"If competition has any virtue, we ought not to have a system that stifles it": competition in London clearing banking, 1946-1971

Article

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“If competition has any virtue, we ought not to have a system that stifles it”:

Competition in London Clearing Banking, 1946-1971[1]

1. Introduction

This article explores the degree of competition in clearing banking in the UK from 1946 until 1971, a period in which there was a cartel in the industry and the Committee of London Clearing Bankers set certain prices collectively.[2] The prevailing interpretation in the literature holds that although the structure of the industry and the nature of the regulatory framework resulted in an unusually stable banking sector, it also led to one in which competition was weak. Weak competition in turn impeded innovation. This interpretation is summarised succinctly by Capie and Billings thus, although it should be noted that they do not wholly concur with it themselves:

> It has long been contended that British commercial banking, for most of the twentieth century, was not competitive; it has sometimes been described as a 'complex' or 'collusive' oligopoly. This is said to account for the banks' allegedly sluggish, conservative and inefficient behaviour - part of the capital market failure that was said to contribute to Britain's relative economic decline."[3]

Moreover:

> It is generally believed that English banks failed to finance industry in as supportive a way as their European contemporaries, discriminated against small firms […] and suffered from many other defects.[4]

This interpretation – with its implicit acceptance of the competition-fragility hypothesis – has long prevailed.[5] In the late 1980s, Ross asserted that "the cocoon in which the government wrapped the British banking structure not only stifled innovation and development of new services and products, but left it completely unable to respond to the competitive pressures of the following decade."[6] Moreover, it has not altered substantially in the wake of the global financial crisis. Shortly after the crisis in 2010 Baker and Collins argued that banking suffered from an "industry-wide cognitive inertia" as a result of which there was "a failure to recognize competitive threats and opportunities."[7] In 2016, Michie characterised that the banking industry between 1945 and 1970 as marked by a "high degree of inertia and conservatism," and observed that "it was as if the British banking system had been 'frozen in time' and that time was 1922."[8] Scott and Newton argued in relation to the 1930s that the clearing banks used their market power to undermine competition. Specifically, they thwarted the development of "specialist medium-long-term industrial lending institutions."[9] Although dominant, this interpretation is not completely uncontested. Bátiz-Lazo and Wardley, for example, rejected the idea that "the major British clearing banks were managed ineffectively by conservative and technically naïve executive officers."[10]

This study takes as its unit of analysis the London clearing banks. The London clearing banks, of whom there were eleven in 1946, were designated as 'clearing banks' as members of the London Bankers' Clearing House. The clearing banks' cheques and other payment instructions were exchanged each day at the clearing house, which greatly simplified the settlement of balances between the eleven banks. They were 'London' clearing banks because one requirement of a 'London' clearing bank was to have a principal office in London. The London designation did not mean that they operated in London only. When the District Bank joined the Clearing House on 1 January 1936, the conditions for membership (and for being considered a London Clearing bank) were:

"(i) […] the District Bank Limited shall have a principal office in London and shall have a Director resident in London who can attend meetings of the Committee at short notice, e.g. meetings called by telephone message, and who has authority to commit his bank in cases of emergency.

(ii) [that] the District Bank Limited shall agree to publish a Monthly Statement of Average Weekly Balances, in accordance with the practice of the present Clearing Banks.

(iii) […] the District Bank shall pay the Bankers' Clearing House Limited an entrance fee of One thousand guineas and take up £4,500 of the Stock of the Company."[11]

The central claim of this article is that the evidence as to the degree of competition in clearing banking, and the propensity of the clearing banks to innovate, is more equivocal than the literature would suggest. This assertion needs to be understood in the context that the degree to which unfettered competition in banking *should* prevail was contested. On the one hand the authorities feared the absence of competition and the prospect of a monopoly or duopoly developing in banking. On the other, the authorities greatly benefited from the policy of financial repression and the moderated competition which flowed from it. British banking during this period is an illustration of a more general problem – how to measure over the long term the extent of competition in, or the contestability of, a market in which there are relatively few competing firms. This issue has been thrown into sharp relief in recent years as a result of less competition (and increased concentration) in many industries in the US since the late 1990s and early 2000s.[12]

This article evaluates competition in clearing banking from four perspectives. First, the article measures competition quantitatively – the conventional approach – using the Herfindahl-Hirschman Index (HHI) and concentration ratios. It then evaluates an aspect of the contestability of the market, by evaluating banking from the perspective of competition policy and law (the presence or otherwise of monopoly, mergers and restrictive trade practices). Next, it explores the findings of the report on *Bank Charges* by the National Board for Prices and Incomes (NBPI) in May 1967. Finally, it assesses the clearing banks' openness to change and their propensity to innovate. Taken together, these perspectives paint a more ambiguous picture of competition in banking than is portrayed in the existing literature. The article concludes by considering the wider implications of this conclusion.

The end point of this study – 1971 – is significant. In September 1971, the Bank of England implemented its radical new approach to competition in banking and to the control of credit – Competition and Credit Control. This liberalisation of clearing banking occurred in the same year as the closing of the US Federal Reserve 'gold window', marking the beginning of the end of the exchange rate system established under the Articles of Agreement of the IMF whereby exchange were fixed-but-adjustable in relation to the US dollar. Offer sees this a seminal moment, ushering in the "market turn" and with it the "transition away from social democracy."[13]

2. Evaluating Clearing Banking Competitiveness

2.1 Introduction

Competition in clearing banking in the quarter of a century or so after the Second World War needs to be considered in the context of the changing structure of banking and financial services. Watson has analysed the assets of types of UK financial institution over the period from 1955 until 2000. A modified and expanded version of her data is set out in Table 1.[14] While there was growth in banking and financial services measured by assets between 1955 and 1970, the rate of growth accelerated for most types of financial institutions from the 1970s and was exceptionally strong during that decade. Between 1955 and 1980 bank assets grew by a factor of 30, insurance by a factor of 32, and pension funds by a factor of 28. Although by 1980 banking remained the dominant industry within the sector, the assets of the London clearing banks were much less significant than in 1955. Over the period from 1955 until 1980, London clearing bank assets fell as a ratio of UK GDP from 0.35 to 0.24. What makes this particularly noteworthy is that this reduction was during a period when the assets of banking and financial institutions as a whole were growing strongly in relation to GDP. Banking sector assets increased from a ratio of 0.41 of GDP in 1955 to 0.90 in 1980 while the ratio of assets of all UK financial institutions to GDP increased from 0.73 in 1955 to 1.61 in 1980.

Table 2 illustrates the changing structure of a specific market, the market for savings products, by type of financial institution. During the period 1950 to 1971 savings held with the clearing banks grew less strongly than those held with building societies, pension funds and life assurance companies. Amounts deposited with the London clearing banks accounted for a diminishing proportion of all UK bank deposits but not until the mid-1970s, as shown in Table 3.

Table 1: Assets of UK Financial Institutions, 1955–2000 (£ million current prices)

Year	Banking sector	of which: London clearing banks	Building societies	Insurance (long-term and general)	Pension funds	Invest-ment trusts	Unit trusts	Total Assets	Banking sector assets as percent-age of total assets	London clearing banks as a percent-age of total assets	Gross Domestic Product at market prices, seasonally adjusted	Ratio of banking sector assets to GDP	Ratio of London clearing bank assets to GDP	Ratio of total assets to GDP
1955	7,905	6,792	2,075	1,750	1,870	620		14,220	55.6	47.8	19,416	0.41:1	0.35:1	0.73:1
1958	10,370	7,300	2,620	5,990	2,500	710	90	22,280	46.5	32.8	23,500	0.44:1	0.31:1	0.95:1
1960		8,110	3,183	4,820		1,989	191	-	-	-	26,476		0.31:1	
1965	15,808	10,390	5,577	9,867	5,380	3,119	500	40,251	39.3	25.8	37,036	0.43:1	0.28:1	1.09:1
1970	33,727	11,410	10,940	15,452	7,644	4,469	1,316	73,548	45.9	15.5	56,177	0.60:1	0.20:1	1.31:1
1975	107,682	31,501	24,364	27,890	13,589	5,651	2,537	181,713	59.3	17.3	115,176	0.93:1	0.27:1	1.58:1
1980	233,392	63,452	54,317	65,262	51,555	8,352	4,629	417,507	55.9	15.2	259,962	0.90:1	0.24:1	1.61:1
1985	589,880		121,239	157,239	156,395	18,085	18,433	1,061,271	55.6		414,329	1.42:1		2.56:1
1990	1,031,245		221,974	276,530	302,670	19,108	41,617	1,893,144	54.5		667,435	1.55:1		2.84:1
1995	1,476,769		297,294	553,020	519,270	43,062	104,069	2,993,484	49.3		846,536	1.74:1		3.54:1
2000	1,467,943		158,703	1,021,711	765,199	60,499	222,824	3,696,879	39.7		1,089,341	1.35:1		3.39:1

Sources: For all years except 1958: Katherine Watson, "The Financial Services Sector since 1945," in *The Cambridge Economic History of Modern Britain Volume 3: Structural Change and Growth, 1939–2000* eds. Roderick Floud and Paul Johnson (Cambridge: Cambridge University

Press, March 2008), accessed 19 September 2017, http://www.cambridge.org/core, Table 7.1. For 1958: Committee on the Working of the Monetary System, Report, Cmnd. 827, August 1959, to face page 360, para. 127, Table 20, column headed ‘End 1958’. The data in the London clearing banks column for 1955, 1960 and 1965 is from: David K. Sheppard, *The Growth and Role of UK Financial Institutions 1880-1962*, Methuen & Co Ltd., London, 1971, Table (A) 1.8 London Clearing Banks, End-of-Year Consolidated Balance Sheet 1919–1966 (Assets and liabilities £ millions*); Annual Abstract of Statistics No. 112* 1975, Table 390; and *Bank of England Quarterly Bulletins* Quarter 4 1976 and Quarter 4 1981. By 1985, the Bank of England Quarterly Bulletins did not show the assets of the London clearing banks separately. GDP figures are taken from *Gross Domestic Product at market prices: Current price: Seasonally adjusted £m*, accessed 29 May 2019, https://www.ons.gov.uk/economy/grossdomesticproductgdp/timeseries/ybha/pn2?referrer=search&searchTerm=ybha. An earlier version of this table appears in Arch, *The Regulation of the London Clearing Banks, 1946–1971: Stability and Compliance*, Table 3.1.

