

## Core indicators

Table A.1 Core indicator set for the countercyclical capital buffer\* (a)

Indicator	Average, 1987–2006 <sup>(b)</sup>	Average 2006 <sup>(c)</sup>	Minimum since 1987 <sup>(b)</sup>	Maximum since 1987 <sup>(b)</sup>	Previous value (oya)	Latest value (as of 29 July 2020)
<b>Non-bank balance sheet stretch<sup>(d)</sup></b>						
1 Credit to GDP <sup>(e)</sup>						
Ratio	120.5%	161.6%	86.7%	174.8%	145.8%	149.8% (2020 Q1)
Gap	7.2%	9.1%	-29.2%	21.0%	-12.0%	-6.1% (2020 Q1)
2 Private non-financial sector credit growth <sup>(f)</sup>	9.8%	9.1%	-2.2%	24.0%	3.6%	2.6% (2020 Q1)
3 Net foreign asset position to GDP <sup>(g)</sup>	3.7%	-6.9%	-28.1%	20.9%	-17.0%	-17.4% (2020 Q1)
4 Gross external debt to GDP <sup>(h)</sup>	180.6%	314.8%	113.1%	399.4%	302.5%	324.9% (2020 Q1)
<i>of which bank debt to GDP</i>	119.4%	192.6%	77.6%	263.5%	169.7%	186.4% (2020 Q1)
5 Current account balance to GDP <sup>(i)</sup>	-1.8%	-2.8%	-6.5%	0.7%	-6.5%	-3.8% (2020 Q1)
<b>Conditions and terms in markets</b>						
6 Long-term real interest rate <sup>(j)</sup>	1.45%	1.23%	-3.15%	2.18%	-2.57%	-3.15% (29 July 2020)
7 VIX <sup>(k)</sup>	19.1	12.8	9.8	65.5	13.2	27.2 (29 July 2020)
8 Global corporate bond spreads <sup>(l)</sup>	84 bps	84 bps	74 bps	482 bps	115 bps	146 bps (29 July 2020)
9 Spreads on new UK lending						
Household <sup>(m)</sup>	480 bps	352 bps	284 bps	844 bps	628 bps	704 bps (Mar. 2020)
Corporate <sup>(n)</sup>	101 bps	95 bps	76 bps	349 bps	223 bps	247 bps (Mar. 2020)
<b>Bank balance sheet stretch<sup>(o)</sup></b>						
10 Capital ratio						
Basel II core Tier 1 <sup>(p)</sup>	6.6%	6.3%	6.1%	12.3%	n.a.	n.a.
Basel III common equity Tier 1 <sup>(q)</sup>	n.a.	n.a.	n.a.	n.a.	14.6%	14.8% (2020 Q1)
11 Leverage ratio <sup>(r)</sup>						
Simple	4.7%	4.1%	2.9%	6.9%	6.8%	6.6% (end-2019)
Basel III (2014 proposal)	n.a.	n.a.	n.a.	n.a.	5.1%	4.9% (end-2019)
12 Average risk weights <sup>(s)</sup>	53.6%	46.4%	29.7%	65.4%	31.6%	29.7% (end-2019)
13 Return on assets before tax <sup>(t)</sup>	1.0%	1.1%	-0.2%	1.5%	0.7%	0.6% (end-2019)
14 Loan to deposit ratio <sup>(u)</sup>	114.5%	132.4%	91.8%	133.3%	93.3%	91.8% (end-2019)
15 Short-term wholesale funding ratio <sup>(v)</sup>	n.a.	22.8%	8.4%	24.9%	9.9%	9.2% (end-2019)
<i>of which excluding repo funding</i>	n.a.	15.5%	3.9%	15.5%	3.9%	3.9% (end-2019)
16 Overseas exposures indicator: countries to which UK banks have 'large' and 'rapidly growing' total exposures <sup>(w)(x)</sup>		In 2006 Q4: AU, BR, CA, CH, CN, DE, ES, FR, IE, IN, JP, KR, KY, LU, NL, US, ZA		In 2019 Q1: AU, CA, FR, JP, TW		In 2020 Q1: AE, CN, FR, KH, JP, KR, KY, SG, US
17 CDS premia <sup>(y)</sup>	12 bps	8 bps	6 bps	302 bps	53 bps	56 bps (29 July 2020)
18 Bank equity measures						
Price to book ratio <sup>(z)</sup>	2.11	1.89	0.44	2.86	0.76	0.44 (29 July 2020)
Market-based leverage ratio <sup>(aa)</sup>	8.0%	6.4%	1.8%	13.0%	4.1%	2.3% (29 July 2020)

