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The Origins of the Eurodollar Market in London: 1955–1963[1]

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The Eurocurrency market is arguably the most dramatic financial innovation in the post-war period yet very little is known about its origins. This paper examines two facets of the Eurodollar market: why it happened and why London kept most of the business. Using archival evidence, this article reveals that Eurodollars were accumulated earlier than has hitherto been thought. This has important implications for how we interpret the factors prompting the innovation. High interest rates, self-regulation by banks, and changes in access to the forward exchange market combined in mid-1955 to encourage innovation by the Midland Bank. The major source of competitive advantage for London was the regulatory environment which combined tight money in the domestic economy with relative freedom in international finance.

The accumulation of foreign currency deposits by London banks was not a new phenomenon in the 1950s. Customers had long been allowed to deposit their US$ or other currency at banks in London. Indeed, there had been a growth in such deposits in the interwar period, which had only ended with the imposition of exchange controls and the collapse of the international monetary system in the 1930s.[2] In the immediate postwar period exchange controls prevented the re-emergence of this practice, but by the early 1960s observers became aware of a growth in $US deposits from overseas, mainly by Europeans and mainly in London banks. These deposits are usually identified as being on a much larger scale in the postwar period than in earlier times, and also the funds were put to a distinctive use by the borrowers.[3] Instead of immediately remitting the foreign currency to the central bank or depositing it in their accounts in the U.S., banks used their dollar deposits for loans to third parties either in the U.K. or abroad.

The dramatic acceleration of this new source of international capital from the

[1] The author thanks the archivists of the Bank of England and the Public Records Office for access to their records, and Edwin Green, Archivist of Midland Bank, for useful comments.

[2] The Bank of England initially interpreted the emergence of the Eurodollar deposits in the late 1950s as merely a return to a practice of the 1920s. Letter from HB Mynors to Sir Charles J. Hambro. Drafted and vetted by Governor Cobbold. 29 January 1963. Bank of England Archives (hereafter BE) EID 10/22. P. Einzig also emphasises the familiarity of these types of deposits. Einzig (1960), 23–27.

[3] Einzig and Quinn (1977), 2–3.

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1960s is now a familiar tale in the existing literature.[4] The origin of the financial innovation, however, is less well understood, partly because published statistics on the size of the market are only available from 1963.[5] This paper will focus on the period 1955–63 in order to interpret the factors that generated the innovation. The period begins with the first dollar deposits attracted for investment in the U.K. and ends with the relaxation of Regulation Q and the first Eurobond issue in 1963. Until July 1963, Regulation Q in the U.S. restricted interest payable on 30-day deposits to a maximum of 1% and on 90-day deposits to 2½%.[6] The analysis offers new evidence that establishes the emergence of the market at an earlier date than has hitherto been suggested. This has important implications for how we interpret the determining factors behind the innovation. This case also stresses the need to distinguish between environmental pressures for innovation and precipitating factors.

The Eurodollar market emerged during a key period in the history of the international monetary system. During the 1950s, the U.K. moved closer to the Bretton Woods goals with a more realistic commitment to current account convertibility and freer trade. At the same time, however, British policy-makers felt under continual threat from inflationary pressures at home which they countered with attempts to control the money supply and periodic returns to direct controls on the economy. At the end of 1952 the British government committed itself publicly to liberalizing trade and payments. External current account convertibility was achieved de facto by the official support of the transferable sterling exchange rate in March 1955, and official convertibility was announced (in common with most other West European countries) at the end of 1958. Although the government was committed to freer current account transactions, policy on capital flows was inconsistent. In 1954 the restrictions on British banks operating in the forward exchange market were lifted. In 1955, interest rates were raised sharply in response to a confidence crisis and domestic inflationary pressure. New capital controls were introduced in 1957 in response to a threatened drain on the reserves. These contradictions in policy between liberalization and attempts to mitigate its affects generated opportunities for profitable innovation which led to the emergence and growth of the Eurodollar market in this period.

Section I examines the origins of the Eurodollar market in the 1950s, first discussing traditional explanations and then presenting new evidence on the role of the Midland Bank. This is followed by a brief account of the spread of the innovation from 1958–63. Section II identifies the sources of competitive advantage of the City of London, emphasizing the regulatory environment. The final section concludes.

[4] See, for example, Gibson (1989), Johnston (1983), Clendenning (1970).

[5] The Bank for International Settlements collected the first statistics from European central banks at the end of 1963. BIS (1964).

[6] In July 1963 interest payable on 90-day deposits in the USA was raised from 2½% to 4%. Restrictions on 30-day and shorter deposits were maintained until November 1964.

I. THE ORIGINS OF THE EURODOLLAR MARKET

Traditional Explanations

One of the frustrating aspects of the literature on the Eurodollar market is that the cause of the innovation is so briefly and casually addressed. A catalogue of factors from the specific to the very general are traditionally listed. These include Russians fearful of American confiscation, ceilings on interest payable on deposits in the U.S., American balance of payments deficits, and British regulations. In most cases, the supply of Eurodollar facilities is interpreted as a response to a demand for a new way to accommodate US$ surpluses. These factors are not usually weighed as to their relative importance. Even more frustratingly for the historian, the beginnings of the innovation are vague both as to which institutions were involved and as to when the innovation occurred. This section aims to address these weaknesses.

