nearly a year later in March 2018, with asset prices boiling over all across the globe, it appears that the chickens may be coming home to roost again, a decade after the last crisis.

In the next chapter, we discuss in detail the economic model at the Federal Reserve that privileged price stability (not of assets but of goods and services) and not financial stability. The 'Great Moderation' was about achieving price stability and stable economic growth. That led to the Federal Reserve and other regulators taking their eyes off financial stability. That is an important consequence – undesirable for the economy – of financialization of the economy. Putting financial stability at the apex of monetary policy and banking regulatory framework would have led the Federal Reserve to the conclusion that financialization was indeed harming the economy and the society, precipitating, in turn, action to roll it back. Hence, an intellectually elegant excuse was needed to avoid walking down that path. The belief (or the hope) was that the financial markets were self-correcting and hence financial stability did not require regulatory oversight and action provided that excuse. That had been proven wrong in the past. It went wrong again in 2008 in a big way and it will happen again. An important reason is that activity in financial markets is motivated and governed by a different set of considerations (see Box 2.1).

2.3 The modern origins of financialization

The world economy experienced very sluggish growth for 18 centuries in the Common Era. Then, the fruits of industrial revolution began to appear. Growth picked up in the nineteenth century. The 35 years before World War I were really a golden era for world economy. There was mobility of capital and labour.

[9] 'Fed's Janet Yellen Says Era of Stimulative Monetary Policy Is Ending', *Wall Street Journal*, 11 April 2017, available at https://www.wsj.com/articles/federal-reserve-chairwoman-janet-yellen-sees-monetary-policy-shifting-1491865770 (accessed on 15 April 2017).

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There was price stability and strong growth. Technological breakthroughs from the industrial revolution chipped in too to aid growth. For the most part, the next 30 years were bad for the world economy with two world wars, the collapse of the Gold Standard and the Great Depression. Reconstruction from the ravages of World War II helped the world economy experience strong growth from 1945 to 1965.

When the reconstruction era had run its course by the 1970s, it became more difficult to sustain growth in developed countries. Once those low hanging fruits were plucked, war and strife returned and the world experienced economic stagflation in the 1970s.

By the early 1970s, a different dynamic had gripped the world economy. Consumer prices rose almost 50 per cent between 1975 and 1980 in the United States. Inflation rate peaked at 14.3 per cent in June 1980. Donald Tomaskovic-Devey and Ken-Hou Lin write:[10]

> In 1973, surges in oil prices increased the cost of manufacturing and transportation while transferring income to oil producing firms and countries. The rise in union and consumer power put real limits on corporate autonomy in the labour process and the market. Manufacturing competition from Japan and northern Europe ended the post-war era of U.S. global manufacturing hegemony.

This put pressure on governments to rekindle growth through other means. Economist and former Greek finance minister, Yanis Varoufakis, wrote in his essay, 'The Vicious Disequilibrium': [11]

> The Bretton Woods system oversaw capitalism's Golden Era (1950–1970) in America. What tripped it up on 15 August 1971, causing the economic system itself to lose its footing? It was the US government's inability to restrain abuse of its exorbitant privilege – its ability, as custodian of the world's reserve currency – to print global public money at will to finance (without substantial new taxes) a stupendous military-industrial complex, the Vietnam war, the space program, Lyndon Johnson's (otherwise splendid) Great Society policies, et cetera.

[10] Tomaskovic-Devey and Lin, 'Income Dynamics, Economic Rents, and the Financialization of the U.S. Economy'.

[11] Yanis Varoufakis, 'Vicious Disequilibrium', *Los Angeles Review of Books*, 3 April 2014, available at http://lareviewofbooks.org/essay/vicious-disequilibrium (accessed on 3 May 2017).

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> US policy makers made an audacious strategic decision: faced with the rising twin deficits that were building up in the late 1960s (the budget deficit of the US government and the trade deficit of the American economy), Washington decided to turn a blind eye to them. Rather than imposing stringent austerity, whose effect would be to shrink both the twin US deficits and America's capacity to project hegemonic power around the world, they allowed the deficits to rise and economic growth to resume….
>
> The expansion of US deficits generated the increases in aggregate demand that kept factories in the surplus countries going. On the other hand, almost 70 percent of the profits made globally by Eurasian capitalists were transferred to the United States, in the form of capital flows to Wall Street.

This was not just an isolated view. Many social and political scientists share this view of the rise of finance and the neoliberal agenda as being motivated by the economic stagnation and high inflation of the 1970s. Both of them were attributed to militant labour unions and the consequent high wage growth. James Montier and Pilkington, whose work we had cited in Section 2.2, note that 1948–1969 was the Golden Age of Keynesian full employment policy, that 1970–1982 was the crisis period of rising inflation due to OPEC oil price hikes and poor labour relations and that 1983–2015 was the period of inflation targeting.

The last was part of the emergent neoliberal agenda. The post–World War II world featured the commitment and responsibility of the state to citizens. That is how an elaborate system of social security, unemployment and pension benefits and state-funded health care came up. This was a fallout of the Depression of the 1930s which was seen (somewhat wrongly, in our view) as a consequence of the outcome of the Gold Standard era that tied the hands of the state from acting to prevent its damaging consequences. In the 1980s, this was pushed back through an intellectually clever argument that the representative Homo sapiens was a rational economic agent and that she was very well capable of looking after herself. This argument served a dual purpose. One was to discourage and dismantle state regulation and the second was to roll back or, at least, arrest the spread of the welfare state.

Although mathematics and econometrics were very much part of the academic economic literature, mathematical models were more prominently pressed into service in the cause of the neoliberal economic agenda from the late 1960s or 1970s, gathering further momentum in the 1980s. The use of mathematics lent a (false) touch of precision to the policy prescriptions of economists in favour of 'laissez faire' and against state intervention in the economy. That is, an impression was created that economic policies can

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be 'programmed' to deliver deterministic results like in the case of physical sciences, even though counterfactual scenarios cannot be constructed or controlled experiments cannot be done in economics, in social sciences and in real life![12]

This shift towards a pro-business (pro-capital) policy agenda would be meaningful only if the cost of capital could be brought down. The cost of borrowing, even for the US government, had doubled in the 1970s. The yield on the 10-year US government bond was around 5 per cent in the late 1960s. By October 1979, it was over 10 per cent. Businesses naturally faced even higher interest costs. So, inflation had to be brought down because the yield on loans was first, and foremost, a compensation for the loss of purchasing power.

Recall from Section 2.2 that inflation targeting by central banks was the second of the four pillars of the neoliberal regime, according to Montier and Pilkington. Reducing inflation meant restraining wage growth since labour costs were the biggest item of cost for most businesses – service or manufacturing. Thus, monetary policy, targeting inflation, in effect, began to target wage growth, completing the transformation of the interventionist, compassionate and pro-labour state to a non-interventionist, pro-business and empowering state that allowed individuals to determine their own destinies. That was a nice way of stating that elected political leaders were now condemning individuals to their own fate even as they decided to side with capital in pursuit of economic growth and political advancement.

