University of New South Wales Law Research Series

THE CHANGING NATURE OF BANKING AND WHY IT MATTERS

ROSS P BUCKLEY

Buckley, Avgouleas & Arner (eds), *Rethinking Global Finance and Its Regulation* (Cambridge University Press, New York, 2016)

[2016] *UNSWLRS* 74

UNSW Law
UNSW Sydney NSW 2052 Australia

E: unswlrs@unsw.edu.au
W: http://www.law.unsw.edu.au/research/faculty-publications
AustLII: http://www.austlii.edu.au/au/journals/UNSWLRS/
SSRN: http://www.ssrn.com/link/UNSW-LEG.html

Chapter in Buckley, Avgouleas & Arner (eds), *Rethinking Global Finance and Its Regulation,* Cambridge University Press, New York, 2016.

The Changing Nature of Banking and Why it Matters

Ross P. Buckley*

Introduction....................2
1. Changes in Banking....................3
Personnel....................3
Attitude....................4
Remuneration....................5
Complexity and Opacity of Goods....................6
Legalisation of Gambling....................6
2. Purposes of Banking....................11
3. Implications of the Fundamental Changes in Banking....................12
Misaligned Interests....................12
Human Capital....................13
Regulatory Implications....................15
Societal Consent....................16
6. Conclusion....................16

Introduction

Banks have been a ubiquitous feature of almost all successful civilisations. Organisations discharging early banking functions operated in ancient Babylon,[1] and gained much greater sophistication in ancient Greece and Rome.[2]

When asked what they understand a bank to be, most people describe an institution that accepts deposits and makes loans -- what we generally understand as a 'retail' bank.

However, the banks at the centre of our global financial system are utterly different. Entities such as JP Morgan Chase, UBS or Deutsche Bank do a great deal more than take deposits and grant loans.

Prior to the 1970's bankers were prudent, deeply cautious people who gave advice predicated on a good knowledge of the needs and interests of the customer.[3] Bank managers tended to have real authority as banks were quite decentralised organisations, and thus bank managers tended to be highly respected members of their local communities.

These days are long gone. Most branches in my country, Australia, no longer have a full-time manager. Most Australians, at least the more sophisticated ones, understand that when a bank employee recommends a certain investment, they are typically incentivised by a commission to do so. Banks have changed from a relatively local institution working in the client's interests, to a far more complex organisation that is intent on maximising profits and the number of products it can sell to customers.

This change has been so dramatic that many of the world's largest and best-known banks are barely recognisable from the organisations they were in the 1970's, let alone their ancient forebears. The implications of those changes are profound, especially if we think of the economic consequences of the allocation of much of our most talented human capital away from high value-added roles in the real economy to the banking sector.

---

* CIFR King & Wood Mallesons Professor of International Financial Law, and Scientia Professor, University of New South Wales; Honorary Fellow, Asian Institute for International Finance Law, University of Hong Kong; email: ross.buckley@unsw.edu.au. Sincere thanks to the Centre for International Finance and Regulation in Sydney, whose funding (project no. E135) supported the workshop in Hong Kong at which this article was first presented, the research that underpins it, and the editing of this volume. CIFR is a Centre of Excellence for research and education in the financial sector funded by the Commonwealth and NSW Governments and supported by other consortium members (see www.cifr.edu.au). Thanks also for the enlightening feedback from participants at the Hong Kong workshop and to Rebecca Stanley and Ross Willing for their very helpful research assistance. All responsibility is mine.

[1] Richard Grossman, *Unsettled Account: The Evolution of Banking in the Industrialized World since 1800* (Princeton University Press, 2010), 30.

[2] See generally: W. V. Harris, *The Monetary Systems of the Greeks and Romans* (Oxford University Press, 2008); Paul Millet, *Lending and Borrowing in Ancient Athens* (Cambridge University Press, 2002); and Glyn Davies, *A History of Money: From Ancient Times to the Present Day* (University of Wales Press, 2002), ch 3.

[3] Ismael Erturk and Stefano Solari, 'Banks as Continuous Reinvention' (2007) 12(3) *New Political Economy* 369, 369.

This chapter will seek to explore the full dimensions of this transformation and analyse why it matters for how we think about banks today, and the regulations we pass to govern them.

The chapter is in four further parts. First, it identifies the major changes that have occurred in banking over the past 40 years. Second, it analyses why banks exist – their core purposes. Third, it explores the implications of these major changes, in particular, as to how we should think about banks. And, finally, it concludes by suggesting that drawing a sharper distinction between a traditional bank and the new type of super-bank may be really useful for policy and public discussion.

1. Changes in Banking

Much of what occurs at international financial institutions would not be recognised as banking by the modern layperson. Indeed, even a banker from 40 years ago would hardly recognise what they would see today. If a lawyer from 1970 was brought forward in time and put in a modern day courtroom, most things would be familiar: the solemnity, the architecture of the court room, the mode of dress, the procedure, the objections being made by counsel. Since 1970 the manner of lawyers, the way they carry themselves, the way they are trained, the way they think and look backwards to find authority for what they propose doing, has all changed very little. Indeed, a lawyer transported forward in time from 17th century England would likewise see much in a contemporary courtroom they would recognise. Yet if a banker from as recently as 1970 was brought forward in time to 2014 and placed in a modern investment bank, or in the investment banking arm of a commercial bank, much would seem profoundly different.

Personnel

The first and major difference would be in the people. The manner of bankers, the way they carry themselves, the way they are trained, the way they see the world, has all changed profoundly. Bankers in 1970 had basic arithmetic. You needed some math to run a bank, but it was mostly primary school math, not the calculus of high school.

Bankers in 1970 were as prudent, cautious and dull as lawyers, perhaps more so.[4] If we consider a sophisticated market like London, the traditional degree to have taken to go into a bank was in Classics (Greek and Latin) or History.[5] This remained the case in the UK until well into the 1980s. Having studied classics or been an officer in a good regiment were considered good training for banking as banking was perceived to be about prudence and judgment, and the study of history or military officer training were seen to promote careful deliberation and sound judgment.[6]

Today younger bankers are typically highly trained in mathematics and quantitative skills – degrees in finance, quantitative economics or perhaps even physics are considered good

---

[4] Susan Strange, *Casino Capitalism* (Manchester University Press, 2nd ed, 1997), 2.

[5] Paul Thompson, 'The Pyrrhic Victory of Gentlemanly Capitalism: The Financial Elite of the City of London, 1945-90' (1997) 32(3) *Journal of Contemporary History* 283, 301.

