

CREDIT RESEARCH  
December 2010

# US CREDIT OUTLOOK 2011 THE GREAT DEBATE: HIGH SPREAD VS LOW YIELD



## CONTENTS

### OVERVIEW

#### **The great debate: High spread versus low yield 3**

If we are truly in the new normal environment of lower trend growth levels, then we think it is possible for credit to continue its bull run.

### STRATEGY

#### **High Grade: No yield, no problems 18**

We forecast 250bp of excess returns for the year, based on carry plus moderate spread tightening of 15bp, and a slightly lower 200bp of total returns.

#### **Municipal markets: Taxable municipal market/BABs: Supply, spreads, and opportunities reach high-water marks 33**

In our view, the technical environment in the taxable municipal market has created an attractive entry point against a backdrop of elevated supply and ambiguity about the extension of Build America Bond (BAB) legislation.

#### **Hybrid Capital: Technicals augment a strong fundamental backdrop 39**

We expect hybrid spreads to tighten 50-60bp in 2011, driven roughly equally by a rally in financials and a compression in the senior hybrid basis.

#### **High Yield: Almost priced out 51**

Despite an environment of low rates, improving fundamentals and high spreads, we conclude that a 5-6% return is more likely than returns above 10%.

#### **Leveraged Loans: Moving from total returns to income 70**

The risk/reward offered by leveraged loans relative to other asset classes is compelling given the lower volatility and duration, in addition to the secured position in the capital structure.

#### **Structured Credit and Volatility Strategy: Testing the waters 78**

Regulatory changes, including risk retention rules for securitisations and increases in risk weights, are likely to impede the revival of primary synthetic CDO or CLO issuance in 2011.

### SECTOR OUTLOOKS

#### **High Grade**

Aerospace & Defense – Market Weight .....	92
Banks – Overweight.....	93
Basic Industries (Chemicals, Metals, Paper) .....	94
High Grade/High Yield Building Materials – Market Weight.....	95
Cable & Media – Market Weight.....	96
Consumer Products – Underweight.....	97
Electric Utilities – Market Weight.....	98
Energy & Pipelines.....	99
Food & Beverage – Market Weight.....	100
Healthcare – Market Weight.....	101
High Grade/High Yield Homebuilders – Overweight/Market Weight .....	102
Insurance/Life – Overweight.....	103
Insurance/Property & Casualty – Market Weight.....	104
REITs – Overweight.....	105

Retail & Supermarkets – Market Weight.....	106
Technology – Market Weight.....	107
Telecom – Underweight .....	108
Tobacco – Underweight .....	109
<b>High Yield</b>	
Aerospace/Defense – Overweight .....	110
Cable & Satellite – Market Weight.....	111
Chemicals – Market Weight.....	112
Consumer Products – Market Weight.....	113
Electric Utilities.....	114
Energy & Pipelines – Overweight.....	115
Food & Beverage – Market Weight.....	116
Gaming – Market Weight .....	117
Healthcare – Market Weight.....	118
Industrials – Market Weight.....	119
Media & Entertainment – Market Weight.....	120
Metals & Mining – Market Weight .....	121
Paper & Packaging – Market Weight.....	122
Restaurants – Overweight.....	123
Retail – Market Weight.....	124
Services.....	125
Supermarkets – Market Weight.....	126
Technology – Market Weight.....	127
Telecom – Market Weight.....	128

## OVERVIEW

### US

Jeffrey Meli  
+1 212 412 2127  
jeff.meli@barcap.com

Bradley Rogoff, CFA  
+1 212 412 7921  
bradley.rogoff@barcap.com

### Europe

Matthew Leeming  
+44 (0) 20 7773 9320  
matthew.leeming@barcap.com

### Asia

Krishna Hegde  
+65 6308 2979  
krishna.hegde@barcap.com

## The great debate: High spread versus low yield

Corporate credit has had an unparalleled two-year run of returns, representing the sweet spot for income-seeking investors. The market successfully adjusted expectations, and low government bond rates have caused credit to break through yield barriers that previously seemed unthinkable. If we are truly in the new normal environment of lower trend growth levels, then we think it is possible for credit to continue its bull run.