Table 2: National Savings and Other Financial Institutions: Savings Balances

Totals invested at the end of the calendar year £ million	1950	1960	1971
National Savings	6,989	7,185	9,256
Life Assurance (Total Funds at book value)	2,500	5,428	15,094
Self-administered Pension Funds	n. a	3,172	9,960
Friendly Societies	n. a	251	328
Retail Co-operative Societies	302	302	170
London Clearing Banks (Current and Deposit Accounts)	6,060	6,884	12,201
Unit Trusts (Market Values)	n. a	201	1,991
Building Societies (Total Assets)	1,256	3,166	12,919

Source: Adapted from the report of the Committee to Review National Savings, Cmnd. 5273, April 1973, para. 17, Table 6.

Table 3: UK Bank Total Deposits and London Clearing Banks Deposit and Other Accounts, 1946-79

	Total Bank Deposits: United Kingdom (£ million)	London Clearing Banks: Total Deposit and Other Accounts (£ million)	London Clearing Banks: Total Deposit and Other Accounts as a Percentage of Total Bank Deposits
1946	6,808	5,680	83.43
1947	7,120	5,928	83.26
1948	7,408	6,141	82.90
1949	7,399	6,145	83.05
1950	7,572	6,310	83.33
1951	7,505	6,333	84.38
1952	7,636	6,460	84.60
1953	7,901	6,694	84.72
1954	8,228	6,941	84.36
1955	7,833	6,612	84.41
1956	7,861	6,656	84.67
1957	8,152	6,929	85.00
1958	8,419	7,199	85.51
1959	8,709	7,767	89.18
1960	8,806	7,831	88.93
1961	8,840	7,928	89.68
1962	9,219	8,231	89.28
1963	9,706	8,851	91.19

1964	10,414	9,222	88.55
1965	10,943	9,882	90.30
1966	11,033	9,920	89.91
1967	11,941	10,262	85.94
1968	12,457	10,736	86.18
1969	12,436	10,724	86.23
1970	12,374	10,606	85.71
1971	14,510	12,557	86.54
1972	19,363	16,187	83.60
1973	26,098	21,632	82.89
1974	30,456	25,511	83.76
1975	48,143	26,271	54.57
1976	54,380	29,486	54.22
1977	61,092	32,694	53.52
1978	70,274	37,104	52.80
1979	87,169	45,789	52.53

Sources: (i) B. R. Mitchell, *British Historical Statistics*, Cambridge, Cambridge University Press, 1988, Financial Institutions 4. Bank Deposits – United Kingdom, 1870-1982, p. 663; (ii) *Bank of England Statistical Abstract Number 1*, *1970, Table 9(1)* accessed 10 October 2018, https://www.bankofengland.co.uk/-/media/boe/files/archive/statistical-abstract/number-1-1970.pdf; (iii) *Bank of England Statistical Abstract Number 2*, *1975, Table 8/2*, accessed 10 October 2018, https://www.bankofengland.co.uk/-/media/boe/files/archive/statistical-abstract/number-2-1975.pdf; (iv) *Bank of England Statistical Abstract 1992, Part 1*, "Banking, capital markets, government debt and related statistics; Interest and exchange rates," Table 2.4: London clearing banks: balance sheet. The discontinuity in the column 'Total Bank Deposits: United Kingdom (£ million)' from 1975 was as result of changes introduced in that year in the statistical information collected from banks and discount houses with a larger number of institutions being included in the statistics.[15]

2.2 Measuring Competition Quantitatively

How does the market structure of a banking system (such as the number of banks in the market, their size, and the degree of concentration within it) affect its competitiveness? A high degree of concentration in an industry might suggest that there are high barriers to entry which in turn thwarts competition.[16] On the other hand, if there is relatively easy entrance to and exit from it, incumbent firms are subject to the *threat* of new entrants. They will act as if those potential entrants had already entered the market. How concentrated was clearing banking? The empirical research uses several methods to measure concentration and competition.[17] Measures of competition (or concentration) tend to fall into one of two categories. First, there are "structural" measures such as the n-firm concentration ratio and the HHI. These measures tend to assume that concentration is an indicator of the absence of competition. There are also "non-structural" measures which are concerned not only with the current set of participants in the market, but also with *potential* participants. These focus on the contestability of the market rather than its structure. Empirical research relies increasingly on non-structural competition measures. Given that there is no single, universally-accepted quantitative measure of competition, a limitation of measuring competition quantitatively is that different measures may result in different outcomes and for this reason, Liu, Molyneux and Wilson suggest that the research should consider using multiple measures.[18] de-Ramon and Straughan, for example, adopt this approach in their study of competition in the deposit-taking sector in the UK from 1989 to 2013 where they deploy the HHI (a structural measure), and three non-structural measures: the Panzar-Rosse H-statistic, the Boone indicator and the Lerner Index.[19] In this case, all four measures yielded consistent results.

Table 4 below give an indication of the degree of concentration in London clearing banking, which have been measured using concentration ratios (three-firm and then five-firm) and the HHI.[20] The results below for the period 1946–66 show that measured by the HHI, clearing banking was moderately concentrated.

Table 4: London Clearing Banking: Concentration Ratios and the HHI with respect to (i) Advances and (ii) Deposits, 1946–66

	Advances			**Current, Deposit and Other Accounts**		
	Three Firm Concentration Ratio with respect to Advances	**Five Firm Concentration Ratio with respect to Advances**	**HHI with respect to Advances**	**Three Firm Concentration Ratio with respect to Current, Deposit and Other Accounts**	**Five Firm Concentration Ratio with respect to Current, Deposit and Other Accounts**	**HHI with respect to Current, Deposit and Other Accounts**
Jan-46	0.58	0.87	1608	0.60	0.87	1613
Jan-47	0.58	0.87	1616	0.60	0.87	1611
Jan-48	0.59	0.87	1615	0.61	0.87	1620
Jan-49	0.60	0.87	1621	0.60	0.87	1613
Jan-50	0.60	0.87	1614	0.60	0.86	1602
Jan-51	0.59	0.86	1573	0.60	0.86	1597
Jan-52	0.58	0.87	1581	0.60	0.86	1579
Jan-53	0.59	0.87	1589	0.60	0.86	1584

Jan-54	0.58	0.86	1572	0.60	0.86	1598
Jan-55	0.58	0.85	1551	0.60	0.87	1605
Jan-56	0.58	0.85	1549	0.61	0.87	1622
Jan-57	0.60	0.86	1576	0.61	0.86	1624
Jan-58	0.60	0.86	1574	0.62	0.87	1632
Jan-59	0.60	0.86	1578	0.62	0.87	1639
Jan-60	0.61	0.86	1621	0.62	0.87	1639
Jan-61	0.62	0.87	1642	0.62	0.87	1640
Jan-62	0.62	0.87	1655	0.62	0.87	1652
Jan-63	0.62	0.87	1743	0.62	0.87	1729
Jan-64	0.63	0.87	1767	0.62	0.87	1746
Jan-65	0.63	0.87	1744	0.62	0.87	1735
Jan-66	0.62	0.87	1747	0.62	0.87	1739

Source: “Monthly Statement of Balances of London Clearing Banks,” LMA CLC/B/029/MS32193/004–7 and author’s calculations.

Table 5: Five-firm Bank Concentration Ratios, 1930–80

	Canada	France	Germany	Japan	UK	US	Spain	Portugal
1930	84	41	44	22	70	9		
1935	85	44	51	27	65	11		
1950	80	66	-	31	84	13	68	76
1955	80	70	27	29	84	14	65	70
1960	83	65	24	26	83	15	64	65
1965	86	66	25	23	81	14	58	68
1970	85	57	24	21	85	16	57	68
1975	81	60	24	20	70	18	60	67
1976	83	65	25	20	67	18		
1977	82	66	25	20	66	18		
1978	80	67	25	20	66	18		
1979	79	76	26	20	68	19		
1980	80	81	24	22	68	18		

Source: (i) Canada, France, Germany, Japan, UK and US: Herbert Baer and Larry R. Mote, "The Effects of Nationwide Banking on Concentration: Evidence from Abroad." *Economic Perspectives*, Federal Reserve Bank of Chicago, January/February 1985: 3-17. Baer and Mote cite as their source Herbert Baer and Elizabeth Pongracic, "The Development of Banking Structure Histories in Five Countries," unpublished paper, Federal Reserve Bank of Chicago, 1984; (ii) Spain and Portugal: Luciano Amaral, "Measuring Competition in Portuguese

Commercial Banking During the Golden Age (1960–1973)." *Business History* 57, no. 8 (2015): 1192-1218.

Table 4 indicates high but stable levels of concentration in UK banking between 1946 and1970. Following the merger of Westminster and National Provincial in 1968, concentration in clearing banking increased.[21] From 1970, concentration declined steeply. We can thus associate the earlier stable period with moderate to high concentration and associate the less stable period from the early 1970s with lower concentration. This would support the proposition that concentration in banking is associated with stability.

Table 5 enables concentration in the UK banking system to be considered in a wider context. The marginal increase in concentration in the UK in the period from 1950 until 1970 contrasts with the falls in concentration in the other European countries in the Table, and with Japan. From 1970 to 1980 there were reductions in concentration in the UK and Canada only, albeit the reductions were more marked in the UK than in Canada. In 1967, the Bank Act in Canada introduced some liberalising measures. These had some parallels with changes in British banking as a result of the new policy of Competition and Credit Control in 1971.

If clearing banking was moderately to highly concentrated up until the 1970s, what does this imply about the degree of competition in the market? The theory of contestable markets suggests that competition can prevail even in an oligopolistic market. The definition of a contestable market is that "it has no entry or exit barriers, no sunk costs, and all firms (new and incumbent) have access to the same level of technology."[22] One approach to evaluating the contestability of banking in this period would be to test whether or not these three conditions were met. We can also evaluate the contestability of the market from a competition policy perspective, by evaluating the market for the presence of monopoly, mergers, and restrictive trade practices. These phenomena potentially impede entry and exit into the market. To what extent were they present in banking?

