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Wealth Management Research **3 August 2010**

Corporate bonds

Subordinated bank bonds regain appeal

- This update of our series on subordinated bank bonds analyzes the impact of current regulatory proposals and assesses the relative attractiveness of common bond structures in this environment.
- We identify opportunities for sophisticated investors willing to assume higher credit risk and we provide recommendation lists containing individual securities.
- We also list bonds for which we think positions should be reduced or even sold.

This note 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 deeply subordinated perpetual securities should be considered more like stocks than bonds from a portfolio risk perspective.

- We provide an update on Basel 3 regulation and its consequences for subordinated bank securities (page 2)
- We discuss common structures of perpetual bonds and offer our view on their relative appeal for investors (pages 2-3)
- We update our list of recommended securities and list bonds we would use as sources of funds for switches (page 4)
- We include a section on Landesbank Tier-1 bonds and present our recommendations for each of those securities (pages 5-6)
- We explain common subordinated Lower Tier 2 structures and show attractively valued bonds (pages 7-10)
- For reference, we also reprint our discussion of valuation and important features of perpetual securities (pages 11-15)

Related WMR publications

Banks review and outlook	06.07.2010
Subordinated bank bonds in the sovereign crisis	30.04.2010
Understanding Bonds, Part 10: Subordinated Bonds	24.09.2009

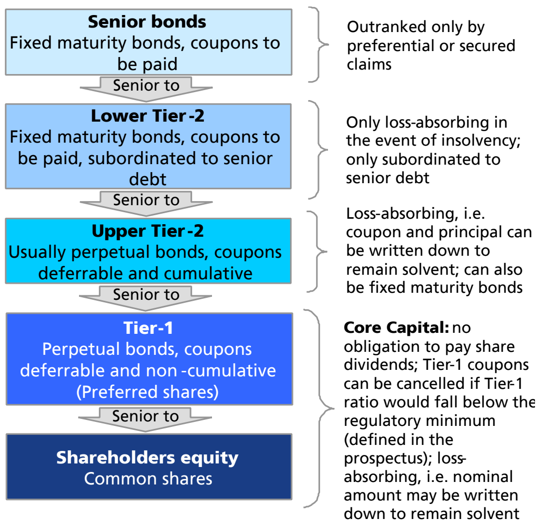
Preferred Financials

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

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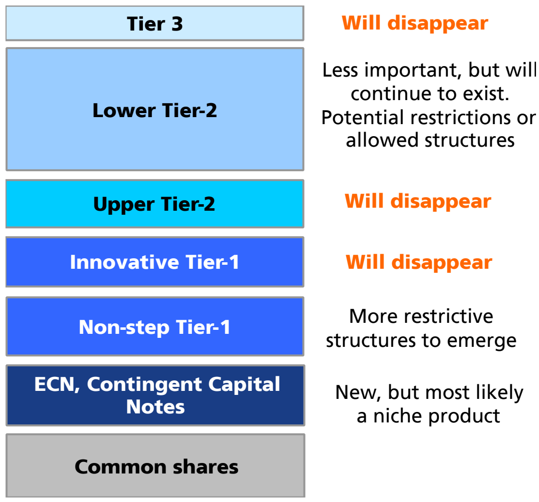
News from Basel

The Basel Committee's update on 26 July added few details on hybrid capital securities beyond what is know from its December 2009 proposal, discussed below. However, as many other aspects of Basel 3 have been amended, we assume that we will see no material changes to the proposed new definition of capital securities eligible for Tier 1 status. This means that, under the new rules, none of the existing structures would be eligible. With no clear guidance on the transition period – when existing Tier 1 securities remain part of a bank's regulatory capital base (grandfathering) – we assume that it will be in line with the proposed implementation of the leverage ratio and the net stable funding ratio, which should be adopted by 2018.

What Basel 3 means for call probabilities

We think most of the stronger banks will continue to call institutional structures at the first call date and that call dates beyond 2018 may be tendered for, unless they include a regulatory call option. This option would allow the issuer to redeem or exchange the bond as the regulatory capital definition changes in a way that makes it ineligible for Tier 1 status. Calls on any other structure will most likely be considered from an economical perspective, meaning that high coupon structures may be called, whereas low coupon structures would remain outstanding as long as is considered economically reasonable. After 2018, those securities would be comparable to senior funding from an issuer's perspective, whereas their risk factors for investors remain unchanged.

Changes to bank capital securities
According to Basel 3 proposal



Source: UBS WMR

Investment considerations

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.

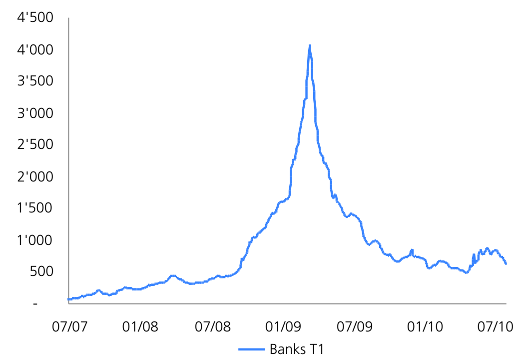
Retail versus institutional Tier 1

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.

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 issuers likely to call
- For issuers with unclear call policy, high coupon step-up structures should be preferred, unless they contain regulatory par calls

Risk premium for Tier 1 securities (in bps)



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

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. 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 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 volatility.

High-coupon structures – not always attractive

Based on the economic argument, a high coupon or large step-up provides the strongest incentive to call. However, this is already reflected in market valuations. Comparing a sample of similar structures from the same issuers (Fig. 1-3), which primarily differ only in terms of coupon level, we observed significantly lower yields-to-call for the high-coupon bonds, implying their larger call probability. Owing to the higher coupon, those bonds show larger yields-to-maturity compared to lower-coupon bonds, which we think can be neglected in most cases, given their higher call probability.

Conclusions

- Higher coupon securities are more likely to be called, but this is already in the price
- For strong banks that consistently called in the past, we would buy institutional structures with lower coupons or step-ups
- For weaker banks or those with unclear policies towards first calls, we prefer high-coupon institutional structures with larger step-ups.

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.

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. We think an issuer would only be able to exercise a regulatory call once the new rules apply, i.e. after a grandfathering period for existing securities.

We present a list of high-coupon securities in Table 1 that view as two expensive and are issued by banks that we have frequently recommended in this series. We advise against buying these securities and suggest switching

Fig 1: High versus low coupons (1)

Valuation example with identical bond structure

Name	First Call date	Coupon current	Coupon FRN	Yield & Price (%) to call	mat.	Ask
BNP PARIBAS CAP TRST VI	16.01.2013	5.868	3mE+248	7.5	3.9	96.5
BNP PARIBAS	11.09.2013	8.667	3mE+405	5.8	5.2	108.0

BNP is considered likely to call institutional structures at the first call date, i.e. we think the 5.868% bond is likely to be called. The 8.667% bond has a strong economic incentive to be called, hoewever, it is trading at a yield to call of 5.8%, which is 1.7% less than for the lower coupon bond. Also, the 8.667% bond has a regulatory par call, making it much less attractive.

