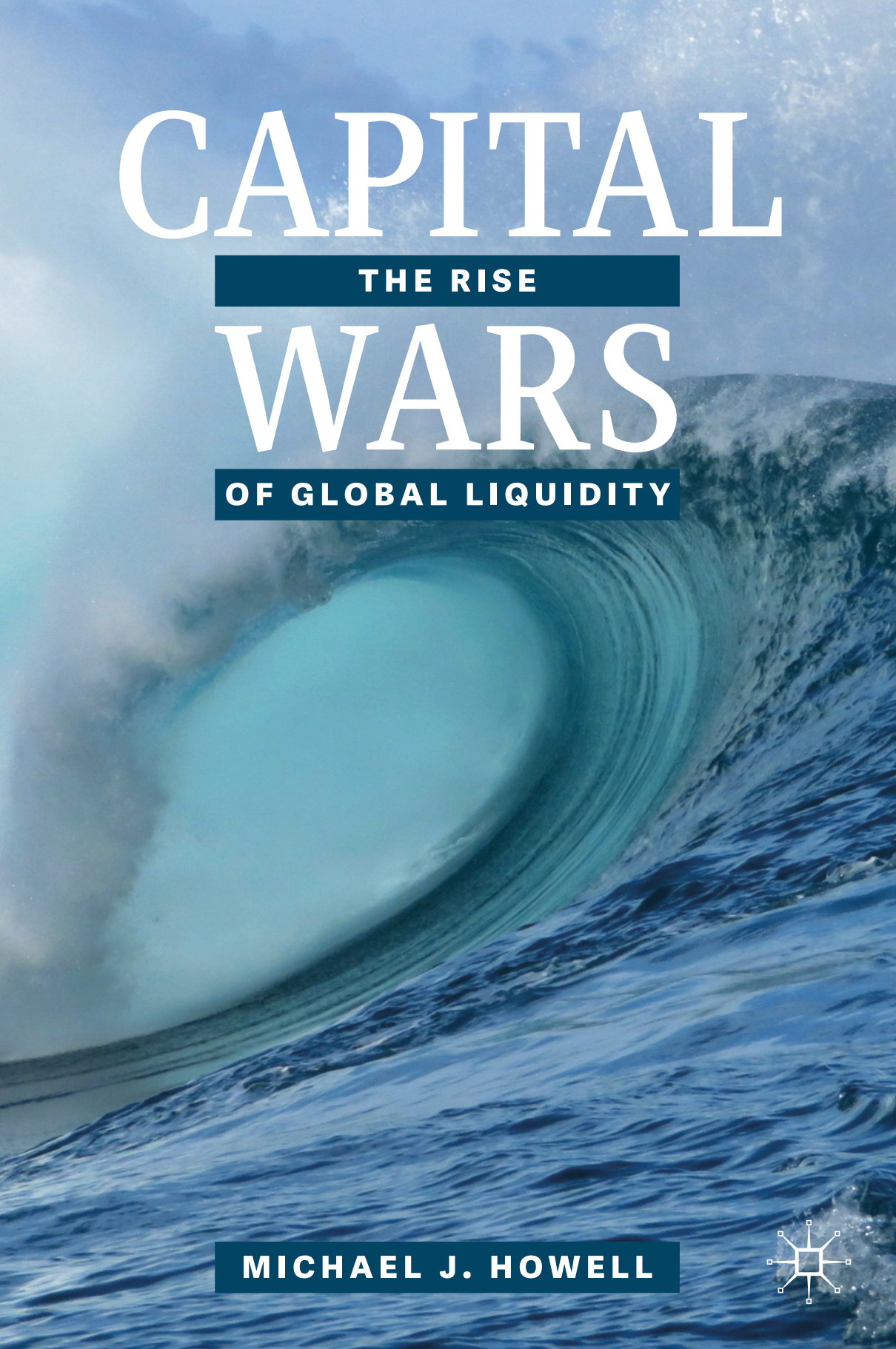




CAPITAL

THE RISE

WARS

OF GLOBAL LIQUIDITY

MICHAEL J. HOWELL



Capital Wars

Michael J. Howell

Capital Wars

The Rise of Global Liquidity

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macmillan

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To the Salomon Brothers' Diaspora