2.3 Monopoly, Mergers and Restrictive Practices

2.3.1 Monopoly

Competition policy is concerned with curbing the anticompetitive effects of monopoly and oligopoly, and reducing the adverse impacts of mergers and restrictive trade practices on competition. In 1948 the Labour government enacted the Monopolies and Restrictive Practices (Inquiry and Control) Act 1948, and thereby established a ten-member Monopolies and Restrictive Practices Commission. This could be interpreted as the first formal implementation of competition policy in the UK.[23] Of central importance was the definition of a monopoly. Under the Act, the threshold was that at least one-third of the supply of goods in an industry was carried out by any one person or body corporate. The Commission was an administrative body whose verdicts did not carry legal weight, it being for the Board of Trade to act (or otherwise) on those verdicts. monopoly did not emerge or prevail in clearing banking in the period under review. The market structure was oligopolistic. Table 6 shows the relative size of each of the Big Five in terms of deposits, branches and numbers of shareholders in 1964. Deposits with Barclays, the largest bank in terms of deposits, amounted to 27 per cent of total deposits.

Table 6: Distribution of Deposits among the Big Five, 31 December 1964

Bank	Head Office	Deposits £ million	Branches	Shareholders
Barclays Bank Ltd	London	2,147	2,421	89,000
Midland Bank Limited	London	1,927	2,533	92,000
Lloyds Bank Limited	London	1,618	2,110	79,000

Westminster Bank Ltd	London	1,224	1,340	68,000
National Provincial Bank Limited	London	1,050	1,610	70,000
Total		**7,966**	**10,014**	**398,000**

Source: Roger Orsingher, Banks of the World (London: Macmillan, 1967), 48.

Had the proposed merger of Barclays, Lloyds and Martins in 1968 proceeded, the combined deposits of all three banks would have been well in excess of the monopoly threshold – see Table 7.

Table 7: Deposits by Group on 17 July 1968

Group		**Deposits (£ million)**	**Group Total (£ million)**	**%**
1	Barclays	2,528.3		
	Martins	509.1	3,037.4	29.0
2	Westminster	1,411.8		
	National Provincial	1,167.6		
	District	344.5		
	Coutts & Co.	71.5	2,995.4	28.5
3	Midland	2,186.3	2,186.3	20.8
4	Lloyds	1,979.6	1,979.6	18.9
5	Williams Deacon’s	172.6		
	Glyn, Mills & Co.	74.1		
	National	47.3	294.0	2.8
	Total		**10,492.7**	**100**

Source: “Committee of London Clearing Banks: Grouping of Deposits on 17th July, 1968,” BoE G1/13 Governor’s File: Various Bank Mergers and Amalgamations.

2.3.2 Mergers

Mergers and monopolies are closely related, in that a merger of entities might lead to a monopoly or at least a duopoly in a market. In 1962 the takeover of District Bank by National Provincial Bank was the first takeover of one clearing bank by another since the report of the Treasury Committee on bank amalgamations in 1918. The Committee recommended that the joint stock banks be required by statute to obtain prior approval for future amalgamations. A Bill to that effect was presented to the House of Commons in April 1919. Under threat of legislation, the Big Five undertook not to propose further amalgamations. Although the Bill was withdrawn in December 1919, in 1924 the government and the governor formalized the principle that the Big Five should not amalgamate among themselves or with another bank without approval. The “gentleman’s agreement” between the clearing banks not to amalgamate without government approval was thus established.[24] National Provincial accordingly sought and received consent from HM Treasury for the takeover of District.[25] The clearing banks thus self-regulated mergers – with their gentlemen’s agreement – as opposed to using competition policy to regulate mergers, at least until 1965.

The scope of competition policy was extended to mergers with the Monopolies and Mergers Act 1965. In that year, Jasper Hollom, then chief cashier at the Bank, expressed a distinctly tolerant attitude towards mergers in clearing banking: “I am attracted by the idea of a clearing bank coming to be the centre of a group of concerns covering the widest range of financial interests. H.S.C. objects that such a development would lead to a reduced field of choice […]. It seems to me more important, however, that it would lead to the creation of the powerful units that are increasingly necessary in international trading."[26] By the time of the publication of the NBPI's report on *Bank Charges* in 1967, the Bank's position had shifted decisively and it explicitly questioned the convention that the Big Five clearing banks should not amalgamate. This coincided with a change of governor, Leslie O'Brien having replaced the Earl of Cromer in 1966:

> Further amalgamations among the banks, carried through to the appropriate point, could permit some rationalization of existing networks. The Bank of England and the Treasury have made it plain to us that they would not obstruct some further amalgamations if the banks were willing to contemplate such a development; and we think that a further reduction in the number of independent banking units would not necessarily affect very significantly the degree of competition.[27]

On 26 January 1968 two of Big Five clearing banks – the Westminster Bank and the National Provincial Bank – announced that they were to amalgamate, reducing the Big Five to a Big Four. This merger was a "tremendous shock" according to Wilson, Chief General Manager of Lloyds.[28] Within two weeks, on 8 February, Barclays, Lloyds and Martins announced that they proposed to merge. This announcement came as "a bombshell" according to *The Economist* while nevertheless pronouncing itself in favour of the merger: "a regrouping of British banking into three giants […] would give Britain the kind of superbanks required by the growing demands of British and international business companies."[29]

On 12 February 1968, the Board of Trade referred the proposed merger to the Monopolies Commission. Ten members of the Commission carried out the investigation under its chair Sir Ashton Roskill. It reported on 15 July 1968, stating that, "By a majority of six to four, the Commission concluded that the mergers could be expected to operate against the public interest and that there were no safeguards which could be recommended as practicable and worthwhile […] The Commission accepted that there was a strong case for Martins Bank Ltd. joining with another bank."[30] The four dissenters on the Commission believed that "a three-bank system" – the merged bank, plus Midland Bank and National Westminster Bank – "would be one in which all three banks would have an incentive to compete."[31]

The principal concern of the authorities with the proposed merger was that it would lead to a duopoly. With one very large bank (the merged Barclays, Lloyds and Martins) and two other banks – National Westminster and Midland – each roughly half the size of the largest one, there was a strong possibility that in due course the National Westminster and Midland would merge. A duopoly, according to a Bank of England official, could lead to "instability, particularly if the largest bank grew faster than the others."[32] This echoed the Treasury's concern: "The Treasury representatives thought a drop in the number of banks to two would be very serious […] a two-bank system might in certain circumstances behave like a monopoly."[33]

The Monopolies Commission investigation in 1968 was one of the very few instances of competition policy having a direct impact upon the structure of clearing banking in this period. It was unusual for the Commission to reject mergers in any sector, let alone banking. Over the period from 1965 to 1979, the activity of the Commission in relation to mergers across all sectors was modest.[34] It investigated 31 proposed mergers during that period, excluding both newspaper mergers and those which were abandoned during the investigation. In 20 cases it recommended that the merger be permitted; in 11 it recommended against the merger. Merger activity intensified in the 1960s, in terms of value, peaking in 1968 and 1972, as shown in Table 8.

Table 8: Merger Activity, Industrial and Commercial Companies, 1963–77

Year	Number of Mergers	Consideration for Acquired Companies: £ million Current Prices	Consideration for Acquired Companies: Index
1963	888	352	100
1964	940	505	134
1965	1000	517	146
1966	807	500	140
1967	763	822	216
1968	946	1946	362
1969	907	935	176
1969	846	1069	201
1970	793	1122	238
1971	884	911	164
1972	1210	2532	357
1973	1205	1304	213
1974	504	508	141
1975	315	291	64
1976	353	427	79
1977	482	812	117

Source: *A Review of Monopolies and Mergers Policy: A Consultative Document*, Cmnd. 7198, May 1978, Appendix: Table 1, itself derived from Business Monitor M7. The data for 1969 is based upon company accounts prior to 1970, and on the financial press and other sources since 1968. The consideration in current prices is deflated by the FT Actuaries 500 Ordinary Share Index.

Notwithstanding the persistence of these concerns about amalgamations in banking on the part of the authorities, Garnett, Mollan and Bentley point out that the population of British banks has been in decline since 1810 and that neither "strategic action at the firm level, [n]or regulation at the state level" have altered that fundamental trend.[35] In any case, attitudes towards mergers (across industry and commerce generally) were changing by the 1960s. Greater tolerance of merger activity in the 1960s and early 1970s reflected the authorities' view that one reason why the UK economy was declining in relation to its competitors was because of the relatively small size of its operating units. Middlemas notes: "The first stage of the great wave of concentration […] was based on the premise that, as competition externally became more difficult, economies of scale and increased monopolistic power would safeguard domestic market share."[36] The Board of Trade was not hostile to mergers, it even welcomed them:

> [The Board of Trade] watched the burgeoning process of concentration with enthusiasm. Mergers and takeovers […] appeared to offer an alternative means to recover Britain's lost competitive position in world trade […] BOT policy favoured and facilitated mergers, yet at the same time worked to eliminate restrictive practices, a trend that culminated in Edward Heath's abolition of resale price maintenance in 1963. [37]

In 1966 the Labour government established the Industrial Reorganisation Corporation (IRC) – which reflected a presumption in favour of mergers in its workings – expressly to rectify the problem of relatively small operating units, by seeking out opportunities for "rationalisation schemes."[38] Any merger which took place under the aegis of an IRC scheme was exempt from referral to the Monopolies Commission.[39] The *Financial Times* characterized the IRC's role as "help[ing] in the task of welding much of British industry into bigger and more efficient units."[40] The establishment of the IRC fits with an ideational shift between the 1950s and the 1980s whereby the state came to see monopolies as "relatively harmless."[41] In 1968 the chair of the NBPI commented on the growing tolerance for firms with significant market power thus:

> Is market power in fact the result of efficiency, and if so, should it be penalised? I think our Reports that have dealt with this problem have tended not to condemn the expansion of market power if there is a reason to believe that this is the outcome of efficiency.[42]

As it was articulated in 1978, UK legislation made a presumption that "mergers are generally not against the public interest and should therefore be allowed to go ahead unless clear net detriments can be identified."[43]

2.3.3 Restrictive Trade Practices

The Conservatives were victorious at the October 1951 general election and Peter Thorneycroft was appointed to the position of president of the Board of Trade by the prime minister, Winston Churchill. Thorneycroft focused on increasingly on eliminating restrictive practices as a prominent feature of competition policy. In 1956 the Restrictive Trade Practices Act established a new Restrictive Practices Court. Simultaneously, there was a diminution of the power of the Monopolies and Restrictive Practices Commission with the reduction of its membership from twenty-five to ten. Crucially, the scope of the Restrictive Practices Act 1956 was limited to the supply of goods only, so did not address bank restrictive agreements. The Fair Trading Act 1973 amended the Restrictive Trade Practices Acts of 1956 and 1968 to cover services and defined a monopoly situation as one where the supply of services, to the extent of at least one-quarter, was supplied by one and the same person.[44] Governments in the period 1946 until 1971 did not use competition law to address restrictive practices, as is illustrated in the three examples of restrictive practices which follow. Three restrictive practices are described below.

