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Corporate bonds

Subordinated bank bonds shine in light of Basel 3

- This report is the latest update of our series on subordinated bank bonds. In this report, we explain the consequences of the Basel Committee's recent release of further details on bank capital regulation, and we update our recommendations.
- The phase-in process for stricter capital standards supports our recommended positioning, and we believe institutional Tier 1 and Tier 2 securities of stronger banks are now highly likely to be called at their first call date.
- We affirm our preference for stronger issuers and institutional step-up bond structures, and we recommend switching out of weaker structures and issuers.

This report covers subordinated bank bonds, which are subject to higher credit risk than senior bonds. We emphasize that these bonds should only be held in a diversified manner, and we believe deeply subordinated perpetual securities should be considered more like stocks than bonds from a portfolio risk perspective.

- We assess the latest news on the Basel 3 regulations and the consequences for subordinated bank securities (pages 2-3)
- We also discuss common structures of perpetual bonds and offer our view on their relative appeal for investors (pages 4-5)
- We update our list of recommended securities, and we list bonds that we would use as sources of funds for switches. (pages 6-10)
- For reference, we also reprint our discussion of valuation and important features of perpetual securities.

Related WMR publications

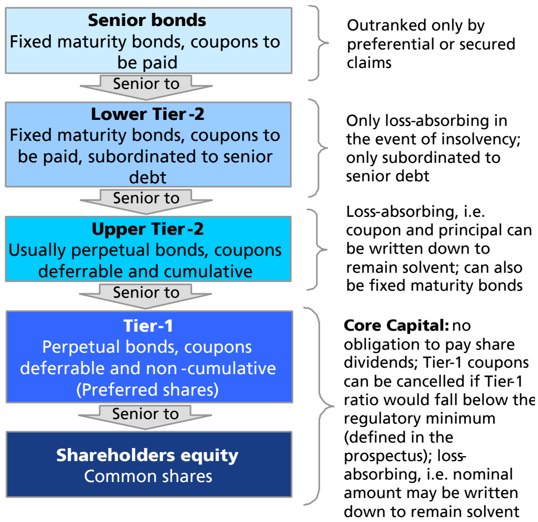
Basel 3 or when the regulatory curtains go up	14.09.2010
Subordinated bank bonds regain appeal	03.08.2010
Banks review and outlook	06.07.2010
Understanding Bonds, Part 10: Subordinated Bonds	24.09.2009

Preferred Financials

Americas	Goldman Sachs, J.P. Morgan
Europe	Allianz, BNP Paribas, Credit Suisse, Deutsche Bank, DnB Nor, Intesa SanPaolo, Nordea, Rabobank, SEB, Unicredit, Zurich Financial
UK	Barclays, HSBC Holdings
Canada	Bank of Montreal, Bank of Nova Scotia, Royal Bank of Canada, Toronto Dominion
Australia	Australia & New Zealand Banking Group, Commonwealth Bank of Australia, National Australia Bank, Westpac Banking

Source: UBS WMR

Bank Capital Securities
A simplified overview



Source: UBS WMR

Basel provides details on minimum capital and transition phase

The Basel Committee's update on 12 September provided the future set of minimum capital ratios and clear guidance on the phase-in period and transition rules for existing hybrid securities (see page 3). Please refer to our 14 September report, "Basel 3 or when the regulatory curtains go up," for a detailed review of the new guidelines. In this report, we concentrate on the impact for subordinated bank bonds.

Two Basel statements are key for subordinated bank bonds

Statement 1:

"*Capital instruments that no longer qualify as non-common equity Tier 1 capital or Tier 2 capital will be phased out over a 10-year horizon beginning 1 January 2013. Fixing the base at the nominal amount of such instruments outstanding on 1 January 2013, their recognition will be capped at 90% from 1 January 2013, with the cap reducing by 10 percentage points in each subsequent year. In addition, instruments with an incentive to be redeemed will be phased out at their effective maturity date.*"

The bonds we recommended in this series contained an incentive to be redeemed. Therefore, the last sentence above tells us that those will stop qualifying as Tier 1 or Tier 2 capital, respectively, at the first call date, and, as a consequence, there is a strong incentive for the issuer to redeem those bonds. For bonds with first call dates later than end-2012 and those an issuer decided not to call until then, the capital recognition will be reduced by 10% each year, starting on 1 January 2013. We think this provides an incentive for issuers to tender for bonds with long-dated first calls, unless there is a regulatory call option available to enforce an early redemption.

Statement 2

"*Capital instruments that no longer qualify as common equity Tier 1 will be excluded from common equity Tier 1 as of 1 January 2013. However, instruments meeting the following three conditions will be phased out over the same horizon described in the previous bullet point: (1) they are issued by a non-joint stock company; (2) they are treated as equity under the prevailing accounting standards; and (3) they receive unlimited recognition as part of Tier 1 capital under current national banking law.*"

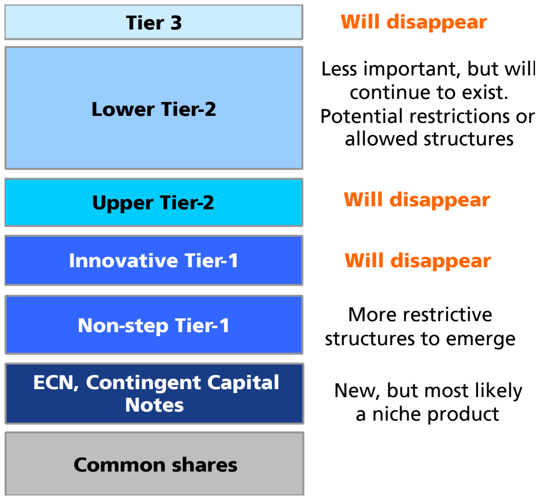
The second statement is tailormade for some German Landesbanks, savings banks and co-operative banks that hold much of their current core Tier 1 capital in the form of silent participations. With the exception of WestLB, HSH Nordbank and LB Berlin, which are joint-stock companies, this allows the Landesbanks to keep their existing silent participations as part of their core Tier 1, subject to annual reductions of 10%, starting in 2013. Despite this Germany-specific exception, we think Landesbanks will find it hard to replace those with common equity to meet the increasing minimum common equity Tier 1 ratio. We maintain our negative stance on Landesbank Tier 1 securities.

Conclusions and recommendations

We think the transition period provides banks with sufficient time to adjust their capital bases by retaining earnings, raising common equity and replacing existing hybrid capital securities with new structures that qualify as Tier 1 capital. The exact structure of new Tier 1 securities is currently not clear and we expect Basel to provide the missing details by December 2010. Until then, it makes little sense for banks to issue "old-style" Tier 1 securities as the transition rules only apply to securities issued until 12 September 2010 and later new issues would not qualify for Tier 1 as of January 2013, unless they meet the new standard.

Changes to bank capital securities

According to Basel 3 proposal



Source: UBS WMR

Basel 3 Phase-in arrangements (shading indicates transition periods)

All dates as of 1 January

	2012	2013	2014	2015	2016	2017	2018	2019
Minimum Common Equity Capital Ratio		3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%
Capital Conservation Buffer					0.625%	1.250%	1.875%	2.5%
Minimum common equity plus capital conservation buffer		3.5%	4.0%	4.5%	5.125%	5.750%	6.375%	7.0%
Minimum Tier 1 Capital		4.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%
Minimum Total Capital		8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Minimum Total Capital plus conservation buffer		8.0%	8.0%	8.0%	8.625%	9.125%	9.875%	10.5%
Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital	Phased out over 10 year horizon beginning 2013							

Source: BIS "Group of Governors and Heads of Supervision announces higher global minimum capital standards"; 12 September 2010

As a consequence, the existing Tier 1 bond market is now a closed universe without supply and any future new Tier 1 issue will have a less investor-friendly structure. At the same time, banks need to build up a larger common equity position, which better protects existing Tier 1 bonds from losses. Except for those banks with material event risk, we think both the larger common equity buffer and their potential scarcity value should contribute to a stronger performance of existing subordinated bank bonds compared to instruments of similar risk, like high-yield bonds for example.