Figure 2.3 shows how the shares of employee compensation and corporate profits in GDP moved in the opposite direction. Before 1980, the former was rising and the latter was falling and post–1980, the trend reversed, except for a

[12] In his essay 'The New Monetarism', Nicholas Kaldor had this to say about the followers of Milton Friedman: 'The new school, the Friedmanites (I do not use this term in any pejorative sense, the more respectful expression "Friedmanians" sounds worse) can record very considerable success, both in terms of the numbers of distinguished converts and of some rather glittering evidence in terms of "scientific proofs", obtained through empirical investigations summarised in time-series regression equations. Indeed, the characteristic feature of the new school is "positivism" and "scientism"; some would say "pseudo-scientism", using science as a selling appeal. *They certainly use time-series regressions as if they provided the same kind of "proofs" as controlled experiments in the natural sciences*' (emphasis ours). V. Ramanan, 'Nicholas Kaldor on Milton Friedman's Influence', *The Case for Concerted Action*, 13 July 2013, available at https://www.concertedaction.com/2013/07/13/nicholas-kaldor-on-milton-friedmans-influence/ (accessed on 4 March 2018).

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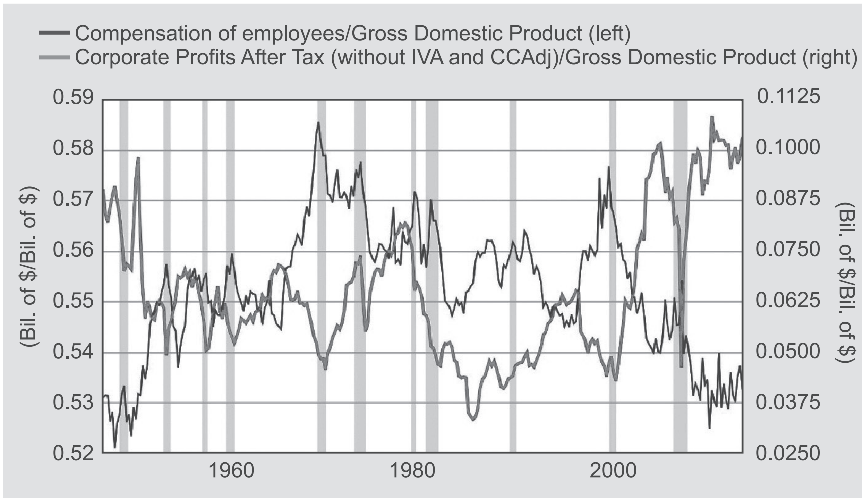
few years in the second half of the 1990s when stock options and stock grants in technology companies briefly drove up employee compensation.

Figure 2.3 Labour share of GDP peaked and profits share of GDP bottomed in the 1970s



Sources: Bureau of Economic Analysis and the FRED Database of the Federal Reserve Bank of St. Louis.

It was not entirely coincidental that the collapse of the post–World War II consensus on government regulation, welfare state, government-led economic reconstruction and recovery also saw the collapse of the exchange rate arrangement agreed upon in Bretton Woods, anchored by the United States. Rising inflation, the exigencies of the Vietnam War and the fear of eroding competitiveness as Japan and Germany rapidly rebuilt their economies as competitive export machines led Nixon to end the dollar's anchor role. In its wake, other central banks abandoned their fixed exchange rates to the US dollar. This happened earlier in the 1970s.

Towards the end of the decade of the 1970s, after Paul Volcker, the newly appointed chairperson of the US Federal Reserve, abandoned targeting of money supply and began to target interest rates, the intellectual consensus in the developed ('free') world paid less attention to money supply. All that central banks had to do was to credit the accounts of commercial banks with more money. Creating base money became as easy as that. In a sense, the base money became the margin money on top of which the mountain of debt was

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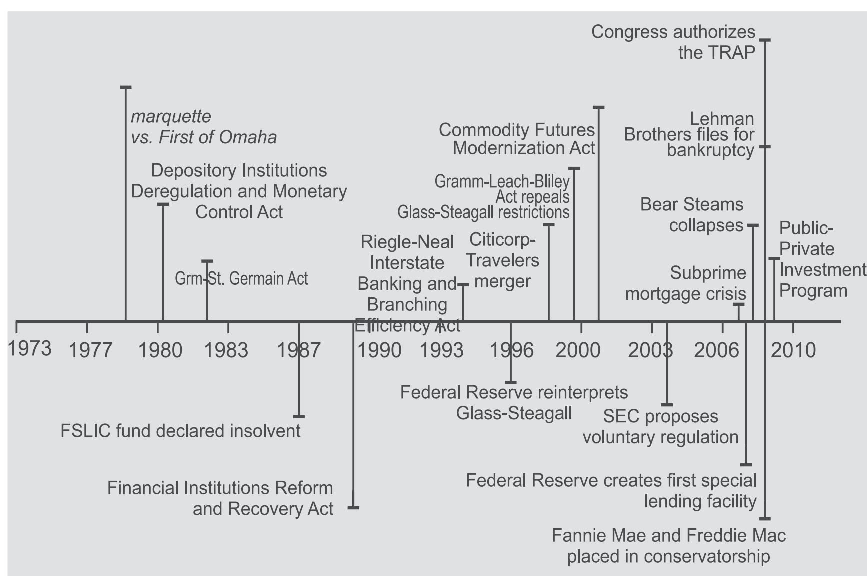
created – many times as big. This should have led to higher inflation but it did not because monetary policy was now on the prowl for any nascent sign of acceleration in wage growth, to nip it in the bud.[13] The stage was set for the rise of finance or too much finance.

Shackles imposed on banks too began to loosen. The following timeline of deregulation initiatives taken by the United States since the 1980s shows clearly that banking and financial deregulation initiatives began in the late 1970s and continued all the way into the new millennium (Figure 2.4). We discuss this in greater detail in the next section.

Figure 2.4 A timeline of financial deregulation initiatives in America



Source: Matthew Sherman, 'A Short History of Financial Deregulation in the United States', Centre for Economic and Policy Research (CEPR), July 2009.

In their discussion of the unintended consequences of economic policy advice that ignores the political economy, Daron Acemoglu and James Robinson provide a succinct summary of the chronology of financial deregulation

[13] Indeed, we argue in Chapter 4 that inflation has become less of a monetary phenomenon, if it ever was one. We explore the dynamics of inflation in the chapter.

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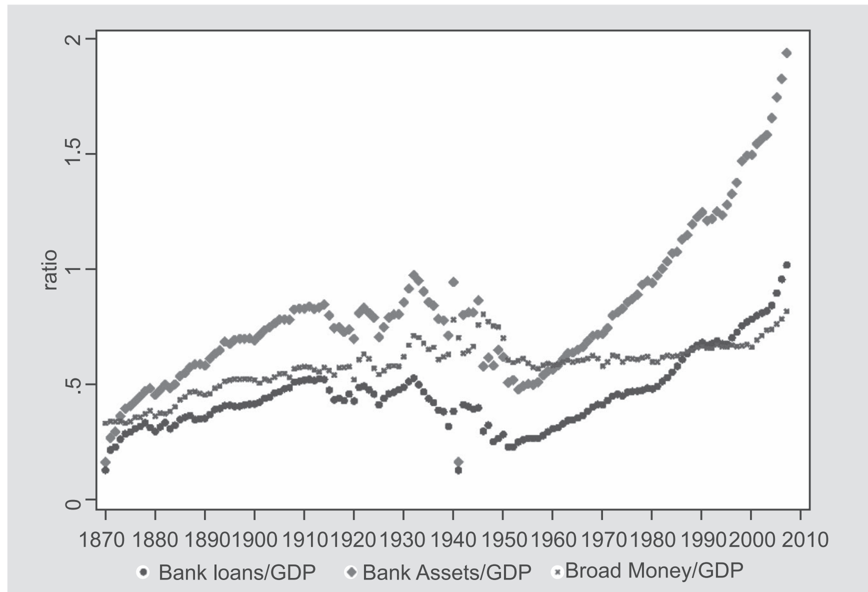
('Money and Politics in the United States') and how it bolstered the political power and influence of finance, facilitating further deregulation.[14]

Consequently, bank credit growth picked up. The figure below (Figure 2.5) shows the 'structural break' in the evolution of bank credit and bank assets in the world from the 1970s and, more pronouncedly, from the 1980s. Something changed in the 1980s. Alan Taylor, an economist from the University of California, Davis, concedes that one of the goals of current and future research would be to pin down exactly why the period from the 1940s to the 1970s was so unusually quiescent, with no financial crisis at all.