The quintessential expression of the cartel in clearing banking was that they set rates of interest payable (or receivable) on many bank products and services collectively. Typically, the Chief Executive Officers of the clearing banks met and reviewed rates whenever the Bank Rate changed. Their collective agreement included: an agreement not to pay interest on current accounts; the minimum period of deposit for a deposit account; the rate of interest payable on deposit accounts; the minimum rate of interest on loans to the discount market; and the discount rate on bills. For example, on 11 March 1952, the bank rate increased from 2.5 per cent to 4 per cent. The Chief Executive Officers of the clearing banks met on that day and agreed a rating structure to take effect from 12 March 1952. Interest rates payable on deposit accounts were set at 2 per cent.[45] There was not a formal mechanism for enforcing uniform prices. Adherence to collectively-agreed prices was a norm and thus not binding. Transgressions (usually by other types of bank) would be reported to the Committee and the Chair would take the matter up with the transgressing bank. The Bank ended collective pricing in 1971 with its new policy of Competition and Credit Control.

The operation of uniform opening hours by the London Clearing Banks was a restrictive practice and, as with pricing, the CLCB was responsible for collectively agreeing these. Uniform bank opening hours were a restrictive practice. In the mid-1960s the opening hours of the London clearing banks were from 10.00 a.m. to 3 p.m. from Monday to Friday and from 9.30 a.m. to 11.30 a.m. on Saturdays. If anything, the practice became *more* restrictive at the end of the 1960s because in 1968 the clearing banks collectively decided that from 1 July 1969 they would close on Saturdays. This change was driven by the fact that, with the UK economy operating at close to full employment, it was not easy for the banks to recruit and retain staff. In parallel with a reduction in opening hours, the banks introduced cash dispensers and / or Automated Teller Machines (ATMs) in the late 1960s and early 1970s, with the ATM becoming "the chief alternative to the human teller during the 1980s."[46]

A third restrictive practice was that membership of the Bankers' Clearing House was strictly controlled by its members. This was a major barrier to becoming a clearing bank. Joint-stock banks were able to become members of the Clearing House from 1854, when six joint-stock banks were admitted. The admission of District Bank to the Clearing House on 1 January 1936 brought the number of clearing banks to eleven. It was not until the early 1970s that the Clearing House admitted some new members, although banks who were not members of the Clearing House did have access to the cheque clearing system through agency arrangements with Clearing House members. It is not evident that other banks were clamouring to become members of the Bankers' Clearing House. In a document submitted to the Monopolies Commission in 1968, "Report on the Bankers' Clearing House," on 6 March 1968, the Committee of London Clearing Bankers commented on whether any new applications for membership had been turned down in recent years. They stated in their response: "There is no record of any formal application for membership having been either made or refused in recent years, except for the admission of the District Bank in 1936. This may, to an extent, be accounted for by the fact that certain non-Clearing Banks, as shown on the attached list, have access to General clearing through their clearing agents."[47]

In 1973, following the dismantlement of the cartel, the CLCB invited a number of banks to discuss the possibility of joining the Bankers' Clearing House. In 1974, the Co-operative Bank (which had become a banking company in 1971) joined, the first new member of the Clearing House since 1936. The Central Trustee Savings Bank joined the Clearing House in November 1975.

Reveley and Singleton advance the view that the principal role of the Committee of London Clearing Bankers' was solely to advance the interest of its members: "It [the CLCB] was an organizational vehicle for supporting the rent-seeking activities of its clearing bank members."[48] While it is the case that the Committee of London Clearing Bankers played a central role in the enforcement of London clearing bank restrictive practices, to conceive of the Committee as a trade association is too narrow and understates the multi-faceted role of the CLCB.

Governments' reluctance to mobilize competition policy and competition law in banking is a reflection of the authorities' ambivalence towards competition in banking until the mid- to late-1960s. Monopolies and mergers in services (including banking) only came within the remit of competition law with the passage of the Monopolies and Mergers Act 1965. It was not until 1968 that the Monopolies Commission used competition law directly upon the clearing banks when it voted by a narrow margin to reject the proposed merger of Barclays, Lloyds and Martins. The law did not cover restrictive practices in services until the Fair Trading Act 1973. Moderated competition in clearing banking was not a sufficiently serious problem for governments to bring competition policy and competition law to bear upon it. This was because the degree to which competition *should* prevail in banking was contested and because it may not have been in the immediate interests of the authorities to inject greater competition into banking. In any case, the management of sterling was the priority issue during this period.

2.4. The Report of the National Board for Prices and Incomes

Under the National Board for Prices and Incomes' Terms of Reference, it was for the government determine which questions relating to prices and pay should be referred to the Board. Inevitably, therefore, these referral decisions had a political dimension and the clearing banks were sitting targets. Prior to the reference on bank charges, a very early NBPI report addressed the salaries of the staff of Midland Bank. The Board recommended that no further pay increases be made until early in 1967 at both Midland and the other clearing banks.[49] In June 1966, the government requested the NBPI to examine “the system and level of charging customers of the London clearing banks and of the Scottish banks.”[50] The government wanted this examination “in the light of the banks’ profit and dividend record,” implying that clearing banking was excessively profitable and therefore not sufficiently competitive.[51] The Board reported to parliament eleven months later in May 1967.[52]

The NBPI report highlighted the need to improve competition in banking:[53] “We think that a widening of the area of competition between the banks is a prerequisite for promoting change, for the banks to regain the place which they have tended to lose in the capital market and for extending the degree of competitiveness in the entire financial system.”[54] To correct these, it recommended the abolition of collective pricing of current and deposit accounts, and of advances. It also recommended that financial reporting exemptions for banks be rescinded as they inhibited competition: “To sharpen the competitive pressures on the banks – and therefore between the banks and other institutions – we recommend that […] the Government should aim at ensuring complete disclosure of profits and reserves as soon as is practicable.”[55]

Competition between the clearing banks and other institutions implied the existence of substitutes in consumption. By the 1960s, there were at least eight sources of substitutes in consumption for core clearing bank products:[56]

1. Building Societies: the purchase of shares in a building society was an alternative to saving in a clearing bank deposit account;

2. Trustee Savings Banks (TSBs): in addition to competing for savings, TSBs offered a limited current account from 1965, as an alternative to a clearing bank current account. They also sold the Trustee Savings Banks Unit Trust from 1968;
3. The Post Office Savings Bank offered ordinary accounts and investment accounts and focused on customers with modest savings. Interest was offered on their ordinary accounts, in contrast with clearing bank current accounts;
4. Finance Houses offered medium-term instalment credit to individuals and industry and thus competed with clearing bank loans and advances;
5. Non-clearing Banks included Accepting Houses, British overseas banks, and overseas and foreign banks, most notably American banks and Japanese banks. As these banks operated primarily in the wholesale rather than the retail markets, they were competing less directly with the clearing banks as takers of retail deposits and as retail lenders. Battilossi has documented how important the new euromarkets, led by the American banks, were to the transformation of the large clearing banks from "sleeping giants" into global banking groups;[57]
6. Local Authorities: firms could lend to a local authority as an alternative to placing a term deposit with a clearing bank;
7. Sterling Certificates of Deposit: in 1968 the Bank of England authorized a market for sterling certificates of deposit. Unlike ordinary deposits, these could be traded in a secondary market.
8. National Savings: There were a number of national savings products, which were potential substitutes for clearing bank savings products.

Returning to the question of profitability, Capie and Billings' research indicates that over the period 1920–70, returns on capital in banking took the form of a very shallow "U-shape." Profitability in clearing banking did increase from the 1940s through to the 1960s albeit modestly.[58] Ackrill and Hannah's study of Barclays Bank specifically suggests that the rate of return on actual shareholders' funds in real terms was extremely volatile for the period 1945 to 1971. It ranged from -72.9 per cent in 1955 to 37.5 per cent in 1958. In terms of decadal averages, they estimate that the annual average actual rate of return above bank rate (or Minimum Lending Rate) for Barclays was 4 per cent from 1946-70 and 1970-9, but then fell to 1 per cent in 1980-09.[59] Throughout this period the Bank implemented quantitative and qualitative credit controls. These controls had an impact upon clearing bank profitability by restricting lending in the form of advances, their most profitable service. Davies and Wynne Evans showed that for the period from 1970 to 1982 (when lending ceilings had largely disappeared) the average annual growth rate of pre-tax profits of the Big Four was 17 per cent.[60]

Table 1 illustrated the growth of banking and financial services measured by assets. Gross trading profits also grew, and significantly faster than in other broad sectors. Over the period 1947 to 1970, gross trading profits in the 'Insurance, Banking and Finance' sector increased from £172 million in 1947 to £1,571 million in 1970, a compound annual growth rate (CAGR) of 10.09 per cent. For 'Distributive Trades' the increase was from £345 million to £940 million (a CAGR of 4.45 per cent) and for 'Manufacturing', from £1,017 million to £3,180 million (a CAGR of 5.08 per cent). The gross trading profits of the 'Insurance, Banking and Finance' sector as a percentage of the UK's Gross National Product increased from 1.90 per cent in 1948 to 6.69 per cent by 1970.[61] On the other hand, while gross trading profits were healthy, a series of articles in the *Bank of England Quarterly Bulletin* drew attention to the fact that there was a downward trend in aggregate real profitability in the 1960s and early 1970s for the economy as a whole. A sharp decline in the mid-1970s was followed by a modest recovery from 1975.[62]