Table A.2 Core indicator set for sectoral capital requirements<sup>(a)</sup>

Indicator	Average, 1987–2006 <sup>(b)</sup>	Average 2006 <sup>(c)</sup>	Minimum since 1987 <sup>(b)</sup>	Maximum since 1987 <sup>(b)</sup>	Previous value (oya)	Latest value (as of 29 July 2020)
<b>Bank balance sheet stretch<sup>(o)</sup></b>						
1 Capital ratio						
Basel II core Tier 1 <sup>(p)</sup>	6.6%	6.3%	6.1%	12.3%	n.a.	n.a.
Basel III common equity Tier 1 <sup>(q)</sup>	n.a.	n.a.	n.a.	n.a.	14.6%	14.8% (2020 Q1)
2 Leverage ratio <sup>(r)</sup>						
Simple	4.7%	4.1%	2.9%	6.9%	6.8%	6.6% (end-2019)
Basel III (2014 proposal)	n.a.	n.a.	n.a.	n.a.	5.1%	4.9% (end-2019)
3 Average mortgage risk weights <sup>(ab)</sup>	n.a.	n.a.	11.3%	22.4%	11.5%	11.9% (end-2019)
UK average mortgage risk weights <sup>(ac)</sup>	n.a.	n.a.	9.7%	15.8%	10.0%	10.3% (end-2019)
4 Balance sheet interconnectedness <sup>(ad)</sup>						
Intra-financial lending growth <sup>(ae)</sup>	12.0%	13.0%	-29.8%	45.5%	-14.3%	-0.1% (end-2019)
Intra-financial borrowing growth <sup>(af)</sup>	14.1%	13.7%	-21.5%	29.5%	7.9%	1.8% (end-2019)
Derivatives growth (notional) <sup>(ag)</sup>	37.7%	34.2%	-25.9%	52.0%	18.7%	-7.7% (end-2019)
5 Overseas exposures indicator: countries to which UK banks have 'large' and 'rapidly growing' non-bank private sector exposures <sup>(ah)(x)</sup>		In 2006 Q4: AU, CA, DE, ES, FR, IE, IT, JP, KR, KY, NL, US, ZA			In 2019 Q1: HK, JP	In 2020 Q1: CN, FR, HK, JP, KY, SG, US
<b>Non-bank balance sheet stretch<sup>(d)</sup></b>						
6 Credit growth						
Household <sup>(ai)</sup>	10.6%	10.7%	-0.9%	21.6%	2.9%	3.1% (2020 Q1)
Commercial real estate <sup>(aj)</sup>	15.3%	18.5%	-9.7%	59.8%	5.5%	6.7% (2020 Q2)
7 Household debt to income ratio <sup>(ak)</sup>	98.4%	139.1%	77.1%	145.7%	128.8%	130.6% (2020 Q1)
8 PNFC debt to profit ratio <sup>(al)</sup>	262.5%	358.9%	157.7%	421.4%	318.7%	337.0% (2020 Q1)
9 NBFIs debt to GDP ratio (excluding insurance companies and pension funds) <sup>(am)</sup>	54.5%	127.7%	13.7%	171.7%	122.3%	130.1% (2020 Q1)
<b>Conditions and terms in markets</b>						
10 Real estate valuations						
Residential price to rent ratio <sup>(an)</sup>	100.0	151.3	68.5	162.4	155.0	156.3 (2020 Q1)
Commercial prime market yields <sup>(ao)</sup>	5.4%	4.1%	3.6%	7.1%	3.7%	3.6% (2019 Q3)
Commercial secondary market yields <sup>(ap)</sup>	8.6%	5.6%	5.1%	10.2%	5.9%	6.0% (2019 Q3)
11 Real estate lending terms						
Residential mortgage LTV ratio (mean above the median) <sup>(aq)</sup>	90.6%	90.7%	81.6%	90.8%	88.1%	88.4% (2020 Q1)
Residential mortgage LTI ratio (mean above the median) <sup>(ar)</sup>	3.8	3.8	3.6	4.2	4.2	4.2 (2020 Q1)
Commercial real estate mortgage LTV (average maximum) <sup>(as)</sup>	77.6%	78.3%	57.0%	79.6%	57.1%	58.2% (2019 Q4)
12 Spreads on new UK lending						
Residential mortgage <sup>(at)</sup>	80 bps	50 bps	34 bps	369 bps	109 bps	131 bps (Mar. 2020)
Commercial real estate <sup>(au)</sup>	132 bps	130 bps	83 bps	367 bps	252 bps	270 bps (Dec. 2019)