Figure 2.5 The inflection point in the global leverage cycle



Source: Alan Taylor, 'The Great Leveraging', National Bureau of Economic Research, Working Paper no. 18290, issued in August 2012, revised in October 2012.

He refers to the century between 1870 and 1970 as the 'Age of money'. In this age,

[14] Daron Acemoglu and James A. Robinson, 'Economics versus Politics: Pitfalls of Policy Advice', *Journal of Economic Perspectives* 27, no.2 (2013): 173–92, doi: 10.1257/jep.27.2.173.

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> the ratio of loans to money was more or less stable. Loans to GDP hovered in a range around 0.4 to 0.5, with broad money to GDP sitting a little higher at an average of about 0.6 to 0.7. From the 1970s, the picture changed dramatically, and we entered what might be called the 'Age of Credit'. Although broad money relative to GDP remained almost flat at around 0.7 (rising a little only in the 2000s), the asset side of banks' balance sheets exploded. Loans to GDP doubled from 0.5 to 1.0 and assets to GDP tripled from about 0.7 to roughly 2.0.

What changed in the 1980s? Alan Taylor pointed to two possible factors: first, banks' risk tolerance changed over time as enterprises were rebuilt after the economic depression followed by the devastation of World War II and second, financial liberalization played its part. He did not examine these hypotheses rigorously since the thrust of his paper was on something else. While these were proximate reasons, the important underlying causes were, as discussed earlier in this section, the American policy choices to accept and grow deficits, drop the nominal anchor for money supply and to target interest rates while money supply expanded unhindered by any nominal anchor.

Box 2.1 The British playbook for America's financialization – three hundred years later

'The Origins of Central Banking' written in 1998 by Lawrence Broz for the journal *International Organisation* is a brilliant paper.[1] Every generation thinks that the problems it faces are unique and unprecedented challenges. Either they are not aware of economic history or they are short on memory (deaths come in the way!). But the truth is that most often issues repeat themselves. Studying history might not help solve present-day problems all the time but at least would reassure that no condition – no matter how unpleasant – stays forever.

The paper by Lawrence Broz traces the origins of the creation of the Bank of England and, along the way, it chronicles the balance of power tussles between the citizenry, the elites, the rent-seeking classes and workers. These have been playing out in our times, especially since the 1980s.

The monarchy committed to cede to the Parliament the power to provide it credit and to the newly created Bank of England with an express proviso in the charter that the government could not utilize a current loan if it had failed to honour its past obligations. That proved to be a crucial difference for Britain. That took away a big risk from providing war financing for the government. In turn, the government granted favours to the sub-groups that 'organised to support central banking'. One was the monopoly on bank note issuance (notes could be issued against the loans extended to the government) and the

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other was the special relationship with the state. For example, the government deposited its funds with them and the bank paid no interest on them.

The monopoly on notes issuance and the special relationship with the government meant that other banks used its notes as reserves. Thus, this special bank evolved to become a central bank. A rival bank – the Land Bank – was set up by others who were excluded from this arrangement. It failed and the promoters of the Bank of England ensured that its special privileges were protected and the bank received tax exemption too. In the first century of its existence, the bank's monetary policy discretion was circumscribed by a gold standard rule – it had pledged to redeem its notes in gold at a fixed price. So, excessive note issuance meant that its value dropped and the public could buy the notes with their gold and trade the notes for gold with the bank. Thus, the note–specie convertibility restrained inflation in the first century of the existence of the Bank of England. In that century, the general inflation rate in the country was statistically indistinguishable from zero.

However, in the initial years of the Napoleonic war, between 1797 and 1821, the government persuaded the bank to suspend gold standard, resulting in inflation and depreciation of the sterling. That brought tenant-farmers, manufacturers and industrial labour together since farmers earned higher prices for commodities but paid rents fixed in nominal terms. Prices of tradeable goods and wages rose as well. However, landowners wanted the gold standard restored. 'Government bondholders joined landlords in supporting the return to the gold standard.'

The return to the gold standard was a commitment by the government to ensure that the government would not resort to inflation tax and depreciate the currency too. That is why landowners who received rents from tenant-farmers fixed in nominal terms and government bondholders preferred it.

Came one data point – the Great Depression – and it was abandoned. It was reinstated partially after World War II in a modified form (the Bretton Woods fixed exchange rate system). However, that did not stop the working class from still being compensated well for the following reasons: social welfare net was comprehensively created and economic growth was a low-hanging fruit. There was plenty to go around, for all, for capital and for labour. It lasted two decades.

Once the Bretton Woods was abandoned on 15th August 1971 – again a war was the principal reason and worries over erosion of competitiveness to Germany and Japan was another – the inflation floodgates opened. It had multiple causal factors but excesses of labour unions and wage growth were important.

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So, in the 1980s, the American government copied the playbook of the British monarchy in setting up the Bank of England. No, it did not set up the Federal Reserve only then. That was set up long ago. They made the same pact with the financial sector as Britain did with a group of creditors who set up the Bank of England. The parallels are uncanny and yet unsurprising. History revisits. Always.

The financial sector was arranged to finance the massive fiscal deficits of the Reagan government. America was in the final stage of its 'Cold War' with the Soviet Union. In return, finance was given concessions like the British government did. Restrictions on finance and barriers to interstate banking were removed; derivatives contracts were made legally enforceable, Glass-Steagall Act was dismantled by stealth, and so on. What was missing was the specie–note exchange to preserve its value.

Hence, inflation targeting in the 1980s – but with a lovely twist. The gold standard had served the capitalists well by protecting the real value of their rents. But its discipline too could rebound, as 'The Great Depression' proved. In the circumstances, inflation targeting appeared a brilliant winner.

Historical experiences should have made it amply clear that money supply was not the causal factor for inflation. The decade-long experience with quantitative easing is only the latest example. Only money supply created to finance fiscal expansion (war financing) was inflationary. Wages were the real driver of inflation. Charts of wage growth and inflation in the UK and in the USA provide powerful confirmation of the causal power of wages for inflation. That central banks, post-1980s, adopted inflation targeting after dumping money supply growth targeting, despite swearing by Milton Friedman, was an acknowledgement that inflation was caused not by monetary factors but by real factors. Hence, 'inflation targeting' in practice meant leashing wage growth.

At the same time, capitalists wanted no restraint on money and credit creation. Central banks obliged with no other target for money supply growth or credit growth. So, leverage-aided and induced asset price growth. Win-win!

The result? Working class contained and restrained; profit growth and wealth creation unrestrained and unconstrained! But, as recent events show, this may have been a Pyrrhic triumph.

What next? Now that we know that banks create money and not the central bank (courtesy of Bank of England), can we bring back the gold standard that would restrain money creation? But will it matter if banks are creating money? What is the point in restraining the central bank and not commercial banks? Further, neither the working class nor the capital class will want the discipline of the gold standard. The capital class is too spoilt and has travelled too far down the road of asset bubbles to walk back. There is risk of too much

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dislocation. The working class will be worse off. For them, the gold standard is a stiffer anti-labour policy straitjacket than inflation targeting. It reinforces the anti-inflation commitment of the central bank. That, in practical terms, is anti-wage growth. Only stricter.