Source: UBS WMR, Bloomberg, as of 30 July 2010

Fig 2: High versus low coupons (2)

Valuation example with different structures

Name	First Call date	Coupon current	Coupon FRN	Yield & Price (%) to call	mat.	Ask
DEUTSCHE CAP TRUST IV	19.09.2013	5.330	3mE+199	10.4	3.9	87.0
DB CAPITAL FUNDING XI	31.03.2015	9.500	fix	6.7	8.5	111.0

Deutsche Bank is known to consider first calls only on an economic basis. So its 5.33% bond may not be called in 2013, which is reflected in its relatively high yield-to-call. The 9.5% bond is a retail structure, but still more likely to be called in the specific case of Deutsche Bank due to the high coupon. This leads to a much lower yield-to-call, however, the 9.5% bond has a regulatory par call, which is less appealing for a security priced at 111%. We recommend none of the two bonds currently.

Source: UBS WMR, Bloomberg, as of 30 July 2010

Fig 3: High versus low coupons (3)

Valuation example for high par call risk

Name	First Call date	Coupon current	Coupon FRN	Yield & Price (%) to call	mat.	Ask
BARCLAYS BANK PLC	15.12.2017	6.000	3mL+142	9.3	4.4	83.0
BARCLAYS BANK PLC	15.06.2019	14.000	3mL+1340	8.8	10.8	131.3

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. Besides the larger yield-to-call of the 6% bond, the 14% bond trading at 131% has a regulatory par call.

Source: UBS WMR, Bloomberg, as of 30 July 2010

Corporate bonds

out of any existing positions and into lower cash-price alternatives. Our best ideas in Tier 1 securities are listed in Table 2.

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

			First		Coupon		Regulatory		Ind. yield & price (%)				
	Name	**Maturity**	**Call date**		current	FRN	**Call**	**Ratings**	to call	mat.	Ask	**Piece**	**ISIN**
EUR	DNB NOR BANK ASA	perpetual	19.11.2012	var	7.068	3mE+325	make-whole	BBB+//Baa3	5.6	4.4	103.0	1+1	XS0157873760
EUR	BNP PARIBAS	perpetual	11.09.2013	var	8.667	3mE+405	par call	A/A/Baa1	6.3	5.3	106.5	50+50	FR0010661314
EUR	SKANDINAVISKA ENSKILDA	perpetual	31.03.2015	var	9.250	3yS+640	par call*	BBB-/A-/Ba2	6.8	8.0	109.5	1+1	XS0454821462
EUR	CREDIT AGRICOLE SA	perpetual	31.03.2018	var	8.200	3mE+480	make-whole	A-/A/A3	7.3	6.5	105.0	50+50	FR0010603159
EUR	BNP PARIBAS	perpetual	02.07.2018	var	7.781	3mE+375	par call	A/A/Baa1	7.2	5.7	103.5	50+50	FR0010638338
EUR	SOCIETE GENERALE	perpetual	04.09.2019	var	9.375	3mE+890.1	par call	BBB+//Baa2	7.9	8.8	109.5	50+50	XS0449487619
EUR	CREDIT AGRICOLE SA	perpetual	26.10.2019	var	7.875	3mE+642.4	par call	A-/A/A3	7.3	7.4	103.5	50+50	FR0010814434
GBP	HSBC CAPITAL FUNDING LP	perpetual	30.06.2015	var	8.208	5yT+465	make-whole	A-/A+/A3	6.3	6.6	108.0	1+1	XS0110560165
GBP	BARCLAYS BANK PLC	perpetual	15.06.2019	var	14.000	3mL+1340	par call	A-/A/Baa2	8.8	10.8	131.3	50+1	XS0397801357
USD	RABOBANK NEDERLAND	perpetual	30.06.2019	var	11.000	3mL+1086.75	make-whole	AA-/AA-/A2	7.0	8.9	127.0	75+1	XS0431744282
USD	CREDIT AGRICOLE SA	perpetual	13.10.2019	var	8.375	3mL+698.2	par call	A-/A/A3	7.6	7.6	105.0	100+1	USF22797FK97
EUR	DB CAPITAL FUNDING XI	perpetual	31.03.2015	fix	9.500	-	par call	BBB+/A/Baa2	6.7	8.5	111.0	1+1	DE000A1ALVC5
USD	CREDIT AGRICOLE SA	perpetual	26.12.2014	fix	9.750	-	par call	A-/A/A3	7.4	9.0	108.5	2+2	FR0010772244

* may either be modified to remain Tier 1 or be called at par.

Source: UBS WMR, Bloomberg, as of 03 August 2010. Please refer to the appendix section for explanations on the table.