It is not necessarily straightforward to compare the profitability of banking with that of other sectors, however. This is in part because bank balance sheets are different from the balance sheets of many other companies since customer deposits are liabilities (from a bank's perspective) and loans to customers are assets (from a bank's perspective). These items would not feature on the balance sheets of companies in other sectors. In addition, there are several distinct measures of profitability, some based on return on sales and other based on return on investment. It is not evident which measure would be most appropriate when comparing banking with other sectors. In commenting on bank profitability the NBPI was at pains to point out that bank profits necessarily contained an "endowment" element. Bank income rose with increases in the Bank Rate but costs did not necessarily increase at the same rate. This was an inherent feature of the industry. The NBPI recognized that the generally higher levels of the Bank Rate during the 1960s contributed to increased profit margins.[63] The Bank Rate had been 2 per cent from October 1939 until November 1951. Between then and 1959 it ranged from 2.5 per cent to 7 per cent, while between 1960 and 1969 it was in the range 4 per cent to 8 per cent. The Board concluded that the recent high levels of profit and dividend were *not* attributable to excessive charges: "It does not seem that the actual level of charges could be described as unreasonable."[64] It re-iterated the point was on several occasions: "we cannot say that these 'excessive' profits have resulted from unnecessarily high charges, including lending rates, since, granted existing conventions, they merely reflect the level of Bank Rate."[65] "As for commission charges," the Board opined, "we have received no information to indicate that they are generally too high."[66] The distribution of accounts with London clearing banks by commission charged over a six-month period in 1966 is shown in Table 9.[67]

Table 9: Distribution of Accounts by Commission Charged for Six Months ending 31 August 1966

Commission charged (shillings)	**London Clearing Banks Per Cent of Accounts**
No charge	41.9
1s to 19s	23.7
20s to 39s	14.5
40s to 59s	8.1
60s to 79s	4.7
80s to 99s	2.7
100s and over	4.4
Total	**100**

Source: Adapted from National Board for Prices and Incomes, Report No. 34, *Bank Charges*, May 1967, Cmnd. 3292, Appendix VIII, para. 4, Table C.

The NBPI thus cast doubt on the idea that moderated competition necessarily led to high or excessive prices. Alternatively, if bank charges were reasonable, competition may not have been as weak as was generally assumed, particularly if high profits were at least in part attributable to the endowment effect.

2.5. Openness to Change and Innovation

The conclusions of the NBPI notwithstanding, it was generally assumed that high profits in clearing banking were evidence that they were insufficiently innovative. The

Economist opined that "innovations do not pay – or anyway not immediately. That is suggested by the greater profitability of Lloyds on almost any fair basis of comparison; it is usually reckoned the staidest of the big four."[68] Was there an absence of innovation in clearing banking between 1946 and the early 1970s? Innovation is often measured by counting the number of patents issued (it being assumed that this is a proxy for innovation) or by the scale of expenditure on research and development.[69] This article takes the approach of itemizing chronologically significant product, process, organizational, management and marketing changes and innovation in a clearing banking in the period, drawing predominantly (but not exclusively) on evidence from Lloyds Bank, showing the results in Table 10. Its purpose is to give an impression of the types of changes and innovations in clearing banking from 1946 into the 1970s and also to suggest that it is an exaggeration to characterize clearing banking as stagnant.[70] Furthermore, while competition may be the fundamental driver of innovation in many industries, this axiom may not hold in banking and financial services. What may motivate innovation in finance is not competition, but the drive to reduce constraints, including the constraint of regulation, according to Silber.[71] Moreover, in the wake of the global financial crisis we can call into question the assumption that innovation in banking and financial is always and necessarily beneficial to consumers. In his study of the cost of financial intermediation, Philippon reached the startling conclusion that in the US, innovation does not appear to have reduced the cost of financial intermediation: "the unit cost of financial intermediation appears to be as high today as it was around 1900 [It] does not seem to have decreased significantly in recent years, despite advances in information technology and despite changes in the organization of the finance industry."[72] The question we should pose about innovation in clearing banking in the period under review is not only *whether* the banks innovated, but whether the benefits of any innovations were greater than their costs and risks.[73] The literature does not address this point, and is more concerned with establishing the clearing banks' lack of dynamism and failure to innovative.

Table 10: Change and Innovation at Lloyds Bank, 1946–79

Year	Nature of change or innovation	Type of change or innovation
1946	Lloyds established a subsidiary company, the **Indian Premises Company Limited**, to own the freeholds and leaseholds of banking premises in India.	Organizational
1947	The bank established a subsidiary company, **Lloyds Bank Executor and Trustee Company (Channel Islands) Limited**, to enable Lloyds to undertake executor and trustee business in the Channel Islands.	Organizational
1948	A new **Staff College** at Eyhurst Court in Surrey came into operation with full residential facilities. Its courses were aimed at existing (rather than new) staff. There were separate Junior Courses (for five weeks) and Senior Courses (for nine weeks).[74]	Organizational, management
1950	Lloyds entered the specialist field of **financing film production**, up to a limit of £2 million outstanding at any one time. By February 1956 176 films had been financed and over £9 million lent. Lloyds was by then confident that "we are now easily No. 1 in this field," having overtaken National Provincial Bank.[75] By January 1961 262 films had been financed.[76] The film industry was however in decline, with cinema attendances were having fallen from 1,396 million in 1950 to 449 million in 1961.	Product/service

Year	Nature of change or innovation	Type of change or innovation
1950	A **Training Centre** at Hindhead, Surrey opened on 2 October 1950 with residential facilities. Its purpose was to "deal with the preliminary training of new entrants." It sought to provide new staff with "some basic knowledge of the work required of them, and to foster in them a sense of loyalty to our Bank and pride in its service."[77]	Organizational
1954	The 1954 budget had authorized the Export Credits Guarantees Department to provide guarantees directly to British banks for the first time for **medium-term finance for exports.** The clearing banks participated in providing this form of export finance. Although it earned a "comparatively low rate of interest," Lloyds considered it "a valuable service […] in the national interest."[78]	Product
1955	Lloyds acquired a 50 per cent share in Lloyds and National Provincial Foreign Bank Limited from the National Provincial Bank. Its name was changed to **Lloyds Bank (Foreign) Limited**.	Organizational
1957	A **Company Registration Department** was established with a staff of around twenty.[79] It maintained registers of shareholders, despatched annual accounts and notices of extraordinary meetings, paid dividends and dealt with rights and scrip issues. By 1962 it had a staff of 250.[80] By 1968 it was handling over one million shareholders' accounts.[81] By 1976 Lloyds claimed that the operation was the largest of its type in Europe.[82] It provided services to around 400 companies and three million shareholders by 1974.[83]	Product

Year	Nature of change or innovation	Type of change or innovation
1958	Lloyds bought shares in two **hire purchase** finance companies, Olds Discount Company Limited and Bowmaker Limited, in the case of the former in conjunction with The National Bank of Scotland Limited and The Commercial Bank of Scotland Limited. Other clearing banks also moved into hire purchase from 1958. The first mover into this field had been the Commercial Bank of Scotland in 1954.	Product, organizational
1958–9	Banks began to offer "**personal loans**," beginning with the Midland making loans of up to twenty years to farmers and up to ten years to small businesses. This represented a "major change in thinking."[84]	Product/service and organizational
1960	Lloyds launched an "**Investment Management Service**."[85] By the end of June 1966, it managed investment portfolios for over 7,000 customers as well as Trust and Pension Funds with a total invested capital of £450 million.[86]	Product
1960	In April, Lloyds and the other clearing banks introduced a "**credit clearing**" system (or Credit Transfer scheme, similar to continental giro systems) was introduced. It processed traders' credits, standing orders and credits paid in over the counter.[87]	Product/service and process
1962–3	Lloyds fully computerized its Pall Mall branch.[88]	Process
1963	Four banks set up a new organization, 'Midland and International Banks Limited' (**MAIBL**) whose purpose was to offer banking services worldwide. The participant banks were: Midland Bank; the Commercial Bank of Australia Limited; the	Organizational

Year	Nature of change or innovation	Type of change or innovation
	Standard Bank Limited; and the Toronto-Dominion Bank.[89] Kynaston describes its main purpose as "to use the Eurodollar market for medium-term lending."[90]	
1963	**Lloyds Bank Property Company Limited** established. Its object was to "undertake building operations in cases where the provision of adequate premises for our expanding branches involves larger scale operations than our own requirements alone would justify."[91]	Organizational, management
1964	**Lloyds Bank Europe Limited** established.	Organizational
1965	October: National Provincial launched a **cheque card**, guaranteeing cheques up to £30.[92]	Product/service
1965–8	Cheque clearing work was transferred over a number of years to **computer sorter/reader systems** at the City Computer Centre. The system cleared one hundred and fifty million cheques per year, peaking at over one million cheques per day on the busiest days. It allowed cheque details to be transferred to magnetic tape during sorting for subsequent posting to individual accounts.[93] For the London Clearing Banks as a whole, the London Bankers' Clearing House was clearing 752 million debit items per annum by 1969, up from 321 million in 1950.[94]	Process

Year	Nature of change or innovation	Type of change or innovation
1965	Lloyds took a 25 per cent share in the **Exporters' Refinance Corporation** (ERF) and had increased its stake to 75.6 per cent by 1969. The ERF provided credit to British manufacturers to sell abroad and to overseas parties wishing to buy capital goods in the UK.[95]	Organizational
1965–6	Lloyds began to recruit **graduates** directly to their senior 'A' and 'B' scales. In 1966 fifteen graduates joined the bank.[96]	Organizational, management
1966	The **National Bank of New Zealand,** with its 106 branches, became a wholly owned subsidiary of Lloyds.[97] Lloyds had had an investment in the bank since 1919.[98]	Organizational
1966	Lloyds, in a consortium of twelve banks (but not including any other of the Big Five), introduced a **Bankers Card**. The Card enabled customers to cash cheques up to £30 at any of the branches in the consortium. Any cheque drawn up to that amount by the card holder would be honoured.[99]	Product, organizational, management
1966	The clearing banks sought to engage a **public relations** firm to give them advice on improving the public perception towards banking.[100]	Marketing
1966–70	The West End Computer Centre had been established in 1963 and the City Computer Centre in 1964. An additional centre was planned for Birmingham which came into operation in 1968. In 1965 branches in Inner London were connected to	Process, organizational