The importance of external constraints such as government regulation is well established in the theoretical literature on financial innovation,[7] and the Eurodollar market seems to fit snugly into this paradigm. Most accounts of the origins of the market point to exchange controls imposed in 1957 as the earliest impetus for Eurodollar deposits.[8] In the wake of a confidence crisis in sterling in the third quarter of 1957, the Chancellor of the Exchequer banned the use of sterling to finance foreign trade between third parties and also outlawed refinance credits in sterling. In response, according to Strange, ''the resourceful London banks began to use dollar deposits.''[9]

Certainly, these controls encouraged the use of such deposits as credit instruments for nonresidents, and so it is worth going into some detail regarding these regulations. A closer look, however, reveals that this regulatory change was not as important as has been suggested. It was believed that these forms of credit could be used for ''bear'' speculation against the pound, but the decision to suspend this traditional service was a peripheral part of a general package of reforms designed to restore confidence in sterling. Since neither instrument was related to sterling area trade, they were considered disposable. T.L. Rowan at the Treasury, when suggesting these controls, acknowledged that they were ''not of major importance in relation to the size of the problem.''[10] The Treasury had no data on the volume of third country transfers but the total availments fell from £222 million in August 1957 to £180 million a year later, part of which they considered might have been due to the restrictions imposed in September 1957.[11]

Although the restrictions on usances were eventually lifted in February 1959,

[7] See for example Silber (1983). Llewellyn cites the Eurodollar market as a prime example of innovation generated by regulation. Llewellyn (1992), 16.

[8] Strange (1976), 180. Johnston (1983), 9–10. Versluysen (1981), 23–24. McKinnon (1977), 6.

[9] Strange (1976), 180. Such usance credits had been allowed from October 1956. Public Records Office, London (hereafter PRO) T231/1032.

[10] Brief by Rowan for Sir Roger Makins. 10 September 1957. Agreed by Parsons at the Bank of England. PRO T230/397.

[11] Letter from Glaves-Smith to AW France, 8 October 1958. PRO T231/1034.

those on refinance credits remained. At the end of 1958 the accepting houses complained that they were losing business because of these restrictions,[12] but this should not be exaggerated. These credits were used primarily by the Japanese for purchases of Australian wool; this accounted for £43 million out of £47 million total refinance credits at the end of August 1957. From September to December 1957 there was a decrease of £40 million in refinance credits.[13] The Bank of England continued to press the Treasury to relax the controls, explaining that ''the desire of the market to be able to grant refinance credits arises partly from the feeling that it ought to be able to give the full service that is its tradition and partly from its wish to increase its business.''[14] Nevertheless, in the end it was considered of such low priority by the Chancellor that it was delayed until after March 1960.

As a primary motivation for the demand for dollar deposits the restrictions on usances and refinance credits do not seem to be very strong factors. Such facilities were small in volume before the restrictions were imposed. The ban on usances was only in force for 16 months and was removed before the most rapid expansion of the Eurodollar market. It may be, of course, that 16 months was enough to change the habits of nonresident traders. Cobbold, Governor of the Bank of England, warned in January 1959 ''the longer this ban continues the less likely it is that foreigners will resume this method of financing trade [using sterling] when the ban is ultimately removed.''[15] It is more likely, however, that there were more lasting and fundamental factors at work encouraging the use of dollars rather than sterling, such as declining confidence in the pound, the disintegration of the sterling area, and the increase in the supply of US$ outside the U.S.

Midland Bank—The First Stage of Innovation

Perhaps the most important criticism of the existing explanations behind the emergence of the Eurodollar market is that the genesis of these deposits first happened in mid-1955, well before the restrictions imposed in September 1957 or the advent of formal external current account convertibility.

The first half of 1955 was a period of particularly tight monetary policy in response to perceived inflationary pressure. Bank Rate was pushed up from 3% to 3½% at the end of January and then to a postwar high of 4½% on 24 February.[16] Clearing banks continued to offer their traditional return of 2% below Bank Rate on their current deposits but this rigidity became increasingly costly given the Government's tight money policy and support of Treasury Bill rates. By June there was a gap of 1⅜% between returns on Treasury Bills and interest offered on

[12] Letter from Parsons to Rickett, 24 November 1958. PRO T231/1034.

[13] Memo by Glaves-Smith for Atkinson and AW France, 5 December 1958. PRO T231/1034.

[14] Note by Governor Cobbold for Chancellor of the Exchequer, 13 November 1959. PRO T231/1034.

[15] Letter from Governor Cobbold to Makins, 15 January 1959. PRO T231/1034.

[16] For a useful contemporary account of the effects of monetary policy see 'British Banking 1955.' *The Economist*, 25 June 1955, pp. 1–6.

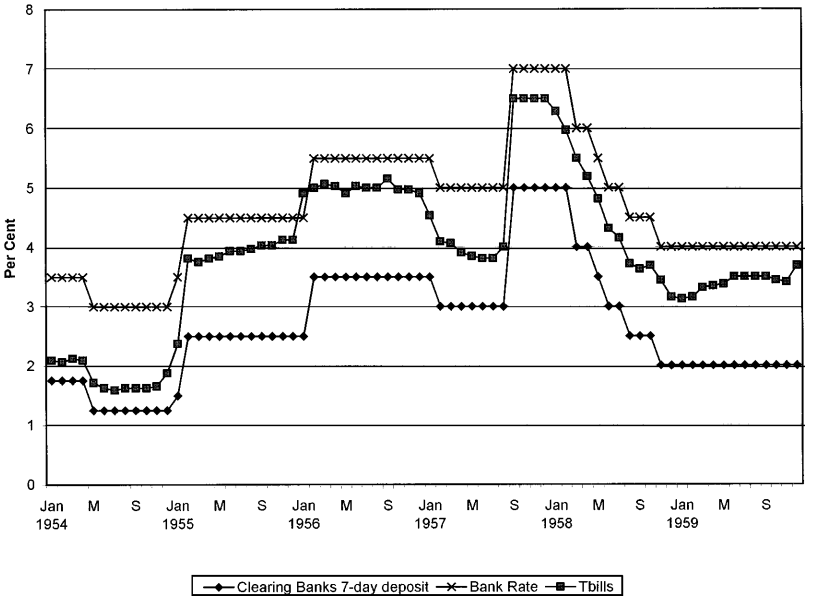

FIG. 1. Monthly interest rates 1954–1959.

bank deposits; this compares to a gap of less than ½% throughout 1954. Movements in these rates are shown in Fig. 1. The relatively high returns on Treasury Bills attracted deposits out of the clearing banks so that in the three months from mid-February net deposits of clearing banks fell by £153 million or 2.5%—the first fall during these months since before the war. Liquidity ratios of clearing banks fell to a postwar low of 30% in June from 35% at the end of 1954.