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

			First		Coupon				Ind. yield & price (%)				
	Name	**Maturity**	**Call date**		Fix	FRN	payments	**Ratings**	to call	mat.	Ask	**Piece**	**ISIN**
EUR	BNP PARIBAS CAP TRST IV	perpetual	24.01.2012	var	6.342	3mE+233	non-cum	A/A/Baa1	7.4	3.5	98.5	1+1	XS0141843689
EUR	CL CAPITAL TRUST 1	perpetual	26.04.2012	var	7.047	3mE+261	non-cum	A-/A/A3	10.7	4.1	94.5	1+1	XS0146942189
EUR	BNP PARIBAS CAP TRST VI	perpetual	16.01.2013	var	5.868	3mE+248	non-cum	A/A/Baa1	7.9	3.9	95.5	1+1	XS0160850227
EUR	SG CAPITAL TRUST III	perpetual	10.11.2013	var	5.419	3mE+195	non-cum	BBB+/A-/Baa2	10.6	4.0	86.3	1+1	XS0179207583
EUR	SOCIETE GENERALE	perpetual	26.01.2015	var	4.196	3mE+153	non-cum	BBB+/A-/Baa2	9.9	3.8	80.0	1+1	FR0010136382
EUR	UNICREDITO ITAL CAP TRST	perpetual	27.10.2015	var	4.028	3mE+176	non-cum	BBB/BBB/Baa3	9.7	4.2	77.5	50+1	XS0231436238
EUR	CREDIT AGRICOLE SA	perpetual	09.11.2015	var	4.130	3mE+165	non-cum	A-/A/A3	9.1	4.0	80.0	50+50	FR0010248641
EUR	HSBC CAPITAL FUNDING LP	perpetual	29.03.2016	var	5.130	3mE+190	non-cum	A-/A+/A3	6.5	3.7	93.5	1+1	XS0188853526
EUR	BNP PARIBAS	perpetual	12.04.2016	var	4.730	3mE+169	non-cum	A/A/Baa1	7.7	3.8	86.5	50+50	FR0010306738
EUR	ALLIANZ FINANCE II B.V.	perpetual	17.02.2017	var	4.375	3mE+173	cumulative	A+/A/A2	6.1	3.6	91.0	1+1	XS0211637839
EUR	BNP PARIBAS	perpetual	13.04.2017	var	5.019	3mE+172	non-cum	A/A/Baa1	7.6	4.0	87.0	50+50	FR0010456764
EUR	SOCIETE GENERALE	perpetual	19.12.2017	var	6.999	3mE+335	non-cum	BBB+//Baa2	8.4	5.8	92.5	50+50	XS0336598064
EUR	SKANDINAVISKA ENSKILDA	perpetual	21.12.2017	var	7.092	3mE+340	non-cum	BBB-/A-/Ba2	7.3	5.4	99.0	50+1	XS0337453202
EUR	INTESA SANPAOLO SPA	perpetual	20.06.2018	var	8.047	3mE+410	non-cum	BBB+/A/Baa1	8.6	6.6	97.0	50+50	XS0371711663
EUR	INTESA SANPAOLO SPA	perpetual	14.10.2019	var	8.375	3mE+687.1	non-cum	BBB+/A/Baa1	8.3	8.2	100.5	50+50	XS0456541506
GBP	UNICREDITO ITAL CAP TRST	perpetual	27.10.2015	var	5.396	3mL+176	non-cum	BBB/BBB/Baa3	11.3	4.5	77.5	50+1	XS0231436667
GBP	CREDIT AGRICOLE SA	perpetual	24.02.2016	var	5.136	3mL+157.5	non-cum	A-/A/A3	9.5	4.0	81.6	50+50	FR0010291997
GBP	BNP PARIBAS	perpetual	13.07.2016	var	5.954	3mL+181	non-cum	A/A/Baa1	8.6	4.1	88.0	50+50	FR0010348557
GBP	SOCIETE GENERALE	perpetual	16.06.2018	var	8.875	3mL+340	non-cum	BBB+//Baa2	8.7	6.1	101.0	50+1	XS0369350813
GBP	UNICREDIT INTL BANK	perpetual	27.06.2018	var	8.593	3mL+395	non-cum	BBB/BBB/Baa3	9.5	6.7	95.0	50+1	XS0372556299
GBP	BARCLAYS BANK PLC	perpetual	15.12.2019	var	6.369	3mL+170	cumulative	A-/A/Baa2	8.8	5.1	85.0	50+1	XS0305103482
GBP	HSBC BANK FUNDING STER	perpetual	07.04.2020	var	5.862	6mL+185	non-cum	A/A+/Baa1	7.0	4.6	91.2	1+1	XS0189704140
GBP	BARCLAYS BANK PLC	perpetual	15.12.2036	var	5.330	3mL+198.5	cumulative	A-/A/Baa2	7.8	7.1	73.0	50+1	XS0248675364
USD	HSBC CAPITAL FUNDING LP	perpetual	27.06.2013	var	4.610	3mL+199.5	non-cum	A-/A+/A3	6.1	2.9	96.0	1+1	USG463802037
USD	SKANDINAVISKA ENSKILDA	perpetual	25.03.2014	var	4.958	3mL+182.75	non-cum	BBB-/A-/Ba2	9.6	3.4	86.0	100+1	USW25381DL07
USD	SKANDINAVISKA ENSKILDA	perpetual	23.03.2015	var	5.471	3mL+154	non-cum	BBB-/A/Ba2	7.8	3.1	91.0	100+1	USW25381DM89
USD	NORDEA BANK AB	perpetual	20.04.2015	var	5.424	3mL+158	non-cum	A-/A/Baa2	7.9	3.1	90.5	100+1	USW5816FCM42
USD	BNP PARIBAS	perpetual	29.06.2015	var	5.186	3mL+168	non-cum	A/A/Baa1	7.9	3.3	89.0	1+1	USF1058YHV32
USD	BARCLAYS BANK PLC	perpetual	15.12.2016	var	5.926	3mL+175	cumulative	A-/A/Baa2	8.6	3.9	87.3	100+1	XS0269453139
USD	SOCIETE GENERALE	perpetual	05.04.2017	var	5.922	3mL+175	non-cum	BBB+/A-/Baa2	9.1	4.1	84.5	100+1	USF8586CAA02
USD	CREDIT SUISSE GUERNSEY	perpetual	15.05.2017	var	5.860	3mL+169	non-cum	BBB+/A/A3	7.1	3.5	93.5	2+2	US225448AA76
USD	BARCLAYS BANK PLC	perpetual	15.12.2017	var	7.434	3mL+317	non-cum	A-/A/Baa2	7.5	5.0	99.5	100+1	XS0322792010

Source: UBS WMR, Bloomberg, as of 03 August 2010. Please refer to the appendix section for explanations on the table.

Landesbank Tier 1s

We have not recommended hybrid securities issued by German Landesbanks, and this remains our view. However, we are aware of investor interest in this segment, so we share our views on the Tier 1 issues of BayernLB, Helaba, HSH Nordbank, NordLB and WestLB.

Weak structures

Most Landesbank hybrids are in fact silent participations, which the banks consider as core Tier 1 capital. Most hybrid securities are only part of the wider regulatory Tier 1. Compared to the Tier 1 securities discussed above, coupon payments are subject to mandatory deferrals instead of the internationally more common optional deferrals. In addition, there are write-down clauses for the nominal value, which usually kick in as soon as the bank incurs a loss under German GAAP. While a bank may usually decide to cover losses with reserves (retained earnings), the EU Commission has enforced loss participation for hybrid securities in most state-aid cases. Besides silent participations, which are non-cumulative with respect to missed coupon payments, Landesbanks also issue Genussscheine, which are loss-absorbing subordinated instruments as well, but which usually have cumulative coupons. As a consequence, a bank that needed to defer coupon payments and write down the principle of its hybrid securities would first need to recover the principle value (write-up), make deferred Genussscheine payments, and only then resume payments on its silent participations. This means that coupon payments may not be made until several years after the bank returned to profitability.

Most Landesbank Tier 1s have fixed coupons for life and no step-up after the first call date. BayernLB's USD perpetual is the only traditional step-up Tier-1 structure among the Landesbanks, but it remains a much riskier structure than those we recommend.

State-aid approvals pending

Currently, the state-aid cases of BayernLB, HSH and WestLB are under review by the EU Commission (LBBW has already received final approval). So far, HSH is the only bank that has ceased coupon payments on their hybrids and reduced their nominal value. WestLB is also a likely candidate for enforced loss absorption and its hybrids may even end up in a bad-bank structure, which could prevent any recovery of losses on those bonds.

Poor capital, poor profitability

Besides weak bond structures and regulatory interventions, our greatest concern about Landesbanks is their poor underlying credit quality. Excluding silent participations, some Landesbanks would struggle to meet minimum capital requirements and many would not pass a stress test on a true core Tier 1 basis. Given their business profiles and legacy issues, we expect profitability to remain poor. In the absence of strong operating earnings, any significant loss could immediately reduce the capital position and trigger losses on their hybrid securities.

Much is in the price

Looking at secondary market valuations, we see no investment opportunity in Landesbank Tier 1s and we emphasize that investors should not be tempted by low cash prices.

BayernLB: With a potential loss of two coupon payments, the USD 6.203% hybrid appears to be fairly valued. The low coupon makes a call uneconomical, but given the pending EU state-aid approval, 2017 is still too far away to assess the bank's future ownership and capital needs.

Helaba: both its Main Capital EUR issues have low coupons that are fixed for life, with no step-up language. We think they are unlikely to be called in 2011 and 2012, respectively. Given their risky structure and the bank's weak capital base, yields to worst (i.e., to maturity) of around 9% are modest compared to the stronger structures of major banks. We would tend to be sellers of such securities at their current valuations.

HSH: With coupons cancelled and probably remaining cancelled a further three to four years, HSH's hybrids and its Resparcs Funding issues are trading at cash prices in the 30s. Assuming four years of lost coupons, their yield-to-worst would be in the low double digits, which we think reflects the bank's uncertain future ownership and the bonds' risky structure. We would not invest into HSH hybrids or hold larger positions, but smaller existing positions may be held, we think.

NordLB: the bank's hybrids are issued via SPV's called Fuerstenberg Capital. The bank has no state-aid issues and achieved a small profit under German GAAP, which triggers coupon payments. However, profitability is poor and capital ratios excluding silent participations are weak. NordLB was the weakest Landesbank in the recent European bank stress test. The fixed-for-life EUR 5.625% callable in 2011 is very unlikely to be called, in our view. The fixed-to-floating EUR 5.344% callable in 2015 is a non-step issue, which we also believe has a low call probability. At current valuations, both are unappealing, in our view, and we would be sellers if prices appreciate. When NordLB issued its USD 10.25% fixed-to-floating structure in October 2009, we saw little value in this bond. Based on its current valuation around 85%, it offers a yield-to-worst of more than 12%, which we think is a fair risk/return profile, but still not a "buy."

