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United Kingdom: Extended-Collateral Long-Term Repo¹

Sean Fulmer²

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Abstract

In response to liquidity crunches in funding markets leading up to the Global Financial Crisis, the Bank of England introduced Extended-Collateral Long-Term Repo (ELTR) operations, which were a modified version of the regularly scheduled three-month open market operations. These operations were conducted by auction and accepted non-sovereign debt securities, including residential mortgage-backed securities, as collateral. The Bank of England routinely changed the frequency and size of the ELTRs in response to financial needs. At the peak, ELTRs occurred weekly with 40 billion British pounds (GBP) available for eligible institutions, and with GBP 180 billion outstanding. In order to drain this increased liquidity from the system, the Bank of England introduced the one-week bill, a non-monetary liability, which reached peak issuance in January 2009 at GBP 100 billion in a week. The Bank of England transitioned ELTR operations into permanent Indexed Long-Term Repo operations in June 2010, with several tweaks to auction design.

Keywords: Bank of England, ELTR, ILTR, Sterling Monetary Framework, United Kingdom

¹ This case study is part of the Yale Program on Financial Stability (YPFS) selection of New Bagehot Project modules considering broad-based emergency lending programs. Cases are available from the Journal of Financial Crises at https://elischolar.library.yale.edu/journal-of-financial-crisis/.
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Overview

After the run on and subsequent nationalization of the British mortgage bank Northern Rock in September 2007, in the lead-up to the Global Financial Crisis, individualized liquidity concerns spread into a systemic liquidity problem. In response, the Bank of England attempted to provide additional liquidity to the banking sector through adjustments to its regularly scheduled open market operations (OMOs). The Bank of England offered term repo auctions for funds of three-month maturity with a penalty rate of 100 basis points above the Bank Rate and an expanded set of eligible collateral (Cheun, von Köppen-Mertes, and Weller 2009; Bank of England 2007b). This included less-liquid and lower-quality private-sector securities, residential mortgage-backed securities, and unsecuritized mortgages. Prior to the Global Financial Crisis, the Bank of England only accepted highly liquid sovereign debt securities as collateral in its regular OMOs and its standing facilities. The Bank of England offered four of these term repo auctions in the autumn of 2007, but no banks participated due to fears that accessing the funding would associate them with the Northern Rock collapse (Fisher 2009; Cheun, von Köppen-Mertes, and Weller 2009).

To overcome the stigma concerns, the Bank of England announced on December 12, 2007, that it had decided to remove the penalty rate from the repo auctions and widen the collateral eligibility further (Fisher 2009). Successful bidders paid their own bid rate. It also announced that, during the previously scheduled OMOs on December 18, 2007, and January 15, 2008, the amount of reserves offered at three-month maturity would be increased from below 3 billion British pounds

Key Terms

| Purpose | The ELTRs reduced “the economic costs of disruptions to the commercial banking system’s provision of liquidity and payments services,” while assisting “commercial banks in financing assets that had suddenly become illiquid” (Bank of England 2008k) |
| Launch Dates | Announcement: December 12, 2007 Operational: December 18, 2007 |
| Expiration Dates | June 2010 |
| Legal Authority | Pre-existing Bank of England authority to initiate open market operations |
| Peak Outstanding | GBP 180 billion in January 2009 |
| Participants | Regular open market operations participants |
| Rate | Discriminatory, minimum bid introduced later |
| Collateral | The ELTRs widened the usual set of eligible collateral to include certain private sector securities. |
| Loan Duration | Three-month maturities |
| Notable Features | The BoE issued one-week bills to banks to drain the excess liquidity |
| Outcomes | Improving market conditions and reserve balances |
The announcement of the Extended-Collateral Long-Term Repo (ELTR) operations came in conjunction with similar measures rolled out by the Federal Reserve and other central banks (Bank of England 2007c). Between 2007 and 2010, the size of funds available in ELTRs ranged from GBP 5 billion to GBP 40 billion, with irregular frequencies of weekly to monthly drawings (Bank of England 2008g).