In June 1955 the Bank of England became aware of reports of substantial operations in the exchange market by the Midland Bank who, it appeared, were seeking foreign currency deposits unrelated to their commercial transactions.[17] This caused some concern at the Bank of England since it implied that Midland was essentially borrowing US$ funds to obtain sterling. C.R.P. Hamilton of the Bank of England approached the Chief Foreign Manager of the Midland who asserted that ''nothing out of the ordinary had taken place and that what dollar deposits had been received were in the normal course of business.'' At the end of the conversation Hamilton believed that ''Williamson appreciates that a warning light has been shown.''[18]

Although the light was shown, it was too late. Midland had bid up to 1⅞% interest for 30-day deposits denominated in US$. This was ⅞% more than the

[17] Note by JLH, ''Banks Liquidity,'' 24 June 1955, BE C43/111.

[18] Memo from CRH Hamilton to O'Brien, Chief Cashier Bank of England, 28 June 1955. BE C43/111. G.I. Williamson was Chief Foreign Manager 1955–62 and General Manager, Overseas 1962–68.

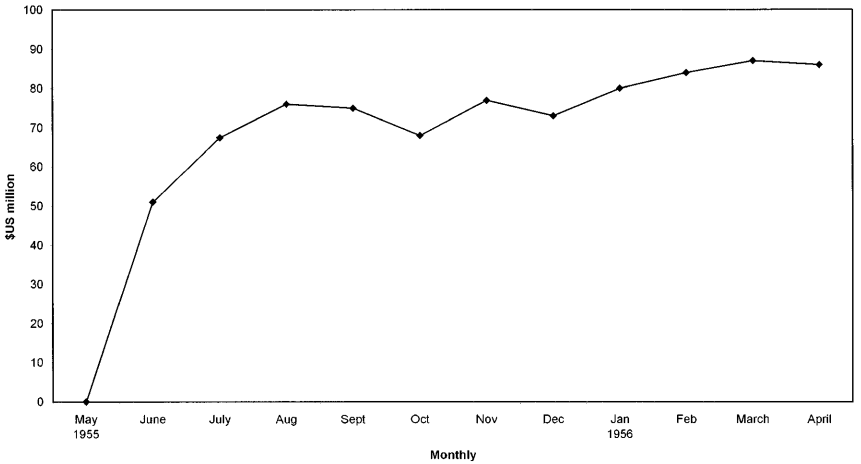

FIG. 2. Midland bank Eurodollar deposits May 1955–April 1956.

maximum payable in the U.S. under Regulation Q. Midland then sold these dollars spot for sterling and bought them back forward at a premium of 2⅛%. The resultant sterling therefore cost Midland 4% (1⅞% + 2⅛%) at a time when Bank Rate was 4.5%. The volume of deposits so attracted in June amounted to US$49 million and Cdn$2 million. Figure 2 shows the monthly value of such deposits as reported to the Bank of England until April 1956. Competitive bidding for sterling deposits, which would have increased Midland's liquidity more directly, was precluded by informal interbank arrangements.

The Midland's exchange deals were the first stage of the financial innovation which produced the Eurodollar market. These deposits were not traditional deposits of clients related to their business with the bank. The foreign exchange was not deposited with Midland's American accounts or converted through the foreign exchange reserves. The deposits were attracted to solve specific liquidity constraints and in response to profitable investment opportunities in the U.K. In this sense they were a new product for the bank's clients and represented a new source of funds for investment.[19]

Why the innovation occurred at Midland Bank is likely to be related to its distinct approach to international operations. Instead of opening branch offices overseas, Midland had an overseas office in London which depended on relations with foreign correspondent banks for their business rather than locating overseas and finding their own business.[20] This strategy did not mean that the Midland were defensive about international operations; indeed, in 1948, they believed that

[19] In Pearson's model of financial innovation this corresponds to the stage of "market creation" with a limited use of the new facility and a limited range of firms offering it. Pearson (1997).

[20] Holmes and Green (1986), 249–251.

Midland enjoyed a leading role among London banks in foreign business.[21] Their outward orientation was emphasized by the appointment of Howard Thackstone, chief foreign manager of the overseas branch in London as chief general manager of Midland in 1962.

Another factor was that Midland became a more innovative bank in the mid-1950s. A new stage of Midland's management is usually located in this period when competition from the branch expansion of Barclays became a realistic threat and the conservative manager Edington retired.[22] In October 1956 the Business Development Committee was established to seek out new opportunities to attract customers. Thereafter Midland became more aggressive in the domestic market, attracting business through new products such as ''gift cheques'' introduced in 1955 and unsecured personal loans and personal check accounts in 1958. The analysis presented here suggests that the overseas office was also aggressive in developing new products.