We highlight that investing in Tier 1 securities continues to require an individual assessment of each instrument, and we think the Basel annoucement supports our preference for institutional step-up structures as those are now highly likely to be redeemed at their first call date. Retail or non-step Tier 1 securities may not be redeemed early and banks may choose to consider their call options from an economic perspective. We maintain our view that high cash price securities with regulatory par call language should be sold (see list below). It is yet unclear when an issuer would be legally in a position to claim a change in regulation, to redeem those immediately at par, but in the absence of a significant valuation discount for those bonds, we think investors should switch into other Tier 1 structures instead of taking the additional risk. Our best guess is that already by 1 January 2013, regulatory par calls may be executed.

Risk of a bubble?

Based on the initial market reaction and our outlook above, we think there is a risk that the asset class may attract too much interest in an environment of low yields, and we already excluded a number of hybrid securities from fundamentally strong banks from our list as we viewed them as too expensive. We think investors should keep in mind the equity-like risk when looking at decreasing yields to call and remember that higher future capital requirements do not already make banks safer investments as of today. While we continue to recommend investing in subordinated bank bonds, we think investors should monitor their positions closely and consider taking profits as valuations become stretched. Also, based on our negative stance towards some peripherial European countries, we may see enhanced volatility again in subordinated bonds, with prices dropping in magnitudes exceeding 10%.

Summary of our relative preferences

- Prefer step-up to non-step structures
- Prefer institutional to retail issues
- Within step-up's, we prefer lower coupon structures of stronger issuers
- For issuers with unclear call policy, high coupon step-up structures should be preferred, unless they contain regulatory par calls
- Any subordinated bond trading above par should be sold if there is a regulatory par call available to the issuer

Investment considerations (updated from last note)

Within the Tier 1 space, it is insufficient to select attractive issuers, as the valuation and expected performance of various bond structures of an issuer can differ substantially. In this section, we explain important differences and provide lists of securities we would consider buying and selling.

Innovative versus non-innovative Tier 1

The most significant difference between traditional and innovative hybrid capital instruments is that the latter usually include an incentive for early redemption – a coupon step-up after the first call date or an equity settlement feature. Non-innovative structures may be callable by the issuer, but the call must not be combined with any feature that incentivizes the issuer to redeem the security. However, coupons of non-innovative securities may also change from fixed to floating at the call date, as long as the margin over swap remains identical. From a regulatory perspective, innovative Tier 1 is lower quality capital and it will disappear after the transition to full implementation of Basel 3.

Retail versus institutional Tier 1

Usually, call probabilities depend to a large extent on the distinction between retail and institutional securities. Retail instruments are usually non-innovative (i.e., non-step) structures that provide no incentive to call at the first call date, except for economical considerations like cheaper refinancing or excess capital. Retail deals were often sold to a bank's customer base since institutional investors often demand more certainty on the redemption date. Therefore, institutional structures are usually called at the first call date. With few exceptions, this was also the case during the financial crisis.

Besides those banks that were restricted by their regulator and/or by the EU Commission from making coupon payments and calling capital securities, only Deutsche Bank applied economic considerations to institutional issues during the crisis and, as a consequence, did not call step-up structures at their first call date. Throughout the crisis, most calls have to be considered uneconomic calls since markets have been almost closed for new issues of subordinated instruments. Those that were issued came at significantly higher coupons than the ones being called. However, we emphasize that investors should never rely on the first call date, even after the Basel 3 announcement. Rather, they should be prepared for extension risk since banks may review their call policy due to capital shortfalls or other considerations.

Non-step structures are riskier

Comparing a structure with a high first-call probability (like step-ups) to one with very low call probability, the latter are generally riskier, as the issuer may not chose to redeem it for an extended period of time, leaving investors exposed to its credit risk. Due to lower market liquidity in retail structures, investors may not be able to exit these securities very easily. Also, those securities are usually priced to perpetuity, which leads to higher interest rate sensitivity and thus higher price volatility.

Beware of regulatory calls

Many Tier 1 securities with high coupons include regulatory call features. These allow the issuer to redeem or exchange the security once the regulatory capital framework changes in a way that would make those securities ineligible. This regulatory call may apply at any time, even before the first call date. We recommend reviewing any hybrid bond trading significantly above par (i.e., 100%) for potential regulatory par-calls. We think the market is not yet pricing this risk and there may be large price declines once this issue gains investor attention.

Some securities include regulatory make-whole calls. This means the bond may be redeemed at the higher value of par or the bond's fair value, calculated by discounting its future cash flows with a predefined discount rate, for example treasury yield + 1%. In this case, redemption prices may be above par but still significantly below the current market value.

The transition rules for Basel 3 make our negative stance towards Tier 1 securities with regulatory par calls and prices at or above par even more pronounced. We think the prospectus of those bonds may be interpreted in a way that already the 10% cut in Tier 1 recognition starting on 1 January 2013 is a trigger event for the regulatory call. We are convinced most banks would use this call option and looking at market valuations, investors are currently not compensated for this additional risk.

Therefore, we advise selling Tier 1 securities that are trading at or above par, contain regulatory par calls, and have their first call dates later than mid 2013. We suggest switching into lower cash-price alternatives. Our best ideas in Tier 1 securities are listed in Table 2.

Below we update the lists of bonds we would buy and sell.

Fig 1: High versus low coupons

Valuation example for high par call risk

		First	Coupon		Yield & Price (%)			
	Name	Call date	current	FRN	to call	mat.	Ask	ISIN
GBP	BARCLAYS BANK PLC	15.12.2017	6.000	3mL+142	8.5	4.1	87.0	XS0222208539
GBP	BARCLAYS BANK PLC	15.06.2019	14.000	3mL+1340	8.5	10.7	132.5	XS0397801357

Barclays has a track record of redeeming innovative Tier 1 securities at the first call date. We compare an older GBP 6% issue to the 14% coupon bond issued in the financial crisis. The 14% has cumulative coupons, whereas the 6% is non-cumulative. However, we would prefer the 6% bond at currently equal yields-to-call. The 14% bond trading at 132.5% has a regulatory par call.

Source: UBS WMR, Bloomberg, as of 15 September 2010

Corporate bonds

Table 1: Tier 1 securities we recommend to sell to switch into stronger structures (Table 2)

	Name	Maturity	First Call date		Coupon current	Coupon FRN	Regulatory Call	Ratings	Ind. yield & price (%) to call	mat.	Bid	Piece	ISIN
EUR	BNP PARIBAS	perpetual	11.09.2013	var	8.667	3mE+405	par call	A/A/Baa1	5.3	5.1	108.0	50+50	FR0010661314
EUR	SKANDINAVISKA ENSKILDA	perpetual	31.03.2015	var	9.250	3yS+640	par call*	BBB-/A-/Ba2	6.5	7.8	109.5	1+1	XS0454821462
EUR	CREDIT AGRICOLE SA	perpetual	31.03.2018	var	8.200	3mE+480	make-whole	A-/A/A3	6.7	6.2	107.0	50+50	FR0010603159
EUR	BNP PARIBAS	perpetual	02.07.2018	var	7.781	3mE+375	par call	A/A/Baa1	6.5	5.4	106.5	50+50	FR0010638338
EUR	SOCIETE GENERALE	perpetual	04.09.2019	var	9.375	3mE+890.1	par call	BBB+//Baa2	7.4	8.6	111.5	50+50	XS0449487619
EUR	CREDIT AGRICOLE SA	perpetual	26.10.2019	var	7.875	3mE+642.4	par call	A-/A/A3	7.1	7.3	104.5	50+50	FR0010814434
GBP	HSBC CAPITAL FUNDING LP	perpetual	30.06.2015	var	8.208	5yT+465	make-whole	A-/A+/A3	5.6	6.2	108.5	1+1	XS0110560165
GBP	BARCLAYS BANK PLC	perpetual	15.06.2019	var	14.000	3mL+1340	par call	A-/A/Baa2	8.5	10.7	132.0	50+1	XS0397801357
GBP	CREDIT AGRICOLE SA	perpetual	26.10.2019	var	8.125	3mL+646.79	par call	A-/A/A3	7.4	7.3	102.5	50+50	FR0010814418
USD	NATIONAL AUSTRALIA BK-NY	perpetual	24.09.2016	var	8.000	7y UST+494	par call	A+/A/A3	6.1	6.7	108.5	100+1	XS0347918723
USD	RABOBANK NEDERLAND	perpetual	30.06.2019	var	11.000	3mL+1086.75	make-whole	AA-/AA-/A2	6.5	8.6	129.5	75+1	XS0431744282
USD	CREDIT AGRICOLE SA	perpetual	13.10.2019	var	8.375	3mL+698.2	par call	A-/A/A3	7.1	7.2	107.0	100+1	USF22797FK97
EUR	DB CAPITAL FUNDING XI	perpetual	31.03.2015	fix	9.500	-	par call	BBB/A/Baa2	6.6	8.5	110.0	1+1	DE000A1ALVC5
EUR	DB CONT CAP TRUST IV	perpetual	15.05.2018	fix	8.000	-	par call	BBB/A/-	6.7	7.4	106.6	1+1	DE000A0TU305
USD	RABOBANK NEDERLAND	perpetual	24.03.2014	fix	7.375	-	par call	AA-/AA-/A2	4.7	6.8	107.6	2+2	XS0387971152
USD	CREDIT AGRICOLE SA	perpetual	26.12.2014	fix	9.750	-	par call	A-/A/A3	7.3	8.9	108.0	2+2	FR0010772244
USD	CLAUDIUS (CREDIT SUISSE)	perpetual	12.12.2015	fix	7.875	-	par call	BBB+/A/-	6.9	7.5	104.2	2+2	XS0531067659