So, what can central banks do to restore some balance between labour and capital, to address inequality and to avoid the destabilizing effects of leverage and asset price bubbles?

Higher inflation target of 4 per cent in the western world and 6 per cent for the developing world and a much higher capital adequacy ratio for banks. In the context of this book and its theme, we do not dwell upon the need for a higher inflation target in the western world. However, we make the case for higher capital ratio for banks in Chapter 6.

[1] Lawrence Broz, 'The Origins of Central Banking: Solutions to the Free-rider Problem', *International Organisation* 52, no. 2 (Spring 1998). Massachusetts Institute of Technology.

While bank assets and bank credit are important markers of financialization, there are other indicators too.

One such indicator is the trend in finance's share of corporate profits in the US.[15] Mathew Klein at *FT Alphaville* points out that after staying roughly the same size relative to the rest of the economy for nearly 40 years, profits in the financial sector shifted to a higher plane starting in the 1980s.[16] The share almost quadrupled in the early noughties before settling down around double the earlier share (Figure 2.6).

Interestingly, he went on to compare the US business productivity growth adjusted for utilization and changes in composition (or productivity due to just technological and managerial progress) and found systematically higher productivity growth when finance sector was smaller, and vice versa. In fact, in comparison to the period 1948–1974, productivity growth halved, and the share of financial sector in corporate profits doubled in the period 1975–2014.[17]

[15] Greta R. Krippner, 'Financialisation of the American Economy', *Socio-economic Review* 3 (May 2005): 173–208.

[16] Matthew C. Klein, 'Crush the Financial Sector, End the Great Stagnation', *FT Alphaville*, 16 February 2015, available at https://ftalphaville.ft.com/2015/02/16/2119138/crush-the-financial-sector-end-the-great-stagnation/ (accessed on 11 August 2017).

[17] We discuss the formal academic investigations by Cecchetti and Kharroubi that corroborate this in Section 2.4.

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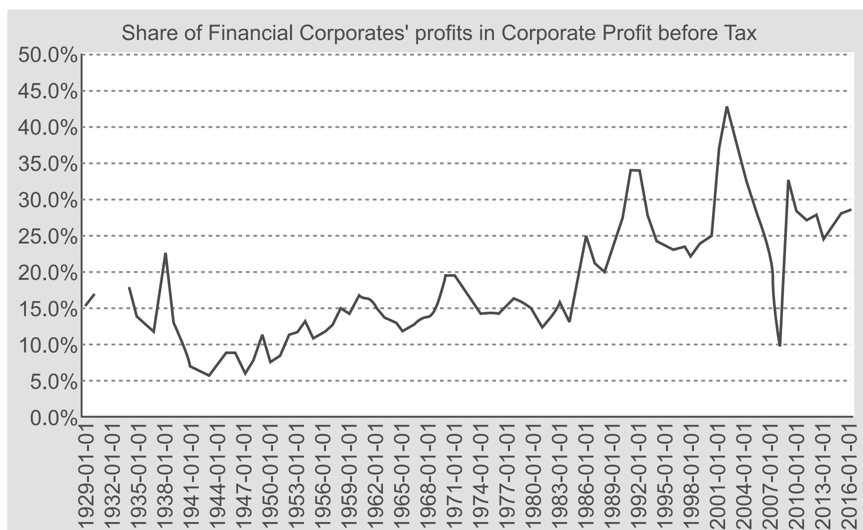
Figure 2.6 The rising share of finance



Source: US Bureau of Economic Analysis and FRED. Share of financial corporations' profits before tax derived from data on corporate profits before tax and non-financial corporations' profits before tax (without inventory valuation adjustment and corporate consumption adjustment). Figures for 1931–1933 are removed because of extreme swings in the data those three years. The numbers were 103 per cent, -52 per cent and 44 per cent, respectively, for those three years.

Gretta Krippner's work firmly establishes the empirical basis for financialization.[18] She begins her analysis with data on the employment, share of GDP and share of profits of the financial (Finance, Insurance and Real Estate) sector. She then considers the share of financial income in the overall profits of the non-financial sector. She accommodates potential objections such as the fact that a higher share of financial sources of income for non-financial businesses could simply be an artefact of offshoring of manufacturing. She looks at profits earned overseas and their breakdown into financial and non-financial components. Financialization of the US economy since the 1980s is evident and is established.

Table 2.1 provides a useful snapshot of the issues, the actors, the challenges that originated in the pre-financialization world, the responses to them and the institutional and income shifts that they caused in the post-financialization world.

[18] Greta R. Krippner, 'Financialisation of the American Economy', *Socio-Economic Review* 3 (May 2005): 173–208.

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Table 2.1 Summary of institutional account of financializaion

1970s: Pro-financialization			*1980s to 2000s: Financialization*	
Precipitating factors: oil crisis, low-growth, high-inflation economy, global economic competition				
Actors	*Challenges*	*Reaction*	*Institutional*	*Income Shifts*
State	Stagflation and political pressure from corporate actors	Adopt deregulation policies	Neoliberal consensus: financialization of state. regulatory capture. dismantling of Class-Steagall regulations.	Favorable treatment of financial sectors income through regulation and bailouts.
Nonfinancial	Reacting national market limit, facing global competition	Demand economic deregulation. lower taxes, and a smaller state.	Rise of shareholder value conception of firm : focus on short-term financial goals rather than long-term capital investment.	Rise of finance CEOs. CEO pay tied to stock market performance. income transfer to finance sector and top management.
Financial	High inflation threatens bank profits from traditional banking activity; reaching local market limits.	Demand deregulation of interest rates. mergers, cross-state banking: function limits.	Developing unregulated financial instruments and cross-sector activity, and increased industry concentration; rise of gigantic bank holding companies; increased systemic risk tied to concentration and scale.	Overall increased sector income. unregulated fee-based business model: growth in bank profits and compensation for investment bankers.

(*Contd.*)

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(*Contd.*)

1970s: Pro-financialization			*1980s to 2000s: Financialization*	
Precipitating factors: oil crisis, low-growth, high-inflation economy, global economic competition				
Actors	*Challenges*	*Reaction*	*Institutional*	*Income Shifts*
Consumers	High inflation, low growth undermines savings.	Demand deregulation of interest rates.	Easier consumer credit, rise of predatory lending, rise of investment mentality.	High interest rate on consumer debt, low interest on savings, banking fees.
Institutional Investors	High inflation, low growth undermines traditional investment strategy	Number and size of institutional investors increases.	Increased investment in speculative financial instruments, increased expectations for stable or high returns.	Inflates financial bubbles
Foreign Capital	Japan, later China and others, seek to invest capital surplus.	Investment in U.S. financial instruments increases.		Finances federal deficits keeping interest rate low
Neoclassical Economists	Dominance of Keynesian policy model.	Legitimates neoliberal policy. Advocates self-regulating market, efficient markets hypothesis. agency theory.		

Source: Donald Tomaskovic-Devey and Ken-Hou Lin, 'Income Dynamics, Economic Rents, and the Financialisation of the U.S. Economy', *American Sociological Review* 76, no. 4 (2011): 538–559.