Understanding the response of market regulators to this innovation is important to assess the role of external constraints and also helps to reveal how the innovation spread to other institutions. The Bank of England was concerned that Midland probably should have sought exchange control, that the interest offered for the dollar deposits was too high, and that the subsequent swaps violated the spirit of monetary constraint pursued by the Government.[23] On the other hand, the transactions did attract a US$ inflow which eased the balance of payments, albeit temporarily. The dollars attracted by Midland reduced the recorded fall in the U.K.'s central reserves in June from US$56 million to US$6 million.[24] Furthermore, Midland was violating the spirit of exchange control but was not strictly beyond the law in its actions. Parsons at the Bank of England reflected that ''it is impossible to say to a London bank that it may accept dollar deposits but may not seek for them. We would be wise, I believe, not to press the Midland any further.''[25]

In the end it was agreed that ''whilst the Bank would much prefer to see nonresident access to London money rates through the medium of sterling held on the appropriate types of nonresident account, they would raise no objections to banks accepting deposits from nonresidents and converting these to sterling through swaps in the London market.''[26] Foreigners were allowed to buy sterling against dollars and use the proceeds to buy 30-day Treasury Bills, hedging the exchange risk in the forward exchange market, so it was decided that U.K. banks should be permitted to accept 30-day dollar deposits from overseas banks and do the forward exchange transactions themselves. This permission was, of course, to

[21] *Ibid.* p. 250.

[22] *Ibid.* p. 221. Ross (1995), 176.

[23] LJ Menzies to Parsons and O'Brien, 19 July 1955. BE C43/111.

[24] Note by Statistics Office, 13 July 1955. BE C43/111.

[25] Minute by Parsons on a Note by LTG Preston to Menzies, 15 July 1955. BE C43/111.

[26] Note by LTG Preston to Menzies confirming the content of a conversation, 22 July 1955. BE C43/111.

be extended to all authorized banks but the Bank of England agreed that they should wait until other banks approached them rather than volunteering the facility.[27]

The spread between British Treasury Bills and the comparable rate in New York averaged about 2%, rising to 2½% in June 1955. At this time *The Economist* reported that European banks (and also some North American banks) were switching their short-term assets from New York to London to take advantage of the spread, which left a profit even after taking account of the cost of forward cover. They estimated the total inflow of funds through this route as approximately £50 million between February and June.[28] These were flows of capital through nonresident sterling accounts rather than Eurodollar deposits but the opportunity to attract US$ deposits in such an environment was easy for the Midland to recognize.

In addition to Treasury Bills, there were other opportunities for profitable switches in London. As part of the Government's anti-inflationary policy, from October 1955 local authorities were restricted in their borrowing from the Public Works Loan Board. This encouraged them to borrow short term in the money market at high interest rates. Hire purchase finance houses were similarly restricted in their borrowing, which drove them also to the short term money market. The resultant increase in profitable short term investment opportunities created demand for Eurodollar deposits for such swaps.[29] Between 1955 and 1961 temporary borrowing by local authorities increased from 5.8% of their total debt to 21.4%. After convertibility in 1958, the volume of Local Authority deposits grew rapidly from £488 million at the end of March 1958 to £1080 million by the end of December 1961.[30]

This account suggests that it was opportunities for profitable interest arbitrage in mid-1955 that precipitated the emergence of Eurodollar deposits. The facilitating legal factor was the authority given to U.K. banks in 1954 to sell US$ or Cdn$ forward against sterling.[31] Initially, U.K. banks could only engage in such transactions with overseas banks, not with overseas individuals since foreigners were expected to use their own banks for this purpose.[32] These facilities were only to be used to cover the legitimate transactions of their own customers but in

[27] LTG Parsons to Menzies, 22 July 1955. See also LJ Menzies to Hamilton, 29 July 1955. BE C43/111.

[28] *The Economist*, 4 June 1955, pp. 867–868.

[29] Grant has suggested that the borrowing needs of local authorities were a major attraction of London for surplus dollars. Grant (1967), 140.

[30] *The Economist*, 30 June 1962, p. 1331.

[31] This was formalized in Notice to Banks and Bankers EC (General) 54 on 10 September 1954.

[32] FM Bennett MP (who was also a consultant for Kleinworts Bank) complained to the Chancellor of the Exchequer in March 1955 that this put UK banks in London at a disadvantage with respect to US banks. Letter from Bennett to Chancellor of Exchequer, 29 March 1955. BE EID C43/111. From June 1956 UK banks could engage in forward exchange market transactions with overseas individuals and non-bank organizations as well as banks. Menzies to Rickett (HMT), 19 June 1956. BE C43/112.

practice it was impossible to police this limitation.[33] Once banks could cover switches between sterling and dollars in the forward market, interest arbitrage became possible. The market then depended on margins between domestic and foreign interest rates, and returns on domestic investment opportunities.

It has been shown that specific features of the market in the mid-1950s encouraged Midland to innovate: these were tight money combined with the Self-Denying Ordinance among banks not to bid competitively for sterling deposits. The main regulatory factors were controls on interest paid on US$ deposits in the U.S. (which created a demand for a new product) and opening the forward exchange market to domestic banks (which allowed the banks to offer the product). The constraints conform to Silber's view of the regulatory sources of innovative pressure, although he places less emphasis on relaxations in legislation rather than imposition of controls.[34]

These pressures might be further categorized into general environmental factors and precipitating factors. The former explain the demand for innovation and why it occurred, and the latter explain when the innovation occurred and which firm led the innovation. Categorizing the pressures in this way helps to clarify the process of innovation which is often related to many different factors without an indication of which were most important or what part of the innovation process they explain. In the case of the Eurodollar market, existing interpretations range from very general factors (such as the Cold War), to the less specific in terms of chronology (such as Regulation Q[35] and U.S. balance of payments deficits), and then to the very specific (such as the September 1957 controls). The evidence presented here about the Midland Bank's innovation shows that these traditional explanations do not coincide chronologically with when the innovation occurred. In this sense they might be considered general environmental factors which contributed to the demand for innovation or accelerated the spread and development of the innovation. Short term factors described here (the rise in interest rates, banks' access to the forward exchange market) which have not been emphasized in the literature explain why the innovation happened when it did.