Source: UBS WMR, Bloomberg, as of 16 September 2010. Please refer to the appendix section for explanations on the table.

Table 2: Tier 1 securities with an attractive risk / return profile

	Name	Maturity	First Call date		Coupon Fix	Coupon FRN	Regulatory Call	Ratings	Ind. yield & price (%) to call	mat.	Ask	Piece	ISIN
EUR	BNP PARIBAS CAP TRST IV	perpetual	24.01.2012	var	6.342	3mE+233	make-whole	A/A/Baa1	5.5	3.4	101.0	1+1	XS0141843689
EUR	CL CAPITAL TRUST 1	perpetual	26.04.2012	var	7.047	3mE+261	make-whole	A-/A/A3	7.0	3.8	100.0	1+1	XS0146942189
EUR	BNP PARIBAS CAP TRST VI	perpetual	16.01.2013	var	5.868	3mE+248	make-whole	A/A/Baa1	5.4	3.6	101.0	1+1	XS0160850227
EUR	SG CAPITAL TRUST III	perpetual	10.11.2013	var	5.419	3mE+195	make-whole	BBB+/A-/Baa2	7.4	3.5	94.5	1+1	XS0179207583
EUR	SOCIETE GENERALE	perpetual	26.01.2015	var	4.196	3mE+153	make-whole	BBB+/A-/Baa2	6.8	3.2	90.5	1+1	FR0010136382
EUR	UNICREDITO ITAL CAP TRST	perpetual	27.10.2015	var	4.028	3mE+176	make-whole	BBB/BBB/Baa3	7.6	3.7	85.5	50+1	XS0231436238
EUR	CREDIT AGRICOLE SA	perpetual	09.11.2015	var	4.130	3mE+165	make-whole	A-/A/A3	6.4	3.3	90.5	50+50	FR0010248641
EUR	HSBC CAPITAL FUNDING LP	perpetual	29.03.2016	var	5.130	3mE+190	make-whole	A-/A+/A3	5.4	3.4	98.5	1+1	XS0188853526
EUR	BNP PARIBAS	perpetual	12.04.2016	var	4.730	3mE+169	par call	A/A/Baa1	6.3	3.4	93.0	50+50	FR0010306738
EUR	ALLIANZ FINANCE II B.V.	perpetual	17.02.2017	var	4.375	3mE+173		A+/A/A2	5.6	3.4	93.5	1+1	XS0211637839
EUR	BNP PARIBAS	perpetual	13.04.2017	var	5.019	3mE+172	par call	A/A/Baa1	6.3	3.6	93.5	50+50	FR0010456764
EUR	SOCIETE GENERALE	perpetual	19.12.2017	var	6.999	3mE+335	make-whole	BBB+//Baa2	7.1	5.3	99.5	50+50	XS0336598064
EUR	SKANDINAVISKA ENSKILDA	perpetual	21.12.2017	var	7.092	3mE+340	make-whole	BBB-/A-/Ba2	6.6	5.2	102.5	50+1	XS0337453202
EUR	INTESA SANPAOLO SPA	perpetual	20.06.2018	var	8.047	3mE+410	make-whole	BBB+/A/Baa1	7.9	6.2	101.0	50+50	XS0371711663
EUR	INTESA SANPAOLO SPA	perpetual	14.10.2019	var	8.375	3mE+687.1	make-whole	BBB+/A/Baa1	7.8	7.9	103.5	50+50	XS0456541506
GBP	UNICREDITO ITAL CAP TRST	perpetual	27.10.2015	var	5.396	3mL+176	make-whole	BBB/BBB/Baa3	8.9	3.9	86.0	50+1	XS0231436667
GBP	CREDIT AGRICOLE SA	perpetual	24.02.2016	var	5.136	3mL+157.5	make-whole	A-/A/A3	7.9	3.5	88.0	50+50	FR0010291997
GBP	BNP PARIBAS	perpetual	13.07.2016	var	5.954	3mL+181	par call	A/A/Baa1	7.2	3.7	94.0	50+50	FR0010348557
GBP	UNICREDIT INTL BANK	perpetual	27.06.2018	var	8.593	3mL+395	make-whole	BBB/BBB/Baa3	9.0	6.4	98.0	50+1	XS0372556299
GBP	BARCLAYS BANK PLC	perpetual	15.12.2019	var	6.369	3mL+170	par call	A-/A/Baa2	7.8	4.6	91.0	50+1	XS0305103482
GBP	HSBC BANK FUNDING STER	perpetual	07.04.2020	var	5.862	6mL+185	make-whole	A/A+/Baa1	6.1	4.2	97.6	1+1	XS0189704140
GBP	BARCLAYS BANK PLC	perpetual	15.12.2036	var	5.330	3mL+198.5	par call	A-/A/Baa2	7.1	6.5	79.0	50+1	XS0248675364
USD	HSBC CAPITAL FUNDING LP	perpetual	27.06.2013	var	4.610	3mL+199.5	make-whole	A-/A+/A3	6.0	2.7	96.5	1+1	USG463802037
USD	SKANDINAVISKA ENSKILDA	perpetual	25.03.2014	var	4.958	3mL+182.75	make-whole	BBB-/A-/Ba2	6.9	2.8	94.0	100+1	USW25381DL07
USD	SKANDINAVISKA ENSKILDA	perpetual	23.03.2015	var	5.471	3mL+154	make-whole	BBB-/A-/Ba2	7.6	2.8	92.0	100+1	USW25381DM89
USD	NORDEA BANK AB	perpetual	20.04.2015	var	5.424	3mL+158	par call	A-/A/Baa2	6.2	2.6	97.0	100+1	USW5816FCM42
USD	BNP PARIBAS	perpetual	29.06.2015	var	5.186	3mL+168	par call	A/A/Baa1	6.5	2.8	94.5	1+1	USF1058YHV32
USD	BARCLAYS BANK PLC	perpetual	15.12.2016	var	5.926	3mL+175	par call	A-/A/Baa2	7.0	3.3	94.5	100+1	XS0269453139
USD	SOCIETE GENERALE	perpetual	05.04.2017	var	5.922	3mL+175	make-whole	BBB+/A-/Baa2	7.2	3.4	93.5	100+1	USF8586CAA02
USD	CREDIT SUISSE GUERNSEY	perpetual	15.05.2017	var	5.860	3mL+169	make-whole	BBB+/A/A3	6.6	3.2	96.0	2+2	US225448AA76

Source: UBS WMR, Bloomberg, as of 16 September 2010. Please refer to the appendix section for explanations on the table.

Lower Tier 2 (updated from last note)

Subordinated LT2 bonds have a fixed maturity date and "must-pay" coupons, because the issuer would be deemed in default on all its obligations if a coupon payment on LT2 were not be paid on time. The subordination to senior claims would only matter in liquidation, when LT2 bondholders may incur a total loss. However, there are a few risk aspects to consider even in the absence of a default. Subordinated bonds may be transferred to a different entity than senior bonds if a bank is split up or a bad-bank structure is created to facilitate the rescue of a struggling bank.

