

## Annex

### Timeline of crisis events

This timeline details key events since Spring 2007.

Date	Event
5 Mar. 07	HSBC announces one portfolio of purchased sub-prime mortgages evidenced much higher delinquency than had been built into the pricing of these products.
22 June 07	Bear Stearns pledges a collateralised loan to one of its hedge funds but does not support another.
30 July 07	IKB announces that profit will be 'significantly' lower than forecast as a result of sub-prime mortgage exposures.
9 Aug. 07	BNP Paribas suspends calculation of asset values of three money market funds exposed to sub-prime and halts redemptions. AXA had earlier announced support for its funds.
9 Aug. 07	European Central Bank (ECB) injects €95 billion overnight to improve liquidity. Injections by other central banks.
17 Aug. 07	Sachsen LB receives bailout from German savings bank association.
17 Aug. 07	Federal Reserve approves temporary 50 basis points reduction in the discount window borrowing rate, extends term financing, and notes it will 'accept a broad range of collateral'.
10 Sep. 07	Victoria Mortgage Funding is the first UK mortgage company to fail.
13 Sep. 07	Bank of England announces that it will widen the range on banks' reserves targets within which they are remunerated at Bank Rate.
14 Sep. 07	Bank of England announces it has provided a liquidity support facility to Northern Rock.
17 Sep. 07	Following a retail deposit run, the Chancellor announces a government guarantee for Northern Rock's existing deposits.
19 Sep. 07	Bank of England announces plans to undertake a series of three-month auctions against a broader range of collateral (including mortgage collateral).
Oct. 07	Citi, Merrill Lynch and UBS report significant write-downs.
8 Nov. 07	Moody's announces it will re-estimate capital adequacy ratios of US monoline insurers/financial guarantors.
20 Nov. 07	Freddie Mac announces 2007 Q3 losses and says it is considering cutting dividends and raising new capital.
10 Dec. 07	UBS announces measures to deal with capital concerns following further write-downs.
12 Dec. 07	Joint Bank of England, Federal Reserve, ECB, Swiss National Bank (SNB) and Bank of Canada announcement of measures designed to deal with pressures in short-term funding markets. Actions taken by the Federal Reserve include the establishment of a temporary Term Auction Facility (TAF).
20 Dec. 07	Bear Stearns announces expected 2007 Q4 write-downs.
Jan. 08	Announcements of significant 2007 Q4 losses, by Citi and Merrill Lynch, among others.
11 Jan. 08	Bank of America confirms purchase of Countrywide.
15 Jan. 08	Citi announces it is to raise US\$14.5 billion in new capital.
24 Jan. 08	Société Générale reveals trading losses resulting from fraudulent trading by a single trader.
11 Feb. 08	American International Group (AIG) announces its auditors have found a 'material weakness' in its internal controls over the valuation of the AIGFP super senior credit default swap portfolio.
17 Feb. 08	UK Government announces temporary nationalisation of Northern Rock.
19 Feb. 08	Credit Suisse announces they have identified mismarkings and pricing errors by a small number of traders.
11 Mar. 08	Federal Reserve announces the introduction of a Term Securities Lending Facility and Bank of England announces it will maintain its expanded three-month long-term repo against a wider range of high-quality collateral.
14 Mar. 08	JPMorgan Chase & Co. announces that it has agreed, in conjunction with the Federal Reserve Bank of New York, to provide secured funding to Bear Stearns for an initial period of up to 28 days.
16 Mar. 08	JPMorgan Chase & Co. agrees to purchase Bear Stearns. Federal Reserve provides US\$30 billion non-recourse funding.
16 Mar. 08	Federal Reserve announces establishment of Primary Dealer Credit Facility.
21 Apr. 08	Bank of England launches its Special Liquidity Scheme (SLS) to allow banks to swap temporarily their high-quality mortgage-backed and other securities for UK Treasury bills.