Preface

History, particularly financial history, is not random. The key idea in this book is that economic cycles are driven by financial flows, namely quantities of savings and credits, and not by high street inflation or the level of interest rates. Their sweeping destructive powers are expressed through Global Liquidity, a US\$130 trillion pool of footloose cash. Our Central Bank policy-makers should, consequently, about-turn and focus more on financial stability than on hitting phantom consumer price inflation targets. The economist John Maynard Keynes distinguished the economy's financial and industrial spheres in a similar way to how we might, today, separate the asset economy from the real economy. Trying to stimulate the real economy with liquidity always runs the risk of creating asset price bubbles instead. In the 1930s, facing a near-identical situation to the post-GFC years, policy-makers then unleashed an analogous stimulus with the same outturn: near-flat high street prices, but soaring asset prices. A fractured, uncertain World encourages investors to hold excessive amounts of 'safe' assets, like cash and government bonds and, particularly, US dollar assets, rather than putting money to work productively. When the State fails to produce sufficient safe assets, then the private sector steps in with less good substitutes, whose values unfortunately move procyclically. Governments' austerity policies and quantitative tightening programmes might not sound such good ideas in this light? Think of this mechanism as the so-called *precautionary demand for money*, hurriedly skipped over in the traditional textbooks, but which seems to better describe the growing systemic risks we face than the better-known speculative motive, which assesses the chances of rising (as opposed to falling) interest rates and can lead to a 'liquidity trap'. I argue that Global

Liquidity is never trapped: it waves no flag, knows no boundaries and shifts all too rapidly between markets and asset classes.

What appear as two puzzling features in the latest policy debates, in fact, emphasise the importance of Global Liquidity. First, the widespread consensus view, underpinned by repeated Central Bank claims, that more QE (quantitative easing) lowers, and does not raise, term premia and hence government bond yields. The academic argument, summarised by Gagnon (2016), quantifies this as 67 basis points (bp) per 10% of GDP injected via QE. Second, many believe that the slope of the yield curve is an unambiguous predictor of the business cycle. Hence, an inverted yield curve should warn us that a recession is fast approaching. In fact, neither statement is true. The former is easily refuted by the data, which show that QE periods in the US have unequivocally been associated with higher yields, with term premia rising by an average 134 bp through each past QE phase. The efficiency of the Treasury yield curve as a predictor of the business cycle is analysed elsewhere (Howell 2018). This confirms that the standard 10-2 year yield curve slope is, at best, a flaky predictor. This analysis points out that, because different maturity spreads work at different times, what also matters is the curvature of the term structure. In other works, slope and curvature must be assessed together. A key component explaining curvature is the pattern of term premia. Term premia are liquidity phenomena, largely reflecting the excess demand for 'safe' assets.

The liquidity shocks that ricocheted across the World in 1989 as the Berlin Wall fell ultimately forced interest rates down and helped to reverse the polarity of the global financial system. Capital raced Eastwards along what I call the *Financial Silk Road*, while politics and people marched West, causing too many countries, and notably China, to lean too heavily on the US dollar and the US Treasury market for safety. Linked to these changes, today's financial markets increasingly have to serve as *refinancing mechanisms* rather than as *new financing mechanisms*, making the capacity of capital, i.e. balance sheet size, more important than the cost of capital, i.e. the level of interest rates. The heightened supply of poor quality 'safe' assets, or what I more formally describe as the *shadow monetary base*, compromises the ability of private balance sheets to roll over the huge volumes of outstanding debts left over from the GFC era. Ironically, a reduced supply of liquidity and 'safe' assets, increases the demand to hoard them. Together these features amplify the swings in Global Liquidity and explain why, as the World has got bigger, it has also become more volatile. The underlying scarcity of high-quality assets leads on to *Capital Wars*. Here, the battleground embraces money, technology and geopolitics, with the struggle fought out

between the two key superpowers: Chinese industry and American finance. China's presence is weighing more and more: in the year 2000, China accounted for 5.9% of Global Liquidity, or less than one-fifth of America's share; China's share reached 10.1% at the time of the 2007–2008 GFC and, today, it has swelled to a whopping 27.5%, significantly out-pacing America's slipping 22.5% slice. China matters hugely to both the World economy and World finance. I conclude that whereas America needs to reinvigorate her industry, China has the more pressing need to rapidly develop her financial sector. Like history, these are processes, not events, but we can still ask whether the final victor in the markets will be the US dollar or a digitally based Chinese Yuan?