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Along with the change in the monetary policy framework and the rise of bank assets, financial liberalization and the development of bond markets meant that both governments and companies could tap capital markets directly for their borrowing requirements. To grow the bond markets, capital had to be allowed to move across borders freely. That is where intellectuals stepped in. The free-market doctrine was extended to finance. Theory suggested that, under certain conditions, free markets should know better. Academics and ideologues concluded that markets knew best, regardless of circumstances. Propelled by a combination of conviction and convenience, they provided the intellectual and ideological cover for authorities to overlook the finer distinctions between the financial and the real economy. Competition rather than regulation might be a desirable state of affairs to achieve optimal economic outcomes in the real sector, they argued.

The financial sector is different, however. The wave of financial market deregulation that America launched in the 1980s and encouraged in the rest of the world (or, more precisely, thrust on) ignored the differences (see Box 2.2).

Box 2.2 Why is finance different?

There are three crucial distinctions between the marketplace for goods and non-financial services and markets for financial assets. The laws of demand and supply usually worked well for normal goods, as long as markets were reasonably competitive. All things being equal, lower prices led to higher demand and higher prices boosted production/supply. In financial markets, it worked the other way. Lower prices created panic and more supply followed. Higher prices boosted animal spirits and greed, resulting in higher risk-taking and demand went up for assets whose prices were rising.

When it comes to normal goods and services, human beings could be relatively more rational. Of course, it is a different matter with luxury goods and prestige goods. Further, consumer-marketing efforts are directed at making individuals make irrational purchase decisions. That is a different matter. But when it comes to financial assets, rational expectations fail miserably. Humans are motivated by greed and fear. Humans are possessive about assets. Further, financial assets are a store of wealth, desire for which is usually limitless. Therefore, emotions are central to the purchase and sale of financial goods. It is not so with respect to consumption goods and services. Thus, investor behaviour is pro-cyclical and that makes cyclicality and instability inherent features of finance.[1] Bubbles and busts follow.

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The second distinction is with respect to contagion, correlation and connectedness. Contagion arises from information asymmetry that, when problems surface, can trigger perceptions of asset–liability mismatches, which in turn leads to, for example, bank runs. The financial engineering of the past two decades has dramatically increased the correlation of assets and interconnectedness among institutions. This has also expanded the 'dark corners' to cover large swathes of the financial market.

The third distinction is that competition between financial firms encourages risk-taking. For example, as banks compete for business, they charge lower interest rates in order to entice more borrowings. They also relax lending standards. In the process, the economy as a whole becomes more indebted. Debts make economies unstable and vulnerable to downturns. Further, debt makes economic downturns deeper and longer. Thus, competition between banks increases systemic risk. Seldom does competition between firms in other sectors increases systemic risk as competition in the financial sector does.

The sub-prime crisis stands out as the best illustration of the confluence of all the three. The alphabet soup of securitized mortgage loans dispersed risk anonymously far and wide across both instruments and institutions, leaving the entire financial system vulnerable to any trouble in the housing sector. Market participants, spooked by information asymmetry and misperceptions, responded with fire sales and credit squeezes which paralysed the entire financial sector. Liquidity problems led to decline in asset values, which triggered fire sales and solvency problems. A localized problem became global.

In the circumstances, a unique dynamic affects the financial market. Outside of finance, when a firm collapses, other firms usually benefit. The industry or the economy is not destabilized. In finance, when a financial institution collapses, panic can ensue. All the three factors come into play, reinforcing one another. Other sectors and firms in those sectors carry idiosyncratic risk that is diversifiable. In contrast, financial sector represents non-diversifiable economic risk making panic inevitable. Hence, unregulated financial markets were theoretically infeasible and practically unwise.

Academics ignored these crucial differences. They advocated financial market liberalization as they advocated the liberalization of markets for normal goods. They advocated free movement of capital across borders as they did for free movement of goods between countries. As capital markets became globally integrated, sovereign and corporate borrowers could tap into international savings. They forgot that, in crises, money ceases to be

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fungible. National origins of money begin to matter. That is why emerging economies encounter sudden rush of capital inflows and sudden stops as well. However, it is a different matter that developing country governments forget the fickleness of capital flows and go all out to court hot money once a crisis passes.

[1] Claudio Borio and William White have a very good discussion of the many aspects and dimensions of cyclicality in Finance. See Borio and White, 'Whither Monetary and Financial Stability? The Implications of Evolving Policy Regimes', Bank for International Settlements (BIS), Working Paper no. 147, February 2004.

2.4 Financialization and deregulation

Amplifying the effects of these trends was the wave of financial market deregulation that was initiated in the 1980s. Financial market deregulation was initially only a small part of the larger Reagan era deregulation movement, but soon came to dominate it.

The Gramm–Leach–Bliley Act, 1999 repealed the Glass–Steagall Act which prohibited commercial banks from offering investment banking and insurance-related services. The Commodity Futures Modernization Act, 2000 exempted derivatives from regulation. Both the regulators and regulated came to implicitly embrace a view of voluntary regulation by the financial industry.[19] Ken-Hou Lin and Donald Tomaskovic-Devey write, 'Although key shifts in the regulatory field that led to financialization happened in the early 1980s, the 1999 Financial Services Modernization Act increased concentration of the finance industry and the centrality of the largest financial institutions to the economy.'[20]

Only part of this deregulation was rolling back oversight. A major part involved financial engineering and the emergence of new forms of opaque and lightly regulated financial instruments. Derivative securities like CDS quickly came to occupy a significant chunk of the market and were very lightly

[19] Matthew Sherman, 'A Short History of Financial Deregulation in the US', CEPR, July 2009.

[20] Tomaskovic-Devey and Lin, 'Income Dynamics, Economic Rents, and the Financialisation of the U.S. Economy'.

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regulated (see Box 2.3).[21] Securitization allowed loans to be sliced and diced, packaged and sold off, thereby triggering both moral hazard among banks (in their lending decision diligence) and creating completely opaque securities.

Rather unusually, the Federal Reserve had a big role to play in rolling back oversight and in deregulating different products and segments of financial market activity. This was largely due to the larger-than-life image that Greenspan, the chairman of the Federal Reserve from 1987 until 2006, enjoyed. His response to the American stock market crash of 1987 – flooding the economy with liquidity – won praise for it restored confidence in the market. It might have played some role in precipitating the Savings and Loan (S&L) crisis. But people ignored it.

His apparent successes gained salience. Again, after keeping interest rates low for too long until 1993, he raised them aggressively in 1994. That is said to have prevented the emergence of inflationary pressures and engineered a soft landing in the economy. Then, in the aftermath of the Asian crisis in 1997–98, he cut interest rates aggressively and that is said to have prevented the US economy from being affected by the recession. Strong growth in the United States and a strong US dollar in that period helped Asian economies recover in 1999. All these successes, attributed widely to his stewardship of American monetary policy and his acute understanding of trends in the economy, earned him the sobriquet 'maestro'. He had acquired a cult status.

In March 1999, he gave a speech[22] that proved, in hindsight, to be the pivotal movement in the deregulation of the derivative industry. That speech helped cement the case for self-regulation by banks of derivatives through their risk management models rather than through 'the traditional approach based on regulatory risk management schemes'. Interestingly, some of his cautionary notes and potential risks he identified only to dismiss them were to eventually prove prescient.

[21] The testimony by Brooksley Born, the then chairperson of Commodities Futures Trading Commission, concerning the 'over-the-counter' derivatives market before the US House of Representatives Committee on Banking and Financial Services on 24 July 1998 is an essential read for its clarity and prescience on the dangers of de-regulation of derivatives trading (available at http://www.cftc.gov/opa/speeches/opaborn-33.htm, accessed on 23 February 2018).