Total returns unexpectedly received a huge boost from declining rates in 2010, and the asymmetric risk profile of interest rates at current levels makes duration a substantial risk in 2011. In addition, the low yields across credit introduce new risks as adding leverage becomes cheap for corporates. With vastly improved fundamentals, record cash balances and an underperforming equity market, we believe that event risk will be in the headlines throughout the next year. Along with continued noise from European sovereigns, the possibility for higher interest rates and China's tightening policy are the biggest causes for concern in 2011. Sovereign funding issues will trump all other risks until the EU announces a more comprehensive plan that provides funding at reasonable levels for countries where spreads have spiked in the past month. Until then, it will be difficult for any risky asset class to have a prolonged rally.

A year ago, we predicted that investors would spend 2010 hunting for yield and credit would be the main beneficiary. At this juncture, we can say that they found that yield, which at first glance does not leave much for 2011 performance. Despite lower absolute yield levels, we believe credit will still benefit from positive technicals as the attractive incremental spread should prevail. Low G3 rates should keep flows positive into credit, even if investors finally begin to turn their attention to the potential upside in equities. We suspect this shift will be modest, as investors remain focused on return of capital, as opposed to returns on capital. Our key themes and forecasts for the year are:

- Investment-grade corporates will, we expect, remain wide of long-term spread averages due to the lagging performance of financials. We are Overweight the primary financial sectors and believe that spread compression from financials could help produce an excess return of 250bp in US IG and 350bp in European IG.
- In the US, hybrid capital securities should benefit from positive technicals due to a lack of issuance as a result of the Dodd-Frank Act. We see insurance hybrids and below-par bank hybrids as the best opportunities. The themes are similar in Europe, with Basel III potentially driving a shrinking of the hybrid universe. Extension risk remains elevated, however, given the heightened senior funding costs many European banks face amid the sovereign crisis. Regardless, we think new structures may emerge, given the regulators' focus on contingent capital.
- High yield returns will be constrained by high average dollar prices. With duration risk to moves in 10y Treasuries increasing as a result of new low-coupon, longer-dated issuance, total returns will likely be 5-6% in the US, with excess returns modestly higher. We focus on ratings cliffs for single-name alpha. In Europe, we expect total returns of 6.5-8.5%. We consider B-rated credit to offer the best balance of risks: in a downturn, it should outperform CCC, while it would likely be less sensitive to rate rises than BB should conditions improve substantially.

- Leveraged loans represent attractive risk-reward despite moving from a total return investment over the past few years to a pure income asset class. We estimate 5-7% total returns in both the US and Europe and find the lack of duration risk compelling.
- Asian credit should perform in line with to better than the US in 2011. On an excess return basis, we look for high grade Asian credit to generate 250-300bp, but sovereigns to earn their carry of only 175-200bp. For Asian high yield, we expect total returns of 8-9%, higher than current yield levels of 6.2%. Generically, we believe the risk premium applied to Asian corporate credit will continue to shrink.
- Technicals will likely remain largely supportive of credit. With limited issuance of other spread product and the Federal Reserve purchasing nearly the entire net supply of Treasuries over the next six months, we expect the positive net global supply of corporate credit to be well received by the market.
- The evolving regulatory landscape should continue to affect the credit profile of banks and other financials. Higher capital requirements and limitations on proprietary trading and other forms of risk-taking make banks safer for bond investors, if less compelling equity stories. However, resolution authority, part of the Dodd-Frank bill, eliminates the implicit government support for banks in the US, which is not the case in Europe, at least for senior debt so far.
- The biggest structural change for our market is set for summer 2011, when CDS is scheduled to clear and begin trading on an exchange. We do not expect an immediate boost to liquidity, but over time, the greater transparency and lack of counterparty risk should increase volumes.