22 Apr. 08	RBS announces £12 billion rights issue.
29 Apr. 08	HBOS announces £4 billion rights issue.

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2 May 08	Co-ordinated announcement from the Federal Reserve, ECB and SNB regarding further liquidity measures.	19 Sep. 08	US Treasury announces temporary guarantee program for the US money market mutual funds (MMMFs). The Federal Reserve Board announces it will extend non-recourse loans to banks to finance purchases of asset-backed commercial paper from MMMFs.
14 May 08	Bradford & Bingley proposes £300 million rights issue.	19 Sep. 08	SEC prohibits short-selling in financial companies. Bans follow from a number of European regulators.
2 June 08	Bradford & Bingley discloses that private equity firm TPG Capital is to obtain a 23% stake.	20 Sep. 08	US Treasury announces draft proposals to purchase up to US\$700 billion of 'troubled assets', later to become the Troubled Asset Relief Program (TARP).
9 June 08	RBS confirms that 5% of shares offered were left with underwriters.	21 Sep. 08	The Federal Reserve approves transformation of Goldman Sachs and Morgan Stanley into bank holding companies.
16 June 08	Lehman Brothers confirms a net loss of US\$2.8 billion in Q2.	23 Sep. 08	Announcement that Berkshire Hathaway is to invest US\$5 billion in Goldman Sachs.
18 June 08	Morgan Stanley reports losses from mortgage proprietary trading and bad loans.	24 Sep. 08	Bradford & Bingley announces the renegotiation of their mortgage forward sale agreement with GMAC-RFC.
25 June 08	Barclays announces plans to raise £4.5 billion in a share issue.	25 Sep. 08	JPMorgan Chase & Co. buys the deposits, assets and certain liabilities of Washington Mutual bank.
11 July 08	Closure of US mortgage lender IndyMac.	29 Sep. 08	Bradford & Bingley is nationalised by UK Government. Abbey buys its branches and retail deposit book.
13 July 08	US Treasury announces a rescue plan for Fannie Mae and Freddie Mac.	29 Sep. 08	Icelandic Government buys stake in Glitnir Bank.
15 July 08	US Securities and Exchange Commission (SEC) issues an emergency order to enhance investor protection against 'naked short-selling'.	29 Sep. 08	Belgian, Dutch and Luxembourg governments announce they will invest €11.2 billion in Fortis.
30 July 08	Federal Reserve announces the introduction of an 84-day TAF in addition to its existing 28-day loans. The ECB and SNB announce they will provide 84-day US dollar liquidity in addition to their existing operations with a maturity of 28 days.	29 Sep. 08	Federal Reserve increases swap lines to foreign central banks.
7 Sep. 08	Fannie Mae and Freddie Mac taken into conservatorship.	29 Sep. 08	Announcement of Citi's intention to acquire the banking operations of Wachovia in a transaction facilitated by the Federal Deposit Insurance Corporation (FDIC), protecting all depositors (under the systemic risk exception of the FDIC Improvement Act of 1991).
15 Sep. 08	Lehman Brothers files for bankruptcy. Bank of America announces purchase of Merrill Lynch.	30 Sep. 08	Dexia receives equity capital injection from Belgian, French and Luxembourg governments and from existing shareholders.
16 Sep. 08	US Government provides emergency loan to AIG of US\$85 billion in exchange for a 79.9% stake and right to veto dividend payments.	30 Sep. 08	Irish Government announces deposit guarantee. Other governments follow with extensions to deposit guarantees.
17 Sep. 08	Bank of England extends drawdown period for SLS.	3 Oct. 08	US House of Representatives passes US\$700 billion TARP, a government plan to rescue the US financial sector (having voted against an earlier version of the plan on 29 September 2008).
18 Sep. 08	Lloyds TSB/HBOS merger announced.		
18 Sep. 08	Announcement of co-ordinated central bank measures to deal with continued elevated pressures in US dollar short-term funding markets. Bank of England concludes a reciprocal swap agreement with the Federal Reserve.		
18 Sep. 08	Financial Services Authority (FSA) announces regulations prohibiting short-selling of financial shares.		

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3 Oct. 08	FSA raises the limit of the deposit guarantee to £50,000 (with effect from 7 October 2008).