WestLB: We see most risk with respect to the state-aid ruling for WestLB, and its Hybrid Capital Funding issues may incur a total loss in an adverse scenario. Priced in the low 40s, we would be sellers of both the EUR and the USD securities.

Table 3: Overview of Landesbank Tier 1 securities (no recommendation - refer to our views above)

			First	Coupon					Ind. yield & price (%)				
	Name	**Maturity**	**Call date**		Fix	FRN	payments	**Ratings**	to call	mat.	Ask	**Piece**	**ISIN**
EUR	RESPARCS FUNDING II LTD	perpetual	30.06.2009	fix	7.500	-	non-cum	-/-/Caa1	211.4	20.7	37.0	1+1	DE0009842542
EUR	MAIN CAPITAL FUNDING SEC	perpetual	30.06.2011	fix	5.500	-	non-cum	-/-/Ba1	63.6	8.5	66.5	1+1	DE000A0E4657
EUR	FUERSTENBG CAP II GMBH	perpetual	30.06.2011	fix	5.625	-	non-cum	-/-/Baa2	77.9	9.3	61.5	1+1	DE000A0EUBN9
EUR	HYBRID CAP FDG II LP	perpetual	30.06.2011	fix	6.000	-	non-cum	-/-/Caa1	126.3	13.7	44.0	1+1	DE000A0D2FH1
EUR	MAIN CAPITAL FUND II LP	perpetual	30.06.2012	fix	5.750	-	non-cum	-/-/Ba1	31.8	8.8	66.5	1+1	DE000A0G18M4
EUR	HSH NORDBANK LUXEMBOURG	perpetual	30.06.2014	var	7.408	12mE+215	non-cum	-/-/Caa1	48.2	15.7	34.3	1+1	XS0142391894
EUR	FURSTENBERG CAPITAL	perpetual	30.06.2015	var	5.344	12mE+150		-/-/Baa2	15.9	5.8	65.8	1+1	XS0216072230
USD	RESPARCS FUNDING LP I	perpetual	30.06.2009	fix	8.000	-	non-cum	-/-/Caa1	150.1	22.7	36.0	1+1	XS0159207850
USD	HSH NORDBANK AG	perpetual	30.06.2011	fix	7.250	-	non-cum	-/-/Caa1	140.8	19.6	37.0	1+1	XS0221141400
USD	HYBRID CAP FUNDING I LP	perpetual	30.06.2011	fix	8.000	-	non-cum	-/-/Caa1	112.5	17.8	45.0	1+1	XS0216711340
USD	FUERSTENBERG CAPITAL	perpetual	30.06.2015	var	10.250	CT5+896	non-cum	-/-/Baa2	14.3	11.9	86.3	1+1	XS0456513711
USD	BAYERNLB CAPITAL TRUST I	perpetual	31.05.2017	var	6.203	3mL+198	non-cum	-/B-/Caa1	20.6	8.8	49.5	1+1	XS0290135358

Source: UBS WMR, Bloomberg, as of 03 August 2010. Coupons in red are currently suspended. Please refer to the appendix section for explanations on the table.

Lower Tier 2 (LT2)

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. In the case of Bradford & Bingley, the LT2 bond prospectus was modified to allow for coupon suspensions; however, this finally triggered a default and is therefore unlikely to happen again.

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.

Investment strategies for the LT2 types described on the top right
1) Buy fixed-for-life LT2 and capture the high credit risk premium
Pros: Clarity on yield to maturity and cash flows
Cons: Long maturities may incur valuation losses as interest rates increase; prices are currently above par for most bonds, i.e., coupons are higher than effective yields.

2) Buy floating-to-floating at low cash prices
Pros: Lower coupon cash flows are compensated by price gains on the nominal, and issuer calls may boost the return since many securities are not priced to call. An additional gain is possible if interest rates increase more than is anticipated by forward rates, which WMR expects for some currencies.
Cons: Most existing bonds have low floating margins, even after the coupon step-up event, which makes calls uneconomical for the issuer. Also, some issuers are restricted from calling those bonds in the next few years.

3) Buy fixed-to-floating as a mixed approach of 1) and 2)
Pros: Less interest rate risk than in 1) and more cash flow certainty than in 2) due to the initially fixed coupon. In addition, this approach offers the

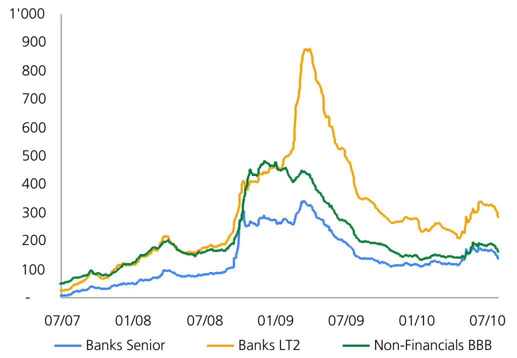
Three common LT2 structures

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

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chance to realize a higher average annual yield compared to 1) if the bond is called.
Cons: Low floating margins after the first call date and higher cash prices than for pure floating structures. Non-call events may lead to price declines if the market expected an issuer to call.

Relative valuations between the three types 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.