- \* The FPC considers this set of core indicators when reaching decisions on the UK countercyclical capital buffer (CCyB) rate. Firms use the UK CCyB rate to calculate their institution-specific CCyB rate and the countercyclical leverage ratio buffer (CCLB) rate. Currently, the CCLB rate for each major UK bank is calculated as 35% of its institution-specific CCyB rate with the CCLB rate percentage rounded to the nearest 10 basis points.
- (a) A spreadsheet of the series shown in this table is available at [www.bankofengland.co.uk/financial-stability](http://www.bankofengland.co.uk/financial-stability).
  - (b) If the series starts after 1987, the average between the start date and 2006 end and the maximum/minimum since the start date are used.
  - (c) 2006 was the last year before the start of the global financial crisis.
  - (d) The current vintage of ONS data is not available prior to 1997. Data prior to this and beginning in 1987 have been assumed to remain unchanged since *The Blue Book 2013*.
  - (e) Credit is defined as debt claims on the UK private non-financial sector. This includes all liabilities of the household and not-for-profit sector except for the unfunded pension liabilities and financial derivatives of the not-for-profit sector, and private non-financial corporations' (PNFCs') loans and debt securities excluding direct investment loans and loans secured on dwellings. The credit to GDP gap is calculated as the percentage point difference between the credit to GDP ratio and its long-term trend, where the trend is based on a one-sided Hodrick-Prescott filter with a smoothing parameter of 400,000. See Countercyclical Capital Buffer Guide at [www.bankofengland.co.uk/financial-stability](http://www.bankofengland.co.uk/financial-stability) for further explanation of how this series is calculated. Sources: ONS, Revell, J and Roe, A (1971): 'National balance sheets and national accounting - a progress report', *Economic Trends*, No. 211, UK Finance and Bank calculations.
  - (f) Twelve-month growth rate of nominal credit (defined as the four-quarter cumulative net flow of credit as a proportion of the stock of credit twelve months ago). Credit is defined as above. Sources: ONS and Bank calculations.
  - (g) As per cent of annual GDP (four-quarter moving sum). Sources: ONS and Bank calculations.
  - (h) Ratios computed using a four-quarter moving sum of GDP. Monetary financial institutions (MFIs) cover banks and building societies resident in the United Kingdom. Sources: ONS and Bank calculations.
  - (i) As per cent of quarterly GDP. Sources: ONS and Bank calculations.
  - (j) Five-year real interest rates five years forward, implied from inflation swaps and nominal fitted yields. Data series runs from October 2004. Sources: Bloomberg Finance L.P., Tradeweb and Bank calculations.
  - (k) 22-day moving average. The VIX is a measure of market expectations of 30-day volatility as conveyed by S&P 500 stock index options prices. Sources: Bloomberg Finance L.P. and Bank calculations.
  - (l) Global corporate bond spreads refers to a 22-day moving average of the global aggregate market non-financial, non-utility corporate bond spread. This tracks the performance of investment-grade corporate debt publicly issued in the global and regional markets from both developed and emerging market issuers. Index constituents are weighted based on market value. Spreads are option-adjusted (ie they show the number of basis points the matched-maturity government spot curve needs to be shifted in order to match a bond's present value of discounted cash flows). Prior to 2016, published versions of this indicator showed the ICE/BofAML Global Industrial Index. Sources: Barclays and Bank calculations.
  - (m) The household lending spread is a weighted average of mortgage and unsecured lending spreads, with weights based on relative volumes of new lending. The mortgage spread is a weighted average of quoted mortgage rates over risk-free rates, using 90% LTV two-year fixed-rate mortgages and 75% LTV tracker, two and five-year fixed-rate mortgages. For the fixed-rate products, spreads are taken relative to the instantaneous forward rate of matching maturity until July 2008, after which spreads are taken relative to the OIS spot rate of the same maturity. Spreads are taken relative to Bank Rate for the tracker product. The unsecured component is a weighted average of spreads on credit cards, overdrafts and personal loans. Spreads on unsecured lending are taken relative to Bank Rate. FCA Product Sales Data includes regulated mortgage contracts only but is used to weight all mortgage products. Series starts in 1997. Sources: Bank of England, Bloomberg Finance L.P., FCA Product Sales Data, UK Finance and Bank calculations.