[22] 'Financial Derivatives', remarks by Chairman Alan Greenspan before the Futures Industry Association, Boca Raton, Florida, 19 March 1999, available at https://www.federalreserve.gov/boarddocs/speeches/1999/19990319.htm (accessed on 23 February 2018).

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He noted that the possibility of increased systemic risk appeared to be an issue that required fuller understanding. He added that the resilience of the derivatives markets had not been tested by a significant downturn in the economy. He was right on both counts. Derivative markets were not only not resilient to the economic downturn but their brittleness also exacerbated it. Evidently, the Federal Reserve had failed to understand the extent of systemic risk that these products posed. Although he talked about stress testing of correlation assumptions and counterparty credit risks, they were to prove inadequate in anticipating and being prepared for the crisis of 2008 as neither he nor the Federal Reserve or market participants had any idea of the extent of overall risk that had been accumulated.

Since there was no central repository for over-the-counter derivatives and since they were not regulated, no one had any idea of the sizes of the leveraged derivative bets that had been built up by all participants. In the circumstances, only credit-rating agencies had some idea of the systemic risk exposures since market participants came to them shopping for better ratings for their securitized products. But they chose not to pay attention to the systemic risk that the rising volume of such products was posing. In the aftermath of the crisis of 2008, one area that required deregulation and the induction of fresh blood was the credit-rating industry. But, to date, that has not happened.

Box 2.3 Deregulation and over-the-counter (OTC) derivatives

Prior to 2000, derivatives traded outside regulated exchanges suffered from legal infirmities that made them difficult to enforce because they ran the risk of being treated as gambling contracts. In the US, restrictions on OTC derivatives were removed by the Commodity Futures Modernisation Act of 2000 leaving them completely unregulated. The Glass–Steagall Act (Banking Act 1933) of the US was gradually relaxed and finally repealed in 1999 and this made it possible for investment banking to be combined with commercial banking. These changes facilitated the growth of the CDS industry whereby banks and financial institutions offered credit insurance, albeit named credit default 'swap'. Unlike a true swap, a CDS does not involve the swapping of streams of cash flows. It is nothing but an insurance contract—an agreement to pay a sum in the event of a particular uncertain event occurring in return for a fixed premium paid in advance. However, a key difference is that normal insurance contracts require an insurable interest, that is, the person taking out the insurance must have an interest in the preservation of the asset. For instance, a person cannot take out insurance on an asset owned by a stranger or on a stranger's life. The use of the term credit default swap instead of credit

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default insurance was to avoid the industry being regulated by insurance regulators. CDSs were not traded in recognised exchanges where the exchange becomes the 'buyer to every seller' and the 'seller to every buyer'. They were traded bilaterally between counterparties. Therefore, they were subject only to the regulations of the International Swaps and Derivatives Association (ISDA) and this is an industry body. It is not a regulator.

The severe weaknesses of self-regulation in this area were illustrated in 2012 by the debt restructuring that Greece announced, which was tantamount to a sovereign default. The ISDA initially ruled that they would not treat this as a default event and Credit Default Swaps would not be paid (on the grounds that the original proposal supposedly only invoked voluntary participation on the part of debt-holders) nullifying the very purpose of buying credit default protection. Subsequently, when the Hellenic Republic invoked collective action clauses to force all debt-holders to participate in the debt restricting, ISDA ruled that a credit event had occurred triggering payments under the Credit Default Swaps that had been bought (either by bond holders to protect from losses or by speculators to profit from a Greek default or debt restructuring). The episode illustrated that credit default swaps carried an element of 'discretion' to be exercised by the self-regulatory body, possibly in its own interest, and could not necessarily be relied upon when they were most needed.

Source: V. Anantha Nageswaran and T. V. Somanathan, *The Economics of Derivatives* (New Delhi: Cambridge University Press, 2015).

In 2008, after the collapse of Lehman Brothers, Greenspan testified to the Congress (the House Committee on Oversight and Government Reform) on the crisis. He admitted that he had put too much faith in the self-correcting power of free markets. Yet, towards the end of his testimony, he said, in contrast to his prescience in 1999, 'whatever regulatory changes are made, they will pale in comparison to the change already evident in today's markets. Those markets for an indefinite future will be far more restrained than would any currently contemplated new regulatory regime'.[23]

As we survey stock markets around the world, the real estate market in several countries including in the United States, the high-yield bond market and the market for exotic products such as short volatility, what we see is pervasive irrational exuberance and not rational restraint. Greenspan has been wrong

[23] 'Greenspan Concedes Error on Regulation', *New York Times*, 24 October 2008, available at http://www.nytimes.com/2008/10/24/business/economy/24panel.html (accessed on 23 February 2018).

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again. The principal reason (if not the only reason) for this state of affairs is the monetary policy framework of the United States before and after the crisis of 2008. Lest we forget, the policy framework is itself a consequence of its capture – intellectually or otherwise – by financial interests. The consequences of financialization are the subject matter of Chapters 3 and 4.

Greenspan completed his reversion to 'form' in 2011 in a sense when he wrote in *Financial Times* that regulatory reforms could lead to excess buffers at the expense of the nation's standard of living.[24] Put differently, curbing finance would lead to lower economic growth and lower standard of living. An International Monetary Fund working paper,[25] widely cited for its seminal conclusions, proved that it was false. It stated rather simply and bluntly that one can always have too much finance. No ifs and buts. It does not matter whether the country enjoys macroeconomic stability or has a volatile economy and whether the country experiences banking crises or not. Only the thresholds at which finance starts to hurt economic growth vary in different circumstances. But it does hurt and always. The inverted U-shaped relationship between finance and economic growth survived different specifications, estimators and data. At some point, the effect of finance on growth vanishes. It happens for all countries. Therefore, they concluded that higher capital requirements that international regulators were prescribing for banks might actually be what the doctor ordered for the global economy and for individual countries. Several countries would be better off with smaller financial sectors.

Cecchetti and Kharroubi of the Bank for International Settlements (BIS) did a series of investigations too.[26] They found that the relationship of several finance-related variables to the real economy has an inverted U-shape. In this, they corroborate the work by IMF researchers. Whether it is total credit, bank credit or employment in the financial services sector, all were positively correlated to GDP per capita and then the correlation reaches a peak before the relationship turns negative. They tested the correlations using econometric techniques and they controlled for other factors. Their findings remained

[24] Cited by Jean-Louis Arcand, Enrico Berkes and Ugo Panizza, 'Too Much Finance?', IMF Working Paper no. WP/12/161, June 2012, available at https://www.imf.org/external/ pubs/ft/wp/2012/wp12161.pdf (accessed on 9 January 2018). See Klein, 'Crush the Financial Sector, End the Great Stagnation'.

[25] Arcand, Berkes and Panizza, 'Too Much Finance?'

[26] S. Cecchetti and E. Kharroubi, 'Reassessing the Impact of Finance on Growth', BIS Working Paper no. 381, Monetary and Economics Department, Bank for International Settlements, July 2012.

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robust. They also noticed that there was a clear inverse relationship between employment in financial intermediation and economy-wide productivity growth. They set out to investigate this inverse relationship in a second paper.[27]

They concluded that as the financial sector attracts skilled workers with higher pay, it affects the ability of other businesses, particularly new enterprises to attract talent, adversely.