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	264	BBB/A+/Baa3		3.1	100.9	1+1	XS0095501606
EUR	COMMERZBANK AG	02.05.2011	fix	6.125	175	-/A/A1		2.3	102.8	1+1	DE0006288921
EUR	ING BANK NV	04.01.2012	fix	5.500	216	A/A/A1		2.9	103.6	1+1	NL0000119592
EUR	BANK OF SCOTLAND PLC	29.10.2012	fix	5.500	389	BBB/A+/Baa3		4.7	101.6	1+1	XS0156924051
EUR	ING BANK NV	04.01.2013	fix	5.250	223	A/A/A1		3.1	104.9	1+1	NL0000113140
EUR	BANK OF SCOTLAND PLC	05.02.2013	fix	6.125	451	BBB/A+/Baa3		5.4	101.6	1+1	XS0124047431
EUR	BARCLAYS BANK PLC	31.03.2013	fix	4.875	216	A/A+/Baa1		3.1	104.5	1+1	XS0165867226
EUR	ROYAL BK OF SCOTLAND PLC	10.05.2013	fix	6.000	371	BBB/A+/Baa3		4.6	103.4	1+1	XS0128842571
EUR	HBOS PLC	20.03.2015	fix	4.875	444	BBB-/A+/Ba1		6.1	95.2	1+1	XS0165449736
EUR	ROYAL BK OF SCOTLAND PLC	22.04.2015	fix	4.875	321	BBB/A+/Baa3		4.9	100.0	1+1	XS0167127447
EUR	ROYAL BK OF SCOTLAND PLC	23.01.2017	fix	4.350	362	BBB/A+/Baa3		5.7	92.6	50+50	XS0271858606
EUR	UNICREDIT SPA	26.09.2017	fix	5.750	241	A-/A-/A1		4.7	106.3	50+1	XS0322918565
EUR	BAYERISCHE LANDESBANK	23.10.2017	fix	5.750	249	-/A /*-/A2		4.8	105.8	50+50	XS0326869665
EUR	BARCLAYS BANK PLC	23.01.2018	fix	6.000	265	A/A+/Baa1		5.0	106.1	50+1	XS0342289575
EUR	ROYAL BK OF SCOTLAND PLC	09.04.2018	fix	6.934	371	BBB/A+/Baa3		6.1	105.0	50+1	XS0356705219
EUR	INTESA SANPAOLO SPA	23.09.2019	fix	5.000	193	A/A+/Aa3		4.5	103.4	50+50	XS0452166324
EUR	LANDESBANK BERLIN AG	25.11.2019	fix	5.875	246	-/A+/A2		5.1	105.7	50+50	XS0468940068
EUR	LLOYDS TSB BANK PLC	24.03.2020	fix	6.500	354	BBB/A+/Baa3		6.2	102.1	50+1	XS0497187640
EUR	DEUTSCHE BANK AG	24.06.2020	fix	5.000	172	A/A+/A1e		4.4	104.7	50+50	DE000DB5DCW6
EUR	INTESA SANPAOLO SPA	16.07.2020	fix	5.150	213	A/A+/Aa3		4.8	102.6	50+50	XS0526326334
EUR	NATIONWIDE BLDG SOCIETY	22.07.2020	fix	6.750	384	BBB+/A/Baa3		6.5	101.6	50+1	XS0527239221
GBP	LLOYDS BANKING GROUP PLC	17.10.2011	fix	9.125	361	-/A+/Ba1		4.3	105.5	1+1	XS0069909751
GBP	LLOYDS TSB BANK PLC	30.03.2015	fix	6.625	304	BBB/A+/Baa3		5.2	105.6	1+1	XS0109722990
GBP	JP MORGAN CHASE BANK NA	28.09.2016	fix	5.375	179	A+/A+/Aa2		4.4	105.1	50+50	XS0269436472
GBP	GOLDMAN SACHS GROUP INC	14.05.2017	fix	6.125	277	A-/A/A2		5.5	103.4	1+1	XS0300096491
GBP	COMMERZBANK AG	30.08.2019	fix	6.625	313	A-/A/A1		6.5	100.8	10+10	XS0101360161
GBP	NATL WESTMINSTER BANK	07.09.2021	fix	6.500	334	BBB/A+/Baa3		7.0	96.4	10+10	XS0090254722
GBP	GOLDMAN SACHS GROUP INC	12.10.2021	fix	5.500	240	A-/A/A2		6.0	95.9	1+1	XS0270349003
GBP	HSBC HOLDINGS PLC	20.12.2027	fix	5.750	194	A/AA-/A1		6.1	96.3	1+1	XS0159497162
USD	JPMORGAN CHASE & CO	15.03.2012	fix	6.625	99	A/A+/A1		1.4	108.2	1+1	US46625HAN08
USD	HSBC HOLDINGS PLC	12.12.2012	fix	5.250	146	A/AA-/A1		2.1	107.1	1+1	US404280AB51
USD	ROYAL BK SCOTLND GRP PLC	12.11.2013	fix	5.000	355	-/A/Ba2		4.5	101.5	1+1	US780097AN12
USD	HSBC BANK USA	01.04.2014	fix	4.625	138	AA-/AA-/A1		2.5	107.4	100+1	US40428EJQ35
USD	JPMORGAN CHASE & CO	15.09.2014	fix	5.125	170	A/A+/A1		3.0	108.2	1+1	US46625HBV15
USD	ROYAL BK SCOTLND GRP PLC	01.10.2014	fix	5.000	467	BBB-/A/Ba2		6.0	96.5	1+1	US780097AL55
USD	ROYAL BK SCOTLND GRP PLC	08.01.2015	fix	5.050	430	BBB-/A/Ba2		5.7	97.5	1+1	US780097AP69
USD	NATIONWIDE BUILDING SOC	01.08.2015	fix	5.000	263	BBB+/A/Baa3		4.3	103.3	1+1	US63859XAA54
USD	JPMORGAN CHASE & CO	01.10.2015	fix	5.150	171	A/A+/A1		3.4	108.3	1+1	US46625HDF47
USD	GOLDMAN SACHS GROUP INC	15.01.2017	fix	5.625	283	A-/A/A2		5.0	103.6	2+1	US38141GEU40
USD	CREDIT SUISSE NEW YORK	15.02.2018	fix	6.000	228	A/A+/Aa2		4.7	108.0	2+1	US22541HCC43
USD	HBOS PLC	21.05.2018	fix	6.750	484	BBB-/A+/Ba1		7.3	96.5	100+1	US4041A3AH52
USD	CREDIT SUISSE	14.01.2020	fix	5.400	181	A/A+/Aa2		4.7	105.5	2+1	US22546QAD97

Source: UBS WMR, Bloomberg, as of 03 August 2010. Please refer to the appendix section for explanations on the table.