  - (n) The UK corporate lending spread is a weighted average of: SME lending rates over Bank Rate; CRE average senior loan margins over Bank Rate; and, as a proxy for the rate at which banks lend to large, non-CRE corporates, UK investment-grade company bond spreads over maturity-matched government bond yields (adjusted for any embedded option features such as convertibility into equity). Spreads data previously referenced the three-month Libor rate. As at 6 August 2020, this now references SONIA. Weights are based on relative amounts outstanding of loans. Series starts in October 2002. Sources: Bank of England, Bloomberg Finance L.P., Cass Commercial Real Estate Lending survey, Department for Business, Energy and Industrial Strategy, ICE BofAML, UK Finance and Bank calculations.
  - (o) Unless otherwise stated, indicators are based on the major UK bank peer group defined as: Abbey National (until 2003); Alliance & Leicester (until 2007); Bank of Ireland (from 2005); Bank of Scotland (until 2000); Barclays; Bradford & Bingley (from 2001 until 2007); Britannia (from 2005 until 2008); Co-operative Banking Group (from 2005); Halifax (until 2000); HBOS (from 2001 until 2008); HSBC (from 1992); Lloyds TSB/Lloyds Banking Group; Midland (until 1991); National Australia Bank (from 2005 until February 2015); National Westminster (until 1999); Nationwide; Northern Rock (until 2011); Royal Bank of Scotland; Santander (from 2004); TSB (until 1994); Virgin Money (from 2012) and Woolwich (from 1990 until 1997). Accounting changes, eg the introduction of IFRS in 2005, result in discontinuities in some series. Restated figures are used where available.
  - (p) Major UK banks' aggregate core Tier 1 capital as a percentage of their aggregate risk-weighted assets. The core Tier 1 capital ratio series starts in 2000 and uses the major UK banks peer group as at 2014 and their constituent predecessors. Data exclude Northern Rock/Virgin Money from 2008. From 2008, core Tier 1 ratios are as published by banks, excluding hybrid capital instruments and making deductions from capital based on PRA definitions. Prior to 2008, that measure was not typically disclosed and Bank calculations approximating it as previously published in the *Financial Stability Report* are used. The series are annual until end-2012, half-yearly until end-2013 and quarterly afterwards. Sources: PRA regulatory returns, published accounts and Bank calculations.
  - (q) The Basel II series was discontinued with CRD IV implementation on 1 January 2014. The 'Basel III common equity Tier 1 capital ratio' is calculated as aggregate peer group common equity Tier 1 capital divided by aggregate risk-weighted assets, according to the CRD IV definition as implemented in the UK. The Basel III peer group includes Barclays, Co-operative Banking Group, HSBC, Lloyds Banking Group, Nationwide, RBS and Santander UK. From 2018, the Basel III CET1 ratio reflects IFRS 9 transitional arrangements as agreed in European law.
  - (r) A simple leverage ratio calculated as aggregate shareholders' equity over aggregate assets. The Basel III (2014 proposal) series corresponds to aggregate CRD IV end-point Tier 1 capital over aggregate leverage exposures, using the CRR definition since 2015 and the 2014 proposal before that. This series consists of Barclays, HSBC, Lloyds Banking Group, Nationwide, RBS, Santander UK and The Co-operative Bank. Latest published figures have been used (2019). In August 2016, the PRA implemented the FPC recommendation allowing firms subject to the leverage ratio framework in the United Kingdom to exclude certain claims on central banks from their leverage exposures; no adjustment has been made for this. Sources: PRA regulatory returns, published accounts and Bank calculations.
  - (s) Aggregate peer group risk-weighted assets divided by aggregate peer group published balance sheet assets according to applicable regulatory regimes. The series begins in 1992 and is annual until end-2012 and half-yearly onwards. Latest published figures have been used. Sources: Published accounts and Bank calculations.