This book is a hybrid of economic and finance theory and real-World experience. Unlike traditional finance, which focuses on the merits of individual securities, I concentrate on asset allocation and evaluate the potential for macro-valuation shifts based on the interaction of investment crowds and monetary institutions. The approach is my own, but several people deserve a hat-tip. Among those academics that have influenced me, foremost have been Ron Smith, Richard Portes, Helene Rey and Pavol Povala. In business, I had the good luck to work with innovative researchers Henry Kaufman, Marty Leibowitz and Chris Mitchinson, and thoughtful bankers, most notably Ewen Cameron-Watt and (the late) Michael Baring. The collection and implementation of liquidity and capital flow data is the specialisation of *CrossBorder Capital*, an investment advisory firm we set up in 1996. My colleagues need special praise, most particularly Angela Cozzini. I owe a debt to Tula Weis and Lucy Kidwell, the editors at Palgrave Macmillan. Above all, heartfelt thanks to my long-suffering family for putting up with so much.

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1

Introduction: Capital Wars

The money power preys upon the nation in times of peace and conspires against it in times of adversity. It is more despotic than monarchy, more insolent than autocracy, more selfish than bureaucracy. Abraham Lincoln (Attributed, purportedly from a letter to Colonel William F. Elkins [November, 1864] following the passage of the National Bank Act [June, 1864])

Capital Wars: The New Trade Wars

Surveying the shattered certainties of the post-2008 era, what can we learn? The 2007–2008 Global Financial Crisis¹ (GFC) was a devastating global liquidity shock. But already by the early 1980s, the warnings were there. New factors had by then evolved to displace the prevailing doctrine of *earnings power* as the main driver of stock prices: foremost among these is *money power*. We focus here on a specific type of money power that we dub *Global Liquidity*: a US\$130 trillion pool of footloose capital that is currently two-thirds bigger than World GDP. See Fig. 1.1.

The 2007–2008 GFC happened when a dramatic escalation in monetary tensions triggered a frantic scramble for US dollars. Europe's demands alone exceeded a whopping US\$8 trillion. Yet, there was no automatic international lender of the last resort and, with the IMF's firepower then still only counted in billions, there was no pool of reserves anywhere in the World, outside of the US Federal Reserve and its system of swap lines, that was large



Fig. 1.1 Global Liquidity

enough to backstop the international financial system. This gap remains and US dollar swap lines have since become even more politicised. The US authorities officially target ‘favoured nations’, which, for now, excludes Emerging Market economies and, pointedly, China, the biggest dollar user.² America’s decisions to deploy Fed swap lines, and whom to allocate these to, have essentially become Nero-like choices and conditional on who sits in the White House. With close to US\$17 trillion of debt now owed by non-US corporations, and with over two-thirds of this debt US dollar-denominated, these decisions matter.

In facing up to these tensions, the last decade has not surprisingly seen an explosion of monetary policy accommodation to fill the gaps left by the many private sector casualties, and rightly analogous to the billion lightning volts that Dr. Frankenstein jolted through his slumping monster. Figure 1.2 shows that Global Liquidity continues to outpace World GDP, even besting its pre-GFC peak ratio to GDP in both 2009 and 2017. The continuing crucial role played by the US Federal Reserve means that its actions now largely dictate whether global investors move risk-on or risk-off. Consequently, US Fed-watching has turned into a much-prized skill, sometimes even serving as a dark art worthy of Hogwarts and Harry Potter. The collapse of global banks in 2007–2008; the Eurozone banking crisis of 2010–2012; the subsequent injection of over US\$10 trillion into financial markets through the widespread adoption of explicit quantitative easing