The Bank of England expanded the set of eligible collateral for inclusion in ELTRs from normal OMOs. This expanded set of collateral initially included AAA-rated residential mortgage-backed securities, covered bonds, and some asset-backed securities. Later expansions of the eligible collateral included commercial mortgage securitizations and corporate bonds and loans. These different types of collateral would face specific haircuts to reflect their value and risk (Breeden and Whisker 2010).

In the immediate aftermath of the collapse of Lehman Brothers, an American investment firm, in September 2008, the Bank of England made several significant changes to the subsequent ELTRs. The Bank introduced a minimum bid rate, set at the Bank’s overnight index swap (OIS) rate, while expanding the size of ELTR drawings from GBP 5 billion to GBP 40 billion (Bank of England 2008g). The Bank of England also expanded the eligible set of collateral several times in the months following the Lehman Brothers collapse.

As the ELTRs increased in size and injected greater liquidity into the banking system than regular OMOs could drain, the Bank of England created Bank of England one-week bills, a new type of non-monetary liability offered weekly at a maturity of one-week, in October 2008 (Cross, Fisher, and Weeken 2010; Winters 2012). The Bank of England issued GBP 100 billion of these bills at their peak in January 2009 (Cross, Fisher, and Weeken 2010). Also in October 2008, the Bank set the minimum bid rate against newly eligible collateral 50 basis points higher than the OIS rate. The minimum bid against collateral previously eligible for OMOs remained at the OIS rate (Bank of England 2008h).

The Bank of England transitioned the ELTRs into a permanent instrument called Indexed Long-Term Repo (ILTR) operations in the Sterling Monetary Framework in June 2010. Unlike the ELTRs, the ILTRs had a multi-good auction format, with two distinct sets of eligible collateral. The ILTRs also had a uniform pricing format, in which successful bidders pay the clearing price rather than their own bid prices (Frost, Govier, and Horn 2015).

**Summary Evaluation**

As the Bank of England refined its pre-existing instruments and introduced new measures to respond to the financial crisis, the usage of ELTRs slowly declined. Specifically, the creation of the Asset Purchase Facility in March 2009, which increased liquidity in corporate funding markets and caused a controlled increase in reserve balances, resulted in a decline of ELTR usage. Fisher (2009) states that improved market conditions and higher levels of

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3 GBP 1 = USD 2.05 on December 12, 2007, according to Yahoo Finance.
required reserves led to banks not needing further liquidity insurance from ELTR operations.
<table>
<thead>
<tr>
<th><strong>Context: United Kingdom 2007–2008</strong></th>
</tr>
</thead>
</table>
| **GDP** (SAAR, nominal GDP in LCU converted to USD) | $3.095 trillion in 2007  
$2.948 trillion in 2008 |
| **GDP per capita** (SAAR, nominal GDP in LCU converted to USD) | $50,567 in 2007  
$47,287 in 2008 |
| **Sovereign credit rating** (five-year senior debt) | Data for 2007:  
Moody’s: Aaa  
S&P: AAA  
Fitch: AAA  
Data for 2008:  
Moody’s: Aaa  
S&P: AAA  
Fitch: AAA |
| **Size of banking system** | $4.884 trillion in 2007  
$5.297 trillion in 2008 |
| **Size of banking system**  
as a percentage of GDP | 157.77% in 2007  
179.77% in 2008 |
| **Size of banking system**  
as a percentage of financial system | Data not available for 2007  
Data not available for 2008 |
| **Five-bank concentration of banking system** | 77% in 2007  
79% in 2008 |
| **Foreign involvement in banking system** | 14% in 2007  
19% in 2008 |
| **Government ownership of banking system** | 1% in 2008  
26% in 2010 |
| **Existence of deposit insurance** | 100% insurance on deposits up to $4,000; 90% on next $66,000 in 2007  
100% insurance on deposits up to $93,000 after October 2008 |

**Key Design Decisions**

1. **Purpose:** The Bank of England intended for the ELTRs to alleviate pressures in short-term funding markets causing liquidity concerns.