[6] These thoughts are not new. Susan Strange in 1986 described how '[b]ankers used to be thought of as staid and sober men, grave-faced and dressed in conservative black pinstripe suits, jealous of their reputation for caution and for the careful guardianship of their customers' money,' but warned that the international financial system had already become a 'gambling hall' and would soon resemble 'nothing as much as a vast casino': Susan Strange, above n 4, 1–2. She was prescient in the extreme.

training for a job. Although some may come from more diverse backgrounds, such as law, training in the humanities is rare. As a consequence most bankers today see the world through a quantitative analytical lens rather than the more qualitative lens associated with studies of the classics, history or politics.

Attitude

In the 1980s in the UK banking went from being an industry that sought to help its customers make money, to being an industry that looked for people from whom they could make money.[7] Much the same could be said of the United States (US), and of Australia, though change in Australia probably occurred a tad later, in perhaps the 1990s.

When contemporary bankers consider the societal impact of their work they would be likely to defer to Smith's dictum that '[b]y pursuing his own interest, he frequently promotes that of the society more effectually than when he really intends to promote it',[8] or as Gordon Gecko would put it: 'greed is good'. The popularity of Smith's 'invisible hand', mentioned only once in *the Wealth of Nations*[9] yet cited so often in modern business and economic life, has had a profound influence. Today's ultra-numerate bankers with little knowledge of history or the humanities are more inclined to accept the world-view that markets and corporations exist only to produce profits and nothing more.

This attitude is reflected in the behaviour of banks. The recent LIBOR scandal involving major banks is clear evidence of an attitude that prioritises the profits of the bank over all else.[10] The attempts to conceal trading losses on derivative bets by JP Morgan Chase employees[11] is equally an example that reflects this attitude, as was the bank turning a blind eye to the operations of its client Bernard Madoff, the man behind the largest Ponzi scheme in history.[12] Goldman Sachs' omission of key facts regarding the synthetic CDO known as

---

[7] Sue Jaffer, Nicholas Morris, Edward Sawbridge and David Vines, 'How Changes to the Financial Services Industry Eroded Trust' in Nicholas Morris and David Vines (eds), *Capital Failure* (Oxford University Press, 2014), 54. See also: Greg Smith, 'Why I Am Leaving Goldman Sachs', *The New York Times* (online), 14 March 2012 <http://www.nytimes.com/2012/03/14/opinion/why-i-am-leaving-goldman-sachs.html?pagewanted=all&_r=0>; Frank Partnoy, *F.I.A.S.C.O: Blood in the Water on Wall Street* (W.W. Norton & Company, 2009); and Frank Partnoy, *Infectious Greed: How Deceit and Risk Corrupted the Financial Markets* (Public Affairs, 2010).

[8] Adam Smith, *Wealth of Nations* (Penguin, 1986), 364.

[9] Ibid.

[10] See generally: Eric Talley and Samantha Strimling, 'The World's Most Important Number: How a Web of Skewed Incentives, Broken Hierarchies, and Compliance Cultures Conspired to Undermine Libor', in Justin O'Brien and George Gilligan (eds), *Integrity, Risk and Accountability in Capital Markets: Regulating Culture* (Hart Publishing, 2013). For a better way forward on LIBOR see Justin O'Brien, 'Singapore Sling: How Coercion May Cure the Hangover in Financial Benchmark Governance' (Working Paper No 29, Harvard University Edmond J. Safra Center for Ethics, 5 November 2013).

'Ex-Barclays Staff Charged Over Libor Scandal', *Sky News* (online), 17 February 2014 <http://news.sky.com/story/1212954/ex-barclays-staff-charged-over-libor-scandal>.

[11] 'Timeline: Libor-fixing scandal', *BBC News* (online), 6 February 2013 <http://www.bbc.com/news/business-18671255>; Patricia Hurtado et al, 'Ex-JP Morgan Traders First Charged in $6.2 Billion Loss', *Bloomberg* (online), 15 August 2013 <http://www.bloomberg.com/news/2013-08-14/ex-jpmorgan-bankers-charged-by-u-s-in-6-2-billion-loss.html>.

[12] Jessica Silver-Greenberg and Ben Protess, 'JP Morgan Chase Nears a $2 Billion Deal in a Case Tied to Madoff', *The New York Times* (online), 5 January 2014

ABACUS 2007-A[13] and Barclays' circumvention of sanctions against Iran, Cuba and Libya are yet further examples.[14]

In Smith's earlier work, *The Theory of Moral Sentiments*, he argues that people are motivated by desires to be respected and regarded as honourable.[15] Such an understanding would have resonated with the sober and dull bankers in the decades before 1970. It no longer does. Bankers today are remunerated as if they are primarily motivated by money.

The shift in the values and attitudes of bankers has without question had a profound effect on the industry and the way in which it behaves. The fundamental purpose of a bank has shifted from providing a social good – by intermediating capital, providing services to its customers and employment to its workers – to earning profits for its employees and itself.

Remuneration

A further significant change in banking has been in the way in which bankers are remunerated. Prior to the 1970s the salaries on offer were comparable to other areas of professional practice in the economy. As identified by Philipon and Reschef:

> "the relative skill intensity and relative wages of the financial sector exhibit a U-shaped pattern from 1909 to 2006. From 1909 to 1933 the financial sector was a high skill, high wage industry. A dramatic shift occurred during the 1930s: the financial sector rapidly lost its … wage premium relative to the rest of the private sector. The decline continued at a more moderate pace from 1950 to 1980. By that time, wages in the financial sector were similar, on average, to wages in the rest of the economy. From 1980 onward, another dramatic shift occurred. The financial sector became once again a high skill, high wage industry. Strikingly, by the end of the sample relative wages and relative education levels went back almost exactly to their pre-1930s levels."[16]

<http://dealbook.nytimes.com/2014/01/05/jpmorgan-chase-nears-a-2-billion-deal-in-a-case-tied-to-madoff/?_php=true&_type=blogs&hp&_r=2>; Jonathan Stempel, 'Madoff said JPMorgan executives knew of his fraud: lawsuit', *Reuters* (online), 20 February 2014 <http://www.reuters.com/article/2014/02/20/us-jpmorgan-madoff-idUSBREA1J21W20140220>.

