

BIS Bulletin

No 65

London as a financial centre since Brexit: evidence from the 2022 BIS Triennial Survey

Jakub Demski, Robert N McCauley and Patrick McGuire

BIS Bulletins are written by staff members of the Bank for International Settlements, and from time to time by other economists, and are published by the Bank. The papers are on subjects of topical interest and are technical in character. The views expressed in them are those of their authors and not necessarily the views of the BIS. The authors are grateful to Branimir Gruić and Swapan Pradhan for excellent analysis and research assistance, and to Louisa Wagner for administrative support.			
The editor of the BIS Bulletin series is Hyun Song Shin.			
This publication is available on the BIS website (www.bis.org).			
© Bank for International Settlements 2022. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.			
ISSN: 2708-0420 (online) ISBN: 978-92-9259-615-6 (online)			

London as a financial centre since Brexit: evidence from the 2022 BIS Triennial Survey

Key takeaways

- We examine the evidence for London's central role in trading of interest rate derivatives, foreign exchange, international banking and bond underwriting post-Brexit.
- The 2022 BIS Triennial Central Bank Survey shows that London remains dominant in FX trading, but has lost share in euro interest rate swap trading to euro area centres after five Surveys showing gains.
- London retains its pre-eminence in international banking, but its ties to the euro area have loosened in part due to the shift of euro repo clearing from London to Paris.

When the euro arrived in 1999, London's established dollar business conferred an advantage in intermediating the new number two global currency. To be sure, the dollar business dominates London's international financial business, as it has since the 1960s (McCauley et al (2021)). But across the business lines examined below, London's share in the global euro business tended to exceed its global dollar share.

The Brexit vote in 2016 put into play London's role in intermediating the euro and thus its role as an international financial centre (IFC).¹ Britain's exit from the European Union (EU) in early 2021 left firms in London without a passport to offer financial services throughout the EU. It also gave fresh impetus to European authorities' long-running efforts to shift euro-denominated financial activity to the euro area. This would put key euro transactions in firms within close reach of central bank liquidity backstops and under the immediate purview of euro area supervision. Clearing of euro repo has already shifted from London to the euro area, more a result of the push for efficiencies in margining than of Brexit (Hill and Westphal (2021)). More contentious are the ongoing efforts to shift the clearing of euro interest rate swaps as well.² In international banking, ECB bank supervisors are pressing for the EU operations of foreign banks to stand on their own and not to depend on affiliates abroad for key functions.³

Enough time has elapsed since the 2016 vote to start to assess the effect of these initiatives, recognising that forces other than Brexit are at work (eg the phasing out of Libor). In what follows, we examine London's role as an IFC across four business lines: the trading of interest rate derivatives (IRD) and foreign exchange (FX), international banking, and bond underwriting. London's loss of euro business in any of these lines could have implications for its dollar business lines, since synergies across lines derive strength from one another and in turn reinforce London's position in the dollar.

¹ In March 2022, the Global Financial Centre Index again ranked London second behind New York (Wardle and Mainelli (2022)).

The ECB sought to force euro swap clearing into the euro area, but in 2015 lost the case at the European Court of Justice, whose jurisdiction the United Kingdom has quit (InfoCuria (2015)). This ambition remains relevant in Frankfurt (Panetta (2021)) and in a Brussels working group looking at impediments to its realisation (McGuinness (2021)). The EU authorities have given extensions, first through 2022 and then through mid-2025, for EU firms to continue to clear euro swaps through LCH in London. The European Commission is expected to publish plans for euro swap clearing in December 2022 (Fleming and Stafford (2022)).

³ ECB bank supervisors are requiring that banks that have relocated the business of serving EU customers into the euro area ensure "adequate local trading presence and risk management capabilities in their newly established entities in the euro area" (Enria (2022)). This targets "empty shell structures" in which parents in third countries do the trading and risk management.

Since Brexit, London's position has been marginally eroded in only some of the business lines we examine. The recently published 2022 BIS Triennial Survey, the first since the United Kingdom's formal departure from the EU, shows that London has remained the dominant centre for over-the-counter (OTC) trading of FX and euro interest rate derivatives (IRD). But it has lost share in euro and dollar IRD, in the latter case owing to Libor's end rather than Brexit. In international banking, London has retained its top position, but its role as a banking hub for the euro area has waned. In the underwriting of euro international bonds, London firms have until recently stood their ground, but recent data raise questions. At the same time, the ongoing responses to European authorities' initiatives leave our assessment a preliminary one.