- (t) Calculated as major UK banks' profit before tax as a proportion of total assets, averaged over the current and previous year. When banks in the sample have merged, aggregate profits for the year are approximated by those of the acquiring group. Series is annual until 2015 when it becomes semi-annual. The latest value uses latest published figures. In November 2018, the figures for 2015 H1, 2016 H1, 2017 H1, 2018 H1 were corrected. Sources: Published accounts and Bank calculations.
- (u) Major UK banks' loans and advances to customers as a percentage of customer deposits, where customer refers to all non-bank borrowers and depositors. Repurchase agreements are excluded from loans and deposits where disclosed. One weakness of the current measure is that it is not possible to distinguish between retail deposits from households and deposits placed by non-bank financial corporations on a consolidated basis. Additional data collections would be required to improve the data in this area. The series begins in 2000 and is annual until end-2012 and half-yearly afterwards. The latest value uses latest published figures. Sources: Published accounts and Bank calculations.
- (v) Share of total funding (including capital) accounted for by wholesale funding with residual maturity of under three months. Wholesale funding comprises deposits by banks, debt securities, subordinated liabilities and repo. Funding is proxied by total liabilities excluding derivatives and liabilities to customers under investment contracts. Latest published figures have been used. Where underlying data are not published estimates have been used. Repo includes repurchase agreements and securities lending. On 28 November 2018, the short-term wholesale funding ratio series were revised to reflect methodology changes. The series starts in 2005. Sources: Published accounts and Bank calculations.
- (w) This indicator highlights the countries where UK-owned monetary financial institutions' (MFIs') overall exposures are greater than 10% of UK-owned MFIs' tangible equity on an ultimate risk basis and have grown by more than 1.5 times nominal GDP growth in that country. Foreign exposures as defined in BIS consolidated banking statistics. Uses latest data available, with the exception of tangible equity figures for 2006–07, which are estimated using published accounts. Sources: Bank of England, ECB, Eikon from Refinitiv, IMF *World Economic Outlook (WEO)*, published accounts and Bank calculations.
- (x) Abbreviations used are: United Arab Emirates (AE), Australia (AU), Brazil (BR), Canada (CA), Switzerland (CH), People's Republic of China (CN), Germany (DE), Spain (ES), France (FR), Hong Kong (HK), Ireland (IE), India (IN), Italy (IT), Japan (JP), Republic of Korea (KR), Cayman Islands (KY), Luxembourg (LU), Netherlands (NL), Singapore (SG), Taiwan (TW), United States (US) and South Africa (ZA).
- (y) Average of major UK banks' five-year euro-denominated senior CDS premia, weighted by end-year total assets until 2014 and by half-year total assets from 2015. Series starts in 2003. Includes Nationwide from July 2003, The Co-operative Bank between 2005 and June 2017 and National Australia Bank between 2005 and June 2015. For June 2018, RBS CDS series was adjusted for a succession event. Sources: Markit Group Limited, published accounts and Bank calculations.
- (z) Relates the share price with the book, or accounting, value of shareholders' equity per share. Averages of the ratios in the peer group are weighted by end-year total assets until 2014 and by half-year assets from 2015. The sample comprises the major UK banks and National Australia Bank between 2005 and 2015 H2, excluding Britannia, Co-operative Banking Group, and Nationwide. Northern Rock/Virgin Money is excluded from 2008. Series starts in 2000. Sources: Bloomberg, Datastream by Refinitiv (formerly known as Thomson Reuters Datastream), published accounts and Bank calculations.
- (aa) Total peer group market capitalisation divided by total peer group assets (note a discontinuity due to introduction of IFRS accounting standards in 2005, which tends to reduce leverage ratios thereafter). The sample comprises the major UK banks, excluding Britannia, Co-operative Banking Group and Nationwide. National Australia Bank is included between 2005 and 2015 H2. Northern Rock/Virgin Money is excluded from 2008. Series starts in 2000. Sources: Bloomberg Finance L.P., Eikon from Refinitiv, published accounts and Bank calculations.
- (ab) Sample consists of Barclays Group, Co-operative Banking Group, HSBC Holdings Group, Lloyds Banking Group, Nationwide Building Society Group, NatWest Group (formerly RBS), Santander UK Group and excludes Nationwide for 2008 H2 only. Average risk weights for residential mortgages (exposures on the Retail IRB method only) are calculated as total risk-weighted assets divided by total exposure value for all banks in the sample. Calculated on a consolidated basis. Series starts in 2009 and is updated half-yearly. Sources: PRA regulatory returns and Bank calculations.
- (ac) Sample consists of Bank of Scotland, Barclays Bank, Co-operative Banking Group, HSBC Bank, Lloyds Bank, Nationwide Building Society Group, NatWest (formerly RBS), Santander UK Group and excludes Nationwide for 2008 H2 only. Average risk weights for residential mortgages (exposures on the Retail IRB method only) are calculated as total risk-weighted assets divided by total exposure value for all banks in the sample. Calculated on an unconsolidated basis, except for Nationwide, Santander UK and Co-operative Bank where only consolidated data were available. NatWest data includes National Westminster Bank, Ulster Bank and NatWest. Historical data updated as of June 2016 to improve data series consistency. Series starts in 2009 and is updated half-yearly. Sources: PRA regulatory returns and Bank calculations.
- (ad) The disclosures the series are based on are not currently sufficient to ensure that all intra-financial activity is included in these series, nor is it possible to be certain that no real-economy activity is included. Additional data collections would be required to improve the data in this area. The intra-financial lending and borrowing growth series are adjusted for the acquisitions of Midland by HSBC in 1992, and of ABN AMRO by RBS in 2007 to avoid reporting large growth rates resulting from step changes in the size and interconnectedness of the major UK bank peer group. Series exclude National Australia Bank.
- (ae) Lending to other banks and other financial corporations. Growth rates are year on year. Latest value shows growth rate for year to 2018 H1, except Nationwide and the Co-operative Bank which extend to 2017 H2. Data point excludes National Australia Bank. Sources: Published accounts, regulatory data and Bank calculations.
- (af) Wholesale borrowing, composed of deposits from banks and non-subordinated securities in issue. Growth rates are year on year. Latest value shows growth rate for year to 2019 H2. Data point excludes National Australia Bank. Data point excludes National Australia Bank. One weakness of the current measure is that it is not possible to distinguish between retail deposits and deposits placed by non-bank financial institutions on a consolidated basis. Sources: Published accounts, regulatory data and Bank calculations.
- (ag) Based on notional value of derivatives (some of which may support real-economy activity). The sample includes Barclays, HSBC and RBS who account for a significant share of UK banks' holdings of derivatives, though the sample could be adjusted in the future should market shares change. Series starts in 2002. Growth rates are year on year. Latest value shows growth rate for year to 2019 H2. Sources: Published accounts, regulatory data and Bank calculations.
- (ah) This indicator highlights the countries where UK-owned MFIs' non-bank private sector exposures are greater than 10% of UK-owned MFIs' tangible equity on an ultimate risk basis and have grown by more than 1.5 times nominal GDP growth in that country. Foreign exposures as defined in BIS consolidated banking statistics. Overseas sectoral exposures cannot currently be broken down further at the non-bank private sector level. The intention is to divide them into households and corporates as new data become available. Uses latest data available, with the exception of tangible equity figures for 2006–07, which are estimated using published accounts. Sources: Bank of England, ECB, Eikon by Refinitiv, IMF *World Economic Outlook (WEO)*, published accounts and Bank calculations.