[13] Dan Wilchens and Karen Brettell, 'Factbox: How Goldman's ABACUS deal worked', *Reuters* (online), 16 April 2010 <http://www.reuters.com/article/2010/04/16/us-goldmansachs-abacus-factbox-idUSTRE63F5CZ20100416>; SEC, 'Goldman Sachs to Pay Record $550 Million to Settle SEC Charges Related to Subprime Mortgage CDO' (Press Release no 123, SEC, 2010) <http://www.sec.gov/news/press/2010/2010-123.htm>.

[14] Michael Rothfeld, David Enrich and Jay Solomon, 'Barclays in Sanctions Bust', *The Wall Street Journal* (online), 17 August 2010 <http://online.wsj.com/news/articles/SB10001424052748703908704575433781894978828>; Dominic Kennedy, 'Lloyds, Barclays helped Iran evade anti-terrorism sanctions', *The Australian* (online), 15 October 2010 <http://www.theaustralian.com.au/archive/business-old/lloyds-barclays-helped-iran-evade-anti-terrorism-sanctions/story-e6frg96f-1225939097490>.

[15] Adam Smith, *The Theory of Moral Sentiments* (Cambridge University Press, 2002), 72. Complementing such a perspective is the recent work of Avner Offer arguing that poor ethics often lead to inefficient economic outcomes: Avner Offer, "A Warrant for Pain: Caveat Emptor vs. the Duty of Care in American Medicine, c. 1970-2010", chap 15 in Morris and Vines (eds), op cit n 7.

[16] Thomas Philippon and Ariell Reshef, 'Wages and Human Capital in the U.S. Financial Industry: 1909-2006' (Working Paper 14644, National Bureau of Economic Research, 2009) <http://www.nber.org/papers/w14644.pdf>, 3.

Not only has the amount of compensation increased dramatically in recent times, the structure of remuneration has also changed. Whereas in the past bankers were principally remunerated by salary, with little performance-based pay,[17] today banks have a clear preference to pay their staff in bonuses rather than fixed wages.[18]

Remuneration plays a key role in the motivation and culture of firms, not to mention in terms of who they attract as employees.[19] As will be outlined below, these changes in the personal remuneration of bankers has interacted powerfully with other changes to misalign profoundly interests in the banking sector.

Complexity and Opacity of Goods

This change in the purpose of banking, and in the type of people joining the industry, has coincided with a rapid ramp up in the sophistication and complexity of financial products.

Contracts for the future delivery of goods have an ancient past,[20] but western civilization has existed for centuries without complex derivative trading. The modern derivatives market began in Chicago in the 1970's with the Chicago Board Options Exchange, which would ultimately revolutionise the world of investment.[21] During the 1980's and 1990's a vast array of increasingly more complex and opaque financial instruments were developed.[22]

The complexity of modern financial products mean customers often lack the capacity to compare different products and determine if they are buying a good investment or not.

Legalisation of Gambling

What a bank does has changed profoundly. Banks in 1970 essentially intermediated money. They received deposits and made loans. Banks today, at least the investment banks and investment banking arms of major commercial banks, derive less of their income from financial intermediation than from speculating on markets, underwriting stock and bond issuances, giving sophisticated advice on mergers and acquisitions and selling financial products to customers, amongst other activities.

---

[17] Sue Jaffer, Nicholas Morris, Edward Sawbridge and David Vines, 'How Changes to the Financial Services Industry Eroded Trust', above n 7, 35.

[18] John Thanassoulis, 'The Case for Intervening in Bankers' Pay' (2012) 67(3) *Journal of Finance* 849, 849 and Lucian A. Bebchuk and Holger Spamann, 'Regulating Bankers Pay' (2009) 98(2) *Georgetown Law Journal* 247, 247.

[19] See, Deborah Gregory, *Unmasking Financial Psycopaths: Inside the Minds of Investors in the Twenty-First Century* (New York, Palgrave MacMillian, 2014); Clive R. Boddy, 'The Corporate Psychopaths Theory of the Global Financial Crisis', 102 *Journal of Business Ethics* 255 (2011).

[20] Ernst Juerg Weber, 'A Short History of Derivative Security Markets' (Discussion Paper 08.10, University of Western Australia Business School, 2008), 5.

[21] Emily Lambert, 'The Man Who Gave Us Derivatives', *Forbes* (online), 17 January 2011 <http://www.forbes.com/sites/emilylambert/2011/01/17/the-man-who-gave-us-derivatives/>. See also Emily Lambert, *The Futures: the Rise of the Speculator and the Origins of the World's Biggest Markets* (Basic Books, 2011) and Don M. Chance, *Essays in Derivatives* (Wiley, 1998).

[22] Steven L. Schwarcz, 'Regulating Complexity in Financial Markets' (2009) 87(2) *Washington University Law Review* 211.

A banker travelling forward in time even 40 years would not recognise most of what a bank does today as being 'banking' business. Indeed, much of the business of a contemporary bank would have been unenforceable in 1973. A banker travelling forward in time would look with horror upon speculative financial derivatives contracts as transactions that could bring a bank undone.

I was practising law in Hong Kong 30 years ago when we were asked for an opinion from a major US investment bank on its proposal to start offering futures contracts on currency. Our legal advice was to the effect that the Gambling Ordinance meant that such contracts entered into by clients for the genuine hedging of risks were valid and enforceable but the same contracts entered into to speculate on a currency's future value were unenforceable. Hong Kong law restricted gambling at the time to race tracks and mah-jong houses. Our client thanked us for the advice, said it intended to do the business anyway and take the risk, and filed our advice in the smallish round filing cabinet that lives on the floors of most offices.

Historically, purely speculative contracts were unenforceable because gambling was perceived to be a social ill. The *Gaming Act 1845* (8 & 9 Vict.c.109) in the UK made gaming houses illegal and gaming or wagering agreements unenforceable. It was enacted on the recommendation of a House of Commons' Select Committee Report on Gaming in 1844. US law was to the same effect,[23] as was Australia's.[24]

For over a century, courts in all these countries took the view that derivatives contracts (as they came later to be known) entered into by at least one party for hedging purposes were valid under these enactments, but derivatives entered merely to place a bet on the price of something were invalid and unenforceable.[25] Accordingly, a contract by which a farmer locks in a price for their wheat crop when it is harvested, or by which an airline guarantees a future price for jet fuel, were both valid, but a contract by which a speculator places a bet on future wheat or fuel prices was not.[26]

Over time, legislatures began to exempt derivatives contracts from the application of these laws. In the words of Philip Wood, 'many states have introduced exceptions to gaming laws in order to facilitate markets … and to remove the threat of nullity. The rationale is either there is a satisfactory alternative system of protection or the contracts are entered into between sophisticated institutions who do not need the protection of gaming legislation.'[27]

[23] Section 5-401 of the General Obligations Law of the State of New York provided that '[a]ll wagers, bets or stakes, made to depend upon any…unknown or contingent event whatever shall be unlawful' and section 5-411 provided that '[a]ll contracts for or on account of any money or property, wagered, bet or staked, as provided in Section 5-401, shall be void.'