Given their enhanced risk, we think investors need to be more careful in selecting LT2 issuers than with senior bonds. However, we also believe that more issuer credit risk can be taken compared to perpetual bonds. This is reflected in our recommendations, which include several banks that are not part of our preferred financials list, and some that are even currently subject to coupons suspensions on their perpetual securities.

Capital conventions for Tier 2

To be eligible as regulatory Tier-2 capital, LT2 securities need to be issued with long maturities. Once the remaining life of the bond is less than five years, its capital recognition is reduced by 20% annually, reflecting the expectation that this capital will not be available in a few years time. As a consequence, many LT2 securities have a first call five years prior to maturity, which most issuers execute, if they are either able to issue new LT2 at reasonable costs or no longer need as much Tier 2 capital.

Credit ratings

LT2 bonds are usually rated one notch below senior bonds. For some banks that received substantial state aid, rating agencies incorporate a rating uplift for expected support in their senior bond ratings, which they do not apply to LT2. This leads to LT2 bonds being rated several notches lower than senior bonds in some cases.

Relative preferences

Relative valuations between the three types shown on the top right require a number of assumptions. We have a preference for floating-to-floating structures, based on their relative valuation, likelihood of being called and our interest rate call for floating rate notes. However, as individual investment targets and cash flow plans for a portfolio may require certain income streams and diversification, we provide longer lists of attractively valued securities for all three strategies and leave it to investors to choose an appropriate structure.

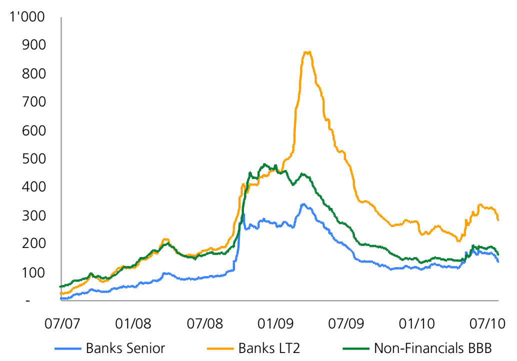
Three common LT2 structures

Fixed-for-life, no coupon step-up and no issuer call. This structure can be valued like a regular fixed-rate senior bond and we use spread-to-treasury as a measure of relative value.

Floating-to-floating, with a step-up of the floating margin at the first call date. A step-up by 30-60 bps is usual, but higher step-ups of 120 bps or even 150 bps exist, offering a higher call incentive for the issuer. For relative valuation, we use the discount margin, which is the most common risk premium measure for floating rate notes.

Fixed-to-floating (variable) bonds, which change to a floating coupon after the first call date. If the issuer is likely to call them at the first call date, spread-to-treasury or yield-to-call are appropriate valuation measures. If the issuer is unwilling to or restricted from calling its LT2 bonds, yield-to-worst (maturity) should be used. For RBS and Lloyds, which are subject to a two-year call restriction, the yield to the first call after the restriction period may be used.

Risk premium for Lower Tier 2 bonds (in bps)



Source: UBS WMR, BNP Paribas, as of 03 August 2010

Corporate bonds

Table 4: Lower Tier 2 fixed rate bonds

					Spread to		Ind. yield & price (%)				
	Name	Maturity		Coupon	Treasury	Ratings	to call	mat.	Ask	Piece	ISIN
EUR	LLOYDS TSB BANK PLC	18.03.2011	fix	4.750	201	BBB/A+/Baa2		2.5	101.1	1+1	XS0095501606
EUR	COMMERZBANK AG	02.05.2011	fix	6.125	162	-/A/A1		2.1	102.4	1+1	DE0006288921
EUR	ING BANK NV	04.01.2012	fix	5.500	194	A/A/A1		2.6	103.6	1+1	NL0000119592
EUR	BANK OF SCOTLAND PLC	29.10.2012	fix	5.500	310	BBB/A+/Baa2		3.8	103.3	1+1	XS0156924051
EUR	ING BANK NV	04.01.2013	fix	5.250	183	A/A/A1		2.6	105.8	1+1	NL0000113140
EUR	BANK OF SCOTLAND PLC	05.02.2013	fix	6.125	369	BBB/A+/Baa2		4.5	103.6	1+1	XS0124047431
EUR	BARCLAYS BANK PLC	31.03.2013	fix	4.875	168	A/A+/Baa1		2.5	105.8	1+1	XS0165867226
EUR	ROYAL BK OF SCOTLAND PLC	10.05.2013	fix	6.000	266	BBB/A+/Baa3		3.5	106.3	1+1	XS0128842571
EUR	HBOS PLC	20.03.2015	fix	4.875	378	BBB-/A+/Baa3		5.1	98.9	1+1	XS0165449736
EUR	ROYAL BK OF SCOTLAND PLC	22.04.2015	fix	4.875	270	BBB/A+/Baa3		4.1	103.2	1+1	XS0167127447
EUR	ROYAL BK OF SCOTLAND PLC	23.01.2017	fix	4.350	329	BBB/A+/Baa3		5.1	95.8	50+50	XS0271858606
EUR	UNICREDIT SPA	26.09.2017	fix	5.750	236	A-/A-/A1		4.3	108.4	50+1	XS0322918565
EUR	BAYERISCHE LANDESBANK	23.10.2017	fix	5.750	255	-/A /*-/A2		4.5	107.2	50+50	XS0326869665
EUR	BARCLAYS BANK PLC	23.01.2018	fix	6.000	236	A/A+/Baa1		4.4	109.8	50+1	XS0342289575
EUR	ROYAL BK OF SCOTLAND PLC	09.04.2018	fix	6.934	341	BBB/A+/Baa3		5.5	108.7	50+1	XS0356705219
EUR	INTESA SANPAOLO SPA	23.09.2019	fix	5.000	215	A/A+/Aa3		4.5	104.0	50+50	XS0452166324
EUR	LANDESBANK BERLIN AG	25.11.2019	fix	5.875	272	-/A+/A2		5.0	106.0	50+50	XS0468940068
EUR	LLOYDS TSB BANK PLC	24.03.2020	fix	6.500	344	BBB/A+/Baa2		5.8	105.1	50+1	XS0497187640
EUR	DEUTSCHE BANK AG	24.06.2020	fix	5.000	189	A/A+/NR		4.3	105.7	50+50	DE000DB5DCW6
EUR	INTESA SANPAOLO SPA	16.07.2020	fix	5.150	218	A/A+/Aa3		4.6	104.5	50+50	XS0526326334
EUR	NATIONWIDE BLDG SOCIETY	22.07.2020	fix	6.750	359	BBB+/A/Baa3		6.0	105.6	50+1	XS0527239221
GBP	LLOYDS BANKING GROUP PLC	17.10.2011	fix	9.125	305	-/A+/Baa3		3.6	105.7	1+1	XS0069909751
GBP	LLOYDS TSB BANK PLC	30.03.2015	fix	6.625	301	BBB/A+/Baa2		4.9	106.9	1+1	XS0109722990
GBP	JP MORGAN CHASE BANK NA	28.09.2016	fix	5.375	169	A+/A+/Aa2		4.0	107.5	50+50	XS0269436472
GBP	GOLDMAN SACHS GROUP INC	14.05.2017	fix	6.125	260	A-/A/A2		5.0	106.1	1+1	XS0300096491
GBP	COMMERZBANK AG	30.08.2019	fix	6.625	307	A-/A/A1		6.1	103.2	10+10	XS0101360161
GBP	NATL WESTMINSTER BANK	07.09.2021	fix	6.500	294	BBB/A+/Baa3		6.3	101.7	10+10	XS0090254722
GBP	GOLDMAN SACHS GROUP INC	12.10.2021	fix	5.500	270	A-/A/A2		6.0	95.8	1+1	XS0270349003
GBP	HSBC HOLDINGS PLC	20.12.2027	fix	5.750	170	A/AA-/A1		5.6	101.9	1+1	XS0159497162
USD	JPMORGAN CHASE & CO	15.03.2012	fix	6.625	91	A/A+/A1		1.3	107.9	1+1	US46625HAN08
USD	HSBC HOLDINGS PLC	12.12.2012	fix	5.250	123	A/AA-/A1		1.8	107.6	1+1	US404280AB51
USD	ROYAL BK SCOTLND GRP PLC	12.11.2013	fix	5.000	335	-/A/Ba2		4.1	102.5	1+1	US780097AN12
USD	HSBC BANK USA	01.04.2014	fix	4.625	153	AA-/AA-/A1		2.5	107.3	100+1	US40428EJQ35
USD	JPMORGAN CHASE & CO	15.09.2014	fix	5.125	150	A/A+/A1		2.6	109.6	1+1	US46625HBV15
USD	ROYAL BK SCOTLND GRP PLC	01.10.2014	fix	5.000	350	BBB-/A/Ba2		4.6	101.5	1+1	US780097AL55
USD	ROYAL BK SCOTLND GRP PLC	08.01.2015	fix	5.050	361	BBB-/A/Ba2		4.8	101.0	1+1	US780097AP69
USD	NATIONWIDE BUILDING SOC	01.08.2015	fix	5.000	398	BBB+/A/Baa3		5.4	98.5	1+1	US63859XAA54
USD	JPMORGAN CHASE & CO	01.10.2015	fix	5.150	181	A/A+/A1		3.2	108.8	1+1	US46625HDF47
USD	GOLDMAN SACHS GROUP INC	15.01.2017	fix	5.625	278	A-/A/A2		4.6	105.4	2+1	US38141GEU40
USD	CREDIT SUISSE NEW YORK	15.02.2018	fix	6.000	229	A/A+/Aa2		4.4	109.8	2+1	US22541HCC43
USD	HBOS PLC	21.05.2018	fix	6.750	463	BBB-/A+/Baa3		6.8	99.5	100+1	US4041A3AH52
USD	CREDIT SUISSE	14.01.2020	fix	5.400	212	A/A+/Aa2		4.7	105.5	2+1	US22546QAD97