Thus, with enterprises lacking skilled workers, their ability and willingness to take risks and innovate diminishes. After all, more than the collateral, the intellectual property (IP) embedded in their skilled workers is crucial for the survival and growth of new businesses. As they lose this important factor crucial for their success, financing too becomes more difficult to obtain. That also means that industries that can more easily post collateral are the ones that obtain funding. That is why credit booms usually coincide with construction booms. The property and real estate sector, with its tangible assets, is able to post collateral more easily.[28]

The paper's conclusions are rather unambiguous:

> The growth of a country's financial system is a drag on productivity growth. That is, higher growth in the financial sector reduces real growth. In other words, financial booms are not, in general, growth-enhancing, probably because the financial sector competes with the rest of the economy for resources. Second, using sectoral data, we examine the distributional nature of this effect and find that credit booms harm what we normally think of as the engines for growth: those that are more R&D-intensive. This evidence, together with recent experience during the financial crisis, leads us to conclude that there is a pressing need to reassess the relationship of finance and real growth in modern economic systems.

[27] S. Cecchetti and E. Kharroubi, 'Why Does Financial Sector Growth Crowd Out Real Economic Growth?' Paper presented at the Institute for New Economic Thinking-Federal Reserve Bank of San Francisco conference 'Finance and the Welfare of Nations', September 2013.

[28] Alan Taylor and his co-authors point to BIS capital adequacy requirement changes as one of the contributory factors to the boom in real estate lending. Since such lending is collateralized, it attracted lower risk weights than uncollateralized lending to businesses. See Òscar Jordá, Moritz Schularick and Alan M. Taylor, 'The Great Mortgaging: Housing Finance, Crises, and Business Cycles', Working Paper no. 2014–23, September 2014, available at http://www.frbsf.org/economic-research/publications/working-papers/wp2014-23.pdf (accessed on 23 February 2018).

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Thomas Philippon and Ariell Reshef found that[29] 'most of the rise in living standards after 1870 was obtained with less income spent on finance and less financial output than what is observed after 1980; and the relationship between financial output and income has changed after 1980'. Similar to Cecchetti and Kharroubi, they concluded that it was difficult to make a clear-cut case that, at the margin reached in high-income economies, further expansion of the financial sector increases the rate of economic growth. These authors concede that, until countries reach the maximum point on a curve, finance does provide a positive impetus to growth. In countries whose per capita incomes are below that level, the traditional position is likely to be still valid. However, regulators in those countries have to learn from the experience of the developed countries that finance is not always benign. They should let the financial sector expand but not allow it to reach destabilizing levels.

This has huge implications for developing economies starting from a small size of the financial sector and wanting to expand it to benefit economic growth. It is the correct thing to do but up to a point and with a gradually rising level of checks and balances on the sector as it expands. At some point, the growth of the financial sector has to stop. It does not matter how sophisticated the regulatory regime or how evolved the institutional strength in the country is. But that is easier said than done.

In a recent IMF working paper, Jihad Dagher explored the political economy of financial policy in 10 of the most infamous financial crises since the eighteenth century and found 'consistent evidence of pro-cyclical regulatory policies by governments'.[30] He writes:

> Financial booms, and risk-taking during these episodes, were often amplified by political regulatory stimuli, credit subsidies, and an increasing light-touch approach to financial supervision … post-crisis regulations do not always survive the following boom … in most cases regulation has been pro-cyclical, effectively weakening during the boom and strengthening during the bust. Regulators do not operate in a vacuum, and … in most cases, political interventions have helped fuel the boom in similar ways across time and countries.

[29] T. Philippon and Ariell Reshef, 'An International Look at the Growth of Modern Finance', *Journal of Economic Perspectives* 27, no. 2, (Spring 2013): 73–96.

[30] Jihad Dagher, 'Regulatory Cycles – Revisiting the Political Economy of Financial Crises', IMF Working Paper no. 18/8, 15 January 2018, available at http://www.imf.org/en/Publications/WP/Issues/2018/01/15/Regulatory-Cycles-Revisiting-the-Political-Economy-of-Financial-Crises-45562 (accessed on 11 March 2018).

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Unsurprisingly, deregulation had a prominent role in the crisis of 2008 too. Atif Mian and Amir Sufi too have shown that regulatory standards in the mortgage markets were lowered consistently since the 1990s.[31] The affordable housing mandate given to federal mortgage re-financiers Fannie Mae and Freddie Mac in 1992 encouraged them to dilute quality standards in an attempt to drive down borrowing costs. This was complemented by a slew of measures that deregulated both instruments and institutions in the name of expanding access to housing credit.

America did not just stop with embracing financial deregulation with enthusiasm. It evangelized it around the world. The role of the US dollar as the global monetary standard played no small part in those persuasion efforts.

2.5 How financialization went global

Banks are nothing if not manufacturers of debt (leverage). Therefore, it is unsurprising that the rise in debt levels in the global economy has gone hand in hand with the rise of the importance of finance for economic activity. The financial sector and its participants prospered as finance, financial markets and asset prices drove economic growth rather than reflecting economic growth. The crisis of 2008 was a reminder that this process has run its course and it was time to go back to the basics of promoting economic growth through savings, investment, employment and consumption. In the debt-driven growth model, consumption, instead of being a consequence of economic growth, became its cause.

Nowhere is this more starkly evident than in the case of the United States whose consumption proclivity, while supporting economic activity around the world, has also made the global economy unbalanced and unipolar. This was the case before 2008 and it is repeating itself in the current cycle too. American personal savings rate has declined again to very low levels. It was 2.4 per cent in December 2017, having reached a peak of 11.0 per cent exactly five years earlier. The previous (historical) low was 1.9 per cent in July 2005.

The emergence of the American consumer as the buyer of first and last resort has helped to cement the role of the US dollar as the global transaction and reserve currency. Despite abandoning Bretton Woods and the fixed rate US dollar standard, America was able to ensure that the orbit of money around

[31] Atif Mian and Amir Sufi, *House of Debt* (Chicago: The University of Chicago Press, 2014), available at http://press.uchicago.edu/ucp/books/book/chicago/H/bo20832545.html (accessed on 27 March 2018).

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the world was centred on the US dollar. It involved some deft diplomacy and geopolitical bargaining with other countries, particularly oil-producing nations. Besides crude oil, the US ensured that international trading of other commodities too was settled in US dollars. Delving into details of how the US ensured such a supreme stature for the US dollar is beyond the scope of this book. That other economic powers were not only a fraction of the size of the US economy but also beholden to it for their rise from the ashes of World War II helped.

However, the rest of the world's dependence on her consumption habits has resulted in a de facto world of fixed exchange rates and synchronized monetary policies around the world. Thus, the global economic cycle and the global policy cycle are but extensions of the American economic cycle and policy cycle.

Integration of economic and policy cycles is reflected in the integration of financial market cycles. Global stock and bond markets provide investors with very few, if any, avenues for diversification when they need it the most – during market downturns. When America is healthy, other economies and markets may still be unhealthy for domestic reasons but when the US is not, other economies and markets have no choice. They are infected.

The pre-eminent position of the dollar as an internationally accepted medium of exchange and store of value helped lower the borrowing cost for a country that, otherwise, would have paid more to borrow, considering the perpetual deficits that it had signed up to in pursuit of economic growth sans competitiveness. Hence, the US enjoyed the advantages of having the world's anchor currency without the concomitant responsibilities. From that day onwards, spillover effects were unavoidable for the rest of the world.

It is important to remember that the country's decision to run trade deficits would not have amounted to much had global capital markets remained segmented. How could the US finance trade deficits without making it possible for capital to flow across borders and reach its shores? Hence, the US had to be willing to let non-residents buy American assets and they, in turn, must allow American financial institutions intermediate these flows. Financial liberalization went global. Other countries were leaned on to allow capital to flow out of their countries so that they could finance American deficits.