[24] For instance, *Gaming and Betting Act 1912* (NSW).

[25] Lynn Stout, 'Derivatives and the Legal Origin of the 2008 Credit Crisis' (2011) 1 *Harvard Business Law Review* 1, 4; see also *Earl Ellesmere v Wallace* [1929] 2 Ch 1; *Lipkin Gorman v Karpnale* [1992] 4 All ER 512.

[26] See *See v Cohen* (1923) 33 CLR 174 and note the opposite result by the time of *Morgan Grenfell and Co Ltd v Welwyn Hatfield DC* [1995] 1 All ER 1, 2.

[27] Philip Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (Thompson, 2nd ed, 2007) [13–009].

In the UK, Section 63 of the *Financial Services Act 1986* (UK) exempted 'investments', broadly defined, from the application of the *Gaming Act 1845*.[28]

New York courts carved out an exception to the State gambling laws for certain financial contracts. The remaining, and restraining, uncertainty in the US was removed by *The Commodity Futures Modernization Act of 2000* (CFMA),[29] which excluded the application of any state or local laws in respect of gaming, with the aim of giving legal certainty to derivatives trading.[30]

The US Financial Crisis Inquiry Commission concluded in its Final Report that OTC derivatives contributed significantly to the crisis, and that the enactment of the CFMA legislation 'to ban the regulation by both the federal and state governments of over-the-counter (OTC) derivatives was a key turning point in the march toward the financial crisis.'[31] In the words of Lynn Stout, the CFMA was a 'sudden and wholesale removal of centuries-old legal restraints on speculative trading in over-the-counter (OTC) derivatives,'[32] that played a large role in the 2008 crisis.[33] In hindsight, the removal of derivatives from the purview of gaming laws went largely unremarked at the time, but was to contribute substantially to the GFC.

Our time travelling banker would be very surprised to discover a bank engaging in transactions he would view as unenforceable. He would be even more surprised by the scale of these transactions within the operations of a super-bank.

Derivatives as a proportion of bank assets are difficult to calculate because of differing accounting treatment on either side of the Atlantic. In the UK, derivatives currently represent about 27% of the total assets of Barclays and RBS.[34] In Australia derivatives represent between 4% and 6.5% of assets of the four major banks, calculated much as for the British banks.[35] In the US the published ratios are tiny, in the order of 2.7% for JP

---

[28] This exemption was maintained by section 412 of the *Financial Services and Markets Act 2000,* and section 334 of *The Gaming Act 2005 (UK)*.

[29] 7 USC §§ 1–27f (2013). See also Cravath, Swaine and Moore, *Commodity Futures Modernization Act of 2000* (Memorandum for ISDA members, 5 January 2001) <http://www.isda.org/speeches/pdf/analysis_of_commodity-exchange-act-legislation.pdf>.

[30] In Australia, New South Wales first enacted a carve out to facilitate the establishment of the Sydney Futures Exchange in 1979: Futures Market Act 1979 (NSW) s 7; and this was followed in 1989 by a general validation of exchange-traded futures contracts in the Corporations Act 1989 (Cth) s 1141. Later, section 1101I of the *Corporations Act 2001* excluded all financial products, broadly defined, including derivative products, from gaming and wagering laws.

[31] FCIC, 'The Financial Crisis Inquiry Report' (Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States, January 2011) xxiv.

[32] Lynn Stout, above n 25, 21.

[33] For a full history of the CFMA, its origins and recent attempts to restore regulatory limits on speculative derivatives via the Dodd-Frank Act see Lynn Stout, above n 25.

[34] Derivate Financial Instruments accounted for 324,335 million (26%) of the 1,231,388 million pounds of total assets held by Barclays at 31 December 2013: Barclays PLC, *Annual Report 2013* <http://reports.barclays.com/ar13/>, 160. Derivatives accounted for 288,039 million (28%) of the 1,027,878 million pounds of total assets held by RBS at 31 December 2013: Royal Bank of Scotland, *Annual Report 2013* <http://www.investors.rbs.com/results-centre/annual-report-subsidiary-results/2013.aspx>, 164.

[35] Derivatives accounted for 45,340 million (6%) of the 753,876 million Australian dollars of total assets held by the CBA in 2013: Commonwealth Bank of Australia (CBA), *Annual Report 2013* <https://www.commbank.com.au/content/dam/commbank/about-us/shareholders/pdfs/annual-

Morgan Chase and 0.08% for Bank of America.[36] However, US accounting rules permit most derivatives to be kept off balance sheet. U.S. rules allow banks to "net" their derivatives and show net positions with trading partners on an assumption of simultaneous settlement. JP Morgan Chase, the largest US institution, had $2.4 trillion in assets on its balance sheet at the end of 2013 but derivatives with a market value of an additional $1.5 trillion that were not shown, so in total derivatives represented over 40% of its assets.[37]

JP Morgan Chase had a notional amount of $71.8 trillion in derivatives contracts, according to September 2013 data from the Office of the Comptroller of the Currency.[38] Second and third on the list are Citibank, with $58.5 trillion, and Bank of America, with $44.5 trillion.[39]

---

reports/2013_CBA_Annual_Report_19_August_2013.pdf> 72 and 136. Derivative financial instruments accounted for 45.9 billion (6.5%) of the 703 billion Australian dollars of total assets held by ANZ in 2013: ANZ, *2013 Annual Report* <https://www.shareholder.anz.com/sites/default/files/event_files/2013%20Annual%20Report%20Final.pdf>, 19. Derivative financial instruments accounted for 28,358 million (4%) of the 696,603 million Australian dollars of total assets held by Westpac on 30 September 2013: Westpac Banking Corporation, *2013 Annual Report* <http://www.westpac.com.au/docs/pdf/aw/ic/2013_WBC_Annual_Report.pdf>, 88. Trading derivatives accounted for 39,214 million (4.8%) of the 808,427 million Australian dollars of total assets held by NAB on 30 September 2013: National Australia Bank (NAB), *2013 Annual Financial Report* <http://www.nab.com.au/content/dam/nab/about-us/shareholder-centre/annual-reports/pdf-reports/afr-financial-report.pdf>, 69.