- (ai) The twelve-month growth rate of nominal credit. Defined as the four-quarter cumulative net flow of credit divided by the stock of credit 12 months ago. Credit is defined as all liabilities of the household and not-for-profit sector except for the unfunded pension liabilities and financial derivatives of the not-for-profit sector. Sources: ONS and Bank calculations.
- (aj) Four-quarter growth rate of UK-resident MFIs' loans to the real estate sector. The real estate sector is defined as: buying, selling and renting of own or leased real estate; real estate and related activities on a fee or contract basis; and development of buildings. Not seasonally adjusted. Quarterly data. Data cover lending in both sterling and foreign currency from 1998. Prior to this period, data cover sterling only. Source: Bank of England.
- (ak) Gross debt as a percentage of a four-quarter moving sum of gross disposable income of the UK household and non-profit sector. Includes all liabilities of the household sector except for the unfunded pension liabilities and financial derivatives of the non-profit sector. Disposable income is adjusted for financial intermediation services indirectly measured (FISIM) and changes in pension entitlements. Sources: ONS and Bank calculations.
- (al) Gross debt as a percentage of a four-quarter moving sum of gross operating surplus. Gross debt is measured as loans and debt securities excluding derivatives, direct investment loans and loans secured on dwellings. The corporate gross operating surplus series is adjusted for FISIM. Sources: ONS and Bank calculations.
- (am) Gross debt as a percentage of four-quarter moving sum of nominal GDP. The NBFIs sector includes all financial corporations apart from monetary financial institutions (ie deposit-taking institutions). This indicator additionally excludes insurance companies and pension funds. Sources: ONS and Bank calculations.
- (an) Ratio between UK house price index (seasonally adjusted) and RPI housing rent. The series is rebased so that the average between 1987 and 2006 is 100. Sources: ONS and Bank calculations.
- (ao) The prime (secondary) yield is the ratio between the weighted averages, across the lowest (highest) yielding quartile of commercial properties, of MSCI Inc.'s measures of rental income and capital values. Sources: MSCI Inc. and Bank calculations.
- (ap) Mean LTV (respectively LTI) ratio on new advances above the median LTV (LTI) ratio, based on loans to first-time buyers, council/registered social tenants exercising their right to buy and homemovers, and excluding lifetime mortgages and advances with LTV above 130% (LTI above 10x). FCA Product Sales Data includes regulated mortgage contracts only. Series starts in 2005. Sources: FCA Product Sales Data and Bank calculations.
- (aq) Average of the maximum offered loan to value ratios across major CRE lenders. Sources: Cass Commercial Real Estate Lending survey and Bank calculations.
- (ar) The residential mortgage lending spread is a weighted average of quoted mortgage rates over risk-free rates, using 90% LTV two-year fixed-rate mortgages and 75% LTV tracker, two and five-year fixed-rate mortgages. For the fixed-rate products, spreads are taken relative to the instantaneous forward rate of matching maturity until July 2008, after which spreads are taken relative to the OIS spot rate of the same maturity. Spreads are taken relative to Bank Rate for the tracker product. FCA Product Sales Data includes regulated mortgage contracts only. Sources: Bank of England, Bloomberg Finance L.P., FCA Product Sales Data, UK Finance and Bank calculations.
- (as) The CRE lending spread is the average of senior loan margins across major CRE lenders relative to Bank Rate. Series starts in 2002. Spreads data previously referenced the three-month Libor rate. As at 6 August 2020, this now references SONIA. Sources: Bank of England, Bloomberg Finance L.P., Cass Commercial Real Estate Lending survey and Bank calculations.