Spread of Innovation

Models of financial innovation indicate that once established, a new product or process follows a life-cycle similar to industrial innovation. However, the initial advantage of the innovator is likely to be much shorter in financial markets given the low start-up costs and difficulty of restricting access to it by competitors.[36] The Eurodollar market conforms to this framework. Within the City, the market quickly became more competitive and the Midland lost its initial advantage. At

[33] LTG Parsons to the Dealings and Account Office of the Bank of England, 5 April 1955. BE C43/111.

[34] Silber (1983), 89.

[35] It should be remembered that Regulation Q was in force from the 1930s, well before the advent of the Eurodollar market.

[36] Llewellyn (1992), 16.

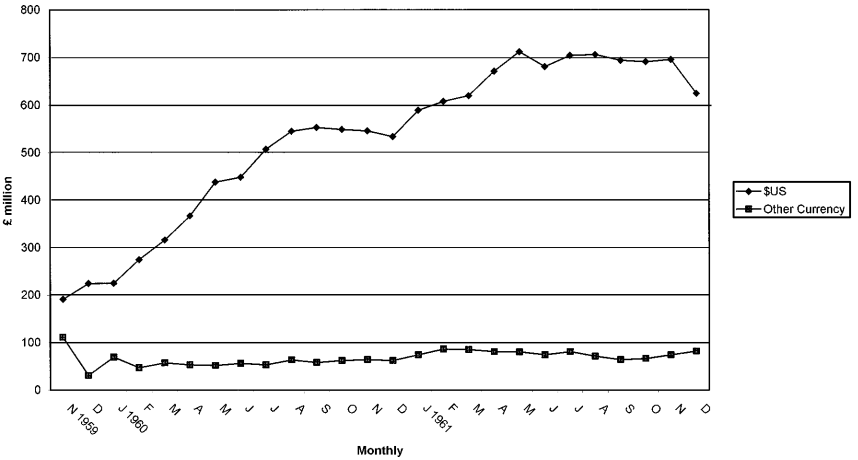

FIG. 3. UK authorized banks US$ deposits by Non-Sterling Area foreigners 1959–1962.

the middle of 1956 Midland probably still accounted for at least half of total Eurodollar deposits but by the end of 1962 they held only 3% of U.K. banks' Eurocurrency deposits. Midland continued to be the most important clearing bank involved in attracting dollar deposits, but US banks in London, British Overseas Banks, Accepting Houses and Japanese Banks took over the market. The growth of Eurodollar deposits from 1959–1962 is presented in Fig. 3 and the distribution of U.K. banks' overseas liabilities by type of institution in December 1962 and March 1963 is presented in Table 1. Liabilities denominated in US$ accounted for 85% of the total.

Table 1 shows that the nine American banks active in London took the greatest share of the deposits by the end of 1962. British Overseas Banks made up the second largest category but the large deposits held at Bank of London and South

TABLE 1
UK Banks' Overseas Liabilities in All Currencies (£m)

	Dec-62	Percent	March-63	Percent	April-63	Percent
Clearing banks	46	4.5	58	5.0	58	5.1
Scottish and Irish banks	27	2.6	23	2.0	24	2.1
British overseas banks	236	23.0	258	22.1	255	22.2
Accepting houses	191	18.6	199	17.0	196	17.1
U.S. banks	277	27.0	362	30.9	370	32.3
Japanese banks	111	10.8	125	10.7	112	9.8
Other foreign banks	139	13.5	145	12.4	132	11.5
Total	1027	100.0	1170	100.0	1147	100.0

Source. Tables compiled on 29 May 1963, BE EID10/22 and EID10/15. Figures exclude liabilities between London banks.

America (BOLSA) can mostly explain this.[37] The dominance of foreign banks (which together accounted for about half of the deposits) undermines the contention that it was local British expertise that was the main source of competitive advantage for London in the Eurodollar market. The clearing banks generally lost ground against merchant banks, overseas banks and foreign banks in London after convertibility in 1958. Between 1958–61 the net deposits of the clearing banks rose 7½% compared to a 100% increase by the other categories of bank.[38] The Economist attributed this to their caution in attracting foreign deposits due to the Self-Denying Ordinance restricting competition for sterling deposits. As explained above, however, The Economist's assertion that ''only the non-clearing banks have directly attracted such funds'' [39] is inaccurate. Nevertheless, the rise of the Eurodollar market marked the revival of the prospects for the merchant banks, which had been relatively moribund since 1945.

After the advent of formal non-resident convertibility in December 1958, new institutions became involved, and new uses were found for the deposits. The innovation, therefore, entered a stage of accelerated process and product innovation as new actors in the market adapted the Eurodollar deposit to suit their own needs. U.K. clearing banks with minimum liquidity ratios tended to switch a significant proportion of their deposits to sterling for short-term investment in Treasury Bills, loans to hire purchase companies or local authorities. Other banks were not under such constraints and the principal use of deposits by 1962 was thought to be for the finance of trade; replacing sterling finance, which was either not available or too expensive.[40] Canadian banks tended to relend their assets to New York security dealers and brokers, while American banks transferred their assets back to head offices in the U.S.[41] Japanese banks in London were particularly active in attracting Eurodollar deposits. By September 1960 they had obtained Eurodollar deposits amounting to more than US$200 million, most of which was converted to Yen to finance Japanese industrial expansion. Because of higher perceived risks, Japanese banks offered 2% over the usual rate to obtain the funds but this was still cheaper than borrowing in Japan.[42]

By 1960 it was estimated that only about 15% of Eurodollar deposits were switched to sterling for local investment[43] and by October 1963 this had fallen to about 10%.[44] In May 1963 about 40% of the funds were lent to Western Europe (mostly not in US$), 40% was loaned to the U.S. and about 10% was loaned to

[37] The Bank of London and South America accounted for about 40% of all such liabilities of British Overseas Banks.

[38] *The Economist*, 30 June 1962, p. 1335.

[39] *The Economist*, 30 June 1962. P. 1335.

[40] ''UK Banks' Foreign Currency Assets and Liabilities,'' 29 January 1962. BE EID10/21.