3 Oct. 08	Wells Fargo and Wachovia agree to merge in a transaction requiring no financial assistance from the FDIC.
3 Oct. 08	Dutch Government acquires Fortis Bank Nederland (Holding) N.V.
6 Oct. 08	German authorities announce package to save Hypo Real Estate.
6 Oct. 08	BNP Paribas announces it has agreed to take control of Fortis' operations in Belgium and Luxembourg as well as the international banking franchises.
7 Oct. 08	The Icelandic Government takes control of Glitner and Landsbanki, which owns Icesave.
7 Oct. 08	Federal Reserve announces the creation of the Commercial Paper Funding Facility.
8 Oct. 08	The Chancellor announces that the retail deposit business of Heritable and the Kaupthing Edge deposit business of Kaupthing Singer & Friedlander has been transferred to ING Direct. The remainder of the two businesses were put into administration.
8 Oct. 08	UK support package announced — including provision of capital to UK incorporated banks, guarantee for new short to medium-term senior unsecured debt issuance and the extension and widening of the SLS.
8 Oct. 08	Co-ordinated interest rate cuts of 0.5 percentage points (including the Bank of England, the Federal Reserve and ECB).
13 Oct. 08	Further details of the UK support package released.
13 Oct. 08	Members of the euro zone announce measures to provide their banks with capital funding. Further co-ordinated action to provide US dollar liquidity.
14 Oct. 08	US Government announces Capital Purchase Program (CPP) of up to US\$250 billion.
16 Oct. 08	Bank of England releases consultative paper on planned developments to its market operations.
19 Oct. 08	Dutch Government injects €10 billion into ING.
21 Oct. 08	Federal Reserve announces the creation of the Money Market Investor Funding Facility.
29 Oct. 08	Federal Reserve announces the establishment of swap lines with the Banco Central do Brasil, Banco de Mexico, Bank of Korea, and the Monetary Authority of Singapore for up to US\$30 billion each.
31 Oct. 08	Barclays announces plans to raise up to £7.3 billion of additional capital, including £5.8 billion from investors in Abu Dhabi and Qatar.
3 Nov. 08	HM Treasury announces that its shareholding in banks will be managed on a commercial basis by a new arm's-length company, UK Financial Investments Limited, which is wholly owned by the UK Government.
6 Nov. 08	Bank of England reduces Bank Rate by 1.5 percentage points to 3%.
6 Nov. 08	International Monetary Fund (IMF) approves US\$15.7 billion Stand-By Arrangement (SBA) for Hungary.
10 Nov. 08	US authorities announce a restructuring of the financial support of AIG. The US Treasury will purchase US\$40 billion of AIG senior preferred shares, which will be used to reduce the Federal Reserve's loan to AIG.
21 Nov. 08	FSA confirms Derbyshire Building Society merger with the Nationwide Building Society.
23 Nov. 08	Citigroup to issue preferred shares to the US Treasury and FDIC in exchange for protection against unusually large losses on a US\$306 billion pool of loans and securities. The US Treasury will invest an additional US\$20 billion in Citigroup from the TARP.
24 Nov. 08	UK Government announces a temporary cut in VAT from 17.5% to 15% in the Pre-Budget Report.
25 Nov. 08	Federal Reserve announces the creation of the Term Asset-Backed Securities Loan Facility (TALF) and a new program to purchase direct obligations of Fannie Mae and Freddie Mac.
26 Nov. 08	Federal Reserve announces approval of the notice of Bank of America Corporation to acquire Merrill Lynch.
1 Dec. 08	National Bureau of Economic Research announces that a peak in US economic activity occurred in December 2007 and that the economy has since been in a recession.