Figure 1: 2011 returns forecast

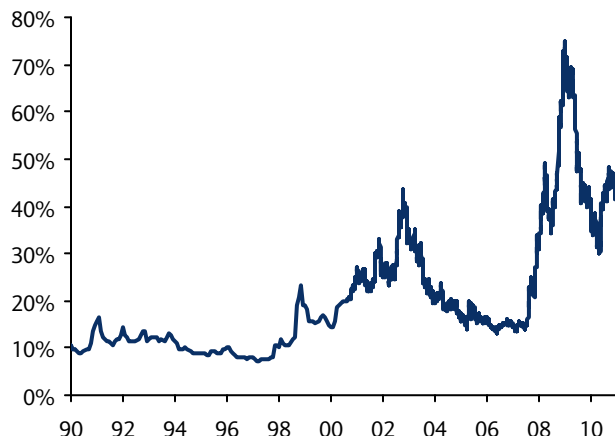
	2010 YTD*		2011 Forecast	
	Excess Return	Total Return	Excess Return	Total Return
US IG	0.97%	9.27%	2.50%	2.00%
EUR IG	0.25%	5.20%	3.50%	1.75%
Asia IG	2.59%	9.55%	2.5-3.0%	3.5-4.0%
US HY	6.74%	13.51%	6-7%	5-6%
EUR HY	9.43%	15.54%	8.5-10.5%	6.5-8.5%
Asia HY	6.76%	16.69%	7-8%	8-9%
US Lev Loans	8.29%	8.29%	5-7%	5-7%
EUR Lev Loans	8.58%	8.58%	5-7%	5-7%

Note: \*YTD returns as of November 26, 2010. Source: S&P LCD, Barclays Capital

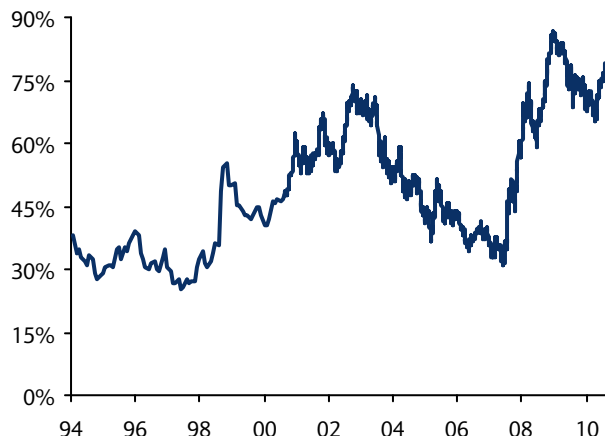
### Is it low yield or high spread?

US and European investment-grade yields have hovered around 3.5% since the summer, well below the previous lows in 2003. Since investment-grade investors look at their market in spread more frequently, the relative pick-up of ~150bp to Treasuries (~180bp in European IG) remains compelling even at lower yields. As Figure 2 shows, the OAS on the U.S. Credit Index is currently 42% of the yield, well above the pre-crisis 2000-08 average of 23% and higher than the 32% in 2003 when yields were also below 4%. In Europe, this trend is even more extreme, with the OAS on the IG Corporate Index representing over 50% of its total yield, after having troughed at only 27% in 2003.

US high yield has not quite reached its all-time low yield-to-worst of 6.74% in 2004, but remains near historical lows, having traded inside 7% during November. The spread as a

**Figure 2: US Credit Index OAS as a percentage of yield-to-worst**

Source: Barclays Capital

**Figure 3: US High Yield Index OAS as a percentage of yield-to-worst**

Source: Barclays Capital

percentage of yield argument is just as compelling for US high yield, as it has remained close to 80% this year (Figure 3) compared to 53% in the same pre-crisis period. With a default forecast for 2011 of 2-2.5% and typically 250-300bp of non-default spread compensation in high yield, we think it is easy to justify compression from the current ~600bp OAS. A similar argument holds for European high yield, where the OAS represents about 70% of the YTW, up from under 30% in 2007.