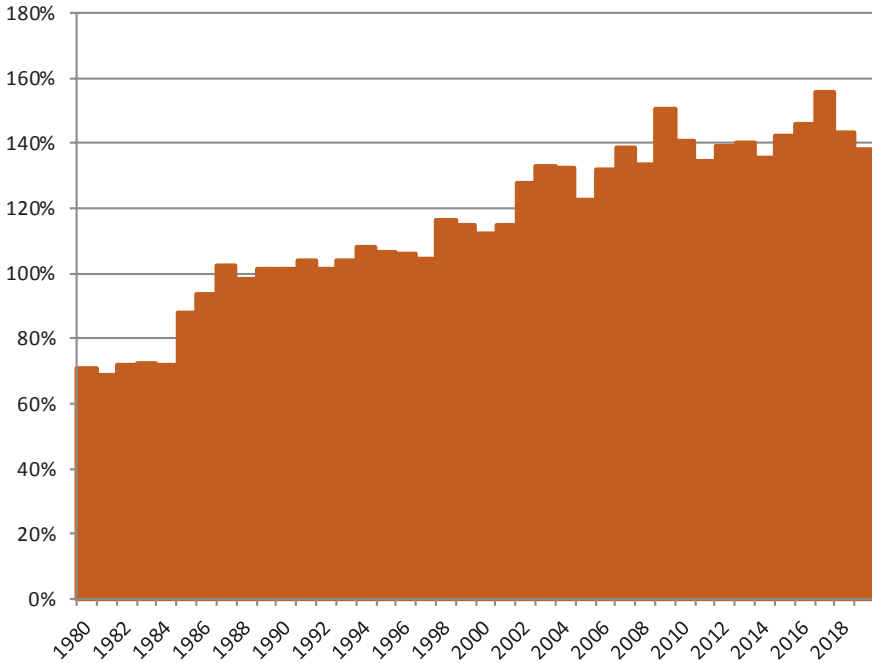


Fig. 1.2 Global Liquidity (% of World GDP), 1980–2019 (Source *CrossBorder Capital*)

(QE) policies by Central Banks, as well as their more recent dalliance with quantitative tightening (QT), all underscore the importance of monitoring and understanding liquidity conditions Worldwide. Simply put, money moves markets.

Democrat strategist James Carville shrewdly recognised how finance controls the World when he famously quipped that if there is reincarnation he wanted to “...come back as the bond market”. These days it more obviously dominates the complex interaction between the industrial economy and the markets. But then who or what controls finance? We focus here on the drivers of Global Liquidity, namely the financial and exchange rate relationships within and between countries and the determinants of cross-border flows of money, securities, goods and services. These same factors have become the new weapons in the escalating Capital Wars between the US, Europe and China. Think of capital wars as a conflict between nations, fought out in investment markets, that parallels the more familiar concept of trade wars and which ultimately involves a battle for currency supremacy in the World economy. Global Liquidity embodies the idea that money, here meaning savings plus credit, is never entirely exogenous to the economic system,

even at the national level and even for the World's largest economies. Global Liquidity shocks compound and spread internationally via cross-border flows. These shocks still obey the classical rules laid down by David Hume's specie-flow mechanism, updated to include cross-border capital flows; they continue to obey Gresham's Law,³ where overvalued (or 'bad') money drives undervalued (or 'good') money out of circulation and into hoards, and they still respect Triffin's dilemma⁴ over international confidence in the US dollar. Throughout history, the problems caused by money are always the same: it is the proposed solutions that differ.

As history's clock has swept forward, the deregulation of both domestic credit markets and cross-border capital flows, lower taxes and falling inflation rates have together helped to mobilise the swelling savings pools that accumulate in the large money-centres of London, New York and Tokyo into fast-moving and sometimes menacing cross-border capital flows. Controversy surrounds whether these flows are ultimately driven by 'push' or 'pull' factors. In truth, both apply. Financial capital tends to flow towards countries where economic growth rates are accelerating, because these economies often have a natural shortfall of domestic savings relative to investment opportunities. Similarly, when economic growth rates slow, financial capital typically quits in step with declining investment potential. However, the clustering and commonality of capital flow movements, both between countries and between asset and liability components, highlight the vital push from some Global Liquidity cycle.

For most of the period since the end of WW1, America's economic dominance meant that her external payments position could provide a convenient cushion or shock absorber for the Rest of the World against these waves of international capital. The two World Wars accelerated American economic growth and gave her a generous savings surplus, which, at first sight, resembles that of China today. But unlike our current setting, America's ability to fund post-war reconstruction in the 1920s and once again in the 1950s, coincided with huge investment and savings shortfalls elsewhere. Thus, the US could easily export her vast savings through increased foreign trade, even though this increased her vulnerability to tariff wars and a subsequent trade contraction in the 1930s.