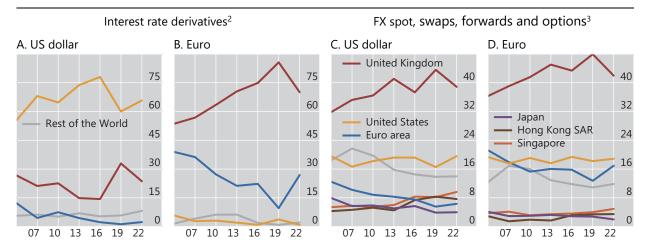
London's role in interest rate derivatives and FX trading

The 2022 BIS Triennial Survey shows that London lost share in trading OTC IRD, principally swaps and options. In dollar contracts (Graph 1.A), the benchmark reform of interest rates has gradually phased out dollar Libor, virtually halting trading in dollar forward rate agreements, of which London had a large share (Huang and Todorov (2022)). The resulting rise in the US share cannot be ascribed to Brexit. After five surveys that showed steady gains, London lost share in trading euro OTC IRD to euro area centres (Graph 1.B), including Frankfurt and Paris but to others as well.⁴ (Euro-denominated contracts are based on Euribor, which remains in use.⁵) That said, London's share remains more than twice that of all the centres of the euro area, consistent with London's dominance in clearing these instruments.

Turnover in over-the-counter interest rate derivatives and FX, by sales desk location

Average daily turnover (notional) in April, "net-gross" basis, 1 share of total in per cent

Graph 1



¹ Corrected for local but not cross-border inter-dealer double-counting (ie "net-gross" basis). ² Includes forward rate agreements, interest rate swaps and options. Share of trades denominated in the US dollar (panel A) and the euro (panel B) ³ Includes spot, FX swaps, currency swaps, outright forwards and options. Share of trades with the US dollar (panel C) and the euro (panel D) on one side.

Source: BIS Triennial Central Bank Survey of Foreign Exchange and OTC derivatives markets.

At the same time, the 2022 Survey shows that London has sustained its dominant share in FX trading in both dollars and euros (Graphs 1.C, 1.D). To be sure, its share in both fell from the 2019 Survey, but to roughly the levels in the 2016 Survey. The euro area centres taken together still run third after London and New York in euro trading.

The Triennial Survey collects turnover data on a sales desk basis, pre-novation to a central clearer. A substantial portion of the execution of dealer-to-dealer euro swaps reportedly shifted in 2021 to US swap exchange facilities (SEFs), which are said to enjoy recognised equivalence with both the UK and the EU regimes (Barnes (2021a,b,c), Whittall (2021)).

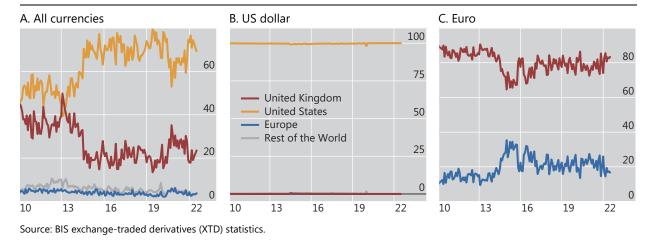
⁵ In the early days of the euro, the Euribor reference rate with its reporting from banks across the euro area won out over euro Libor from a club of banks in London (McCauley (1999)).