Unimpeded, unrestricted and open capital flows are one leg of what Dani Rodrik calls 'hyperglobalization':

> The transition to hyper-globalization is associated with two events in particular: the Organization for Economic Cooperation and Development's decision in 1989 to remove all restrictions on cross-border financial flows, and

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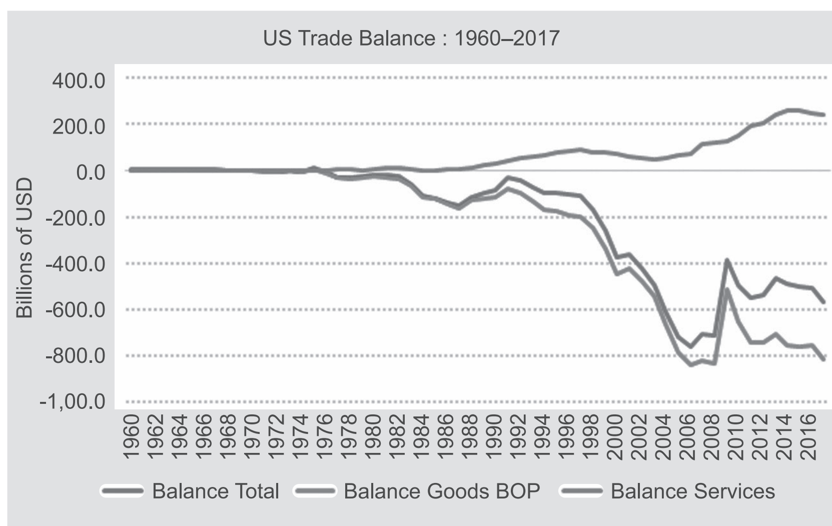
the establishment in 1995, after almost a decade of negotiations, of the World Trade Organization, with wide-ranging implications for domestic health and safety rules, subsidies and industrial policies.[32]

Further, these countries had to allow Wall Street firms – banks and insurance and asset management companies – to operate in their countries so that the process of facilitation of capital outflows to America was made easier. America imported goods and exported services, especially financial services. It enjoys a big trade surplus in services except that it is dwarfed by an even bigger deficit in merchandise trade (Figure 2.7).

Figure 2.7 America's surplus in services



Source: US Census Bureau, Economic Indicator Division.

Once America became the destination for world exports, it was a short step to making the world dependent on American economic cycle and, by extension, American monetary policy. If a country found itself relying on exports to the United States for its economic growth, it was logical that its economic cycle and policy cycles were aligned with America's. In other words, America

[32] See 'Put Globalization to Work for Democracies', *New York Times*, 17 September 2016, available at https://www.nytimes.com/2016/09/18/opinion/sunday/put-globalization-to-work-for-democracies.html (accessed on 18 March 2017).

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not only exported financial services but also the intellectual framework that was shaping regulatory policies governing the financial sector. First, major economies fell in line. Then, smaller economies that were part of the supply chain had no choice.

Referring to the Mundell–Fleming lecture made by Hélène Rey of the London School of Economics last year, Martin Sandbu of *Financial Times* wrote:[33]

> The transmission of financial fluctuations through the world economy goes a long way to destroying the supposed monetary independence that can be retained by keeping one's own currency and letting it float.
>
> The traditional view in international economics was one of a 'trilemma': you must choose two out of three among international capital flows, fixed exchange rates and independent monetary policy.
>
> Rey's work shows that it is really a dilemma, not a trilemma: you can have either internationally mobile capital or independent monetary policy – a floating exchange rate does not rescue your monetary freedom as much as the conventional wisdom has it.

What Hélène Rey says is that the exchange rate regime – fixed or floating – that countries have adopted does not matter. That falls out of the equation. Regardless of the exchange rate regime, countries can enjoy independent monetary policy only if they are prepared to restrict capital flows – in and out. Exchange rate regime choice could have been available to countries had they not made their economic growth hostage to consumer spending in the US. For better or worse, the US had become the market of first and last resort for the rest of the world.

The reduction of the policy trilemma into a policy dilemma has two interconnected reasons. First, countries operate as though they are in a de facto fixed exchange rate with the US dollar. Second, the rest of the world is still dependent on the US economy as the ultimate source of demand. Hence, the tendency to curb exchange rate fluctuations vs. US dollar, making the world economy more synchronous than it needs to be. The period between 2002 and 2007 provides overwhelming evidence on the pernicious effects of this unofficial global fixed exchange rate regime.

When the US dollar strengthens due to restrictive monetary policies in the US, other countries tighten policies to avoid excessive currency weakness.

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[33] Martin Sandbu, 'Lessons Learnt from the Crisis', *Financial Times*, 5 June 2015, available at http://www.ft.com/intl/cms/s/3/d84b1792-0aaa-11e5-a8e8-00144feabdc0.html (accessed on 18 March 2017).

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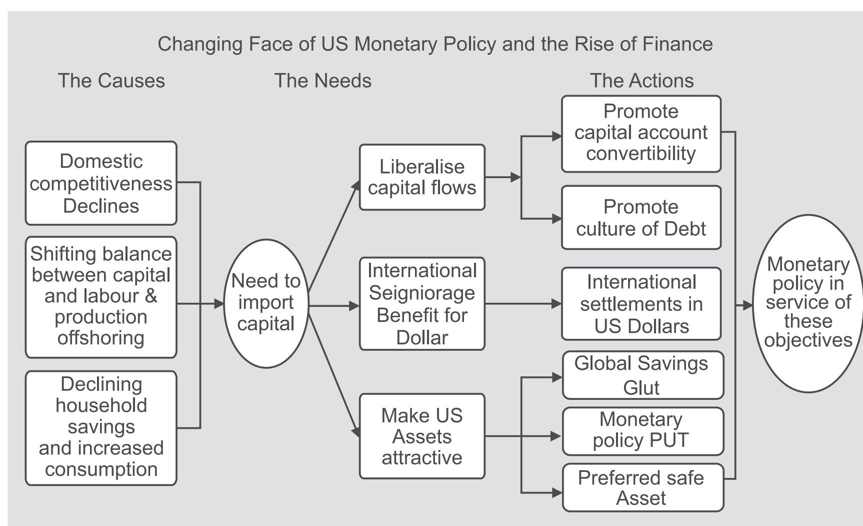
This accentuates the global effect of US tightening. When the US has a loose monetary policy, the US dollar weakens and other currencies appreciate. Other countries respond by following loose policies of their own. Thus, they magnify the impact of US easing. This is what happened between 2002 and 2007. As the US adopted looser policies in this period, most countries followed suit. Therefore, what happened was that the US housing bubble became a global housing bubble. When that bubble burst, it created a global crisis.

As discussed earlier, the costs of excessive growth of the financial sector and the costs of financialization of the economy would have remained confined to the American economy and few others but for the global role of the US dollar. That afforded the US the opportunity to shape the policies of countries around the world intellectually. Figure 2.8 captures this dynamic.

Figure 2.8 Changing face of US monetary policy and rise of finance



A disturbing feature of financialization is that it not only perpetuates the problem of 'too much finance' but also gives rise to too many undesirable consequences, both in the financial markets (asset price bubbles) and in the real economy, such as low productivity, falling economic growth and accumulation of debt. In other words, the medium-term-to-long-term costs of such a policy exceed short-term benefits.

This concludes this chapter and the section on the causes of financialization and its global reach. We now turn to its consequences.

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