Things changed by the late 1960s. The advanced economies, and notably Germany and Japan, had by then been rebuilt and global savings were again abundant. Instead of needing access to scarce capital, these economies now hunted out foreign export markets for their tradable goods, while at the same time protecting their home industries by limiting consumer imports. In short, they wanted to export their excess savings as capital. With their large and

open financial markets and with the background already set by a progressive elimination of controls on capital flows through the 1950 and 1960s, the US and UK economies started to run ever-larger trade deficits to accommodate these Asian and Continental European surpluses, albeit at a cost to themselves of higher unemployment and more consumer debt. Ironically, these large deficits were likely a better measure of the competitiveness of British and American finance, than a signpost to their relative industrial inefficiency.

Lately, we have seemingly reached the apogee: spurred by the vast economic changes that followed the fall of the Berlin Wall, the entire World economy now enjoys excess production and abundant savings, with China alone having to deploy an annual US\$6 trillion nest-egg. Not surprisingly, more and more economies are seeking to increase their trade surpluses, so becoming potentially even bigger net exporters of capital. However, this plainly requires some other economy (or economies) to run large counterpart trade deficits.⁵ And, since trade deficits effectively mean deficits for domestic manufacturing industry, which is a key source of future productivity growth and remains a major urban employer, this policy creates emotive political challenges. The need to run large, persistent trade deficits may also explain why it is probably still too early for China to take America's place in the World trading system. Without the US as the facilitator, other smaller economies would be forced to run deficits to accommodate China, which could sizeably reduce their underlying rates of economic growth. Some estimates even suggest that a switch from a World trading system centred on *American deficits* to one revolving around *Chinese surpluses* could ultimately dampen World GDP growth by as much as 2% per annum.⁶

In this new World of capital abundance, we have seemingly hit an impasse. America has lost her willingness and her ability to absorb the excess savings of others. The US share of World GDP is plainly lower than it was after WW2, domestic income inequality is greater, and the geopolitical benefits of accommodating economic rivals, like China, has become far less obvious. But surely excess liquidity should drive down the price of money and help restore balance? Given that the true *price of money* is the exchange rate⁷ (not the interest rate), a question related to this capital abundance is what currency arrangements now best serve the diverging interests of the US and her economic competitors? For most of the last two centuries, the US dollar and other international currencies have been pegged, initially under the gold standard (1717–1934)⁸ and subsequently under the Bretton Woods (1944–1971) fixed exchange rate system. Bretton Woods was set up as a dollar-based system, although some have since argued that this outcome was not predetermined, but largely driven by British nervousness over their

inability, at the time, to guarantee future sterling stability. Whether or not it came as a coincidence, the Bretton Woods era proved a comparative economic nirvana, enjoying GDP growth rates roughly twice those seen in the preceding and following decades of fluctuating currencies, modest albeit creeping inflation, the absence of major bank failures and financial crises, and more homogeneous distributions of both incomes and wealth.

Following the demise of Bretton Woods,⁹ the major World currencies have now been floating for most of the last fifty years. Alongside, capital flows became progressively deregulated. Almost the first act of Britain's incoming Thatcher Government in 1979 was to abolish UK capital controls. Other countries followed. The evolution of the so-called *Washington Consensus* policies through the 1990s featured tax reform and fiscal discipline, combined with trade liberalisation and the opening-up of capital accounts to inward investment. These initiatives were led by the IMF, the World Bank and the US Treasury, all of whom encouraged their adoption by the Emerging Market economies. As we explore in a later chapter, the symbolic Fall of the Berlin Wall in 1989 and the earlier 1985 reforms in China enacted by Deng Xiaoping effectively economically enfranchised some 2–3 billion workers, across many previously State Socialist governments and formerly closed economies. China further nailed-down her rapid growth path by joining the WTO (World Trade Organisation) in 2001. The decision by several of these fast-growing countries to either officially fix their currencies to the floating US dollar, or else closely shadow it, gave the greenback a much-needed shot in the arm. It follows that the period of floating exchange rates should not be seen as part of a natural evolution into a multi-currency system, as some have suggested, but it should be viewed as three distinct eras. From 1974 until the early 1990s, the World operated on an *oil-based standard*,¹⁰ which effectively underwrote the continuation of the US dollar system. And, from the early 1990s onwards, new demand from the Emerging Market economies has replaced currency demand from the oil producers to similarly help underwrite the US dollar. We shall argue that here-in lie the roots of our current financial instability.