   As strains in the short-term funding markets emerged in the second half of 2007, the Bank of England created the ELTR operations to ease liquidity pressures (Bank of England 2007c). The Bank of England explained the purpose of the ELTR operations in a consultative paper (Bank of England 2008k):

   By shifting the composition of its open market lending away from the one-week maturity and towards the three-month maturity, the Bank has helped to provide time for banks, and the authorities, to address the problems underlying market stress. And by extending the range of collateral eligible in its three-month repos, the Bank has assisted commercial banks in financing assets that had suddenly become illiquid.

2. **Legal Authority:** The Bank of England adjusted its regularly scheduled open market operations to create the ELTRs, which did not require legislation or external approval.

   The Bank of England maintains an operational framework for implementing its monetary policy decisions known as the Sterling Monetary Framework (SMF) (Cross, Fisher, and Weeken 2010). The Bank never refers to specific legislation in any of its discussion of the SMF, and research could not determine legislation that narrowly authorizes the programs in the SMF. The Winters Review, which analyzed the Bank’s approach to liquidity provision, never mentioned legislation or statutory authority, instead focusing on the wide range of authority vested in the Governor of the Bank (Winters 2012). Therefore, it seems likely that the Bank is relatively unrestricted in its power to implement lending programs.

   Open market operations (OMOs) form part of the SMF, along with reserves and operational standing facilities (Cross, Fisher, and Weeken 2010). Since the creation of the ELTRs were only an adjustment of the regularly scheduled OMOs, they did not require additional legislation or external approval.

3. **Part of a Package:** The ELTR operations were one of the first of several liquidity programs the Bank of England introduced to address the Global Financial Crisis.

   The Bank of England added further liquidity insurance operations as the Global Financial Crisis deepened. It created the Special Liquidity Scheme (SLS) in the aftermath of the collapse of Bear Stearns (US) in March 2008. The SLS sought to improve the medium-term liquidity of banks and building societies by allowing them to swap high-quality, but temporarily illiquid, mortgage-backed and other securities (Fisher 2009).

   After the demise of Lehman Brothers, an American investment bank, in September 2008, the Bank of England created two more programs. In September, the Bank of England and other
central banks started overnight US dollar repo operations due to “poor liquidity in dollar inter-bank markets” (Fisher 2009). It initiated the Discount Window Facility in October 2008, which is a permanent bilateral liquidity insurance facility that allows institutions to perform asset swaps of eligible collateral for government securities (Fisher 2009).


5. Administration: ELTRs functioned as a single-good auction with successful bidders paying what they bid.

The ELTRs initially began as a monthly single-good auction, in which institutions could borrow central bank reserves against a single pool of eligible collateral (Frost, Govier, and Horn 2015). The ELTRs replaced the three-month maturities at the regularly scheduled monthly OMOs (Bank of England 2007d).

On the day of the operation, eligible counterparties typically had a 30-minute window to submit their bids, with only ten bids allowed (Bank of England 2007d). From there, the Bank of England would rank counterparties’ bids in descending order by bid. The highest bids were accepted first, and lower bids would be accepted until all bids had been accounted for, or the amount of the ELTR had been exhausted. Successful bidders paid what they bid (Frost, Govier, and Horn 2015).

6. Eligible Participants: Institutions that met the eligibility criteria for regular open market operations from the Bank of England could participate in ELTRs.

In order to be an eligible counterparty for regular OMOs from the Bank of England, an institution had to be either a bank or building society eligible for the reserves scheme, or a bank, building society, or securities dealer “authorised under the Financial Services and Markets Act 2000 that [was an] active intermedian[y] in the sterling markets, subject to standards of prudence and risk” (Bank of England 2008a). The ELTRs were available to the counterparties eligible for regular OMOs (Bank of England 2007c). In October 2008, the Bank of England said in a consultative paper that it did not anticipate changing the eligibility criteria for counterparties (Bank of England 2008k).