[36] Derivative receivables accounted for 65,759 million (2.7%) of the 2,415,689 million American dollars of total assets held by JP Morgan Chase on 31 December 2012: JP Morgan Chase & Co, *Annual Report 2012* <http://files.shareholder.com/downloads/ONE/2974511299x0x652147/a734543b-03fa-468d-89b0-fa5a9b1d9e5f/JPMC_2012_AR.pdf>, 106. Derivative financial instruments accounted for 8,251,000 (0.08%) of 10,789,225,000 American dollars of total assets held by BAML on 31 December 2013: Bank of America Merrill Lynch International Limited, *Director's Report and Financial Statements for the year ended 31 December 2013* <http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=subsidiaries#fbid=OntvNgkDWAQ>, 25.

[37] James R. Barth and Apanard Prabha, *Breaking (banks) up is hard to do: new perspective on 'Too Big to Fail'* (Milken Institute, February 2013) <http://www.milkeninstitute.org/pdf/BreakingBanks.pdf>; Yalman Onaran, 'U.S. Bank Balance Sheets May Hide Risk', *Bloomberg* (online), 21 February 2013 <http://www.businessweek.com/articles/2013-02-21/u-dot-s-dot-bank-balance-sheets-may-hide-risk>; Steve Denning, 'Why JP Morgan Chase is unsafe at any scale', *Forbes* (online), 4 December 2013 <http://www.forbes.com/sites/stevedenning/2013/04/12/why-jpmorgan-chase-is-unsafe-at-any-scale/>. Admati and Hellwig explain the netting of derivatives assets in relation to JPMorgan: Anat Admati and Martin Hellwig, *The Banker's New Clothes: What's Wrong with Banking and What to Do about It* (Princeton University Press, 2013), 84-86. The discrepancy between US regulations (GAAP) and the Europeans (IFRS) accounting rules for JP Morgan Chase =~1.8trillion. US regulations effectively allow derivative assets to be 'netted' on the assumption of simultaneous settlement. Admati and Hellwig point out that this substantially reduces a bank's overall equity and therefore stability. For a full account see Antonio Corbi, 'Netting and Offsetting: Reporting Derivatives under US GAAP and under IFRS' (ISDA Report, 23 May 2012) <http://www2.isda.org/functional-areas/accounting-and-tax/gaap-us/>.

[38] Michael Rapoport, 'Funding Value Adjustment Proves Costly to J. P. Morgan's 4Q Results', *The Wall Street Journal* (online), 14 January 2014 < http://blogs.wsj.com/moneybeat/2014/01/14/funding-value-adjustment-proves-costly-to-j-p-morgan-4q-results/>.
[39] Ibid.

Derivatives therefore represent between 30 and 40% of the assets of some of the largest US and UK banks. Some of these will be for genuine hedging purposes. Most will be purely speculative.[40]

I put forward the idea in Australia that we need a different word to describe two institutions, one of which primarily earns its income intermediating funds, and has perhaps 5% of its assets in derivatives, and another which primarily earns its income trading assets and selling complex opaque new financial products, and which has perhaps 40% of its assets in derivatives. I thought if 'bank' were the correct word for the former institution it was not for the latter and a new word was required.[41] A leading Australian banking regulator interjected at that point and said, "We have a word for that sort of institution already – it is called a casino."[42]

Of course, these firms with a high percentage of assets in speculative derivatives have a substantial cross-over with a new term introduced into the post-GFC lexicon, a Globally Systemically Important Financial Institution, a G-SIFI. [43] G-SIFIs are defined as any firm, as designated by the Financial Stability Board (FSB), whose collapse would pose a risk to the global economy or, in popular parlance, any firm that is 'too big to fail'.[44] These institutions, which by definition, have a great deal of their risk externalised purely because of their size and importance, are in fact one in the same as the super-banks, whose assets are tied up in speculative derivatives.

The current global financial landscape has at its core this very new type of institution. It is a far cry from what we would traditionally consider to be a bank.

---

[40] Wayne Guay and S.P. Kothan, 'How much do firms hedge with derivatives?' (2003) 70 *Journal of Financial Economics* 423. The empirical evidence on the actual use of derivatives by corporations for speculative purposes is mixed and inconclusive: Raffaele Scalcione, *The Derivatives Revolution: A Trapped Innovation and a Blueprint for Regulatory Reform* (Kluwer Law International, 2011), 43; and other studies confirm the difficulty of tracking what derivatives are actually used for. See, George Aragon and Spencer Martin, 'A unique view of hedge fund derivatives usage: Safeguard or speculation?',25 *Journal of Financial Economics* 436 (2012). See also generally Timothy Lynch, 'Gambling by Another Name; The Challenge of Purely Speculative Derivatives', 17 *Stanford Law, Business, and Finance* 67 (2012)

[41] Along the same lines, see, John A. Kay, 'Should we have narrow banking?' (*The Future of Finance: The LSE Reports.* London: School of Economics and Political Science, 2010); John A. Kay, 'Narrow Banking and all that' (Hume Occasional Paper no 84, David Hume Institute, 2010); John A. Kay, 'Narrow Banking', (Centre for the Study of Financial Innovation, 2009); The Independent Commission on Banking, "Final Report Recommendations", Independent Commission on Banking (September 2011)

[42] According to Admati and Hellwig, 'gambling in derivatives may have more favourable odds than gambling in casinos. The principle, however, is the same: if compensation allows bankers to benefit from large gains while not suffering much from losses, taking risks may be attractive': Anat Admati and Martin Hellwig, *The Banker's New Clothes*, above n 37, 123. For a devastating critiques of the contemporary use of derivatives: see 'Interview: Joseph Stiglitz', *Frontline* <http://www.pbs.org/wgbh/pages/frontline/warning/interviews/stiglitz.html>.;

[43] Basel Committee on Banking Supervision, *Global systemically important banks: assessment methodology and the additional loss absorbency requirement* (November 2011) <http://www.bis.org/publ/bcbs207.htm>, 1.

[44] Ibid.; See also Andrew G Haldane, 'On Being the Right Size' (speech delivered at the Institute of Economic Affairs' 22nd Annual Series, 25 October 2012), http://www.bankofengland.co.uk/publications/Documents/speeches/2012/speech615.pdf

2. Purposes of Banking

So why do banks exist, and prosper?