The original proponents of floating exchange rates advanced several inflated claims in the 1950s and the 1960s to promote their attractions, including gradualism in terms of the scope and pace of currency movements and the greater independence for national monetary policies. Yet, even though financial crises were not unknown under the gold standard, the last 30 years have been among the most tumultuous in monetary history; the pace and scope of movements in exchange rates have been larger than ever before, with greater exchange rate 'overshooting'¹¹ and, yet, with a

clearly failing ability to hold back the destructive waves of Global Liquidity. Whereas in the 1960s, the World economy mostly suffered labour cost shocks and, in the 1970s and 1980s, oil and commodity-price shocks, it is more often buffeted these days by Global Liquidity shocks. Financial markets spin on fragile axes and this common driver emphasises that modern financial crises tend to be neither purely national, nor simply isolated events. Moreover, the Global Liquidity shocks are typically bigger, longer-lasting and more pervasive than the calibre of shocks studied by economists and Central Banks when using their so-called DSGE¹² models of the economy. In fact, since 1980 well over sixty countries have experienced asset booms followed by banking crises, with at least six episodes of major asset price bubbles: (1) 1980s Japan; (2) early 1990s in Sweden and across much of Scandinavia; (3) Thailand and the neighbouring South-East Asian economies in the mid-1990s and (4) US in the late 1990s and, so far, twice again in the 2000s. The social and economic costs have been high, with national banking systems in many of these countries subsequently collapsing, after facing loan losses from these bubbles that on occasions exceeded a staggering one-quarter of their GDPs. As 007 agent, James Bond, keenly observed in *Goldfinger*: “Once is happenstance. Twice is coincidence. Three times is enemy action”.

The most recent and deepest of these crises is the 2007–2008 GFC. In the event, this proved to be as much a crisis about ‘bad liabilities’, i.e. unreliable funding structures, as a crisis over ‘bad assets’, i.e. poor investments. The GFC is widely dated from the run on Bear Stearns investment bank in March 2008, with the crisis precipitated by the US Administration’s September 15th decision to allow the venerable investment bank Lehman Brothers to fail. This single event caused interbank credit markets Worldwide to freeze as banks with excess reserves quickly turned more risk-averse. Indebted banks suddenly had to find alternative sources of finance to avoid shrinking their balance sheets. Yet, at the same time, there is a compelling argument that the roots of the GFC instead trail back to the 2002–2006 US real estate boom, with the trigger revealing clear Chinese fingerprints: once again underlining her growing economic and financial sway. Closer inspection of capital flow and credit data highlight the People’s Bank (PBoC) tightening Chinese credit conditions in early 2008, probably to defray industrial pollution concerns and improve air quality ahead of the showcase August 2008 Beijing Olympics? Figure 1.3 tracks the rolling 12-month total of funds injected or withdrawn from Chinese money markets by the PBoC, which recorded a cumulative drawdown exceeding RMB650 billion (circa US\$95 billion) or 6.3% of its balance sheet.