7. Funding Source: The Bank of England funded the ELTR operations with central bank reserves, without a set limit on the total program.

The Bank of England exchanged central bank reserves for less liquid eligible collateral in the repo operations. There was no set overall size for ELTR operations.

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4 A building society is a financial institution owned by its members that provides mortgage loans and savings accounts.
8. **Program Size:** The Bank of England routinely changed the size of the ELTR drawings, which varied from GBP 10 billion at announcement to GBP 40 billion at its peak in September 2008.

The first ELTR drawing in December 2007 offered GBP 10 billion (Bank of England 2007c). The Bank of England adjusted the ELTR size when needed, peaking in September 2008 at GBP 40 billion (Bank of England 2008g). The smallest ELTR occurred after the announcement of the Special Liquidity Scheme in May 2008 with an offering of GBP 5 billion (Bank of England 2008d). This ELTR drawing and two subsequent GBP 5 billion auctions were heavily oversubscribed. Eligible counterparties bid for more than double the amount the Bank offered. Additionally, Lehman Brothers collapsed in September 2008, causing the Bank of England to increase the ELTR to GBP 40 billion, which was still oversubscribed. Participation declined after the initial GBP 40 billion ELTR drawing, and the remaining ELTR drawings were undersubscribed on average. (See Figure 1 for this dynamic.)

**Figure 1:** Size of ELTR Bids and Auction Sizes

![Figure 1](source: Bank of England 2010)

9. **Individual Participation Limits:** Initially, participants could bid only on up to 10% of the total ELTR drawing, but this would be expanded to 20% later.

The Bank of England placed limits on individual firm usage of the ELTRs. At the creation of ELTRs, when they were a part of the regularly scheduled OMOs, a counterparty could only place bids of up to 10% of the total size of OMO on offer, across all maturities (Bank of England 2007d). As the Bank of England increased the frequency of ELTRs in the aftermath of the Lehman Brothers collapse, the maximum total size of bids from a single counterparty increased to 20% of the funds on offer (Bank of England 2008g).
10. Rate Charged: The Bank of England initially operated as a price-taker during ELTRs, while later implementing minimum bids.

The ELTRs did not charge a penalty rate, since earlier attempts in the fall of 2007 to include a penalty rate in some bank programs had led to zero usage (Cheun, von Köppen-Mertes, and Weller 2009). The Bank of England accepted the highest bids first and then bids at successively lower prices until the entirety of the drawing was allocated, with each bidder paying its own bid (Frost, Govier, and Horn 2015).

In September 2008, the Bank of England established that the minimum allowed bid for future ELTRs would be the overnight index swap (OIS) rate (Bank of England 2008g). In October 2008, the Bank amended the minimum bid rule. The OIS rate remained the minimum bid allowed for bids against collateral usually allowed in short-term OMOs. Bids against the newly expanded set of eligible collateral, which was anything not eligible for regular OMOs, would face a minimum bid of 50 basis points higher than the OIS rate. Bidders were required to tell the Bank of England which types of collateral they were holding against their bid. If they did not, the Bank of England would assume it was the wider type and impose the higher minimum bid. Bids against the two sets of collateral competed for the same ELTR drawing, rather than separate auctions. If submitted bids were below the minimum rate, they had to be amended or were cancelled (Bank of England 2008g).

11. Eligible Collateral: The ELTRs allowed a wider range of collateral than previously permitted in OMOs, with haircuts based on their risk.

Prior to the Global Financial Crisis, the Bank of England only accepted highly rated sovereign and supranational debt as collateral in its operations (Breeden and Whisker 2010). Specifically, this included:

- Gilts (including gilt strips), UK government foreign currency debt securities, sterling Treasury bills, Bank of England foreign currency debt securities, and certain sterling and euro-denominated securities issued by EEA (European Economic Area) central governments, central banks and major international institutions where the issuing entity is rated Aa3 or higher by two of the three major ratings agencies (Bank of England 2007a)

In the first (and failed) iteration of the expanded OMOs, the Bank of England expanded this eligible set of collateral to include private-sector securities, AAA-rated residential mortgage-backed securities (RMBS), non-securitized prime mortgages, and others (Cheun, von Köppen-Mertes, and Weller 2009).