Banks can fulfill at least four key functions. First, banks can enable people to save money safely. Secondly, banks can intermediate capital, i.e. supply it to those who can productively use it.[45] This matters just as much as other utilities, such as water and electricity.[46] Thirdly, banks can allocate risk in the economy to those who are willing to bear it.[47] Fourthly, banks can serve as a source of objective financial advice that benefits their customers and allows the better ordering of their affairs. Indeed, banking is arguably almost as important to society as the legal or health care systems.[48]

However, given the changes of the past 40 years, many of these purposes are no longer being well met. Much modern trading has nothing to do with allocating capital to the most productive areas of the economy.[49] Most traders care little for the underlying value of an asset and are primarily only concerned with its price in the next second, minute or hour (i.e. whether a quick profit can be made).[50] Secondly, the remuneration on offer, and scale of modern banking, represents a misallocation of our most valuable form of capital: human capital. Drawing talent away from productive areas of the economy to construct increasingly complex financial products, which do not assist in facilitating saving or allocating capital can, as recent research has shown, serve as a drag on economic growth.[51]

Banks, and trading, can provide a valuable service in allocating risk, but increasingly of late the net effect of the means of doing so is higher total levels of risk in the financial system.

Further, the provision of objective financial advice is no longer a priority for many banks, especially the larger ones more removed from their communities. The attitude and incentives of a large modern bank are aligned with the profitability of the bank and away from the diligent provision of objective advice in the best interests of the client. Indeed, in the system I know the best – the Australian system – banks tend to recommend clients obtain financial advice (for a substantial fee) from 'independent' financial planners before choosing between the financial products on offer by the bank.

---

[45] Shelagh Heffernan, *Modern Banking in Theory and Practice* (Wiley, 1996).

[46] Charles A.E. Goodhart, 'If Banks should act as utilities, why not treat them as such?', *Vox*, 30 August 2011 <http://www.voxeu.org/article/if-banks-should-act-utilities-why-not-treat-them-such>.

[47] Paul Beaudry and Amartya Lahiri, 'Risk allocation, debt fueled expansion and financial crisis' (Working paper no. 15110, National Bureau of Economic Research, 2009), 2.

[48] Sanderson Abel, 'Role of banks in the economy', *The Herald* (online), 10 October 2013 <http://www.herald.co.zw/role-of-banks-in-the-economy/>.

[49] Paul Krugman, 'Three Expensive Milliseconds', *The New York Times* (online), 13 April 2014 <http://www.nytimes.com/2014/04/14/opinion/krugman-three-expensive-milliseconds.html?_r=0>.

[50] Harman Gill, 'Have Financial Markets just become elaborate Casinos?', *Nottingham Economic Review* (online), 19 June 2012 <http://neronline.co.uk/2012/06/19/have-financial-markets-just-become-elaborate-casinos/>; Australian Risk Policy Institute (ARPI), 'High Frequency Trading: More that two rights make a wrong' (White paper, ARPI, 2 March 2014), 4.

[51] Stephen G Cecchetti and Enisse Kharroubi, 'Reassessing the Impact of Finance on Growth' (Working Paper No 381, Bank for International Settlement, July 2012).

So if many banks now serve very different purposes to those which they historically served, should we be thinking differently about these institutions?

3. Implications of the Fundamental Changes in Banking

Misaligned Interests

Banks and bankers seem to no longer be sufficiently incentivised to provide their best professional advice to clients. Instead banks and their employees pursue profit above all else. This is particularly seen in products with 'fat tail risks'.

Fat tail risks are risks that are potentially large (hence fat) and are perceived as being highly unlikely to eventuate (hence tail risks).

New financial products with embedded fat tail risks make it beguilingly attractive for bankers to enhance their performance by buying such products.[52] The derivative built into these products pays a regular fee in exchange for insurance of an unlikely but very large risk. So these products out-perform others in good times but may decline precipitately in value in bad times. This is not such a problem for the banker as the only skin they have in the game in the bad times is their annual bonus, and they will have collected and banked higher bonuses in all the preceding good years. It is much more of a problem for the bank itself or for the customer whose funds the banker is investing, as in the bad times the fat tail risk may well wipe out much or all of the investment's value. In the words of Noe and Young,

> "The key problem that compensation contracts in the financial industry must tackle is tail risk. This term refers to small probability events that have large adverse consequences. Such events are popularly known as 'black swans' … The term suggests that such events occur naturally and they are extremely unlikely. We claim, however, that standard compensation contracts in the financial sector often encourage people to *engineer* the swans; that is, they undertake investment strategies that have a certain probability of blowing up. Furthermore the probability of a blow-up can be quite sizable and still be rational from the standpoint of the agent (though not from the standpoint of the shareholders).[53]

For most bankers these choices are probably not made cynically. Human nature being what it is, the typical banker is not going to be clear-eyed about the size of the tail risks. They are far more likely to convince themselves that the tail risks, if they even fully understand them, are small and represent an entirely acceptable trade-off for the higher current returns on offer.

Nonetheless, the advent of complex, relatively opaque products with tail risks has resulted in a profound misalignment of the motivations and interests of banker and customer, and of employee and employer. Indeed, viewed in this light, the popularity of CDOs and other products with large tail risks in the lead up to the GFC were about more than the ever

---

[52] Sue Jaffer, Nicholas Morris, Edward Sawbridge and David Vines, 'How Changes to the Financial Services Industry Eroded Trust', above n 7, 21.

[53] Thomas Noe and H. Peyton Young, 'The Limits to Compensation in the Financial Sector' in Nicholas Morris and David Vines (eds), *Capital Failure* (Oxford University Press, 2014), 2.

present search for yield;[54] they were popular because their opacity allowed sellers and buyers alike to believe what they wanted to believe, which was that one really could earn higher returns without taking on higher risks.[55]

Prior to the GFC, many CDOs were a CDS attached to a securitisation structure and the CDS provided an extra income stream in addition to that from the asset securitisation. But too often the essential risk underpinning the securitisation and the CDS was the same – the US residential property market. So the purchaser of a CDO saw a financial product offering higher returns than a regular securitised portfolio of mortgages, and what could not be seen without many hours of careful analysis, was one big fat tail risk.