In contrast to OTC IRD trading, Brexit has not diminished London's share in *exchange-traded* IRD. The dominant German government bond futures continue to trade in Frankfurt and euro money futures continue to trade in London (Graph 2.C). The higher volume of euro money futures gives London the lead in the euro. Across all currencies, London's 20–30% share has left it in second place behind the United States since turnover trends in euro- and dollar-denominated contracts diverged after 2013 (Graph 2.A).⁶

Trading of exchange-traded interest rate derivatives, by trading location

Average daily turnover (notional) by month, share of total in per cent

Graph 2



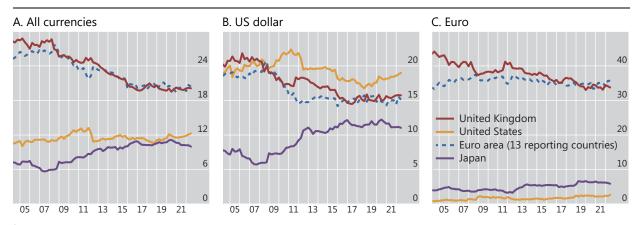
London as an international banking and bond underwriting centre

What impact has Brexit had on London's financial business lines beyond trading? In international banking, London remains the world's leading centre. But cross-border ties with the continent have loosened.

London leads as an international banking centre

Shares of international positions, in per cent; by location of reporting bank¹

Graph 3



¹ Banks' cross-border and local (in foreign currencies) claims and liabilities combined. Includes loans and debt securities but excludes derivatives. Figures have been adjusted to remove the impact of a break in series in Q1 2018, when LCH SA, a central clearer of repurchase agreements located in France, joined the population of reporting institutions. Excludes intra-euro area cross-border positions in EUR.

Source: BIS locational banking statistics.

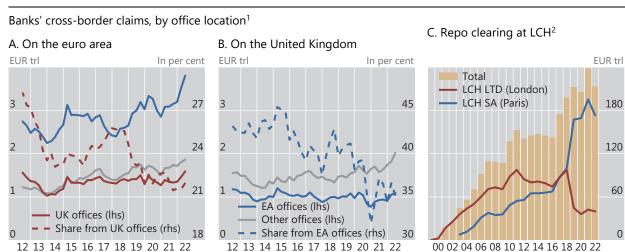
The exchange's location, however, gives little indication of the location of the underlying activity. After the trading in the German government bond future had tipped from London to Frankfurt in 1998, the Bank of England (2002) reported that "more trading on Eurex [in Frankfurt] is now conducted from the United Kingdom by remote access than in Germany".

After Brexit, London, overall, remains the pre-eminent international banking centre (Graph 3.A). Before the Great Financial Crisis, its share of global international banking positions – defined as cross-border plus local positions in foreign currency – approached a third. This share was unsustainable as it reflected round-trip transactions in which US money market funds lent to European banks to fund large holdings of private-label US mortgage debt securities in London (Avdjiev et al (2016)). As the legacy of this activity ran off, London's share declined to a fifth in recent years, still well above that of any other single financial centre and in line with the entire euro area. London's share in dollar positions remains second only to banks in the United States (Graph 3.B). And, for much of the past two decades, London enjoyed an even higher share in the euro, one that exceeded that of banks in the euro area (Graph 3.C).

However, since Brexit London's role as an international hub vis-à-vis the euro area has narrowed.⁷ In mid-2022, banks in the United Kingdom accounted for a smaller share of total cross-border claims on the euro area than in 2016 (Graph 4.A), while banks in the euro area held a declining share of total claims on the United Kingdom (Graph 4.B). At the same time, London's share in euro international banking positions slipped just below that of the euro area countries taken as a whole (Graph 3.C). The shift in 2019 of euro repo clearing from London's LCH Ltd to LCH SA in Paris (Graph 4.C), which is not solely related to Brexit, contributed to this by concentrating euro secured interbank funding in the euro area.

Banking and repo clearing across the channel

Graph 4



¹ Claims includes loans and deposits and banks' holdings of debt securities but excludes derivatives. Figures expressed at end-of-sample exchange rates, and adjusted to remove the impact of a break in series in Q1 2018, when LCH SA, a central clearer of repurchase agreements located in France, joined the population of reporting institutions.
² Yearly nominal value.

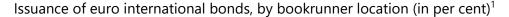
Sources: LCH Group; BIS locational banking statistics.