Table A.3 Core indicator set for LTV and DTI limits<sup>(a)</sup>

Indicator	Average, 1987–2006 <sup>(b)</sup>	Average 2006 <sup>(c)</sup>	Minimum since 1987 <sup>(b)</sup>	Maximum since 1987 <sup>(b)</sup>	Previous value (oya)	Latest value (as of 29 July 2020)
<b>Lender and household balance sheet stretch</b>						
1 LTI and LTV ratios on new residential mortgages						
Owner-occupier mortgage LTV ratio (mean above the median) <sup>(d)</sup>	90.6%	90.7%	81.6%	90.8%	88.1%	88.4% (2020 Q1)
Owner-occupier mortgage LTI ratio (mean above the median) <sup>(d)</sup>	3.8	3.8	3.6	4.2	4.2	4.2 (2020 Q1)
Buy-to-let mortgage LTV ratio (mean) <sup>(e)</sup>	n.a.	n.a.	57.1%	75.4%	58.0%	61.3% (2020 Q2)
2 Household credit growth <sup>(f)</sup>						
	10.6%	10.7%	-0.9%	21.6%	2.9%	3.1% (2020 Q1)
3 Household debt to income ratio <sup>(g)</sup>						
	98.4%	139.1%	77.1%	145.7%	128.8%	130.6% (2020 Q1)
<i>of which: mortgages<sup>(h)</sup></i>	68.9%	101.7%	49.3%	109.1%	95.3%	96.9% (2020 Q1)
<i>of which: owner-occupier mortgages<sup>(i)</sup></i>	78.2%	93.1%	65.1%	96.4%	78.1%	79.6% (2020 Q1)
<b>Conditions and terms in markets</b>						
4 Approvals of loans secured on dwellings <sup>(j)</sup>						
	97,909	119,054	9,273	132,497	66,023	40,010 (June 2020)
5 Housing transactions <sup>(k)</sup>						
Advances to homemovers <sup>(l)</sup>	48,954	58,901	9,690	85,300	28,340	12,520 (May 2020)
% interest only <sup>(m)</sup>	53.3%	31.1%	1.7%	81.3%	2.0%	2.1% (May 2020)
Advances to first-time buyers <sup>(l)</sup>	39,167	33,406	8,430	55,800	29,630	43,982 (May 2020)
% interest only <sup>(m)</sup>	52.1%	24.0%	0.1%	87.9%	0.1%	0.1% (May 2020)
Advances to buy-to-let purchasers <sup>(l)</sup>	10,128	14,113	2,500	29,100	5,900	2,600 (May 2020)
% interest only <sup>(m)</sup>	n.a.	n.a.	50.0%	77.4%	72.6%	77.4% (June 2020)
6 House price growth <sup>(o)</sup>						
	1.7%	2.2%	-5.8%	8.4%	0.5%	1.0% (Mar. 2020)
7 House price to household disposable income ratio <sup>(p)</sup>						
	2.9	4.3	2.1	4.5	4.4	4.5 (Mar. 2020)
8 Rental yield <sup>(q)</sup>						
	5.8%	5.1%	4.7%	7.6%	4.8%	4.7% (Apr. 2019)
9 Spreads on new residential mortgage lending						
All residential mortgages <sup>(r)</sup>	80 bps	51 bps	35 bps	369 bps	110 bps	131 bps (Mar. 2020)
Difference between the spread on high and low LTV residential mortgage lending <sup>(r)</sup>	18 bps	25 bps	1 bps	293 bps	54 bps	86 bps (June 2020)
Buy-to-let mortgages <sup>(s)</sup>	n.a.	n.a.	61 bps	397 bps	189 bps	190 bps (Mar. 2020)

(a) A spreadsheet of the series shown in this table is available at [www.bankofengland.co.uk/financial-stability](http://www.bankofengland.co.uk/financial-stability).

(b) If the series start after 1987, the average between the start date and 2006 end and the maximum/minimum since the start date are used.

(c) 2006 was the last year before the global financial crisis.

(d) Mean LTV (respectively LTI) ratio on new advances above the median LTV (LTI) ratio, based on loans to first-time buyers, council/registered social tenants exercising their right to buy and homemovers, and excluding lifetime mortgages and advances with LTV ratio above 130% (LTI above 10x). FCA Product Sales Data includes regulated mortgage contracts only. Series starts in 2005. Sources: FCA Product Sales Data and Bank calculations.

(e) From 2017 Q3, mean LTV ratio is calculated on a value-weighted basis, using market-wide buy-to-let loan-level data submissions to the Bank of England, including further advances and remortgages. Prior to 2017 Q3, estimated mean LTV ratio of new non-regulated lending advances, of which buy-to-let is 88% by value. The figures include further advances and remortgages. The raw data are categorical: the share of mortgages with LTV ratio less than 75%; between 75% and 90%; between 90% and 95%; and greater than 95%. An approximate mean is calculated by giving these categories weights using the average LTV in equivalent buckets in loan-level buy-to-let data gathered by UK Finance. Series starts in 2007. UK Finance data available from 2014; weights prior to this date are average LTVs across the respective buckets using all data gathered in 2014. The share of mortgages with LTV ratio at 75% from 2014 until 2017 Q2 used are adjusted to estimate the LTV of each loan before any fees or charges are added. This approximates the LTV at which the loan was originated. Sources: Bank of England, UK Finance and Bank calculations.

(f) The twelve-month growth rate of nominal credit. Defined as the four-quarter cumulative net flow of credit divided by the stock of credit 12 months ago. Credit is defined as all liabilities of the household and not-for-profit sector except for the unfunded pension liabilities and financial derivatives of the not-for-profit sector. Sources: ONS and Bank calculations.