Human Capital

Our modern world is characterised by ever-increasing complexity.[56] Intelligence is the ability to deal with complexity.[57] Intelligence is a highly controversial topic and beyond the purview of this paper. What should not be controversial however, is that however one measures intelligence, and whatever one believes about the ability of education and training to enhance the productivity or capacities of the individual, we live in a world of increasing complexity in which highly capable people are therefore in increasingly short supply. Indeed, in the modern world, intelligence may be the most precious commodity there is and there is not a lot of it. Only 5% of a population has an IQ over 125.[58]

In the old days banking as an industry did not absorb a high number of highly intelligent people. It was dull, risk-averse, prudent and not particularly well remunerated by professional standards.[59] In Paul Krugman's words, 'only the least ambitious of my classmates sought careers in the financial world. Even then, investment banks paid more than teaching or public service — but not that much more, and anyway, everyone knew that banking was, well, boring.'[60]

Contrast this to a former student of mine, who was studying pre-med at Duke in the late 1990s when Goldman Sachs made a presentation on campus contrasting the earnings of New York's leading surgeons with New York's leading financial traders. Until that day my student had always assumed he'd be a surgeon like his father. After that day, he was headed to Goldman Sachs. Eventually his enthusiasm foundered on his inability to find meaning in

---

[54] Mark Zandi, *Financial Shock* (FT Press, 2008), 118; Anna Katherine Barnett-Hart, 'The Story of the CDO Market Meltdown: An Empirical Analysis' (Honours thesis, Department of Economics, Harvard College, 19 March 2009), 94.

[55] Rodrigo Catril, 'The trouble with CDOs', *NAB Insights*, 20 August 2010 <http://privatewealth.nab.com.au/nabprivate/insights/people/rodrigo_catril/the_trouble_with_cdos.html>.

[56] My gas hot water system stopped working recently. The repairman brought a computer, plugged it in, and the hot water system told his computer the causes of its recent failures. This small gas hot water system has in it a computer chip that stores details of its faults.

[57] Linda S. Gottfredson, 'Why g Matters: The Complexity of Everyday Life' (1997) 24(1) *Intelligence* 79, 93.

[58] Ibid, 120; Earl Hunt, *Human Intelligence* (Cambridge University Press, 2010), 5.

[59] Sue Jaffer, Nicholas Morris, Edward Sawbridge and David Vines, 'How Changes to the Financial Services Industry Eroded Trust', above n 7, 35.

[60] Paul Krugman, 'Making Banking Boring', *The New York Times* (online), 9 April 2009 <http://www.nytimes.com/2009/04/10/opinion/10krugman.html>.

finance, and he was a student of mine in law, before eventually leading a company providing specialist products to the mining industry in Australia. His story is not atypical. Joseph Stiglitz has argued that this amounts to a misallocation of a scarce human capital:

> 'as some of America's most talented young succumbed to the allure of easy money – brilliant minds that, in another era might have made real discoveries that enhanced our knowledge or real innovations that would have enhanced societal wellbeing. In earlier decades, our best students went into a variety of areas – some into medicine, many into research, still others into public service and some into business. Each found fulfillment of their potential at the same time they served their communities in one way or another. … In this modern era of a finance-dominated economy, unfortunately, a disproportionate share of our most talented youth went into finance, lured by the outsized compensation. The costs to our society of this misallocation are incalculable.'[61]

No one would want to live in a society that legislated against bright people working for banks. That would be a nonsense. But if a sector is drawing in too many scarce resources because it offers disproportional returns there may be a case for making that sector less profitable and less attractive as an employment destination. In an important recent study, Cecchetti and Kharroubi examined the impact of finance on growth and development at the aggregate level and found that mature sophisticated economies get to a point where greater size and sophistication in banking and financial markets become associated with lower economic growth. They found that because the finance sector competes with other sectors for scarce resources, in contrast to the common misconception, rapid growth of finance can have an adverse impact on aggregate real growth. In essence, rapid growth of a financial sector can serve as a drag on an economy and shift resource allocation and distribution in sub-optimal ways.[62]

Former Chairman of the UK's Finance Services Authority, Adair Turner, regards this as a 'key insight'. He argues that '[t]here clearly are bits of the financial system, and particularly the bits that relate to fixed income securities, trading, derivatives, hedging, but possibly also aspects of the asset management industry and equity trading, which have grown beyond a socially reasonable size.'[63] Recent research by Christiane Kneer confirms this hypothesis that the absorption of talent into the banking sector hurts the real sectors of the economy and may be a factor behind the marginal cost to economic growth in expanding financial services.[64]

This reveals a key problem caused by the changes in banking over the past 40 years: the growth in our financial system comes at a cost to other areas of society and the economy.

---

[61] Joseph E. Stiglitz, 'Incentives and the Performance of America's Financial Sector' (Testimony at the Hearing on Compensation in the Financial Industry, House Committee on Financial Services, 22 January 2010), 8 <http://www.astrid-online.it/rassegna/Rassegna-I/26-01-2010/stiglitz_22_01_10.pdf>.

[62] Stephen G Cecchetti and Enisse Kharroubi, above n 51.

[63] Adair Turner, 'How to tame global finance', *Prospect* (online), 27 August 2009 <http://www.prospectmagazine.co.uk/magazine/how-to-tame-global-finance/#.UqBaP5RrYVk>.

[64] Christine Kneer, 'The Absorption of Talent into Finance: Evidence from U.S. Banking Deregulation' (Working Paper No 391, De Nederlandsche Bank, September 2013), 21

<http://www.dnb.nl/en/binaries/Working%20Paper%20391_tcm47-296165.pdf>.

Regulatory Implications

We think in words; so the words we use have tremendous implications. At present we use the word 'bank' to describe globally systemic international financial institutions, the so-called G-SIFIs, and local community banks that do little more than accept savings and make loans.

Much of the regulation flowing from the Bank of International Settlements (BIS), FSB, the Financial Action Task Force (FATF) and other soft law, standard setting, regulatory bodies is designed primarily to address the problems of G-SIFIs in the European Union and US. The desirability of some of these new regulatory initiatives for most banks in East Asia or Australia – or small Midwestern banks in the US for that matter – is highly questionable.[65]

Certainly many people in Australia, and not only those working for banks, view some of the new regulations emerging from the BIS and FSB as quite unsuited to Australian conditions. The process has been described to me as a 'new colonialism'. If this is the case for Australia, how much more must it be the case for many developing countries? One area in which I have some expertise is mobile financial services in developing countries and it is a good example of the problem. The pressing need in so many countries is to promote financial inclusion. Well over a billion adults have a mobile phone and no bank account in poorer nations. The FATF promoted strict know-your-customer rules to guard against money laundering and the financing of terrorism – which are primarily problems for rich nations. The FATF rules required identification standards beyond the reach of most poor people in poor nations and so served as a roadblock to achieving the priority for most poorer nations – the provision of financial services to their poor. This impacted the ability of people in poor nations to safely save money, remit it back to their villages, and receive government payments safely without large losses due to corruption. In July 2013 FATF revised its standards and promoted a more risk-based application of them to address this unintended consequence. Nevertheless, the entire episode serves as a potent example of how rules promulgated in Washington, Brussels and Basel, may not suit much of the rest of the world.[66]

The G-SIFI distinction was made, of course, so as to target certain regulation at only these institutions, but it nonetheless seems that when international regulators say 'bank' for non-G-SIFI regulations, their conception of a bank remains primarily that of a high-risk-taking financial speculator, just as when most Australians say 'bank' their conception is of something that is home grown and relatively basic. The language of the elite and the language of the layperson do not mesh. Technical language that stretches the meaning of words beyond their ordinary meaning is common in any profession (with medicine and law to the fore) but we need to be clear as to what we are thinking about when we use the word 'bank'.