Year	Nature of change or innovation	Type of change or innovation
	Computer Centres. In 1966 a project began to link all other branches to these Computer Centres. Details of each day's transactions were transferred from branches to a Computer Centre over telephone lines. Lloyds was proud to be "the first bank to introduce this special computer-controlled equipment."[101] By 1969 the Computer Centres in London and Birmingham were dealing with nearly 3.7 million accounts at 1,700 branches.[102] By October 1970 the entire branch network had been transferred to the new computerized system. Lloyds considered that it was "well ahead of its competitors in the field of electronic data processing."[103] It achieved the four-year programme of automation on target and in advance of decimalization.[104]	
1966	Lloyds began selling units in its "**First Unit Trust**" over its branch counters, the first of the London clearing banks to do so. The work was carried out through Lloyds Bank Unit Trust Managers Limited. By December 1969 53.4 million units were outstanding. Its "**Second Unit Trust**" was launched in November 1968.[105]	Product
1967	In June, Barclays installed six **cash dispensers** (the De La Rue Automatic Cash System), as part of a pilot project. The service was advertised as 'Barclaycash'. Barclays regarded these as the world's first. By February 1973 they had 250 machines in operation.	Service

Year	Nature of change or innovation	Type of change or innovation
1967	Lloyds bought **Lewis's Bank** from Martins Bank.[106] This provided Lloyds with an in-store bank in ten large stores (nine in Lewis's and one in Selfridges).	Organizational, marketing
1967	Together, a group of banks – Lloyds, The National Bank of New Zealand, Barclays Bank Limited, Barclays Bank DCO, The Bank of London and South America, the Chartered Bank and Australia and New Zealand Bank Limited – established the financial advisory company, **Intercontinental Banking Services Ltd**.[107] It was a consortium of banks operating overseas, acting in a "co-operating function."[108] The company ceased to trade after March 1976.	Service, organizational
1968	The beginnings of **online banking** for Lloyds when a number of branches in the North East were linked directly to central computers via private telephone lines, with two-way transmission of information as transactions occurred.[109] Lloyds developed the equipment with IBM. Lloyds regarded this development as a "major breakthrough."[110] By 1970 846 terminals in branches were in two-way communication with a Computer Centre. The general manager responsible observed that "Our developments in this area have created interest, one can truthfully say, throughout the world and we still continue to receive an embarrassing number of requests to visit us […] to […] talk about the system, how it was planned and implemented and of our practical experience."[111]	Product and process

Year	Nature of change or innovation	Type of change or innovation
1968	Following Barclays' lead in 1967, Lloyds equipped a small number of its branches in the London area on a trial basis with **cash dispensers**.	Product and process
1968	Under the aegis of the Bankers' Clearing House, the banks established the **Inter-Bank Computer Bureau**. Its purpose was to facilitate the transmission of money (and reduce the flow of paper) by providing an exchange of payments on magnetic tape.	Process
1969	Lloyds joined a partnership of major British banks and financial institutions to form **Airlease International** to buy jet aircraft for leasing to operators.[112]	Organizational, management
1970	**Lloyds Bank Finance Company Limited** was incorporated on 21 December 1970 as a wholly owned subsidiary company. In January 1971 it was renamed as **Lloyds Associated Banking Company Limited**. Its purpose was to bid for term deposits in sterling in the inter-bank market in minimum amounts of £50,000 (with the possibility at a later stage of other currencies). It would also provide medium-term finance for fixed periods of between one and five years for commercial and industrial companies in the UK.[113] Midland had taken a similar initiative three years earlier in 1967 with the **Midland Bank Finance Corporation**.[114]	Product, organizational

Year	Nature of change or innovation	Type of change or innovation
1970	**Lloyds Associated Air Leasing Limited was** formed. Lloyds held 80 per cent of the equity and British Aircraft Corporation 20 per cent. It purchased British aircraft and leased them to British operators.[115]	Product, organizational
1971	In September, the Bank introduced its new policy, Competition and Credit Control.	
1971	In November**,** Lloyds introduced their **Personal Loan Scheme**.[116]	Product/service
1972	Lloyds established their **Insurance Department**.[117]	Product, organizational
1972	23 October: The **Access credit card** by the Joint Credit Card Company (Lloyds, National Westminster, Midland and the National Commercial Group) was launched.[118]	Product, management
1972	Lloyds entered agreements with Commerzbank AG and Credit Lyonnais to "facilitate and to expedite the arrangement of **credit facilities**."[119]	Product, organizational
1972	December: The world's first **online, real-time cash dispenser** was installed at Brentwood in Essex.[120] This was part of a project to install 600 'Cashpoint' machines, procured from IBM. It marked the transition from the cash dispenser to the ATM, with electronic data processing at the point of contact with the customer.[121] Customers could operate the Cashpoint machine	Product and process

Year	Nature of change or innovation	Type of change or innovation
	with a plastic card with a magnetic strip. Lloyds regarded its system, which linked to its central computers and which authorized payments and debited the customer's account in real-time, as "the first of its kind in the world."[122] By December 1976, 630 Cashpoint machines had been installed and by August 1983, 1,500.[123]	
1973	Lloyds created its **Corporate Financial Services Division**, bringing together their existing share-related services, term advances, money dealing and leasing functions. Expertise in corporate advice and new issues would also be developed, thus enabling the division to compete with the merchant banks.[124]	Organizational, product
1973	Lloyds acquired 99.5 per cent of the capital of First Western Bank and Trust Company of California, subsequently named **Lloyds Bank California**.[125]	Organizational
1973	**Lloyds Leasing Limited** began trading.[126]	Product, organizational
1973	Lloyds' original foreign bank was Lloyds Bank (Foreign) Limited, a wholly owned subsidiary. In 1964, its name was changed to Lloyds Bank Europe Limited. In 1973 Lloyds acquired 100 per cent of Lloyds & Bolsa International Bank Limited. It combined with Lloyds Bank Europe and its name was changed to **Lloyds Bank International Limited** in April	Organizational

Year	Nature of change or innovation	Type of change or innovation
	1974.[127] The objective was for LBI to develop into a "major international bank." By 1977 it employed 11,000 staff in offices or subsidiaries in over 40 countries.[128]	
1976	Lloyd's **Business Advisory Service** was launched.[129]	Product
1977	Lloyds launched its **Home Improvement Loan Scheme**.[130]	Product
1979	Lloyds launched the **Home Loan** scheme, the first such scheme by a clearing bank.[131]	Product

3. Conclusion

There are three implications of this study. First, a purely quantitative evaluation of competition has limitations. To begin with, there is the question of which quantitative measure(s) to use given that there is no single, universally-agreed quantitative measure of competition. Different measures might yield different and even contradictory results as to the degree of concentration or competition. Furthermore, measures of concentration/competition are static in that they measure concentration/competition at a single point in time. The structure of an industry may be highly dynamic and the intensity of competition may fluctuate continuously. One way of addressing this is to focus on trends over time. Finally, even though we discuss competition as if there were two possible states - competitive or not competitive, concentration and competition are a matter of degree. Perfect competition is an ideal type so what needs to be evaluated is the extent to which a market is imperfect and the nature of its imperfections.

Second, there are definitional issues with which to grapple. Regardless of whether we measure competition quantitatively or qualitatively, the question of how we should define an 'industry' for the purposes of measuring concentration or competition is not straightforward.[132] Do we measure competition between *firms*, taking the firm as our unit of analysis, based on industry classifications? Or do we measure competition by activity or function (the provision of loans, the provision of insurance) regardless of the industry classification of the firm. An emphasis on the first approach may have resulted in the weakness of competition in clearing banking being overstated.

Furthermore, competition itself is a polysemous term. An economic interpretation of competition might view a sector as competitive if it were productively efficient. From a consumer sovereignty perspective, we would understand competition as providing the consumer with options and the consumer being able to choose effectively from those options.[133] A perspective from the business literature might see an industry as competitive when there are low barriers to entry; when there is rivalry between firms in the market; when there are substitute products and services; and when suppliers and buyers are relatively powerful in relation to the firms in the industry.[134] A popular view of competition might equate it with the free market and an absence of regulation. In contradistinction, competition might be defined as the existence of a level playing field. Under this view, competition rests upon regulation. As Vogel puts it, free markets require more rules, not fewer.[135] Academic research into the degree of competition in a market needs to be explicit about which version of competition is being evaluated.

The third implication of this research is that competition needs to be evaluated in the context of the regulatory and institutional frameworks within which the industry operates. Ideally we will have policy goals of competition and regulation that are consistent and complementary, and consistent with the wider institutional framework. They may however be in tension. For example, the goal of competition policy may be to maximize the productive efficiency of the sector being regulated whereas regulatory policy may have the social goals of ensuring stability in the banking sector and of ensuring high professional standards in banking. Competition policy may lean towards lower barriers to entry while regulatory policy might wish them to be higher. The political goal of preventing monopoly may conflict with the competition objective of productive efficiency. In this earlier period, a policy tension existed between the objective of greater competition in banking on the one hand, and the need to manage the currency and the balance of payments on current account on the other. This manifested itself in the authorities' distinct ambivalence towards greater competition in clearing banking. How should these tensions or conflicts be resolved?

Competition in clearing banking in the period from 1946 until the early 1970s was imperfect. On the other hand, there were mechanisms to prevent mergers between the Big

Five and these were effective until 1968, charges were not excessive, and consumers had available to them an increasing range of substitute products and services from which to choose. Finally, it was not the case that the clearing banks did not innovate. Insofar as it has been established that there was some degree of competition in clearing banking, this research lends support to the competition-stability hypothesis.[136]

The concerns which arose in 1968 about the dangers of banking being dominated by two very large firms and the consequences this would have for competition, bring to mind a very contemporary business problem: in some industries in some economies, market concentration has been increasing since the 1990s. How can competition (or contestability) be measured in concentrated sectors, with relatively few firms? What constraints should be placed on those few firms and how are they best implemented and enforced through competition, regulation and institutions?

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[1] Goodhart, "Competition and Credit Control," Appendix A. Appendix A reproduces a note from J. S. Fforde to the governors, "Banking System (and Credit Control)," 24 December 1970.

[2] The original version of the argument in this article is set out in the unpublished PhD thesis, Arch, "Chapter Three: The Competition Framework," in *London Clearing Banking 1946-79: Stability and Compliance and its Regulatory, Competition and Institutional Underpinnings*," 151–213. Aspects of the argument were explored in Arch, *The Regulation of the London Clearing Banks, 1946–1971: Stability and Compliance*, 75–82.

[3] Capie and Billings, "Evidence on Competition in English Commercial Banking, 1920–1970," 69.