In underwriting euro-denominated international bonds, London firms held their own through end-2021.8 Following the Bank of England (2002) and UK Treasury (2003), London's role is indicated by the location of bookrunners, those with the pre-eminent role in the underwriting group. Admittedly, the practice of anointing multiple "leads", a form of status inflation, has reduced this indicator's sensitivity to role shifts (O'Malley (2015)). That said, London-based underwriters – most of them affiliates of firms headquartered elsewhere – had until end-2021 led in roughly three quarters of euro-denominated international bonds. This held regardless of whether or not the issuer was a national of the euro area

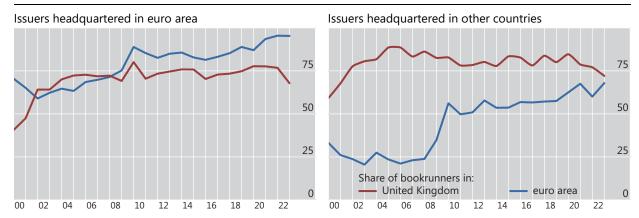
Trade data show a post-Brexit decline in exports of financial services from the United Kingdom to the EU. From 2018 through 2021, financial service exports to the EU fell by 19%, while those to the rest of the world rose by 4% (UK, House of Commons Library (2022)). Such a decline seems large in relation to a reported shift of just 7,000 financial service jobs from London to the euro area since Brexit (UK, House of Lords (2022, p 15)).

⁸ International bonds, as defined by Dealogic, are those issued in international markets.

(Graph 5). Still, partial data for 2022 point to a deterioration in their bookrunning shares, especially for issuers headquartered in the euro area.



Graph 5



¹ Location of the lead bank is used as a proxy for the bookrunner location. The United Kingdom (red line) and euro area (blue line) is identified as the bookrunner's location if at least one lead bank is located in these jurisdictions respectively. For 2022, data through end-October.

Source: Dealogic and authors' calculations.

Conclusions

Since Brexit, London has retained its pre-eminence as an IFC, and its role has eroded at the margin in only two lines. London continues to play a pre-eminent role in FX trading and international banking. However, in trading interest rate swaps and other IRD, London has lost euro-denominated business to euro area centres; its loss of share in dollar business to New York reflects the demise of Libor rather than Brexit. Banks in London and the euro area have lost share in each other's market, but some of this reflects the relocation of euro repo clearing that is only partly related to Brexit. And only the most recent data on the underwriting of euro bonds signal a possible loss of centrality for London.

That said, the full adjustment to Brexit is ongoing, and our findings should be viewed as provisional and subject to change. The ECB's requirement that some euro area affiliates of banks headquartered outside the EU should rely on local trading and risk management could further shift activity. So too could the expiration of the EU equivalence designation of UK clearing of euro interest rate swaps in 2025. If the effect of European policy remains to be seen, the same is true of the effect of UK efforts to make London more competitive in financial services. London's long-standing advantages of scale, scope and time zone may well sustain its pre-eminence as an IFC (Cassis (2010); Schenk (2019)). Those holding this prior have limited call to update it based on the observations above.

References

Avdjiev, S, R McCauley and H S Shin (2016): "Breaking free of the triple coincidence", *Economic Policy*, vol 31, issue 87, July, pp 409–45.

Bank of England (2002): Practical issues arising from the introduction of the euro, November.

Barnes, C (2021a): "The new status quo for derivatives markets after Brexit", Clarus Financial Technology, 24 March.

Whether or not euro swap clearing ends up split between two centres will have implications for the efficiency of the key euro swap market. The concentration of euro swap clearing has conferred a subtle financial market advantage on the euro over the dollar, and this is at stake in the competition between financial centres.

(2021b): "More EUR are trading on-SEF than ever before", Clarus Financial Technology, 21 April.

——— (2021c): "Using the Clarus API to monitor the latest Brexit impacts", Clarus Financial Technology, 29 July.

Cassis, Y (2010): Capitals of capital: the rise and fall of international financial centres 1780–2009, Cambridge University Press.

Enria, A (2022): "The desks mapping review – integrating Brexit banks into European banking supervision", *ECB Supervision Blog*, 19 May 2022.

Fleming, S and P Stafford (2022): "Brussels demands share of London derivatives clearing", *Financial Times*, 23 November.

Hill, A and A Westphal (2021): The post-Brexit impact on secondary and repo markets, *International Capital Market Association Quarterly Review*, Second Quarter.

Huang, W and K Todorov (2022): The post-Libor world: a global view from the BIS derivatives statistics, *BIS Quarterly Review*, December (forthcoming).