(g) Gross debt as a percentage of a four-quarter moving sum of disposable income. Includes all liabilities of the household sector except for the unfunded pension liabilities and financial derivatives of the non-profit sector. The household disposable income series is adjusted for financial intermediation services indirectly measured (FISIM). Sources: ONS and Bank calculations.

- (h) Total debt secured on dwellings as a percentage of a four-quarter moving sum of gross disposable income of the UK household and non-profit sector. Disposable income is adjusted for FISIM and changes in pension entitlements. Sources: ONS and Bank calculations.
- (i) Total debt associated with owner-occupier mortgages divided by the four-quarter moving sum of gross disposable income of the UK household and non-profit sector. Disposable income is adjusted for FISIM and changes in pension entitlements. Owner-occupier mortgage debt estimated by multiplying aggregate household debt secured on dwellings by the share of mortgages on lender balances that are not buy-to-let loans. Series starts in 1999. Sources: ONS, UK Finance and Bank calculations.
- (j) Data are for monthly number of house purchase approvals covering sterling lending by UK MFIs and other lenders to UK individuals. Approvals secured on dwellings are measured net of cancellations. Seasonally adjusted. Series starts in 1993. Source: Bank of England.
- (k) The number of houses sold/bought in the current month is sourced from HMRC's Land Transaction Return. From 2008 the Return excluded properties priced at less than £40,000 (2006 and 2007 data have also been revised by HMRC to correct for this). Data prior to 2005 comes from the Survey of Property Transactions; the UK total figure is computed by assuming that transactions in the rest of the United Kingdom grew in line with England, Wales and Northern Ireland. Seasonally adjusted. Sources: HMRC, UK Finance and Bank calculations.
- (l) The number of new mortgages advanced for house purchase in the current month. Buy-to-let series starts in 2001. There are structural breaks in the series in April 2005 where the UK Finance switches source. Data prior to 2002 are at a quarterly frequency. Sources: UK Finance and Bank calculations.
- (m) The share of new owner-occupied mortgages advanced for house purchase that are interest only. Interest-only mortgages exclude mixed capital and interest mortgages. There are structural breaks in the series in April 2005 where the UK Finance switches source. Data prior to 2002 are at a quarterly frequency. Sources: UK Finance and Bank calculations.
- (n) The share of non-regulated mortgages that are interest only. The data include all mortgages, not just those for house purchase. Interest-only mortgages exclude mixed capital and interest mortgages. Sources: Bank of England and Bank calculations.
- (o) House prices takes the quarterly index of UK HPI up until March 2005. From June 2005 onwards, the series uses the monthly index of UK HPI. The growth rate is calculated as the quarter-on-quarter percentage change until March 2005 then calculated as the percentage change three months on three months earlier. Seasonally adjusted. Sources: Land Registry, ONS and Bank calculations.
- (p) The ratio is calculated using a four-quarter moving sum of gross disposable income of the UK household and non-profit sector per household as the denominator. Disposable income is adjusted for FISIM and changes in pension entitlements. Historical UK household population estimated using annual GB data assuming linear growth in the Northern Ireland household population between available data points. House prices takes the seasonally adjusted UK HPI quarterly £ value series from 2005 onwards. Data prior to 2005 back-projects the UK HPI quarterly £ value series using the quarterly UK HPI index series. Series starts in 1990. Sources: Department for Communities and Local Government, Land Registry, ONS and Bank calculations.
- (q) Using Association of Residential Letting Agents (ARLA) data up until 2014. From 2015 onwards, the series uses LSL Property Services plc data normalised to the ARLA data over 2008 to 2014, when both series are available. Series starts in 2001. Sources: Association of Residential Letting Agents, LSL Property Services plc and Bank calculations.
- (r) The overall spread on residential mortgage lending is a weighted average of quoted mortgage rates over risk-free rates, using 90% LTV two-year fixed-rate mortgages and 75% LTV tracker, two and five-year fixed-rate mortgages. For fixed-rate products, spreads are taken relative to the instantaneous forward rate of matching maturity until July 2008, after which spreads are taken relative to the OIS spot rate of the same maturity. Spreads are taken relative to Bank Rate for the tracker product. Weights are based on relative volumes of new lending. The difference in spread between high and low LTV lending is the rate on 90% LTV two-year fixed rate mortgages less the 75% LTV two-year fixed rate. Series starts in 1997. FCA Product Sales Data includes regulated mortgage contracts only. Sources: Bank of England, Bloomberg Finance L.P., FCA Product Sales Data, UK Finance and Bank calculations.
- (s) The spread on new buy-to-let mortgages is the weighted average effective spread charged on new floating and fixed-rate non-regulated mortgages over safe rates. Spreads are taken relative to Bank Rate for the floating-rate products. The safe rate for fixed-rate mortgages is calculated by weighting two-year, three-year and five-year gilts by the number of buy-to-let fixed-rate mortgage products offered at these maturities. Series starts in 2007. Sources: Bank of England, Bloomberg Finance L.P., Moneyfacts and Bank calculations.