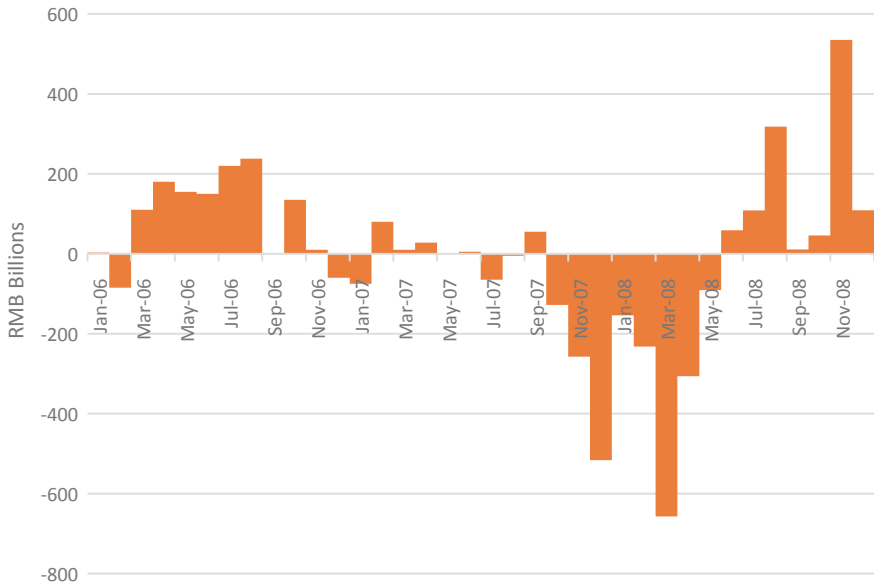


Fig. 1.3 Liquidity injections into Chinese money markets, 2007–2008 (RMB billions, rolling 12-month total) (Source *CrossBorder Capital*, People's Bank)

This forced credit-starved Chinese borrowers into the offshore Eurodollar markets in search of replacement funding. Could their demands have simultaneously clashed with the rising needs from Western borrowers, who were increasingly struggling to finance their leveraged mortgage-backed and asset-backed security portfolios, particularly following the failure of Bear Stearns?

Cross-Border Capital Flaws?

With hindsight, the pattern of all these crises looks remarkably similar. Every national crisis is preceded by an economic boom, although not every economic boom has been followed by a financial crisis. Their cause is not so much floating exchange rate regimes, per se, but the destructive effect of rapidly shifting cross-border capital flows. Those economies that suffer severe crises tend to have previously experienced above-average increases in cross-border capital inflows, which lead on to higher financial asset and real estate prices. Ahead of the 2007–2008 GFC many countries, including even the US, saw sharp jumps in their cross-border capital activity. Notwithstanding, the rising ratios between investment inflows and GDP

were multiple times bigger for the smaller economies of Ireland, Greece, Spain and Iceland, with their large-scale inflows often resulting, ironically, from the whopping debts issued by their banks and corporations in the major offshore funding centres of New York, Frankfurt and London. In contrast, the parallel increase in capital inflows into America largely arrived from fast-growing Emerging Market economies, namely China and South-East Asia, and from the oil-exporting economies all eager to buy more US dollar 'safe' assets. Admittedly, these capital flows were also at times unusually large: China enjoyed a dramatic windfall increase in her exports after joining the World Trade Organization (WTO) in 2001, and the oil exporters benefitted from the tripling of crude oil prices to \$90/barrel between 2001–2006.

Such risks were well-known to the architects of Bretton Woods. They deliberately restricted private capital movements, blaming the depth of the 1930s Depression and the turmoil of the interwar years on the violent swings of capital between nations. Ironically, the original case for floating exchange rates largely ignored capital movements, seeing them, at worst, as adjusting passively to current account imbalances. Not only did these experts miss the size and velocity of capital flows, but they failed to recognise that it is also likely that current accounts adjust to capital flows: a possibility that echoes an earlier debate in the 1920s about the so-called *transfer problem* over German WW1 reparation payments. There is, of course, no reason why capital flows should sum to zero. In fact, they are the necessary counterpart to current account imbalances. There is also no reason per se why large or small net capital flows tell us everything about exchange rates. What matters for the exchange rate is the net balance between overall supply and demand. A surge of capital inflows is likely to increase the exchange rate unless there is a corresponding expansion in the supply of the currency. But even when the exchange rate is bid higher, there is no guarantee that it will rebalance flows. Exchange rate movements act as a more plausible equilibrium mechanism following trade shocks than after capital flow shocks. In reality, in the wake of a capital flow shock, it is often hard to predict whether the financial system will converge or diverge from its equilibrium position, because capital flows may, at least for a period, become self-sustaining so causing currencies and asset prices to overshoot. These rapid, large-scale cross-border capital flows consequently demand equally large offsetting movements both in current accounts and potentially in exchange rates. To help ensure economic stability, many national governments have insisted on maintaining currency parities against competitor currencies, and notably by staying closely aligned with the US dollar.