InfoCuria (2015): <u>Judgment of the General Court (Fourth Chamber) Case T-496/11</u>, United Kingdom of Great Britain and Northern Ireland v. European Central Bank (ECB), 4 March.

McCauley, R (1999): "The euro and the liquidity of European fixed income markets", in *Market liquidity:* research findings and selected policy implications, Report of a Study Group established by the Committee on the Global Financial System, *CGFS Papers*, May.

McCauley, R, P McGuire and P Wooldridge (2021): "Seven decades of international banking", *BIS Quarterly Review*, September, pp 61–75.

McGuinness, M (2021): Keynote address FIA Boca International Futures Industry Conference, 16 March.

O'Malley, C (2015): Bonds without borders: a history of the eurobond market, Wiley.

Panetta, F (2021): "Central clearing and the changing landscape", address to the Third Annual Joint Conference of the Deutsche Bundesbank, European Central Bank and Federal Reserve Bank of Chicago on CCP Risk Management, Frankfurt, 3 March.

Schenk, C (2019): "The City and financial services: historical perspectives on the Brexit debate", in G Kelly and N Pearce (eds), *Britain beyond Brexit, The Political Quarterly*, vol 90, issue S2, pp 32–43.

UK, HM Treasury (2003): The location of financial activity and the euro, London, HMSO.

UK, House of Lords, European Affairs Committee (2022): *The UK-EU relationship in financial services, 1st Report of Session 2022–23*, HL Paper 21, 23 June.

Wardle, M and M Mainelli (2022): <u>The global financial centres index 31</u>, Z/yen, City of London and China Development Institute (CDI), March.

Whittall, C (2021): "Post-Brexit derivatives deadlock hurts EU banks", IFR, no 2374, 13 March.

Previous issues in this series

No 64 13 December 2022	Energy markets: shock, economic fallout and policy response	Fernando Avalos, Adam Cap, Deniz Igan, Enisse Kharroubi and Gabriela Nodari
No 63 9 December 2022	"Front-loading" monetary tightening: pros and cons	Paolo Cavallino, Giulio Cornelli, Peter Hördahl and Egon Zakrajšek
No 62 1 November 2022	Global exchange rate adjustments: drivers, impacts and policy implications	Boris Hofmann, Aaron Mehrotra and Damiano Sandri
No 61 22 September 2022	Global supply chain disruptions: evolution, impact, outlook	Deniz Igan, Phurichai Rungcharoenkitkul and Koji Takahashi
No 60 16 September 2022	Inflation indicators amid high uncertainty	Fiorella De Fiore, Marco Lombardi and Daniel Rees
No 59 14 July 2022	Hard or soft landing	Frederic Boissay, Fiorella De Fiore and Enisse Kharroubi
No 58 16 June 2022	Miners as intermediaries: extractable value and market manipulation in crypto and DeFi	Raphael Auer, Jon Frost and Jose Maria Vidal Pastor
No 57 14 June 2022	DeFi lending: intermediation without information?	Sirio Aramonte, Sebastian Doerr, Wenqian Huang and Andreas Schrimpf
No 56 07 June 2022	Blockchain scalability and the fragmentation of crypto	Frederic Boissay, Giulio Cornelli, Sebastian Doerr and Jon Frost
No 55 19 May 2022	Rising household inflation expectations: what are the communication challenges for central banks?	•
No 54 18 May 2022	Commodity market disruptions, growth and inflation	Deniz Igan, Emanuel Kohlscheen, Gabriela Nodari and Daniel Rees
No 53 04 May 2022	Are major advanced economies on the verge of a wage-price spiral?	Frederic Boissay, Fiorella De Fiore, Deniz Igan, Albert Pierres-Tejada and Daniel Rees
No 52 23 March 2022	Central banks, the monetary system and public payment infrastructures: lessons from Brazil's Pix	Angelo Duarte, Jon Frost, Leonardo Gambacorta, Priscilla Koo Wilkens and Hyun Song Shin
No 51 17 March 2022	Anchoring of inflation expectations: has past progress paid off?	Tirupam Goel and Kostas Tsatsaronis

All issues are available on our website www.bis.org.