By making a much clearer and stronger distinction between old style banks and the new super-banks, we would be better able to target regulation that could allow for both institutions to achieve their legitimate purposes while mitigating the excesses that currently

---

[65] Indeed, some authors argue that administrative regulation does not work for G-SIFIs. See, Noel Whiteside, 'Creating Public Value: The Theory of the Convention', in John Benington and Mark H. Moore, *Creating Public Value: Theory and Practice* (London: Palgrave Macmillan 2011)

[66] Louise Malady, Ross P. Buckley and Douglas W. Arner, 'Developing and Implementing AML/CFT Measures using a Risk-Based Approach for New Payments Products and Services' (Paper No. 28, Centre for International Finance and Regulation, June 2014).

pervade the system. Perhaps as importantly, a clearer intellectual distinction between traditional style banks and the new super-banks would promote clearer thinking through the issues by all involved in finance.

Societal Consent

Another issue to consider in relation to the growth of the new super-banks is whether we, as citizens, ever agreed to this type of financial architecture?[67]

The changes that facilitated much of the growth were seemingly minor when made: small provisions that exempted financial derivatives from the application of the gaming laws. It is highly unlikely when legislatures voted on these changes that anyone could have foreseen the longer-term consequences.

Moreover, most of the changes that have occurred – the attitudes of bankers, from where they are recruited, and how they are remunerated – have never been an issue for legislatures; and the complexity and the opacity of what banks actually do today is beyond the understanding of most intelligent laypeople. Frankly, much of what a super-bank does today is beyond the understanding of most of its employees. It is apparent from multiple discussions with bankers that while each may well understand their own role well, very few bankers, and only those at the very highest levels of the bank, actually understand the bank's entire business.

The analysis of the changes in banking shows that the current architecture of international finance was never planned nor foreseen. The consequence of a series of seemingly innocuous changes has been the creation of vast, complex financial speculators at the very core of the international economy.

Something as fundamental as the way in which money is intermediated and for what purposes is rightly of concern to any democratic society. It has a profound effect on the lives of every citizen – yet we live in a system to which virtually no-one assented. If we take democratic ideals seriously, this should be a point of serious concern.

It is important that the public understand the changes that have taken place. Those of us who analyse the regulation of the global financial system have a responsibility to communicate these changes broadly and clearly.[68] Otherwise we risk thwarting the efforts of educated citizens to understand, and possibly insist upon the reform of, the system upon which we all, directly and indirectly, rely.

6. Conclusion

Banking was once a highly prudent, relatively boring industry that operated to serve its clients' interests. Today, much of the behaviour in the financial industry would frighten bankers of the past. Banks have become large, complex organisations intent on maximizing profits. The dramatic changes that have occurred in the banking industry since the 1970's

---

[67] For further discussion of this issue see Sylvia Walby, 'Finance versus Democracy? Theorizing finance in society' (2013) 27(3) *Work Employment and Society* 489.

[68] A good example of a book which does just this very well is Anat Admati and Martin Hellwig, *The Banker's New Clothes*, above n 37.

have revolutionized the concept of a 'bank' – and it was largely the characteristics of this modern style 'bank' that triggered the global financial crisis (GFC).

The GFC was caused by a range of factors: (i) a belief in efficient capital markets that are welfare enhancing with very little regulation, (ii) a raft of consequential deregulating initiatives, (iii) the attempt to align employee and bank interests through most remuneration being by way of bonuses, (iv) the incentive for employees to seek out (or create) products with fat tail risks that offer higher short term returns and thus higher bonuses, and (v) the incentive for banks to merge and grow larger and thereby secure more of the benefits of lower wholesale funding costs that accrue from the implicit government guarantee of solvency for 'too-big-to-fail' banks.[69]

The final three factors that contributed to the GFC remain largely in place today. It is clear, from a regulatory standpoint, that there is a great deal of work to do in order to create a financial system that fulfills its essential role in the economy, without subjecting the rest of society to an unacceptable risk of wholesale economic collapse and accompanying mass human misery.

The aim of this chapter has been to illuminate the extraordinary changes that have occurred in the banking industry over the past 40 years. In this relatively short period of time we have seen an enormous shift in the type of people working in the industry, the attitudes of banks, the remuneration of their workers, the complexity of the products and services they offer and the legalization of gambling. While identifying a series of problems arising from these changes, it is beyond the scope of this chapter to prescribe solutions to many of the problems raised – that is the role of many of the chapters that follow.

Nevertheless, the starting point for any discussion of banking reform must be to understand accurately the current landscape. The banks of old continue to exist, but a new type of institution has emerged over the past 40 years to become the central piece of the architecture of the new globalised economic system: the G-SIFI. This chapter has argued that these institutions are characterised by: substantial asset holdings in 'speculative derivatives' or, as many regard it, gambling; a tendency to offer such high rewards as to attract a disproportionate amount of human capital; a perspective on their institutional purpose that is utterly at odds with historical conceptions of banking; and systemic importance to the extent that their failure cannot be countenanced.

Banks, as traditionally understood, are institutions with social utility: they mediate capital, allocate risk, provide liquidity to the economy and sound financial advice to their customers. Indeed, it is difficult to imagine a functional economy without them. The new breed of super-bank is a different question. The social utility of the G-SIFI must be considered in the context of the Damoclean sword they have created to hang above us all. Some may still regard this as a bank, but it is not the type of bank that has ever been known to the world before – history has shown that we can survive without them; only time will tell if we can survive with them.

[69] Jeffrey M. Lacker, 'Testimony on Bankruptcy and Financial Institution Insolvency' (Statement to Subcommittee on Regulatory Reform, Commercial and Antitrust Law of the Committee on the Judiciary, Washington, December 2013), 1.