The creation of ELTRs expanded the original eligible set of collateral for OMOs again to include AAA-rated (RMBS) and asset-backed securities, backed by credit card receivables, AAA-rated US GSE debt, and AAA covered bonds (Cheun, von Köppen-Mertes, and Weller 2009). The securities could be denominated in sterling, euro, US dollars, Australian dollars, Canadian dollars, Swedish krona, Swiss francs, or Japanese yen (only for Japanese Government Bonds) (Bank of England 2007c).
In the aftermath of the Lehman Brothers bankruptcy, the Bank of England further expanded the eligible set of collateral to include AAA-rated ABSs of corporate and consumer loans, some types of asset-backed commercial paper, as well as the new bank bonds covered by the Bank of England’s guarantee scheme (Cheun, von Köppen-Mertes, and Weller 2009). (See Appendix A for a deeper description of the eligible collateral expansions.)

The Bank of England announced in December 2007 that three-month repos against the wider set of collateral allowed would be margined separately from other OMOs. The margin ratios for ELTRs depended on both the type of collateral and the terms of the underlying collateral (see Figure 2 for an example margin ratio table). As the Bank of England adjusted ELTRs by increasing the size and eligible collateral set, it would similarly update its margin ratios at the end of market notices. The Bank of England also added 3 basis points to margin ratios for securities denominated in non-sterling currencies to allow for currency risk (Bank of England 2007d).

**Figure 2: Sample Margin Ratios**

<table>
<thead>
<tr>
<th>Credit rating</th>
<th>Sovereign paper Aa3/AA- or higher</th>
<th>Government guaranteed agencies AAA</th>
<th>US GSEs AAA</th>
<th>Covered bonds AAA</th>
<th>Credit card ABS AAA</th>
<th>UK &amp; EEA RMBS AAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floating rate/Fixed interest rate under 3 years to maturity</td>
<td>1.01</td>
<td>1.03</td>
<td>1.03</td>
<td>1.04</td>
<td>1.08</td>
<td>1.04</td>
</tr>
<tr>
<td>Fixed interest rate 3-5 years to maturity</td>
<td>1.015</td>
<td>1.04</td>
<td>1.04</td>
<td>1.06</td>
<td>1.12</td>
<td>1.06</td>
</tr>
<tr>
<td>Fixed interest rate, 5-10 year maturity</td>
<td>1.03</td>
<td>1.08</td>
<td>1.08</td>
<td>1.12</td>
<td>1.24</td>
<td>1.12</td>
</tr>
<tr>
<td>Fixed interest rate, 10-30 year maturity</td>
<td>1.055</td>
<td>1.16</td>
<td>1.16</td>
<td>1.22</td>
<td>1.44</td>
<td>1.22</td>
</tr>
</tbody>
</table>

**Additional notes**

An additional 0.03 is added to margin ratios to allow for currency risk when securities are non-sterling.

*Note on calculation: adjusted collateral value (post-haircut) = collateral value / margin ratio.*

**Source:** Bank of England 2007d.

12. **Loan Duration: The ELTRs consisted of three-month long-term repo operations.**

Before the Global Financial Crisis, the Bank of England conducted regular OMOs at three-, six-, nine-, and 12-month maturities. The Bank of England expanded the eligible set of collateral and the size for the three-month maturities, creating the ELTRs (Bank of England 2007c).

13. **Other Conditions: There were no additional conditions on ELTR drawings.**

There were no further notable conditions on ELTR funds.

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5 Adjusted collateral value (post-haircut) = collateral value/margin ratio (Bank of England 2007d).
14. Impact on Monetary Policy Transmission: The Bank of England introduced the one-week Bank of England bill after the collapse of Lehman Brothers, which served to drain the extra reserves in the market as the ELTRs grew in size.