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

			First		Coupon		FRN disc.		Ind. yield & price (%)				
	Name	**Maturity**	**Call date**		current	FRN	**margin***	**Ratings**	to call	mat.	Ask	**Piece**	**ISIN**
EUR	JPMORGAN CHASE & CO	12.10.2015	-	frn	1.210	3mE+40	199	A/-/A1	-	2.9	92.3	50+50	XS0231555672
EUR	INTESA SANPAOLO SPA	08.02.2016	08.02.2011	frn	0.927	3mE+25/85	62	A/A+/Aa3	5.1	1.5	98.0	50+50	XS0242832599
EUR	ING BANK NV	18.03.2016	18.03.2011	frn	0.902	3mE+17.5/67.5	169	-/-/A1	14.5	2.6	92.0	1+1	XS0240868793
EUR	HBOS PLC	29.03.2016	29.03.2011	frn	0.923	3mE+17.5/67.5	400	BBB-/A+/Ba1	34.4	4.9	81.0	1+1	XS0249026682
EUR	HSBC BANK PLC	29.03.2016	29.03.2011	frn	0.948	3mE+20/70	38	A+/AA-/A2	2.6	1.3	99.0	50+1	XS0248366576
EUR	INTESA SANPAOLO SPA	19.04.2016	19.04.2011	frn	1.046	3mE+20/80	65	A/A+/Aa3	4.7	1.5	97.5	50+1	XS0249938175
EUR	BARCLAYS BANK PLC	20.04.2016	20.04.2011	frn	1.036	3mE+17.5/67.5	72	A/A+/Baa1	5.4	1.6	97.0	50+50	XS0240949791
EUR	INTESA SANPAOLO SPA	28.06.2016	28.06.2011	frn	1.042	3mE+30/90	74	A/A+/Aa3	4.0	1.6	97.5	1+1	XS0194783352
EUR	LLOYDS TSB BANK PLC	09.07.2016	09.07.2011	frn	1.102	3mE+30/80	312	BBB/-/Baa3	18.8	4.0	85.0	1+1	XS0195810717
EUR	HBOS PLC	01.09.2016	01.09.2011	frn	0.999	3mE+30/80	398	BBB-/A+/Ba1	21.8	4.9	80.5	1+1	XS0192560653
EUR	ABN AMRO BANK NV	14.09.2016	14.09.2011	frn	0.918	3mE+20/70	197	A-/A/A1	10.6	2.9	90.0	1+1	XS0267063435
EUR	UNICREDIT SPA	20.09.2016	20.09.2011	frn	1.029	3mE+30/90	94	A-/A-/A1	4.6	1.8	96.3	50+1	XS0267703352
EUR	FORTIS BANK SA/NV	13.10.2016	13.10.2011	frn	1.072	3mE+25/75	93	AA-/A/A2	4.6	1.8	96.0	50+1	BE0932051759
EUR	BNP PARIBAS	17.10.2016	17.10.2011	frn	1.066	3mE+22/72	55	AA-/A+/Aa3	2.8	1.5	98.0	50+1	XS0270531147
EUR	DNB NOR BANK ASA	18.10.2016	18.10.2011	frn	1.146	3mE+30/105	64	A/-/A1	2.9	1.5	98.0	1+1	XS0202707567
EUR	UNICREDIT SPA	21.10.2016	21.10.2011	frn	1.320	3mE+45/105	113	-/A-/A1	4.7	2.0	96.0	1+1	XS0203450555
EUR	NATIONWIDE BLDG SOCIETY	22.12.2016	22.12.2011	frn	0.952	3mE+22/72	174	BBB+/A/Baa3	8.0	2.6	91.0	50+1	XS0279585169
EUR	FORTIS BANK SA/NV	17.01.2017	17.01.2012	frn	1.096	3mE+25/75	171	AA-/A/A2	4.9	1.7	93.5	50+1	BE0932317507
EUR	ROYAL BK OF SCOTLAND PLC	30.01.2017	30.01.2012	frn	1.146	3mE+25/75	390	BBB/A+/Baa3	16.9	4.8	79.5	50+50	XS0259579547
EUR	HBOS PLC	21.03.2017	21.03.2012	frn	0.929	3mE+20/70	348	BBB-/A+/Ba1	14.2	4.4	81.0	50+1	XS0292269544
EUR	DNB NOR BANK ASA	30.05.2017	30.05.2012	frn	0.897	3mE+20/95	70	A/-/A1	2.9	1.6	96.8	50+1	XS0255264656
EUR	SOCIETE GENERALE	07.06.2017	07.06.2012	frn	0.881	3mE+17.5/67.5	81	A/A/Aa3	3.4	1.7	95.9	50+50	XS0303483621
EUR	DEXIA CREDIT LOCAL	09.07.2017	09.07.2012	frn	0.952	3mE+15/65	256	A-/A/A2	9.5	3.5	85.0	50+50	XS0307581883
EUR	SKANDINAVISKA ENSKILDA	28.09.2017	28.09.2012	frn	0.992	3mE+25/175	90	A-/A/A2	3.2	1.8	95.6	50+1	XS0230339847
EUR	SVENSKA HANDELSBANKEN AB	19.10.2017	19.10.2012	frn	1.046	3mE+20/170	64	A+/A+/Aa3	2.5	1.5	97.0	50+1	XS0232843671
EUR	ABN AMRO BANK NV	31.05.2018	31.05.2013	frn	0.949	3mE+25/75	202	A-/A/A1	5.9	2.9	87.5	1+1	XS0256778464
GBP	BNP PARIBAS SA	05.10.2015	05.10.2010	frn	0.907	3mE+17.5/67.5	28	-/-/Aa3	4.0	1.0	99.5	1+1	XS0230888439
GBP	LLOYDS TSB BANK PLC	29.04.2016	29.04.2011	frn	0.974	3mL+23/73	322	-/-/Baa3	24.3	4.0	84.8	1+1	XS0218023447
USD	CREDIT AGRICOLE (LONDON)	13.03.2016	13.03.2011	frn	0.736	3mL+20/70	94	A+/-/Aa2	7.4	1.4	96.0	100+100	XS0237452320
USD	SVENSKA HANDELSBANKEN AB	15.03.2016	15.03.2011	frn	0.687	3mL+15/165	61	A+/-/Aa3	4.7	1.1	97.5	100+1	XS0246446859
USD	ROYAL BK OF SCOTLAND PLC	11.04.2016	11.04.2011	frn	0.728	3mL+20/70	395	BBB/A+/Baa3	32.2	4.4	81.0	100+1	XS0250214797
USD	ING BANK NV	23.05.2016	23.05.2011	frn	0.659	3mL+17.5/67.5	191	-/-/A1	13.2	2.4	90.5	75+1	XS0255306671
USD	BARCLAYS BANK PLC	27.06.2016	27.06.2011	frn	0.737	3mL+20/70	108	A/-/Baa1	6.4	1.5	95.0	100+1	US06738CKJ70
USD	DNB NOR BANK ASA	01.09.2016	01.09.2011	frn	0.768	3mL+23/98	72	A/-/A1	3.4	1.2	97.1	50+50	XS0265516335
USD	COMMONWEALTH BANK AUST	28.09.2016	28.09.2011	frn	0.737	3mL+20/70	70	AA-/-/Aa2	3.3	1.2	97.0	50+50	XS0269363577
USD	HBOS PLC	30.09.2016	30.09.2011	frn	0.733	3mL+20/70	388	BBB-/A+/Ba1	20.3	4.3	80.0	75+1	XS0269136163
USD	HSBC HOLDINGS PLC	06.10.2016	06.10.2011	frn	0.734	3mL+20/70	70	A/AA-/A1	3.3	1.2	97.0	100+1	XS0269733258
USD	ROYAL BK OF SCOTLAND PLC	14.10.2016	14.10.2011	frn	0.806	3mL+28/78	384	BBB/A+/Baa3	19.2	4.3	80.5	1+1	XS0202629407
USD	WESTPAC BANKING	20.10.2016	20.10.2011	frn	0.731	3mL+21/71	79	AA-/-/Aa2	3.6	1.2	96.5	100+100	XS0272075705
USD	COMMONWEALTH BANK AUST	15.12.2016	15.12.2011	frn	0.757	3mL+22/72	79	AA-/-/Aa2	3.3	1.2	96.5	100+100	XS0278417596
USD	ABN AMRO BANK NV	17.01.2017	17.01.2012	frn	0.725	3mL+20/70	252	A-/-/A1	10.9	3.0	86.3	50+50	XS0282833184
USD	BARCLAYS BANK PLC	23.03.2017	23.03.2012	frn	0.713	3mL+17.5/67.5	149	A/-/Baa1	5.9	1.9	91.8	100+1	XS0292937165
USD	BNP PARIBAS	27.04.2017	27.04.2012	frn	0.668	3mL+17.5/67.5	107	AA-/-/Aa3	4.1	1.5	94.3	50+50	XS0296895047
USD	ING BANK NV	03.07.2017	03.07.2012	frn	0.734	3mL+20/70	191	A/-/A1	6.8	2.4	89.0	75+1	XS0306992545
USD	WESTPAC BANKING CORP	27.07.2017	27.07.2012	frn	0.723	3mL+23/73	98	AA-/-/Aa2	3.3	1.4	95.0	100+100	XS0313165374
USD	ROYAL BK OF SCOTLAND PLC	29.08.2017	29.08.2012	frn	0.738	3mL+20/70	377	BBB/A+/Baa3	12.8	4.2	78.0	100+100	XS0302127625
USD	HBOS PLC	06.09.2017	06.09.2012	frn	0.738	3mL+20/70	367	BBB-/A+/Ba1	12.3	4.1	78.5	100+1	XS0304201790
USD	BARCLAYS BANK PLC	11.09.2017	11.09.2012	frn	0.737	3mL+20/70	163	A/-/Baa1	5.4	2.1	90.5	1+1	XS0229313696

Source: UBS WMR, Bloomberg, as of 03 August 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.