4 Dec. 08	Bank of England reduces Bank Rate by 1.0 percentage points to 2.0%.
4 Dec. 08	FSA consults on liquidity rules for banks, building societies and investment firms.
5 Dec. 08	FSA confirms Cheshire Building Society merger with the Nationwide Building Society.

Date	Event	Date	Event
15 Dec. 08	UK Government announces changes to the Credit Guarantee Scheme, adjusting the formula that determines the fees paid by participating institutions for use of the Government guarantees.	10 Feb. 09	US Treasury announces a Financial Stability Plan, involving 'stress tests' to inform the need for capital injections, the creation of a Public-Private Investment Fund to acquire troubled loans and other assets from financial institutions, expansion of the TALF, and new initiatives to stem residential mortgage foreclosures and to support small business lending.
16 Dec. 08	Federal Reserve establishes a target range for the effective federal funds rate of 0% to 0.25%.	17 Feb. 09	President Obama signs into law the 'American Recovery and Reinvestment Act of 2009' which includes a variety of spending measures and tax cuts intended to promote economic recovery.
16 Dec. 08	FSA confirms Catholic Building Society merger with the Chelsea Building Society.	21 Feb. 09	UK Banking Act 2009 comes into effect implementing the Special Resolution Regime (SRR) and replaces temporary powers provided by the Banking (Special Provisions) Act 2008.
23 Dec. 08	IMF approves US\$2.35 billion SBA for Latvia.	23 Feb. 09	UK Government announces plans for Northern Rock to increase mortgage lending by up to £14 billion over the next two years.
24 Dec. 08	FSA confirms Barnsley Building Society merger with the Yorkshire Building Society.	26 Feb. 09	RBS announces an attributable loss of £24.1 billion. UK Government announces details of the APS and an agreement in principle with RBS to participate in the APS including increased lending commitments.
7 Jan. 09	Lloyds Banking Group (LBG) offers to exchange upper Tier 2 for Tier 1 securities.	27 Feb. 09	US Treasury announces its willingness to convert up to US\$25 billion of Citigroup preferred stock issued under the CPP into common equity.
8 Jan. 09	Bank of England reduces Bank Rate by 0.5 percentage points to 1.5%.	27 Feb. 09	LBG announces results, including pre-tax loss of £10.8 billion for HBOS.
14 Jan. 09	UK Government announces loan guarantees to the value of more than £20 billion to help small and medium-sized businesses.	Mar.–Apr. 09	Various UK banks offer to buy back or exchange for senior debt Tier 1 and Tier 2 capital securities.
15 Jan. 09	Irish Government announces that Anglo Irish Bank is to be nationalised.	2 Mar. 09	US authorities announce a restructuring of their assistance to AIG. Under the restructuring, AIG will receive as much as US\$30 billion of additional capital.
19 Jan. 09	UK Government announces the Asset Purchase Facility (APF), authorising the Bank of England to purchase a range of high-quality assets as part of a package of measures to support lending.	2 Mar. 09	HSBC announces plans to raise £12.5 billion in a rights issue.
19 Jan. 09	UK Government announces the Asset Protection Scheme (APS) designed to protect financial institutions against exposure to exceptional future credit losses on certain portfolios of assets.	3 Mar. 09	US authorities announce the launch of the TALF. Under the program, the Federal Reserve Bank of New York will lend up to US\$200 billion to eligible owners of certain AAA-rated asset-backed securities.
19 Jan. 09	FSA issues a statement clarifying that banks are expected to maintain a minimum core Tier 1 capital ratio of 4% and expressing its preference for the capital regime to incorporate countercyclical measures.	5 Mar. 09	Bank of England reduces Bank Rate by 0.5 percentage points to 0.5% and announces £75 billion asset purchase programme.
23 Jan. 09	ONS releases preliminary estimate of 2008 Q4 GDP which shows a second consecutive quarter of negative growth implying that the UK economy has entered recession based on a definition of two quarters of negative growth.	7 Mar. 09	UK Government announces an agreement in principle with LBG to participate in the APS, including additional lending commitments.
3 Feb. 09	Federal Reserve announces the extension, to 30 October 2009, of the existing liquidity programs and swap lines with foreign central banks.		