Initially, the Bank of England stated that it intended to offset the additional reserves provided by the ELTRs by reducing the size of its weekly short-term repo operations. The initial market notice for the ELTRs mentions the possible need for issuance of Bank of England sterling bills to account for the increased liquidity (Bank of England 2007d).

The ELTRs provided a significant amount of liquidity—especially in the aftermath of the Lehman Brothers collapse—and created more central bank reserves than banks could use. This led the Bank to halt its short-term lending operations, as it could no longer sterilize them. To drain these excess reserves from the market and limit the impact on monetary policy, in October of 2008, the Bank of England created the one-week Bank of England bill (Fisher 2009). This new instrument was a non-monetary liability of the central bank that it offered weekly and with a maturity of one week. At their peak on January 8, 2009, the Bank of England issued over GBP 100 billion of one-week Bank of England bills (Cross, Fisher, and Weeken 2010).

15. Other Options: The Bank of England initially attempted a program similar to the ELTRs, which included a penalty rate.

In the autumn of 2007, the Bank of England announced four term-repo auctions for funds of three-month maturities, with a wider than usual set of collateral eligible. These auctions included a penalty rate of 100 basis points above the Bank Rate, which led to zero bids (Cheun, von Köppen-Mertes, and Weller 2009; Fisher 2009). When the Bank of England announced the ELTRs in December 2007, it removed the penalty rate and widened the set of eligible collateral even further (Fisher 2009).

16. Similar Programs in Other Countries: The original announcement of ELTRs connected the expanded operations to similar programs in Canada, the European Union, Japan, South Korea, Sweden, Switzerland, and the United States.

The original announcement of the ELTRs on December 12, 2007, presented the expanded operations as a joint effort between the Bank of England, the European Central Bank, the Federal Reserve System, and the Swiss National Bank. Additionally, the original announcement links to similar programs by the Bank of Japan and the Swedish Riksbank, but the Bank of England does not appear to have directly coordinated with these two central banks in a similar fashion to the others (Bank of England 2007c).

17. Communication: The Bank of England first announced the ELTRs on December 12, 2007, but did not initially refer to them as an established program.

The Bank of England routinely provided market notices which described design changes to upcoming ELTR operations. The Bank of England announced the size of ELTRs the Friday before operations (Bank of England 2008h).
When the Bank announced the failed auctions in the autumn of 2007, it stated that these operations would attempt to “alleviate the strains in longer-maturity money markets” (emphasis added; Bank of England 2007c). However, when the Bank unveiled the first ELTR operations, it said that the purpose was “to address elevated pressures in short-term funding markets” (emphasis added; Bank of England 2007d). It is unclear why the phrasing changed in between iterations, as the Bank mainly removed the penalty rate in announcing the ELTRs.

18. **Disclosure:** The Bank of England released anonymous aggregate data on the results of ELTRs quickly after the operations closed.

The Bank of England announced the results of ELTRs approximately 25 minutes after the 30-minute window for bids closed (Bank of England 2007). The reported results included the total size of bids received, the cover ratio, the lowest and highest accepted rates, the weighted average accepted rate, the tail length, and the proportion of the total ELTR allocated to bids at the lowest rate (Bank of England 2010).

The Bank of England has not released individual participant details.

19. **Stigma Strategy:** Earlier attempts to provide liquidity through adjustments to regularly scheduled OMOs failed, likely due the inclusion of a penalty rate which was removed for the ELTRs.

The Bank of England held four term auctions in September–October 2007 which featured adjustments to the regularly scheduled OMOs, such as an expanded set of collateral. However, no bids were placed by commercial banks during these four auctions, due to a penalty rate of 100 basis points above the Bank Rate, and stigma concerns. Institutions feared that their participation in the term auctions would become public and they could potentially collapse and face nationalization, as was the case with the mortgage lender Northern Rock in September 2007 (Cheun, von Köppen-Mertes, and Weller 2009).