[4] Capie and Billings, "Profitability in English Banking in the Twentieth Century," 367.

[5] For a survey of the literature supporting the competition-fragility hypothesis, see Arch, *The Regulation of the London Clearing Banks, 1946–1971: Stability and Compliance*, 75–77..

[6] Duncan McDougall Ross, *The Clearing Banks and the Finance of British Industry, 1930–1959* (PhD thesis, London School of Economic and Political Science, 1989), 257, accessed 6 September 2018, British Library Ethos e-theses online service.

[7] Baker and Collins, "English Commercial Banks and Organizational Inertia: The Financing of SMEs, 1944–1960," 67, 68.

[8] Michie, "Chapter 6: Control and Compartmentalization, 1945–1970," in *British Banking: Continuity and Change from 1694 to the Present*, 184, 82.

[9] Scott and Newton, "Jealous Monopolists? British Banks and Responses to the Macmillan Gap During the 1930s," 885.

[10] Bátiz-Lazo and Wardley, "Banking on Change: Information Systems and Technologies in UK High Street Banking, 1919–1969," 180-1. See also Bátiz-Lazo, "Emergence and Evolution of ATM Networks in the UK, 1967–2000."

[11] Minutes of a Meeting of the Committee of London Clearing Bankers, 12 December 1935, LMA CLC/B/029/MS32037/001.

[12] See for example, Philippon, *The Great Reversal: How America Gave Up on Free Markets* and Grullon, Larkin and Michaely, "Are US Industries Becoming More Concentrated?" The picture for Europe is less clear: concentration may be falling in some industries in some European countries.

[13] Offer, "The Market Turn: From Social Democracy to Market Liberalism," 1056.

[14] Watson, "The Financial Services Sector since 1945," Table 7.1.

[15] See "New Banking Statistics," *Bank of England Quarterly Bulletin*, Quarter 2, 1975. Collins noted that the larger number of institutions included in the statistics from 1975 meant that the relative decline of the London clearing banks in relation to all banks is likely to be "overstated." See Collins, *Money and Banking in the UK*, 411.

[16] Michael Porter identifies eight major sources of entry barriers. Porter, "The Five Competitive Forces That Shape Strategy," 80-6.

[17] For an evaluation of these methods, see Liu et al., "Competition in Banking: Measurement and Interpretation," and De Jonghe et al., "Competition in EU Banking," 187-212. A slightly less technical overview is provided by Casu, Girardone, and Molyneux, *Introduction to Banking*, 644-68.

[18] Liu et al., "Competition in Banking: Measurement and Interpretation," 212-3.

[19] de-Ramon and Straughan, *Measuring Competition in the UK Deposit-Taking Sector, Staff Working Paper No. 631*, 5-10.

[20] The Antitrust Division of the US Department of Justice "generally consider markets in which the HHI is between 1,500 and 2,500 points to be moderately concentrated, and consider markets in which the HHI is in excess of 2,500 points to be highly concentrated." See "Herfindahl-Hirschman Index," *The United States Department of Justice*, accessed 10 September 2018, https://www.justice.gov/atr/herfindahl-hirschman-index.

[21] "Grouping of Deposits on 17th July 1968," BoE G1/13 Governor's File: Various Bank Mergers and Amalgamations.

[22] Minniti, "The Foundational Contribution to Entrepreneurship Research of William J. Baumol," *Strategic Entrepreneurship Journal* 10, 2 (2016): 223.

[23] Kay, *The Truth About Markets: Why Some Nations Are Rich but Most Remain Poor*, 69.

[24] Sayers, "Chapter 10: Responsibility for the British Banking Structure. A. Policy on Bank Amalgamations," in *The Bank of England 1891-1944, Volume I.*

[25] "Place of Mergers in British Banking: Control by Gentlemen's Agreement," *Times*, 15 August 1962, The Times Digital Archive 1785–2010, Gale Cengage Learning.

[26] Note to Mr Morse and the governors, "Westminster Bank/Brown Shipley," 8 June 1965, BoE G1/13: Governor's File: Various Bank Mergers and Amalgamations. 'H.S.C' is almost certainly a reference to Hilton Swift Clarke, Principal of the Discount Office from 1953 until 1967.

[27] National Board for Prices and Incomes, Report No. 34, *Bank Charges*, Cmnd. 3292, May 1967, para. 154.

[28] Winton, *Lloyds Bank, 1918–1969*, 196.

[29] "Britain's Superbank," *The Economist*, 10 February 1968, 49, The Economist Historical Archive 1843–2012, Gale Cengage Learning.

[30] *Monopolies & Mergers Acts 1948 and 1965: Annual Report by the Board of Trade for the Year ended 31 December 1968*, 26 February 1969, Appendix 5, para. 4.

[31] *Monopolies & Mergers Acts 1948 and 1965: Annual Report by the Board of Trade for the Year ended 31 December 1968*, 26 February 1969, p. 17, para. 21.

[32] "Summary of the Report of the Monopolies Commission on the Proposed Bank Mergers," 12 July 1968, BoE G15/102: Secretary's Files – Committee of London Clearing Banks (CLCB), British Bankers' Association (BBA), Committee of Scottish Clearing Banks.

[33] The Monopolies Commission, *Barclays Bank Ltd., Lloyds Bank Ltd. and Martins Bank Ltd.: A Report on the Proposed Merger*, 15 July 1968, para. 191.

[34] In 1973, the Commission was renamed the Monopolies and Mergers Commission under the Fair Trading Act of that year.

[35] Garnett, Mollan, and Bentley, "Complexity in History: Modelling the Organisational Demography of the British Banking Sector," 194.

[36] Middlemas, *Power, Competition and the State Volume 1: Britain in Search of Balance, 1940–61*, 310.

[37] Middlemas, *Power, Competition and the State Volume 1: Britain in Search of Balance, 1940–61*, 305-6.

[38] *Industrial Reorganisation Corporation*, Cmnd. 2889, January 1966, para. 5.

[39] *Industrial Reorganisation Corporation*, Cmnd. 2889, January 1966, para. 11.

[40] "Wide-ranging powers for IRC under new Bill," *Financial Times*, 13 July 1966, Financial Times Historical Archive 1888–2010, Gale Cengage Learning.

[41] Stedman Jones, *Masters of the Universe: Hayek, Friedman, and the Birth of Neoliberal Politics*, 6-7.

[42] Jones, "The Public Forum on Prices," 154.

[43] *A Review of Monopolies and Mergers Policy: A Consultative Document*, Cmnd. 7198, May 1978, para. 5.13.

[44] Fair Trading Act 1973, Part 1, 7 (1).

[45] Minutes of a Meeting of the Chief Executive Officers of the Clearing Banks, "Rating Structure," 11 March 1952, LMA CLC/B/029/MS32037/008. Minutes of a meeting of Chief Executive Officers of the Clearing Banks, "Suggested Scale as a General Basis of Interest Rates, 29 November 1951, LMA CLC/B/029/MS32037/007. In this latter case the chief executives agree a "Suggested Scale as General Basis of Interest Rates" following the bank rate change on 8 November 1951.

[46] Bátiz-Lazo, "Emergence and Evolution of ATM Networks in the UK, 1967–2000," 16.

[47] "Report on the Bankers' Clearing House," 6 March 1968, LMA CLC/B/029/MS32141/002.

[48] Reveley and Singleton, "Clearing the Cupboard: The Role of Public Relations in London Clearing Banks' Collective Legitimacy-Seeking, 1950–1980," 476.

[49] National Board for Prices and Incomes, Report No. 6, *Salaries of Midland Bank Staff*, Cmnd. 2839, November 1965, para. 52. This report, and the report on *Bank Charges*, were two of several NBPI reports published between 1965 and 1970 relating to bank and building society prices, charges, pay, and terms and conditions of employment.

[50] National Board for Prices and Incomes, Report No. 34, *Bank Charges*, Cmnd. 3292, May 1967, p. 3, para. 2.

[51] National Board for Prices and Incomes, Report No. 34, *Bank Charges*, Cmnd. 3292, May 1967, p. 3, para. 1.

[52] For a discussion of the context of the NBPI report and responses to it, see Capie, *The Bank of England: 1950s to 1979*, 439-47.

[53] National Board for Prices and Incomes, Report No. 34, *Bank Charges*, Cmnd. 3292, May 1967, paras. 176–92.

[54] National Board for Prices and Incomes, Report No. 34, *Bank Charges*, Cmnd. 3292, May 1967, para. 183.

[55] National Board for Prices and Incomes, Report No. 34, *Bank Charges*, Cmnd. 3292, May 1967, para. 190. The London Clearing Banks and the Scottish banks were the subject of the reference on 22 June 1966.

[56] Arch, *London Clearing Banking 1946-79: Stability and Compliance and its Regulatory, Competition and Institutional Underpinnings* (Unpublished PhD thesis, University of Reading, 2017), Appendix Eight.

[57] Battilossi, "Banking with Multinationals: British Clearing Banks and the Euromarkets' Challenge, 1958-1976," in *European Banks and the American Challenge: Competition and Cooperation in International Banking under Bretton Woods*, eds. Stefano Battilossi and Youssef Cassis, 103-4.

[58] Capie and Billings, "Profitability in English Banking in the Twentieth Century," 378-85, Tables 2 and 3.

[59] Ackrill and Hannah, *Barclays: The Business of Banking 1690–1996*, Tables B6 and 8.1. The former shows the percentage rate of return on actual shareholders' funds in real terms, for the main bank. Table 8.1 shows the long-run average post-tax rate of return on Barclays' shareholders' funds in the twentieth century.

[60] Davies and Evans, "Profitability and Employment in United Kingdom Financial Services 1971-1981," Table 7.

[61] *Annual Abstract of Statistics No. 93*, 1956, Table 287 (London: Her Majesty's Stationery Office) and *Annual Abstract of Statistics No. 109*, 1972, Table 320 (London: Her Majesty's Stationery Office).

[62] See "Measures of Real Profitability," *Bank of England Quarterly Bulletin*, Quarter 4, 1978, "The Profitability of UK Industrial Sectors," *Bank of England Quarterly Bulletin*, Quarter 4, 1979, and "Profitability and Company Finance," *Bank of England Quarterly Bulletin*, Quarter

2, 1982, accessed 3 June 2019, https://www.bankofengland.co.uk/quarterly-bulletin/quarterly-bulletins.