[41] Low of BOLSA suggested in October 1962 that more American banks' deposits were being used in Europe rather than channelled to head office. Report of discussion by LP Thompson-McCausland, 4 October 1962. BE EID 10/21.

[42] Note from GW Lucas to RL Workman (HMT), 21 July 1961. BE EID10/21.

[43] GW Lucas to RL Workman, 21 July 1961. BE EID 10/21.

[44] Note from Balance of Payments Office, Bank of England, 21 October 1963, BE EID10/22.

Japan, leaving only 10% for switching to local currency.[45] This reflects the growing importance of American and Japanese banks in the market that tended not to engage in U.K. short term investments.

American banks quickly came to dominate. Low of BOLSA told the Bank of England in October 1962 that the New York banks were more conscious of openings for business in the Eurodollar market and were developing new facilities through the market for their customers. These included stand-by facilities on which the Eurobanker could draw at need to allow the banks to commit to longer term lending than otherwise. Another variant was to offer ''finance over a considerable period to be taken by means of a series of 90-day bills discounted by the Eurobanker.''[46] British banks, on the other hand, were still primarily using the market for switching to sterling.[47]

The major new product developed in this period was the Eurobond. The use of Eurodollars for loans to foreign governments began to be discussed at the end of 1962 after the foreign bond market in London was re-opened for government issues. Stamp duty kept the costs of borrowing in London relatively high which encouraged alternative means to fund loans. In mid-December 1962 the Treasury outlined the plan for a foreign currency loan, noting that ''the object of these loans is to make the facilities of the London capital market more widely available and to mop up some of the very volatile Eurodollars at present in London.'' At this point it was reported that the Belgian government had applied to raise US$30 million.[48] This first proposal fell through in February 1963[49] but a subsequent loan in May was completed.

The source of the Eurodollar deposits is even more shrouded in mystery than their location and use. The general source of supply was the increase in official and nonofficial holdings of US$ outside the U.S. as America's balance of payments deficits accumulated. In May 1962 European commercial banks seeking to employ liquid funds were believed to be the main sources of deposits. Some of these were the product of swaps with their central banks. The second largest category of depositors was the European central banks directly, and the BIS who sought to deposit their US$ surpluses in order to minimize the accounting of their official reserves.[50] Thomson-McCausland of the Bank of England estimated at the time that of the US$2.5–3 billion in the Eurodollar market, US$1.5–2 billion was directly or indirectly pushed out by central banks, leaving about US$1 billion for other sources such as U.S. corporations. Figure 4 shows the geographical distribution of U.K. banks' overseas liabilities in non-sterling area currencies in 1962/1963. This shows that most deposits came from Western Europe.

[45] ''Recent Developments in the London Euro-Currency Market,'' Paper for Basel Meeting, 29 May 1963. BE EID10/15.

[46] Report of a meeting between Thompson-McCausland and Low of BOLSA, 4 October 1962.

[47] ''Draft request to principle market operators for information,'' 18 August 1962. BE EID10/21.

[48] Telegram to Commonwealth posts, 25 January 1963. BE C40/773.

[49] Telegram to Kingston Jamaica from Commonwealth Relations Office, 11 February 1963. BE C40/773.

[50] Paper for the Committee on Overseas Figures, 11 May 1962. BE EID 10/15.

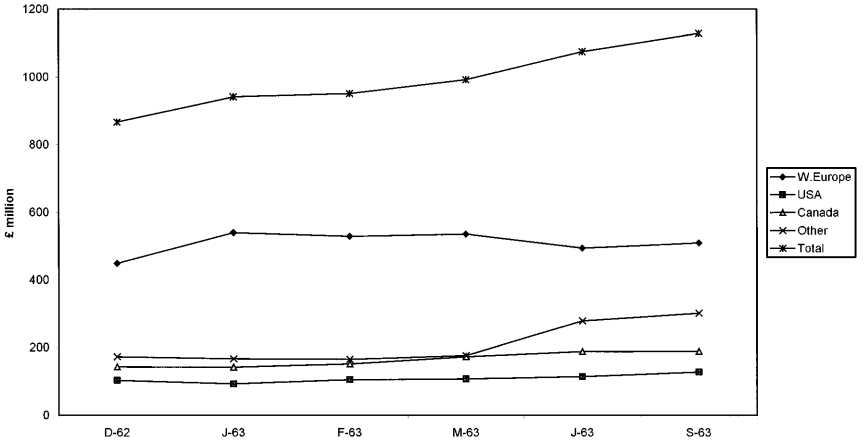

FIG. 4. UK banks' US$ overseas liabilities December 1962–September 1963.

II. COMPETITIVE ADVANTAGE OF LONDON

When seeking to explain why the innovation occurred we are also interested in why it occurred in London and why the City continued to be the center of the market as it expanded globally. The pressures for innovation, therefore, are closely linked to the issue of competitive advantage. This section will address these questions.

Most accounts of the source of London's competitive advantage in the Eurodollar market point to the accumulated expertise in foreign financing which existed in the City as a legacy of Britain's trading dominance in the 19th century and the use of sterling as a major international currency. McKinnon refers to this as the "debris of history"[51] and it seems a rather static and deterministic explanation. Archival evidence supports the more compelling view that the regulatory framework in which banks operated encouraged innovation as a means of evading controls while tolerating such innovations ex post. Once the innovation was established, the Bank of England and the Treasury were faced with the decision of whether to eliminate the 'loophole' or allow it to continue. There is little evidence that the authorities actively encouraged the acceleration of the market in London beyond a negative decision not to intervene. McKinnon has emphasized regulatory freedom in explaining why London dominated the market but he did not investigate the motives behind this permissive environment or the role of regulations in prompting innovation.