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

	Name	Maturity	First / Next Call date		Coupon current	Coupon FRN	Spread to Treasury	Ratings	Ind. yield & price (%) to call	mat.	Ask	Piece	ISIN
EUR	ROYAL BK OF SCOTLAND PLC	28.01.2016	28.01.2011	var	4.500	3mE+85	3545	BBB/A+/Baa3	35.9	4.9	86.8	1+1	XS0180946906
EUR	HSBC BANK PLC	18.03.2016	18.03.2011	var	4.250	3mE+105	244	A+/AA-/A2	2.9	2.1	100.8	1+1	XS0164883992
EUR	SVENSKA HANDELSBANKEN AB	20.04.2016	20.04.2011	var	4.000	3mE+172	266	A+/A+/Aa3	3.2	2.7	100.5	50+1	XS0250873642
EUR	DANSKE BANK A/S	20.06.2016	20.06.2013	var	4.250	3mE+205	346	BBB/A-/Baa2	4.4	3.7	99.5	10+10	XS0170248503
EUR	COMMERZBANK AG	13.09.2016	13.09.2011	var	4.125	3mE+90	1077	A-/A/A1	11.4	3.6	92.8	50+50	DE000CB07899
EUR	UNICREDIT SPA	20.09.2016	20.09.2011	var	4.125	3mE+94	355	A-/A-/A1	4.2	2.3	99.9	50+1	XS0267704087
EUR	LANDBK HESSEN-THUERINGEN	08.12.2016	08.12.2011	var	4.125	3mE+83	938	-/A/Aa3	10.1	3.6	92.8	50+50	XS0278214563
EUR	DEUTSCHE BANK AG	09.03.2017	09.03.2012	var	3.625	3mE+76	510	A/A+/A1	5.8	2.7	96.7	1+1	DE0003933941
EUR	SWEDBANK AB	27.09.2017	27.09.2012	var	5.570	3mE+260	290	-/-/A3	3.7	3.6	103.7	50+1	XS0322614420
EUR	COMMERZBANK AG	29.11.2017	29.11.2012	var	5.625	3mE+185	542	A-/A/A1	6.3	4.0	98.6	50+50	DE000CB8AUX7
EUR	LLOYDS TSB BANK PLC	05.03.2018	05.03.2013	var	5.625	3mE+203	598	BBB/A+/Baa3	6.9	4.4	97.1	50+1	XS0350487400
EUR	INTESA SANPAOLO SPA	26.06.2018	26.06.2013	var	4.375	3mE+100	367	A/A+/Aa3	4.6	3.0	99.3	50+50	XS0258143477
EUR	SWEDBANK AB	26.06.2018	26.06.2013	var	7.375	3mE+380	303	A-/-/A3	4.0	4.4	109.0	50+1	XS0372124403
EUR	BNP PARIBAS	22.01.2019	22.01.2014	var	4.375	3mE+71	195	AA-/A+/Aa3	3.1	2.3	104.2	50+1	XS0283256062
EUR	BAYERISCHE LANDESBANK	07.02.2019	07.02.2014	var	4.500	3mE+81	799	-/-/A2	9.1	5.0	86.6	50+50	XS0285330717
EUR	BARCLAYS BANK PLC	04.03.2019	04.03.2014	var	4.500	3mE+139	342	A/A+/Baa1	4.6	3.3	99.7	1+1	XS0187033864
EUR	SOCIETE GENERALE	12.03.2019	12.03.2014	var	4.500	3mE+92	245	A/A/Aa3	3.6	2.6	102.9	1+1	XS0187584312
EUR	ING BANK NV	15.03.2019	15.03.2014	var	4.625	3mE+144	361	-/A/A1	4.8	3.5	99.5	1+1	NL0000113892
EUR	UNICREDIT SPA	22.09.2019	22.09.2014	var	4.500	3mE+95	281	A-/A-/A1	4.2	3.0	101.1	50+1	XS0200676160
EUR	HBOS PLC	30.10.2019	30.10.2014	var	4.375	3mE+136	702	BBB-/A+/Ba1	8.5	5.4	85.9	1+1	XS0203871651
EUR	JPMORGAN CHASE & CO	12.11.2019	12.11.2014	var	4.375	3mE+150	234	A/A+/A1	3.8	3.1	102.2	50+50	XS0205436040
EUR	INTESA SANPAOLO SPA	02.03.2020	02.03.2015	var	3.750	3mE+89	305	A/A+/Aa3	4.7	3.3	96.3	50+50	XS0213101230
EUR	HSBC HOLDINGS PLC	29.06.2020	29.06.2015	var	3.625	3mE+93	206	A/AA-/A1	3.8	2.9	99.3	1+1	XS0222053315
EUR	ING BANK NV	16.09.2020	16.09.2015	var	3.500	3mE+136	333	A/A/A1	5.1	3.8	92.9	50+1	XS0229593529
EUR	ROYAL BK OF SCOTLAND PLC	22.09.2021	22.09.2016	var	4.625	3mE+130	604	BBB /*-/A/Ba2	8.1	5.7	83.8	1+1	XS0201065496
EUR	ING BANK NV	29.05.2023	29.05.2018	var	6.125	3mE+255	323	A/A/A1	5.6	4.9	103.1	50+1	XS0366066149
GBP	BNP PARIBAS	08.12.2015	08.12.2010	var	4.750	3mL+72	383	AA-/A+/Aa3	4.3	1.7	100.1	1+1	XS0221178584
GBP	AUST & NZ BANKING GROUP	07.06.2016	07.06.2011	var	4.750	3mL+68	438	AA-/A+/Aa2	5.0	2.0	99.8	1+1	XS0237036370
GBP	INTESA SANPAOLO SPA	19.12.2016	19.12.2011	var	5.500	3mL+99	731	A/A+/Aa3	8.1	3.2	96.6	50+1	XS0260456065
GBP	BNP PARIBAS	07.09.2017	07.09.2012	var	6.742	3mL+118	292	AA-/A+/Aa3	3.9	2.6	105.5	50+1	XS0320304164
GBP	HBOS PLC	18.10.2017	18.10.2012	var	6.305	3mL+120	804	BBB-/A+/Ba1	9.1	4.3	94.6	50+1	XS0325811296
GBP	INTESA SANPAOLO SPA	12.11.2017	12.11.2012	var	6.375	3mL+135	547	A/A+/Aa3	6.6	3.7	99.4	50+50	XS0324790657
GBP	WESTPAC BANKING CORP	29.04.2018	29.04.2013	var	5.875	3mL+173	263	AA-/AA-/Aa2	3.9	3.1	105.0	10+10	XS0156885302
GBP	UNICREDIT SPA	16.10.2018	16.10.2013	var	6.375	3mL+138	395	A-/A-/A1	5.4	3.5	102.8	50+1	XS0326211801
GBP	AUST & NZ BANKING GROUP	07.12.2018	07.12.2013	var	4.750	3mL+143	209	AA-/A+/Aa2	3.7	2.8	103.3	1+1	XS0171431660
GBP	LLOYDS TSB BANK PLC	29.05.2020	29.05.2015	var	6.963	3mL+195	474	BBB/-/Baa3	6.9	5.0	100.2	50+1	XS0366686284
GBP	HSBC BANK PLC	29.09.2020	29.09.2015	var	4.750	3mL+82	258	A+/AA-/A2	4.9	3.4	99.2	50+1	XS0230339417
GBP	HSBC HOLDINGS PLC	18.10.2022	18.10.2017	var	6.375	3mL+130	237	A/AA-/A1	5.2	4.1	107.0	50+50	XS0326347373
GBP	CREDIT SUISSE LONDON	16.01.2023	16.01.2018	var	6.750	3mL+255	263	A/A+/Aa2	5.6	4.8	107.1	50+1	XS0336248082
GBP	ING BANK NV	29.05.2023	29.05.2018	var	6.875	3mL+255	303	A/A/A1	6.1	5.2	104.7	50+1	XS0366066222
GBP	COMMONWEALTH BANK AUST	19.12.2023	19.12.2018	var	4.875	3mL+100	195	AA-/AA-/Aa2	5.2	4.1	98.1	10+10	XS0170398068