[63] National Board for Prices and Incomes, Report No. 34, *Bank Charges*, Cmnd. 3292, May 1967, para. 39.

[64] National Board for Prices and Incomes, Report No. 34, *Bank Charges*, Cmnd. 3292, May 1967, para. 110.

[65] National Board for Prices and Incomes, Report No. 34, *Bank Charges*, Cmnd. 3292, May 1967, para. 177.

[66] National Board for Prices and Incomes, Report No. 34, *Bank Charges*, Cmnd. 3292, May 1967, para. 189.

[67] A charge of nineteen shillings in six months, or £1 and eighteen shillings in one year, would be equivalent to around £30 per annum at 2017-18 prices. The deflator for 1966–7 is 6.269 where 2017–18 is 100. "GDP [Gross Domestic Product] deflators at market prices, and money GDP: June 2018 (Quarterly National Accounts)," *gov.uk*, accessed 7 September 2018, https://www.gov.uk/government/collections/gdp-deflators-at-market-prices-and-money-gdp.

[68] "Banking for Profit," *The Economist*, 8 August 1970, 42, The Economist Historical Archive 1843–2012, Gale Cengage Learning.

[69] Measuring innovation by patents issued is problematic given that financial intermediation firms are not "patent-intensive," compared with other sectors. See Hall et al., "The Importance (or Not) of Patents to UK Firms," 619. For an example of the second approach, see Beck et al., "Financial Innovation: The Bright and the Dark Sides."

[70] A slight variant on this typology is the OECD's typology of: product, process, marketing and organisational. See "OECD Innovation Strategy," accessed 10 September 2018, https://www.oecd.org/site/innovationstrategy/defininginnovation.htm.

[71] Silber, "The Process of Financial Innovation," 89.

[72] Philippon, "Has the US Finance Industry Become Less Efficient? On the Theory and Measurement of Financial Intermediation," 1434-5.

[73] Johnson and Kwak, "Is Financial Innovation Good for the Economy?," 13.

[74] Meeting of the Board of Lloyds Bank Limited, 19 October 1962, LBGA HO/D/Boa/Age/32.

[75] Meeting of the Board of Lloyds Bank Limited, 3 February 1956, LBGA HO/D/Boa/Age/26.

[76] Meeting of the Board of Lloyds Bank Limited, 27 January 1961, LBGA HO/D/Boa/Age/31.

[77] Lloyds Bank Limited, Statement by the Chairman Accompanying the Report of Directors and Balance Sheet for the Year Ended 31 December 1950, 3, LBGA HO/S/Rep/9.

[78] Lloyds Bank Limited Report and Accounts 1966, Statement by the Chairman, 20, LBGA HO/S/Rep/15–19.

[79] Lloyds Bank Limited Report and Accounts 1962, Statement by the Chairman, 18, LBGA HO/S/Rep/11–13.

[80] Lloyds Bank Limited Report and Accounts 1962, Statement by the Chairman, 18, LBGA HO/S/Rep/11–13.

[81] Meeting of the Board of Lloyds Bank Limited, 1 November 1968, LBGA HO/D/Boa/Age/38.

[82] Lloyds Bank Limited Report and Accounts 1976, Statement by the Chairman, 35, LBGA HO/S/Rep/21–24.

[83] Lloyds Bank Limited Report and Accounts 1974, Statement by the Chairman, 26, LBGA HO/S/Rep/15–19.

[84] Holmes and Green, *Midland: 150 Years of Banking Business*, 227.

[85] Winton, *Lloyds Bank, 1918–1969*, 181.

[86] Lloyds Bank Limited Report and Accounts 1966, Statement by the Chairman, 22, LBGA HO/S/Rep/15–19.

[87] Lloyds Bank Limited Report and Accounts 1960, Statement by the Chairman, 15–16, LBGA HO/S/Rep/11–13.

[88] Winton, *Lloyds Bank, 1918–1969*, 187.

[89] Press Announcement, 17 December 1963, LMA CLC/B/029/MS32141/001.

[90] Kynaston, *City of London: The History*, 496.

[91] Lloyds Bank Limited Report and Accounts 1962, Statement by the Chairman, 19, LBGA HO/S/Rep/11–13.

[92] Hanson, *Service Banking: The Arrival of the All-Purpose Bank*, 192.

[93] Meeting of the Board of Lloyds Bank Limited, 1 November 1968, LBGA HO/D/Boa/Age/38.

[94] Winton, *Lloyds Bank, 1918–1969*, 185.

[95] Winton, *Lloyds Bank, 1918–1969*, 182.

[96] Winton, *Lloyds Bank, 1918–1969*, 191.

[97] Lloyds Bank Limited Report and Accounts 1966, Statement by the Chairman, 19, LBGA HO/S/Rep/15–19.

[98] Winton, *Lloyds Bank, 1918–1969*, 183.

[99] Lloyds Bank Limited Report and Accounts 1966, Statement by the Chairman, 22–3, LBGA HO/S/Rep/15–19.

[100] Minutes of a Meeting of the Chief Executive Officers of the Clearing Banks, 20 January 1966, LMA CLC/B/029/MS32037/017.

[101] Lloyds Bank Limited Report and Accounts 1965, Statement by the Chairman, 19, LBGA HO/S/Rep/14.

[102] Lloyds Bank Limited Report and Accounts 1969, Statement by the Chairman, 27, LBGA HO/S/Rep/15–19.

[103] Lloyds Bank Limited Report and Accounts 1969, Statement by the Chairman, 28, LBGA HO/S/Rep/15–19.

[104] Lloyds Bank Limited Report and Accounts 1970, Statement from the Chairman, 38, LBGA HO/S/Rep/15–19.

[105] Winton, *Lloyds Bank, 1918–1969*, 181.

[106] Winton, *Lloyds Bank, 1918–1969*, 183.

[107] Winton, *Lloyds Bank, 1918–1969*, 183-4.

[108] "Intercontinental Banking Services," 22 September 1967, LBGA HO/D/Boa/Age/36.

[109] Lloyds Bank Limited Report and Accounts 1968, Statement by the Chairman, 20, LBGA HO/S/Rep/15–19.

[110] Meeting of the Board of Lloyds Bank Limited, 1 November 1968, LBGA HO/D/Boa/Age/38.

[111] Report to a Meeting of the Board of Lloyds Bank Limited on Computer Operations, 29 September 1970, LBGA HO/D/Boa/Age/39.

[112] Lloyds Bank Limited Report and Accounts 1970, Statement by the Chairman, 34, LBGA HO/S/Rep/15–19.

[113] Meeting of the Board of Lloyds Bank Limited, 19 March 1971, LBGA, HO/D/Boa/Age/41.

[114] Holmes and Green, *Midland: 150 Years of Banking Business*, 240.

[115] Meeting of the Board of Lloyds Bank Limited, 21 April 1978, LBGA HO/D/Boa/Age/48.

[116] Lloyds Bank Limited Report and Accounts 1972, Statement by the Chairman, 31, LBGA HO/S/Rep/15-19.

[117] Winton, *Lloyds Bank, 1918–1969*, 202.

[118] Meeting of the Board of Lloyds Bank Limited, 7 May 1976, LBGA HO/D/Boa/Age/46. Entry into this market was significant given the potential profitability of credit cards. Barclays had been issuing the Barclaycard credit card since 1966-7. By 1986, it was "Britain's most profitable credit card business." See Ackrill and Hannah, *Barclays: The Business of Banking 1690–1996*, 251.

[119] News Release, 2 November 1972, LBGA HO/D/Boa/Age/42.

[120] Postcard: Customers using a Lloyds Bank Cashpoint at Upminster branch in 1981, Lloyds Bank, plc.

[121] Bátiz-Lazo, "Emergence and Evolution of ATM Networks in the UK, 1967–2000," 10-14. Bátiz-Lazo states that the initial order was for 500 machines at a cost of £3.5 million.

[122] Lloyds Bank Limited Report and Accounts 1972, Statement by the Chairman, 31.

[123] Bátiz-Lazo, "Emergence and Evolution of ATM Networks in the UK, 1967–2000," 11,14.

[124] Meeting of the Board of Lloyds Bank Limited, 3 November 1972, LBGA HO/D/Boa/Age/42.

[125] Lloyds Bank Limited Report and Accounts 1973, Statement by the Chairman, 26, LBGA HO/S/Rep/15–19.

[126] Winton, *Lloyds Bank, 1918–1969*, 202.

[127] Lloyds Bank Limited Report and Accounts 1973, Statement by the Chairman, 26, LBGA HO/S/Rep/15–19.

[128] Lloyds Bank Limited Report and Accounts 1977, Statement by the Chairman, 7–8, LBGA HO/S/Rep/21–24.

[129] Lloyds Bank Limited Report and Accounts 1977, Statement by the Chairman, 7, LBGA HO/S/Rep/21–24.

[130] Lloyds Bank Limited Report and Accounts 1978, Chief General Manager's Report, 8, LBGA HO/S/Rep/21–24.

[131] Lloyds Bank Limited Report and Accounts 1979, Review of Group Operations, 7, LBGA HO/S/Rep/21–24.

[132] See Arch, *The Regulation of the London Clearing Banks, 1946–1971: Stability and Compliance*, 77–78.

[133] Averitt and Lande, "Consumer Sovereignty: A Unified Theory of Antitrust and Consumer Protection Law," 713, 33. Consumer sovereignty prevails when consumers have options and are able to choose freely among them. Being able to choose freely is undermined by (i) overt coercion; (ii) undue influence; (iii) deception; (iv) incomplete information; or (v) confusing information, 733.

[134] See Porter, "The Five Competitive Forces That Shape Strategy," 78-93.

[135] Vogel, *Freer Markets, More Rules: Regulatory Reform in Advanced Industrial Countries*, 16.

[136] Evidence supportive of the competition-stability hypothesis is found in the following studies: Claessens and Laeven, "What Drives Bank Competition? Some International Evidence"; Boyd et al., *Bank Risk-Taking and Competition Revisited: New Theory and New Evidence, WP/06/297*; Beck et al., "Bank Concentration, Competition, and Crises: First Results"; Berger, Klapper, and Turk-Ariss, "Bank Competition and Financial Stability"; and Anginer, Demirgüç-Kunt, and Zhu, "How Does Competition Affect Bank Systemic Risk?"