5 Feb. 09	Bank of England reduces Bank Rate by 0.5 percentage points to 1.0%.		
6 Feb. 09	Bank of England publishes operational details about the APF agreed with HM Government.		

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18 Mar. 09	Federal Reserve maintains the target range for the effective federal funds rate at 0% to 0.25% and announces an expansion of over US\$1 trillion in its planned asset purchases this year.	7 May 09	Federal Reserve releases the results of the 'stress test' of the 19 largest US bank holding companies. The assessment finds that losses at the 19 firms during 2009 and 2010 could be US\$600 billion and ten firms would need to add, in aggregate, US\$185 billion to their capital to maintain adequate buffers if the economy were to track the more adverse scenario considered in the programme.
19 Mar. 09	Bank of England publishes details of its Corporate Bond Secondary Market Scheme as part of its APF.	7 May 09	Bank of England maintains Bank Rate at 0.5% and increases size of asset purchase programme by £50 billion to £125 billion.
20 Mar. 09	FSA confirms Scarborough Building Society merger with the Skipton Building Society.	7 May 09	ECB announces it will lower its policy interest rate to 1.0%, after reducing it by 50 basis points in March and 25 basis points in April. It expects to purchase around €60 billion of covered bonds, and the European Investment Bank will become an eligible counterparty in the Eurosystem's monetary policy operations.
23 Mar. 09	US Treasury announces details on the Public-Private Investment Program for Legacy Assets. The Treasury will provide 50% of the equity capital.	21 May 09	S&P affirms the long-term sovereign credit rating of the United Kingdom but revises the outlook to negative.
24 Mar. 09	IMF creates the Flexible Credit Line (FCL), inviting applications from strong-performing countries.	28 May 09	FSA issues a statement that clarifies how stress tests have been used within the United Kingdom and provides information on the key macroeconomic parameters.
30 Mar. 09	Standard & Poor's (S&P) lowers the long-term sovereign credit rating of Ireland from AAA to AA+, with a negative outlook.	1 June 09	General Motors Corporation and three domestic subsidiaries announce that they have filed for relief under Chapter 11 of the US Bankruptcy Code.
30 Mar. 09	Bank of England announces that key parts of Dunfermline Building Society have been transferred to Nationwide Building Society under the SRR.	8 June 09	S&P lowers the long-term sovereign credit rating of Ireland from AA+ to AA, with a negative outlook.
2 Apr. 09	G20 Summit communiqué announces a tripling of the IMF's available resources to US\$750 billion.	8 June 09	LBG repays some of the Government's capital.
7 Apr. 09	Irish Government announces plans for the National Asset Management Agency to manage the worst-performing land and development loans of Irish banks.	9 June 09	US Treasury announces that ten of the largest US financial institutions participating in the CPP have met the requirements for repayment.
9 Apr. 09	German Government begins the process to take over Hypo Real Estate.	11 June 09	BlackRock agrees to pay US\$13.5 billion to buy Barclays Global Investors.
9 Apr. 09	CVC Capital Partners Ltd. agrees to buy iShares from Barclays for £3.0 billion.	12 June 09	West Bromwich Building Society announces a significant strengthening of its core Tier 1 capital position by swapping subordinated debt for a new instrument which will qualify as core Tier 1 capital.
17 Apr. 09	IMF approves a US\$47 billion credit line for Mexico under the new FCL.	17 June 09	President Obama announces a comprehensive plan for regulatory reform. The plan would give the Federal Reserve new responsibilities for consolidated supervision of systemically important banks among other changes.
22 Apr. 09	UK Government launches Asset-backed Securities Guarantee Scheme, under which HM Treasury will provide credit guarantees and liquidity guarantees on residential mortgage-backed securities issued by UK banks and building societies.		
22 Apr. 09	IMF publishes its <i>World Economic Outlook</i> warning that the global economy will decline by 1.3% in 2009, the weakest performance by far of the whole post-war period.		
6 May 09	IMF approves a US\$20.6 billion credit line for Poland under the IMF's new FCL.		