Source: UBS WMR, Bloomberg, as of 15 September 2010. Please refer to the appendix section for explanations on the table.

Corporate bonds

Table 5: Lower Tier 2 floating-to-floating rate bonds

	Name	Maturity	First Call date		Coupon current	Coupon FRN	FRN disc. margin*	Ratings	Ind. yield & price (%) to call	mat.	Ask	Piece	ISIN
EUR	JPMORGAN CHASE & CO	12.10.2015	-	frn	1.210	3mE+40	-	A/-/A1	-	2.6	93.6	50+50	XS0231555672
EUR	INTESA SANPAOLO SPA	08.02.2016	08.02.2011	frn	1.154	3mE+25/85	5	A/A+/Aa3	5.1	1.4	98.5	50+50	XS0242832599
EUR	ING BANK NV	18.03.2016	18.03.2011	frn	1.051	3mE+17.5/67.5	14	-/-/A1	10.8	2.0	95.3	1+1	XS0240868793
EUR	HBOS PLC	29.03.2016	29.03.2011	frn	0.923	3mE+17.5/67.5	34	BBB-/A+/Baa3	25.2	3.0	88.0	1+1	XS0249026682
EUR	HSBC BANK PLC	29.03.2016	29.03.2011	frn	0.948	3mE+20/70	3	A+/AA-/A2	2.0	1.2	99.5	50+1	XS0248366576
EUR	INTESA SANPAOLO SPA	19.04.2016	19.04.2011	frn	1.046	3mE+20/80	5	A/A+/Aa3	4.6	1.4	98.0	50+1	XS0249938175
EUR	BARCLAYS BANK PLC	20.04.2016	20.04.2011	frn	1.036	3mE+17.5/67.5	5	A/A+/Baa1	3.5	1.3	98.6	50+50	XS0240949791
EUR	INTESA SANPAOLO SPA	28.06.2016	28.06.2011	frn	1.042	3mE+30/90	4	A/A+/Aa3	3.5	1.5	98.3	1+1	XS0194783352
EUR	LLOYDS TSB BANK PLC	09.07.2016	09.07.2011	frn	1.102	3mE+30/80	19	BBB/-/Baa2	15.8	3.2	89.0	1+1	XS0195810717
EUR	HBOS PLC	01.09.2016	01.09.2011	frn	1.188	3mE+30/80	22	BBB-/A+/Baa3	13.9	3.0	88.0	1+1	XS0192560653
EUR	ABN AMRO BANK NV	14.09.2016	14.09.2011	frn	1.078	3mE+20/70	11	A-/A/A1	9.6	2.5	92.0	1+1	XS0267063435
EUR	UNICREDIT SPA	20.09.2016	20.09.2011	frn	1.176	3mE+30/90	5	A-/A-/A1	3.7	1.6	97.5	50+1	XS0267703352
EUR	FORTIS BANK SA/NV	13.10.2016	13.10.2011	frn	1.072	3mE+25/75	5	AA-/A/A2	4.0	1.6	97.0	50+1	BE0932051759
EUR	BNP PARIBAS	17.10.2016	17.10.2011	frn	1.066	3mE+22/72	3	AA-/A+/Aa3	2.0	1.3	99.0	50+1	XS0270531147
EUR	DNB NOR BANK ASA	18.10.2016	18.10.2011	frn	1.146	3mE+30/105	3	A/-/A1	2.1	1.3	99.0	1+1	XS0202707567
EUR	UNICREDIT SPA	21.10.2016	21.10.2011	frn	1.320	3mE+45/105	5	-/A-/A1	3.4	1.7	97.8	1+1	XS0203450555
EUR	NATIONWIDE BLDG SOCIETY	22.12.2016	22.12.2011	frn	0.952	3mE+22/72	8	BBB+/A/Baa3	6.9	2.3	93.0	50+1	XS0279585169
EUR	FORTIS BANK SA/NV	17.01.2017	17.01.2012	frn	1.096	3mE+25/75	5	AA-/A/A2	3.3	1.3	96.0	50+1	BE0932317507
EUR	ROYAL BK OF SCOTLAND PLC	30.01.2017	30.01.2012	frn	1.146	3mE+25/75	17	BBB/A+/Baa3	13.2	3.5	84.0	50+50	XS0259579547
EUR	HBOS PLC	21.03.2017	21.03.2012	frn	0.929	3mE+20/70	14	BBB-/A+/Baa3	10.1	2.9	86.3	50+1	XS0292269544
EUR	DNB NOR BANK ASA	30.05.2017	30.05.2012	frn	1.088	3mE+20/95	3	A/-/A1	2.1	1.3	98.3	50+1	XS0255264656
EUR	SOCIETE GENERALE	07.06.2017	07.06.2012	frn	1.058	3mE+17.5/67.5	3	A/A/Aa3	2.8	1.5	97.0	50+50	XS0303483621
EUR	DEXIA CREDIT LOCAL	09.07.2017	09.07.2012	frn	0.952	3mE+15/65	10	A-/A/A2	9.4	3.3	86.0	50+50	XS0307581883
EUR	SKANDINAVISKA ENSKILDA	28.09.2017	28.09.2012	frn	0.992	3mE+25/175	3	A-/A/A2	2.6	1.6	97.0	50+1	XS0230339847
EUR	SVENSKA HANDELSBANKEN AB	19.10.2017	19.10.2012	frn	1.046	3mE+20/170	2	A+/A+/Aa3	2.3	1.4	97.5	50+1	XS0232843671
EUR	ABN AMRO BANK NV	31.05.2018	31.05.2013	frn	1.138	3mE+25/75	6	A-/A/A1	5.3	2.6	89.5	1+1	XS0256778464
GBP	BNP PARIBAS SA	05.10.2015	05.10.2010	frn	0.907	3mE+17.5/67.5	4	-/-/Aa3	1.1	1.1	100.0	1+1	XS0230888439
GBP	LLOYDS TSB BANK PLC	29.04.2016	29.04.2011	frn	0.974	3mL+23/73	24	-/-/Baa2	21.6	3.2	88.5	1+1	XS0218023447
USD	CREDIT AGRICOLE (LONDON)	13.03.2016	13.03.2011	frn	0.493	3mL+20/70	7	A+/-/Aa2	5.7	1.0	97.5	100+100	XS0237452320
USD	SVENSKA HANDELSBANKEN AB	15.03.2016	15.03.2011	frn	0.442	3mL+15/165	5	A+/-/Aa3	2.5	0.6	99.0	100+1	XS0246446859
USD	ROYAL BK OF SCOTLAND PLC	11.04.2016	11.04.2011	frn	0.728	3mL+20/70	32	BBB/A+/Baa3	29.0	3.5	85.5	100+1	XS0250214797
USD	ING BANK NV	23.05.2016	23.05.2011	frn	0.514	3mL+17.5/67.5	13	-/-/A1	10.0	1.6	93.8	75+1	XS0255306671
USD	BARCLAYS BANK PLC	27.06.2016	27.06.2011	frn	0.737	3mL+20/70	6	A/-/Baa1	4.4	1.0	97.0	100+1	US06738CKJ70
USD	DNB NOR BANK ASA	01.09.2016	01.09.2011	frn	0.527	3mL+23/98	3	A/-/A1	2.1	0.8	98.5	50+50	XS0265516335
USD	COMMONWEALTH BANK AUST	28.09.2016	28.09.2011	frn	0.737	3mL+20/70	3	AA-/-/Aa2	2.0	0.7	98.5	50+50	XS0269363577
USD	HBOS PLC	30.09.2016	30.09.2011	frn	0.733	3mL+20/70	20	BBB-/A+/Baa3	15.0	3.2	86.0	75+1	XS0269136163
USD	HSBC HOLDINGS PLC	06.10.2016	06.10.2011	frn	0.734	3mL+20/70	3	A/AA-/A1	1.9	0.7	98.5	100+1	XS0269733258
USD	ROYAL BK OF SCOTLAND PLC	14.10.2016	14.10.2011	frn	0.806	3mL+28/78	19	BBB/A+/Baa3	15.7	3.4	85.0	1+1	XS0202629407
USD	WESTPAC BANKING CORP	20.10.2016	20.10.2011	frn	0.731	3mL+21/71	4	AA-/-/Aa2	1.9	0.8	98.5	100+100	XS0272075705
USD	COMMONWEALTH BANK AUST	15.12.2016	15.12.2011	frn	0.512	3mL+22/72	3	AA-/-/Aa2	2.1	0.8	98.0	100+100	XS0278417596
USD	ABN AMRO BANK NV	17.01.2017	17.01.2012	frn	0.725	3mL+20/70	11	A-/-/A1	10.2	2.5	88.0	50+50	XS0282833184
USD	BARCLAYS BANK PLC	23.03.2017	23.03.2012	frn	0.713	3mL+17.5/67.5	6	A/-/Baa1	4.2	1.3	94.5	100+1	XS0292937165
USD	BNP PARIBAS	27.04.2017	27.04.2012	frn	0.668	3mL+17.5/67.5	4	AA-/-/Aa3	2.7	1.0	96.5	50+50	XS0296895047
USD	ING BANK NV	03.07.2017	03.07.2012	frn	0.734	3mL+20/70	7	A/-/A1	5.6	1.8	91.3	75+1	XS0306992545
USD	WESTPAC BANKING CORP	27.07.2017	27.07.2012	frn	0.723	3mL+23/73	3	AA-/-/Aa2	2.2	1.0	97.0	100+100	XS0313165374
USD	ROYAL BK OF SCOTLAND PLC	29.08.2017	29.08.2012	frn	0.499	3mL+20/70	13	BBB/A+/Baa3	9.5	3.2	83.5	100+100	XS0302127625
USD	HBOS PLC	06.09.2017	06.09.2012	frn	0.493	3mL+20/70	12	BBB-/A+/Baa3	8.8	3.0	84.5	100+1	XS0304201790
USD	BARCLAYS BANK PLC	11.09.2017	11.09.2012	frn	0.493	3mL+20/70	5	A/-/Baa1	4.0	1.5	93.3	1+1	XS0229313696