It would, therefore, seem that modern financial crises have less to do with lax regulation, excessive risk-taking by imprudent bankers and policy-makers' obsession with inflation-targeting than might be presupposed. Central Banks have power, but they do not always have control. And, often they exercise unelected powers. According to an anonymous governor,¹³ the ECB: "... threaten[s] governments that misbehave with financial destruction. They cut off refinancing and threaten to kill the banking system. They create a roll-over crisis in the bond market. This is what happened to Italy in 2011". We focus on the similar disruptive potential of Global Liquidity in aggregate; its role is raising cross-asset correlations, and its contribution towards the build-up of systemic risk. The expansion of domestic credit and heightened asset demand in each of these previous crises was largely a consequence of the inflows of cross-border capital, which substantially eased funding constraints on local banks. This extra ability to borrow allowed certain governments, businesses, households and even other banks to side-step the burdens imposed by their existing debts, often for years. Each crisis broke when the global credit providers' appetite for new debt slowed. This forced hasty liquidations of remaining assets to quickly repay debts and it often occurred alongside a sliding national currency unit when the direction of capital flows suddenly reversed. At the same time, the collapse in their capital bases forced banks to sharply shrink their loan books, which, in turn, led on to further falls in the value of bank capital and ever tighter credit conditions. Not only is this the very reverse of what had happened in the preceding boom years, it sounds remarkably like the classic 'debt-deflation' model described by American economist Irving Fisher in his *Booms and Depressions* (1932) written about America's Depression years, but now brought up-to-date with what Rey (2015) describes as a single *global factor* and we explain in terms of Global Liquidity.

The First Sightings: Salomon Brothers Inc.

Whether or not we can rightly claim responsibility for first coining the term *Global Liquidity*, we were certainly among its very earliest pioneers. These roots run back to the mid-1980s when Salomon Brothers,¹⁴ the US investment bank, was set to make its big push into international financial markets. At the time, Salomon dominated securities' trading. Underpinned by a whopping balance sheet, its financial punch was led by an innovative research department, directed by the restless geniuses of Henry Kaufman and Marty Leibowitz. What Henry knew about credit and currencies, Marty matched him on bonds and duration. Investment policy was implemented by a pre-eminent team of

researchers and economists, several plucked from the IMF and recruited from the Federal Reserve, among them Nick Sargen, John Lipsky, Dick Berner, Kim Schoenholtz, Robbie Feldman, Ron Napier, Chris Mitchinson and Laszlo Birinyi. All now form part of the far-reaching Salomon Diaspora.

Many of Salomon's traders believed that watching money and capital flows was the nearest thing to obtaining *insider information*. What's more, it was perfectly legal. In planning its mid-1980s business expansion, Salomon needed estimates of the size of cross-border investment and trading flows and this writer, brilliantly assisted by Angela Cozzini, was tasked with gathering the data. Our researches ultimately led to an annual publication (now defunct) called *International Equity Flows* that surveyed the cross-border capital markets and featured estimates of what we dubbed *Global Liquidity* and defined, in the Salomon tradition, as the total inflow of savings and credit into domestic and cross-border financial markets. Salomon Research Head, Henry Kaufman's famous dictum is of course: "...*money matters, but credit counts*". The first Salomon Brothers publication tracking *Global Liquidity* was published in 1986.

Global Liquidity can be split functionally, as well as geographically, by type of liquidity, which helps to isolate its changing quality. In other words, certain components exercise a greater influence over the future size and direction of the total pool than others. We focus on three liquidity components: (1) Central Bank provision; (2) private sector supply and (3) cross-border inflows. We think in terms of three broad liquidity transmission channels, with each one affecting or amplifying risk-taking behaviour. First, the sum of domestic Central Bank and private sector liquidity tends to affect the relative prices of 'safe' assets, through a *risk-taking channel*. By reducing the odds of systemic risk, more domestic liquidity increases the term premia on government bonds as the demand for safety falls, while simultaneously reducing the equivalent premia assigned to risk assets. When the 'safe' asset is used internationally, cross-border inflows are also likely to come into play. Second, the *exchange rate channel* reflects the changing quality-mix of liquidity between the private and public sectors. More private sector or 'good' liquidity strengthens a currency unit, whereas more Central Bank or 'bad' liquidity weakens it. Third, the spillovers of domestic liquidity from the core economies into outward cross-border capital flows are typically amplified both by offshore funding markets and by other policy-makers in the periphery economies into bigger increases in Global Liquidity and more risk-taking by investors. This latter *cross-border capital flow channel* is shaped by the current institutional make-up of the World economy and embodies many of the structural differences between America and China.