The monetary authorities in the U.K. had not anticipated the response to the combination of regulations in force in the 1950s, and they had mixed views as to whether it should be encouraged. The reluctant toleration of Midland's innovation has been described above, and it will be shown that the Treasury and the Bank of England continued to be concerned about the possible implications of this new practice. In May

[51] McKinnon (1977), 10.

1962 the Bank of England investigated the possibility of exerting greater monitoring or restrictive control over Eurodollar deposits and their use. This stemmed from a fear that the term structure of the deposits vis-à-vis loans might become precarious and that the authorities had no method of identifying in detail the size of the market or its participants. It also seemed possible that changes in relative interest rates might prompt a substantial volume of the dollars to return to European central banks (including the Bank of England) for conversion to local currency.

In the end it was decided that requesting voluntary self-restraint ''would be embarrassing to apply,'' liquidity ratios were impossible for technical reasons, information on the maturity spread of deposits would be too onerous for the banks to report, and (finally) that any suspicious dealing would not be conducted by the big operators they proposed to question. Instead the Governor of the Bank of England was to approach the leading six or so banks in the market to advise caution.[52] This attitude may be interpreted as generally acquiescent. Although there were worries, the Treasury and the Bank of England did not have the power to exclude this new line of business if London were to remain a financial center. While the Bank of England and the Treasury were generally sympathetic to the City, the Treasury was more cautious than the Bank, sometimes complaining that the latter was under excessive influence by financial institutions. Nevertheless, there was a consensus that London should remain an important financial center and that restricting the new business through invasive action was inadvisable.

The competitive advantage of London created by this regulatory environment was enhanced by restrictions elsewhere in Europe. There were risks associated with attracting ''hot money,'' including increased bank liquidity and potential calls on the reserves if there were a sudden withdrawal. In mid-1960 the Swiss launched a gentlemen's agreement with Swiss banks not to accept short term foreign currency deposits in order to stop the inflow of hot money. Banks agreed not to credit interest on foreign deposits and to charge a commission of 1% on deposits withdrawn from Switzerland within six months. They also agreed not to invest foreign capital in Swiss shares, property or mortgages. France and Germany also prohibited the payment of interest to foreigners.[53] In April 1963 the French Conseil National du Credit decided that French banks should cease to pay interest on all foreign deposits. In France and Italy swaps from Eurodollars to local currency were prohibited.[54]

In November 1960 there was a Parliamentary Question as to whether London would follow other European centers by discouraging Eurodollar deposits. The answer was that this would hurt London as an international financial center and that the inflow of US$ helped the central reserves. In any case, however, restrictions would be difficult to balance with London's role as an international financial center. One of the major obstacles was that the structure of the British

[52] Summary of a meeting at the Bank of England, 16 August 1962. BE EID 10/21.

[53] Letter from D. E. Thompson to M. H. Locke (HMT), 23 August 1960. BE EID10/19. Grant (1967), 141n.

[54] Draft Report of BIS meeting on Eurodollar Market, 13 January 1964. BE EID10/22.

TABLE 2
Commercial Banks' Foreign Currency Short-term Liabilities and Assets vis-à-vis Non-residents: September 1963

	US Dollars (US$ million)		Other Currencies[a] (US$ million)		Total (US$ million)	
Country	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets
UK	3160	2970	450	490	3610	3460
Japan	1820	1660	370	230	2190	1890
Italy	1540	950	750	400	2290	1350
Switzerland[c]	1060	1660	Na	Na	Na	Na
France[b]	650	670	630	660	1280	1330
Belgium	360	260	280	230	640	490
Germany	270	570	100	170	370	740
Netherlands	270	440	90	270	360	710
Sweden	80	150	40	100	120	125

[a] Sterling, Swiss francs, Deutsche Mark, Dutch florins.
[b] Position vis-à-vis banks only.
[c] Including Eurodollar assets of the BIS.
Source, *BIS 35th Annual Report*, Basle, 1965.

exchange control system was designed to prevent flows of capital out of the country, not inward flows. There was also the impossibility of imposing restrictions on payments between the U.K. and the rest of the sterling area, which would always leave loopholes. These factors were considered to make London distinct from other financial centers such as Switzerland, which was more homogenous and therefore easier to control.[55]

As a report by the Bank of England stated in 1963, ''however much we dislike hot money we cannot be international bankers and refuse to accept money. We cannot have an international currency and deny its use internationally.''[56] As a result, London captured most of the Eurodollar business. Paris was a rival but it was much smaller than London. In May 1962 about half of the US$1.2 billion in French Eurodollar deposits was denominated in US$, 20% in sterling, 12% in DM, 10% in Swiss francs, and the rest in other currencies.[57] At this time Eurodollar deposits in London had reached US$3 billion.[58] Italy was another major European center for the Eurodollar market. Through 1963 Italian banks expanded their dollar liabilities until in September they totaled US$1.4 billion. At this point, however, the Italian central bank required the banks to reduce their liabilities and they declined thereafter. Table 2 shows the size of Eurocurrency markets in September 1963.

The Bank of England was aware of the fragility of the competitive advantage of London in this potentially very profitable market. At the beginning of 1963 H. B.

[55] Report by J. M. L. for Hamilton, 19 October 1961. BE EID 10/19.
[56] Report by JML for Hamilton, 19 October 1961. BE EID 10/19.
[57] Note by R. G. R. ''Eurocurrency Market in Paris,'' 31 May 1962. BE EID10/21.
[58] ''Eurodollars'' by Thomson-McCausland, 24 May 1962. BE EID 10/15.