Source: UBS WMR, Bloomberg, as of 15 September 2010. Large step-ups marked in blue. Yield to call marked in red means that the issuer is currently restricted from redeeming subordinated instruments at this date. Please refer to the appendix section for explanations on the table.

Corporate bonds

Table 6: Lower Tier 2 fixed-to-floating rate bonds

			First / Next		Coupon		Spread to		Ind. yield & price (%)				
	Name	**Maturity**	**Call date**		current	FRN	**Treasury**	**Ratings**	to call	mat.	Ask	**Piece**	**ISIN**
EUR	ROYAL BK OF SCOTLAND PLC	28.01.2016	28.01.2011	var	4.500	3mE+85	2327	BBB/A+/Baa3	23.6	3.3	93.5	1+1	XS0180946906
EUR	HSBC BANK PLC	18.03.2016	18.03.2011	var	4.250	3mE+105	216	A+/AA-/A2	2.6	2.0	100.8	1+1	XS0164883992
EUR	SVENSKA HANDELSBANKEN AB	20.04.2016	20.04.2011	var	4.000	3mE+172	216	A+/A+/Aa3	2.6	2.6	100.8	50+1	XS0250873642
EUR	DANSKE BANK A/S	20.06.2016	20.06.2013	var	4.250	3mE+205	244	BBB/A-/Baa2	3.3	3.1	102.5	10+10	XS0170248503
EUR	COMMERZBANK AG	13.09.2016	13.09.2011	var	4.125	3mE+90	841	A-/A/A1	9.0	3.0	95.6	50+50	DE000CB07899
EUR	UNICREDIT SPA	20.09.2016	20.09.2011	var	4.125	3mE+94	322	A-/A-/A1	3.8	2.2	100.3	50+1	XS0267704087
EUR	LANDBK HESSEN-THUERINGEN	08.12.2016	08.12.2011	var	4.125	3mE+83	733	-/A/Aa3	8.0	3.0	95.7	50+50	XS0278214563
EUR	DEUTSCHE BANK AG	09.03.2017	09.03.2012	var	3.625	3mE+76	429	A/A+/A1	5.0	2.4	98.1	1+1	DE0003933941
EUR	SWEDBANK AB	27.09.2017	27.09.2012	var	5.570	3mE+260	264	-/-/A3	3.4	3.5	104.2	50+1	XS0322614420
EUR	COMMERZBANK AG	29.11.2017	29.11.2012	var	5.625	3mE+185	354	A-/A/A1	4.3	3.3	102.7	50+50	DE000CB8AUX7
EUR	LLOYDS TSB BANK PLC	05.03.2018	05.03.2013	var	5.625	3mE+203	457	BBB/A+/Baa2	5.3	3.8	100.6	50+1	XS0350487400
EUR	INTESA SANPAOLO SPA	26.06.2018	26.06.2013	var	4.375	3mE+100	328	A/A+/Aa3	4.1	2.7	100.6	50+50	XS0258143477
EUR	SWEDBANK AB	26.06.2018	26.06.2013	var	7.375	3mE+380	275	A-/-/A3	3.6	4.3	109.8	50+1	XS0372124403
EUR	BNP PARIBAS	22.01.2019	22.01.2014	var	4.375	3mE+71	170	AA-/A+/Aa3	2.7	2.1	105.3	50+1	XS0283256062
EUR	BAYERISCHE LANDESBANK	07.02.2019	07.02.2014	var	4.500	3mE+81	661	-/-/A2	7.6	4.3	91.0	50+50	XS0285330717
EUR	BARCLAYS BANK PLC	04.03.2019	04.03.2014	var	4.500	3mE+139	298	A/A+/Baa1	4.0	3.0	101.6	1+1	XS0187033864
EUR	SOCIETE GENERALE	12.03.2019	12.03.2014	var	4.500	3mE+92	197	A/A/Aa3	3.0	2.3	104.9	1+1	XS0187584312
EUR	ING BANK NV	15.03.2019	15.03.2014	var	4.625	3mE+144	297	-/A/A1	4.0	3.1	102.0	1+1	NL0000113892
EUR	UNICREDIT SPA	22.09.2019	22.09.2014	var	4.500	3mE+95	264	A-/A-/A1	3.8	2.8	102.4	50+1	XS0200676160
EUR	HBOS PLC	30.10.2019	30.10.2014	var	4.375	3mE+136	551	BBB-/A+/Baa3	6.7	4.4	91.7	1+1	XS0203871651
EUR	JPMORGAN CHASE & CO	12.11.2019	12.11.2014	var	4.375	3mE+150	249	A/A+/A1	3.7	3.1	102.4	50+50	XS0205436040
EUR	INTESA SANPAOLO SPA	02.03.2020	02.03.2015	var	3.750	3mE+89	269	A/A+/Aa3	4.0	2.9	98.8	50+50	XS0213101230
EUR	HSBC HOLDINGS PLC	29.06.2020	29.06.2015	var	3.625	3mE+93	174	A/AA-/A1	3.2	2.5	101.9	1+1	XS0222053315
EUR	ING BANK NV	16.09.2020	16.09.2015	var	3.500	3mE+136	278	A/A/A1	4.3	3.3	96.5	50+1	XS0229593529
EUR	ROYAL BK OF SCOTLAND PLC	22.09.2021	22.09.2016	var	4.625	3mE+130	466	BBB/A/Ba2	6.4	4.7	91.2	1+1	XS0201065496
EUR	ING BANK NV	29.05.2023	29.05.2018	var	6.125	3mE+255	271	A/A/A1	4.8	4.4	108.3	50+1	XS0366066149
GBP	BNP PARIBAS	08.12.2015	08.12.2010	var	4.750	3mL+72	381	AA-/A+/Aa3	4.3	1.6	100.1	1+1	XS0221178584
GBP	AUST & NZ BANKING GROUP	07.06.2016	07.06.2011	var	4.750	3mL+68	289	AA-/A+/Aa2	3.4	1.7	100.9	1+1	XS0237036370
GBP	INTESA SANPAOLO SPA	19.12.2016	19.12.2011	var	5.500	3mL+99	636	A/A+/Aa3	7.1	2.9	98.1	50+1	XS0260456065
GBP	BNP PARIBAS	07.09.2017	07.09.2012	var	6.742	3mL+118	292	AA-/A+/Aa3	3.8	2.5	105.6	50+1	XS0320304164
GBP	HBOS PLC	18.10.2017	18.10.2012	var	6.305	3mL+120	709	BBB-/A+/Baa3	7.9	3.8	96.9	50+1	XS0325811296
GBP	INTESA SANPAOLO SPA	12.11.2017	12.11.2012	var	6.375	3mL+135	472	A/A+/Aa3	5.6	3.3	101.4	50+50	XS0324790657
GBP	WESTPAC BANKING CORP	29.04.2018	29.04.2013	var	5.875	3mL+173	214	AA-/AA-/Aa2	3.2	2.7	106.7	10+10	XS0156885302
GBP	UNICREDIT SPA	16.10.2018	16.10.2013	var	6.375	3mL+138	398	A-/A-/A1	5.1	3.4	103.4	50+1	XS0326211801
GBP	AUST & NZ BANKING GROUP	07.12.2018	07.12.2013	var	4.750	3mL+143	203	AA-/A+/Aa2	3.3	2.6	104.4	1+1	XS0171431660
GBP	LLOYDS TSB BANK PLC	29.05.2020	29.05.2015	var	6.963	3mL+195	369	BBB/-/Baa2	5.5	4.2	105.8	50+1	XS0366686284
GBP	HSBC BANK PLC	29.09.2020	29.09.2015	var	4.750	3mL+82	260	A+/AA-/A2	4.6	3.2	100.7	50+1	XS0230339417
GBP	HSBC HOLDINGS PLC	18.10.2022	18.10.2017	var	6.375	3mL+130	228	A/AA-/A1	4.8	3.8	109.2	50+50	XS0326347373
GBP	CREDIT SUISSE LONDON	16.01.2023	16.01.2018	var	6.750	3mL+255	225	A/A+/Aa2	4.9	4.4	111.2	50+1	XS0336248082
GBP	ING BANK NV	29.05.2023	29.05.2018	var	6.875	3mL+255	279	A/A/A1	5.5	4.8	108.0	50+1	XS0366066222
GBP	COMMONWEALTH BANK AUST	19.12.2023	19.12.2018	var	4.875	3mL+100	170	AA-/AA-/Aa2	4.6	3.7	101.9	10+10	XS0170398068