In response to these issues, the Bank of England removed the penalty rate when initiating the ELTRs. Additionally, the Bank of England reassured commercial banks that their participation in the ELTRs would not become public when the first two auctions announced were fully subscribed (Cheun, von Köppen-Mertes, and Weller 2009).

20. **Exit Strategy:** Although, in the original announcement, the Bank of England had implied that ELTRs would be a temporary program, in June 2010, it transformed ELTRs into a permanent program called Indexed Long-Term Repo (ILTR).

The initial announcement of the ELTR operations only provided for two auctions of ELTRs but stated that extensions could occur depending on market conditions (Bank of England 2007c). The Bank of England periodically extended ELTRs until the creation of ILTR in June 2010 as a permanent facility in the Sterling Monetary Framework (Frost, Govier, and Horn 2015).
References and Key Program Documents

Documents cited in the text are introduced with a parenthetical author-date citation. Documents that are relevant to this case but have not been cited in text do not include this parenthetical reference.

Implementation Documents


*Extension of ELTR for scheduled September and October 2008 OMOs.*
https://ypfs.som.yale.edu/library/long-term-repo-operations-market-notice-090908

*Market notice changing the frequency of ELTR to weekly and expanding the size to £40 billion; implemented minimum bid.*

*Extension of weekly ELTR until at least November 18, 2008, while expanding the eligible collateral set.*

*Expansion of collateral eligible for the ELTR.*
https://ypfs.som.yale.edu/library/bank-england-market-notice-sterling-long-term-repo-operations-us-dollar-repo-operations-0

*Market notice establishing the haircuts that will apply on the ELTR.*

*Announcement lowering the size of ELTR offered to £30 billion starting 10/21/2008.*
https://ypfs.som.yale.edu/library/extended-collateral-three-month-long-term-repo-101708

*Announcement lowering the size of ELTR offered to £20 billion starting 10/28/2008.*
https://ypfs.som.yale.edu/library/extended-collateral-three-month-long-term-repo-102408


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liquidity during the Global Financial Crisis.
https://ypfs.som.yale.edu/library/review-bank-englands-provision-emergency-liquidity-assistance-2008-09

Report presented to the Court of the Bank of England on the BoE operations to provide liquidity during the Global Financial Crisis.
https://ypfs.som.yale.edu/library/review-bank-englands-framework-providing-liquidity-banking-system
## Appendix

### Appendix A: Timeline of Collateral Eligible for ELTR Operations

<table>
<thead>
<tr>
<th>Type of Eligible Collateral</th>
<th>First Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gilts (including gilt strips); UK government foreign currency debt securities; sterling Treasury bills; Bank of England foreign currency debt securities; and certain sterling and euro-denominated securities issued by EEA (European Economic Area) central governments, central banks, and major international institutions where the issuing entity is rated Aa3 or higher by two of the three major ratings agencies (Bank of England 2007a, 23)</td>
<td>February 2007</td>
</tr>
<tr>
<td>BBB/Baa or higher G10 or EEA sovereign bonds; A-/A3 or higher debt issued by G10 or EEA government-guaranteed agencies; debt issued by US GSEs; AAA-rated UK and EEA covered bonds; AAA tranches of UK, US, and EEA ABS backed by credit cards; UK and EEA RMBS rated AA-Aa3 or higher; single-name commercial paper; and senior corporate bonds rated A+/A1 or higher (Bank of England 2007b; Cheun, von Köppen-Mertes, and Weller 2009)</td>
<td>Failed four auctions in September and October 2007</td>
</tr>
<tr>
<td>AA3/AA- or higher G10 sovereign-issued bonds; AAA-rated bonds issued by G10 government-guaranteed agencies; AAA-rated US GSE debt; AAA-rated tranches of UK, US, and EEA ABS backed by credit cards; AAA-rated tranches of UK and EEA RMBS; and AAA-rated UK and EEA covered bonds (underlying assets can be public sector debt or mortgages) (Bank of England 2007d)</td>
<td>December 12, 2007 (this completely replaces the earlier set of expanded collateral for the four failed auctions; hence the overlap)</td>
</tr>
</tbody>
</table>