Mynors wrote to Sir Charles J. Hambro of Hambros Bank Ltd setting out the Bank of England's position.[59] Mynors stated that ''It is par excellence an example of the kind of business which London ought to be able to do both well and profitably. That is why we, at the Bank, have never seen any reason to place any obstacles in the way of London taking its full and increasing share. If we were to stop the business here, it would move to other countries with a consequent loss of earnings for London.''[60] Mynors advised that banks engaging in the market should increase their capital resources as backing for these potentially volatile deposits as well as ensuring a suitable geographical spread of deposits and maturity dates. At the end of the letter he reiterated that ''to drive the business from London would be wrong as it would continue in other places and the reputation of London as a monetary centre would suffer in the process.'' The pressure to maintain this competitive edge was frequently mentioned. At the beginning of 1963 the Bank of England agreed to the request from the BIS to increase its facility for depositing US$ with U.K. banks on the basis that if they refused the business would merely go elsewhere in Europe.[61]

Nevertheless, towards the end of 1963, some in the Bank of England became very nervous about the potential volatility of the Eurodollar deposits. This was in the wake of runs on banks in Switzerland and Germany including default on a Eurodollar loan by Ira Haupte after the bankruptcy of its client, Allied Crude. Other scandals involved Hugo Stinnes and Co. in Germany. Preston, a pessimist about the market, noted that ''I am filled with foreboding. There are a number of failures on the international horizon which are mixed up with dishonesty, which remind me all too strongly of the events leading up to the 1931 crisis.''[62] Bridge accepted that Preston's note ''merits attention and reflection'' but had more faith in the operators, suggesting that recent failures ''may well have shown an amber light and caused a number of banks here and elsewhere to review the way they were doing their business.''[63]

Opinion in the U.S. was that the Eurodollar market would decline after these shocks. R.L. Workman of the U.K. Treasury reported that the American view was that ''Some people had burnt their fingers, even bankers, and would be more cautious in the future. Some corporate treasurers had not quite realized the risks they had been taking in

[59] Hambro had expressed concern at the growth of Eurodollar deposits and had asked for the Bank of England's view. Despite the Chairman's concern, Hambros was a significant participant in the Eurodollar market.

[60] Letter from HB Mynors to Sir Charles J. Hambro. Drafted and vetted by Governor Cobbold. 29 January 1963. BE EID 10/22.

[61] From July 1958 the BIS had been an important depositor, requesting permission to make US$ deposits with banks in London up to a total of $30 million. By October 1960 this limit had been increased to $100 million and in January 1963 the limit was raised to $150 million. By this time, the BIS had total Eurocurrency deposits of $400 million in Canada, France, Switzerland, Belgium, Scandinavia and Italy as well as London. Note by R. A. O'Brien, 16 January 1963. BE EID 10/22.

[62] Note by Preston to Bridge, circulated to Selwyn, O'Brien and Parsons, 4 December 1963. BE EID10/22.

[63] Bridge to Parsons and O'Brien, 5 December 1963. BE EID 10/22.

placing short term dollar funds abroad, thinking of them as deposits with a liquidity corresponding to that of deposits with the domestic banking system rather than as short term loans."[64] Others in Europe were not so sanguine and in December 1963 the Governor of the Banque de France circulated a letter to French banks telling them to drastically reduce their Eurodollar business.[65] All the major French banks were then called in to investigate their Eurodollar dealings and the type of loans they made. Calvet wanted to reduce the volume of Eurodollar deposits by about three-quarters from their existing level of about US$1 billion.[66]

In summary, a combination of Bank of England support, Treasury tolerance, and controls elsewhere created a regulatory environment which gave London a competitive advantage in the Eurodollar market.

III. CONCLUSION

This paper has examined two facets of the Eurodollar market: why it happened and why London kept most of the business. The major contribution of this research is to establish when the innovation occurred which in turn clarifies the most important precipitating factors which generated the innovation. The attraction of dollar deposits was initially a response to the liquidity preferences of the Midland Bank, which could not be satisfied by traditional deposits because of the cartel arrangements among clearing banks. The tight money policy of 1955 combined with the relaxation of controls on the forward exchange market presented an opportunity for interest arbitrage which was used by the Midland to attract new customers. The supply factors behind the innovation, therefore, were official regulation and self-regulation by the banks.

The Eurodollar market grew because of external sterling convertibility, and the rising supply of US$ as American deficits widened. These two factors prompted the emergence of new customers, including European Central Banks and American multinational companies, who needed profitable employment for their surplus dollar balances. There was thus a combination of factors including regulation, changes in the market environment, and changes in demand for services to which banks responded. In this sense the Eurodollar should not be viewed exclusively as a ''defensive'' innovation[67] but also as an aggressive one as banks took advantage of opportunities for profit through domestic currency swaps and third party lending, and also sought to meet the needs of new customers.

The mid-1950s was a time of transition in British government policy. De facto external sterling convertibility had been achieved through support of the transferable market in 1955 and the government was committed to freer trade and payments. The European Payments Union was also maturing which promoted

[64] Note by R. L. Workman (HMT) of a trip to New York and Washington. BE EID10/22.

[65] Letter from Brunet, Governor Banque de France, 6 December 1963. BE EID 10/22.

[66] Note of a Governor's Meeting, 8 December 1963. BE EID10/22.

[67] This is how Llewellyn describes innovations that are the response to regulation. Llewellyn (1992), p. 28.

convertibility of European currencies. At the same time, however, the cyclical shocks to the balance of payments and to confidence in sterling continued to require emergency responses in the form of restrictions both domestically and on the international use of sterling. In this confusing context of mixed signals, the banks were able to take advantage of inconsistency in policy. The harsh and restrictive attitude to the domestic economy resulted in high interest rates in London and the need to seek funds outside the domestic market. The more permissive attitude to international finance initially allowed the innovation to be tolerated and then to spread. This paper has shown that the Bank of England was unable to find an effective way of monitoring or regulating the market without driving it away and contradicting their aim of supporting profitable business in London. The goal of preserving London as an international financial centre ensured that, once established, the market enjoyed a competitive advantage against its more cautious European neighbors.

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