Currently, there are no USD LT2 fixed-to-floating rate recommendations available

Source: UBS WMR, Bloomberg, as of 15 September 2010. Yield to call marked in red means that the issuer is currently restricted from redeeming subordinated instruments at this date. Please refer to the appendix section for explanations on the table.

Reference Section on subordinated bonds

It is very difficult to derive fair values for deeply subordinated bonds due to the following challenges:

- Contractual terms differ: conditions for canceling or deferring coupons and using the principal to absorb losses are defined individually for each bond and may be enforced to a different extent by national regulators. In many cases, a bank has different types of bond structures outstanding.
- Binary outcomes - all or nothing: In good times, perpetual bonds trade close to regular bonds, whereas their prices behave more like the company's stock in a crisis. The recovery value of perpetual bonds in case of an issuer default is most likely zero, whereas senior bonds usually recover some value in liquidation.
- Perpetual bonds generally have lower secondary market liquidity than stocks, as they are traded over-the-counter and often turn illiquid once an issuer is in difficulties. Stop-loss orders, which are frequently used for stocks, would not work for such bonds. As a consequence, investors may be unable to sell positions if news flow turns negative. However, it is difficult to estimate how much additional yield should be required to compensate for liquidity risk, a consideration that is also often overlooked in good times.

"Need to knows" before buying perpetual (hybrid) bank securities

1) Investors buying perpetual securities should have a long investment horizon. Hybrid bonds often turn illiquid and investors may need to wait until the issuing bank calls the bond, which is not necessarily the case at the first call date.

2) Risk tolerance must be high to accept potential coupon non-payments and principal losses, in a worst case. In terms of risk, investors should consider perpetual bank bonds comparable to the equity allocation of their portfolios. Alternatively, deeply subordinated bond could be seen as part of the high-yield bond allocation.

3) Be aware of concentration risks: all stocks and hybrid bonds of a single issuer should be seen as one risky position, which should not exceed prudent limits.

Source: UBS WMR

Yield measures

Perpetual bonds with call options have two common yield measures, yield-to-call and yield-to-maturity. Yield-to-call assumes the issuer would call the bond at the next call date, whereas yield-to-maturity approximates the perpetual nature of the instrument with a very long assumed remaining life.

Both values may differ significantly, as the assumed remaining life of the bond is very different if the call date is close. This may lead to extremely high yield-to-call values if market participants think that the bond may not be redeemed at this date, pricing in a longer remaining life. On the other hand, if market participants firmly believe in the next call being executed by the issuer, the bond would trade close to par. This would lead to a low yield-to-maturity value if the current coupon is low and, vice versa, a high current coupon would result in an inflated yield-to-maturity.

Ideally, investors should form an opinion on the expected remaining life and calculate the yield to this date (see yield example). However, estimates for early redemption are difficult, as many banks are no longer in a position to call perpetual bonds at the first call date. As a consequence, the two measures should be used to derive a best-case and a worst-case yield assumption. In the current market environment, yield-to-call usually shows the best-case yield that may be achieved and yield-to-maturity shows the lowest annual yield, assuming all coupon payments are made and the bond is repaid at 100% at a date far in the future. We caution against using these yield measures for bonds that may not pay coupons or principal.

Yield example for callable perpetual bonds
Different assumed redemption dates

	Bond 1	Bond 2
Fixed coupon	7.50%	9.50%
Bond price (%)	90	105
Redemption (Call)	Yield	Yield
in 1 year	19.450%	4.290%
in 2 years	13.540%	6.740%
in 3 years	11.640%	7.578%
in 4 years	10.700%	7.990%
in 5 years	10.150%	8.240%
in 10 years	9.061%	8.730%
in 20 years	8.560%	8.955%
in 30 years	8.425%	9.012%

Source: UBS WMR

Comparing perpetuals to high-yield bonds

As many perpetual bank bonds are now rated below investment-grade, high-yield securities may allow a reasonable relative return comparison. There are, however, some differences to keep in mind:

- Hybrids may lose coupon and principal payments without the issuer defaulting. However, this is now reflected in their lower ratings compared to a bank's senior unsecured rating.
- The recovery value of defaulted high-yield bonds averaged at 45% over the last 27 years, whereas deeply subordinated bonds usually have zero recovery value in case of a bank default.

Comparing perpetuals to stocks

- Yield stock: dividend yield + expected price performance
- Yield perpetual bond: discount rate that returns the current market value of the security assuming all coupon payments are made and the principal value is repaid at 100% at the next call date (yield-to-call) or an assumed maturity date far in the future.