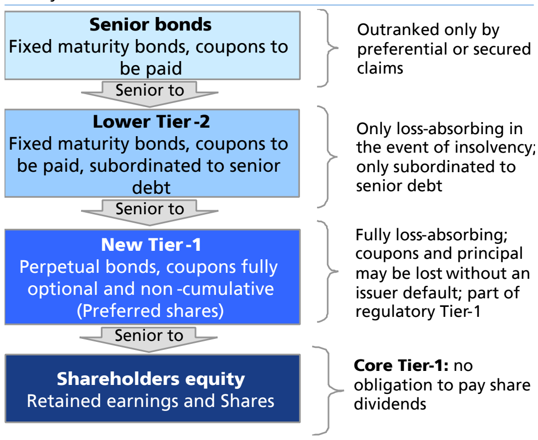
Currently, there are no USD LT2 fixed-to-floating rate recommendations available

Source: UBS WMR, Bloomberg, as of 03 August 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.

Regulatory changes impacting subordinated bonds

The Basel Committee on Banking Supervision (Basel) and the Financial Services Authority (FSA) both published consultative documents on the future of banking regulation and capital requirements in December 2009. While both agree that bank capital needs to be fully loss absorbing and the definition of instruments that qualify as Tier-1 capital needs to become stricter, the consultation papers include a number of differences when it comes to eligible hybrid securities and the treatment of existing Tier-1 securities that would not qualify under the proposed new standards. As the Basel update in July 2010 did not reveal further details on hybrid capital instruments, we assume the proposed new rules to come into effect. The next Basel update on capital intruments is expected to be published in December 2010.

Bank Capital Securities according to Basel 3
Likely new structure



Source: UBS WMR

Changes and their consequences

1) The regulatory focus will be on core Tier 1, which consists of paid-in common equity and retained earnings. So far, a minimum core Tier 1 ratio was only indirectly defined by the regulator, based on the minimum regulatory Tier 1 ratio and the maximum level of hybrid securities that was allowed to be included there.

2) The FSA proposal intends to maintain a maximum level of 15% for innovative Tier 1 securities, i.e. those with a coupon step-up, within the Tier 1. Basel suggests continuing to define a minimum Tier 1 ratio (including hybrids) in addition to a minimum Core Tier 1. So long as the minimum core Tier 1 ratio would be met, an issuer may exceed the 15% limit in the regulatory Tier 1.

3) Basel suggests a very strict definition for hybrid securities, stating that:

- coupons are fully discretionary and non-cumulative,
- bonds are perpetual and not callable for a minimum period of 5 years,
- the regulator needs to approve coupon payment and early redemption
- principal can be written-down to absorb huge losses, or contingent conversion triggers are defined, and n no incentives for early redemption are included (i.e. no coupon step-up)

None of the existing Tier 1 securities would qualify under this strict definition. Even some very restrictive German Tier 1 issues, which already include principal write-down language, would not qualify, as their write-up clauses require recovering the bond's principal before any allocation can be made to common equity. However, the Basel proposal requires a pari passu write-down and write-up, meaning that writing-up the bond principal would take longer. Based on current market surveys, such securities would be difficult to sell to fixed income investors, as their risk profile is too close to common shares. An alternative would be including conditional conversion triggers, similar to the ECN structure issued by Lloyds in late 2009. A trigger level for conversion could be based on the core Tier 1 ratio, requiring that the conversion rate, i.e. the number of shares, must be defined at issuance. As a consequence, the loss upon conversion would be large, as a substantial decline in a bank's Tier 1 ratio should most likely be accompanied by a large share price decline. To be able to issue such securities at reasonable costs, the trigger level for the core Tier 1 ratio would need to be set rather low at 4-5%.

Issuers are concerned that investors trying to hedge such securities by short-selling the stock could make a difficult situation even worse. Besides this, we are not sure if this type of security would attract traditional fixed income investors and believe that contingent convertible securities remain a niche product.

Treatment of existing hybrid Tier 1 securities (grandfathering)

The FSA proposal includes a grandfathering for existing structures that would not qualify under the new rules for 10 years and a limited amount being accepted thereafter for a maximum of 30 years, meaning that banks would have little incentives to redeem existing securities early. Basel intends to provide only a short grandfathering period and would prefer to see banks replacing existing structures with new ones as soon as possible. From Basel's announcement that other stricter measures like the net stable funding ratio will only fully phase-in as of 2018, we assume that this may be also the transition deadline for hybrid capital instruments to comply with the new rules.

Tier 2 capital

The Basel proposal intends to harmonize Tier 2, so there should be no subclasses going forward. Upper Tier 2 will most likely disappear and current Lower Tier 2 will lose importance. Currently, regulatory adjustments may be covered by an equal amount of Tier 2 and Tier 1 capital, whereas the proposed guidelines include 100% Tier 1 coverage. The new definition maintains the gradual reduction of capital credit for Tier 2 securities once the security has less than 5 years to maturity left. With limited use and decreasing capital credit, we think most banks are likely to redeem existing Lower Tier 2 securities at their first call date. Tier 3 capital, which currently covers market risks, will be eliminated.

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.

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

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.

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.

Disclosures (3 August 2010)
ABN-Amro 6, 14, 16, Crédit Agricole 13, 17, 21, 22; Allianz 5, 8, 9, 13, 17, 21, ANZ Bank 13, 17, 19, 21, 22; Barclays 9, 14, 16, 17, 21, 22; BNP Paribas 13, 14, 16, 17, 21, 22; Commonwealth Bank 19, 21, 22; Commerzbank 2, 6, 13, 14, 16, 17, 21, 22; Credit Suisse Group 5, 8, 13, 14, 16, 17, Danske Bank 14, 16, 17, 21, 22; Deutsche Bank 5, 9, 13, 14, 16, 17, 21, 22; DNB NOR 13, 21, 22; Fortis Bank SA/NV 15, 21, Goldman Sachs 8, 10, 12, 13, 14, 16, 17, 18, Helaba 21, 22; ING 6, 9, 13, 14, 16, 17, 21, 22; Intesa Sanpaolo 9, 13, 17, 21, 22; JP Morgan Chase & Co 9, 10, 12, 14, 16, 17, 18, 21, 22; Lloyds Banking Grp 2, 3, 6, 7, 9, 13, 14, 16, 17, 21, 22; Nordea 9, 13, 17, 21, NordLB 21, 22; Nationwide Building 21, 22; Rabobank 13, 21, 22; RBS 1, 2, 4, 6, 9, 11, 13, 17, 20, 21, 22; SEB Group 13, 21, 22; Svenska Handelsbanken 17, 21, 22; Société Générale 13, 14, 16, 17, 21, 22; Swedbank 17, 21, 22; WestLB 21, 22; Westpac Bank 9, 17, 19, 21, 22;

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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	53.65%	(50.90%*)
Neutral View	19.81%	(66.02%*)
Least Preferred	14.04%	(45.21%*)
Suspended	0.77%	(100.00%*)
Discontinued	11.73%	(27.87%*)

*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.

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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