Downside scenario

If a bank fails, both its stock and its hybrids are most likely worthless. Even if it survives but needs to be recapitalized, a bank's hybrid securities may suffer in similar proportion to the losses absorbed by common shares. Only if losses remain manageable, hybrids profit from their seniority to common shares. In this case, share dividends may be suspended, but coupons on hybrids can still be paid.

Upside scenario

In good times, hybrid bonds almost always underperform stocks, as their redemption value is limited to 100% and their coupon terms are fixed; whereas shareholders may earn higher dividends and price increases.

Conclusion

Deeply subordinated bonds are more attractive than stocks in a stock market that is trading in a narrow range or in a moderate cyclical downturn. In good times, stocks outperform hybrid bonds and in bad times there is little bond-like protection. There is even an advantage for stock investors in a period of market disruption, as stocks tend to remain liquid due to market makers on stock exchanges, whereas hybrid bonds are traded over-the-counter and may turn illiquid, preventing a stop-loss trade.

Notes to the bond tables

All of the securities shown are subordinated Tier 1 or Tier 2 capital instruments and investors should carefully read the following notes before investing. The tables include the currency and the legal entity issuing the bond. Those entities may be subsidiaries of a parent company that are not guaranteed and, as a consequence, may default without the parent company defaulting. Some securities may be subject to withholding taxes or sales restrictions.

Price data
Pricing information in the tables is only indicative. Many securities have lower secondary market liquidity and may be difficult to trade. We only include bonds that currently appear to be liquid, but investors should obtain updated pricing information and use limit orders.

Call dates
Most instruments have no fixed maturity date, that is, they are perpetual. This means that the issuer is not obliged to redeem the bond and repay the principal. However, the issuer may chose to redeem the bond at defined call dates. We include the next call date for each bond in the tables. If the issuer does not call a bond at the first call date, it may do so at any coupon date thereafter. An issuer may only call a perpetual bond after obtaining approval from the regulator, as this reduces the amount of available regulatory capital. If the first call date has already passed, we show the next call date in blue italics.

Coupons
Coupons may be fixed for life (fix), floating (frn) or a combination of both (var). We show the current coupon, that is, the one paid at the next coupon date, rounded to three digits.
For floating rate coupons, we show the coupon formula in the column "FRN". As an example, "3mE+200" means that a quarterly coupon is paid that is calculated as one-fourth of 3-month Euribor plus a margin of 200 bps. Assuming 3-month Euribor is 2.5%, the quarterly payout of a bond with a principal value of EUR 1000 is (2.5% + 2%) / 4 x EUR 1000 = EUR 11.25. For bonds denominated in currencies other than EUR, Libor (L) is used instead of Euribor. Floating rates linked to longer-term interest rates are usually linked to treasury rates, e.g. 5yT means the 5-year Treasury bond yield. Floating rate bonds with a coupon step-up at the first call date show two margins, for example, "3mL+20/70," meaning the margin above Libor increases from 20 bps to 70 bps after the first call date. Variable (var) rate bonds usually start with a fixed coupon for a defined period, during which the bond is not callable by the issuer. At the first call date, the coupon switches to an FRN formula, unless the bond is redeemed by the issuer. Under certain conditions, coupon payments on subordinated bonds may not be made by the issuer. This is indicated in the "payment" column.

For Lower Tier 2 (LT2) securities, coupons must be paid. Some subordinated bonds allow coupon payments to be deferred, with the obligation to pay them before any payments can be made to shareholders; those are usually Upper Tier 2 (UT2) bonds and the coupon is called cumulative (cumul.). Most Tier 1 bonds have non-cumulative (non-cum.) coupons, which can be canceled entirely, according to conditions defined in the prospectus of each bond. However, in most cases, the issuer and the regulator usually have ample discretion in this matter.

Credit ratings for each instrument
Ratings for each security are shown as S&P / Fitch / Moody's and may differ due to subordination levels and the agencies' different rating approaches for these bonds.
We also include the minimum piece in our tables, indicating the minimum investment size and increment. "100+1" means a minimum investment of 100,000 followed by pieces of 1,000 for any additional amount.

Appendix

If you require further information on the instruments or issuers mentioned in this publication, or you require general information on UBS Wealth Management Research including research policies and statistics regarding past recommendations, please contact either your Client Advisor or the mailbox UBS-research@ubs.com giving your country of residence.

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Appendix

Stock recommendation system:
Analysts provide three ratings (Most Preferred, Least Preferred or Neutral view). Stocks relevant for UBS WM clients but not selected as neither "Most preferred" nor "Least preferred" are implicitly defined as "Neutral View".

Equity preference:

Most preferred:
We expect the stock to both outperform the relevant benchmark and appreciate in absolute terms.

Least preferred:
We expect the stock to both underperform the relevant benchmark and depreciate in absolute terms.

Neutral view:
We expect the stock neither to out- or underperform the relevant benchmark nor significantly appreciate or depreciate in absolute terms.

Under review
Upon special events that require further analysis, the stock rating may be flagged as “Under review” by the analyst.

Suspended
If data is not valid anymore, the stock rating may be flagged as “Suspended” by the analyst.

Restricted
Issuing of research on a company by WMR can be restricted due to legal, regulatory, contractual or best business practice obligations which are normally caused by UBS Investment Bank’s involvement in an investment banking transaction in regard to the concerned company.

Current UBS WMR global rating distribution (as of last month-end)

Most Preferred	52.53%	(50.96%*)
Neutral View	17.17%	(64.71%*)
Least Preferred	13.30%	(45.57%*)
Suspended	0.34%	(100.00%*)
Discontinued	16.67%	(33.33%*)

*Percentage of companies within this rating for which investment banking services were provided by UBS AG or UBS Securities LLC or its affiliates within the past 12 months.

Corporate bonds

Appendix

Credit issuer/bond recommendation definitions

Recommendation	Time horizon		WMR terminology	Definition
WMR credit/bond* rating	Longer term	Investment grade	AAA	Issuer / Bonds have exceptionally strong credit quality. AAA is the best credit quality.
			High AA	Issuer / Bonds have very strong credit quality.
			Mid AA	
			Low AA	
			High A	Issuer / Bonds have high credit quality.
			Mid A	
			Low A	
			High BBB	Issuer / Bonds have adequate credit quality. This is the lowest investment grade category.
			Mid BBB	
			Low BBB	
		Speculative grade	High BB	Issuer / Bonds have weak credit quality. This is the highest speculative grade category.
			Mid BB	
			Low BB	
			High B	Issuer / Bonds have very weak credit quality.
			Mid B	
			Low B	
			High CCC	Issuer / Bonds have extremely weak credit quality.
			Mid CCC	
			Low CCC	
			CC	Issuer / Bonds have a very high risk of default.
			C	
			D	Obligor failed to make payment on one or more of its financial commitments. This is the lowest quality of the speculative grade category.
WMR credit trend			Improving	Reflects the analyst's expectation that the credit issuer's fundamentals will improve.
			Stable	Reflects the analyst's expectation that the credit issuer's fundamentals will remain stable.
			Deteriorating	Reflects the analyst's expectation that the credit issuer's fundamentals will deteriorate.
	Review within a couple of months		Watch +	Increased likelihood of UBS WMR credit rating upgrade(s).
	Review within a couple of months		Watch	Increased likelihood of UBS WMR credit rating change(s).
	Review within a couple of months		Watch -	Increased likelihood of UBS WMR credit rating downgrade(s).

Recommendation	WMR terminology	Definition
Bond recommendation	Outperform (OUT)	The bond is expected to earn a higher total return than a liquid bond benchmark representing a comparable level of risk.
	Marketperform (MKT)	The bond is expected to earn a total return in line with a liquid bond benchmark representing a comparable level of risk.
	Underperform (UND)	The bond is expected to earn a lower total return than a liquid bond benchmark representing a comparable level of risk.
	Sell (Sell)	In light of substantial downside credit or default risk, and the expectation of a lower total return than a liquid bond benchmark representing a comparable risk, investors should sell their bonds.

*The WMR bond rating reflects WMR's opinion of the credit quality of a bond. The WMR bond rating is derived by adjusting the WMR credit rating of the issuer for any collateral-type and capital structure considerations specific to that bond. This may result in the bond having a different risk profile, and therefore a different rating than the issuer, as well as other bonds of the issuer.

Appendix

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