Lower G3 rates have meant that global investors have flocked to credit in search of yield. While the EU has not been as aggressive as the US in its efforts to keep rates depressed, 10-year euro bonds are still at less than 3%. In Japan, 10-year rates have been below 2% for the better part of 13 years and are now less than 1%. In Europe the credit market is large enough to soak up a good deal of investor demand, but in Asia the lack of credit product has led to investors seeking yield abroad. This has been a large part of the bid for both high-grade and high-yield bonds in the US. While the stickiness of some of this new Asian money is a concern, as long as JGBs remain at depressed levels there will be a need to go elsewhere for income.

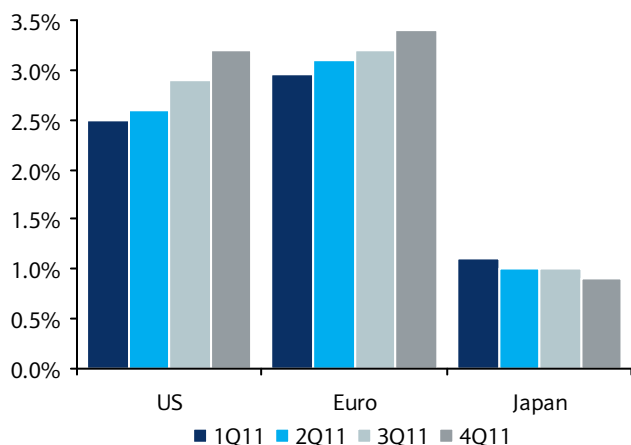
Our interest-rates strategists do not expect Japanese rates to move higher, but anticipate US and European rates moving higher in 2H 11 (Figure 4). This will likely weigh on total returns for credit, although we believe spread compression can make up for a portion of the move based on the aforementioned stats regarding spread as a percentage of yield. With respect to the recent QE2 announcement in the US, we highlight that if it is successful in lowering unemployment and boosting inflation expectations, it should eventually lead to higher rates.

### Where is all the paper?

Credit markets have been unique in recent years regarding the level of net issuance. Since the credit crisis, asset backed issuance has been very limited and we do not expect that trend to change next year. A change will come from the Fed buying the Treasury issuance through at least the first half of the year (Figure 5), signalling less supply from that market as well.

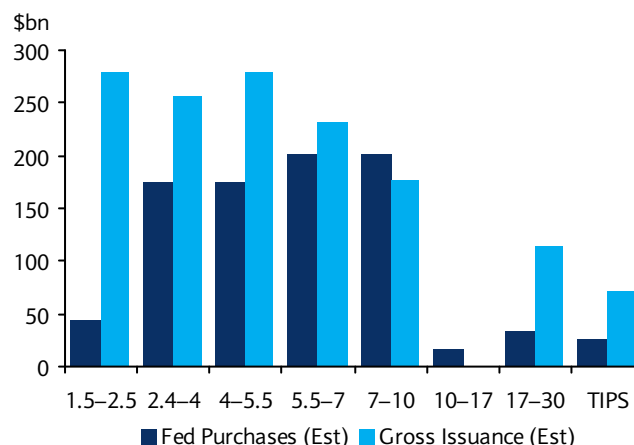
US investment-grade net and gross issuance set a record in 2009 and is poised to come close to that level in 2010, as corporates are incentivized by historically low coupons. We expect a decline of 10% in gross issuance (including non-corporates) for 2011 and 30% in net issuance in the US. For Europe, the picture is different as net supply has been negative and we expect it to be slightly less so next year, driven by continued negative financial net supply.

Figure 4: G3 10y bond yield forecasts



Source: Barclays Capital

Figure 5: Estimated Federal Reserve Treasury purchases vs. gross issuance by maturity (November 2010-June 2011)



Source: NY Federal Reserve, US Treasury, Barclays Capital

Global high yield has already set its second consecutive annual issuance record in 2010 and we expect next year to fall just short of 2010, but come in well above 2009. While two thirds of the proceeds have been for refinancing, half of that amount is refinancing bank loans. Since the investor bases are rather different, this means that net issuance has been fairly high. The mix will still favor refinancing next year, but LBOs and dividend deals will be a bigger part of the calendar and should also push leveraged loan issuance above this year's levels. Trends in high yield should be fairly consistent across regions.

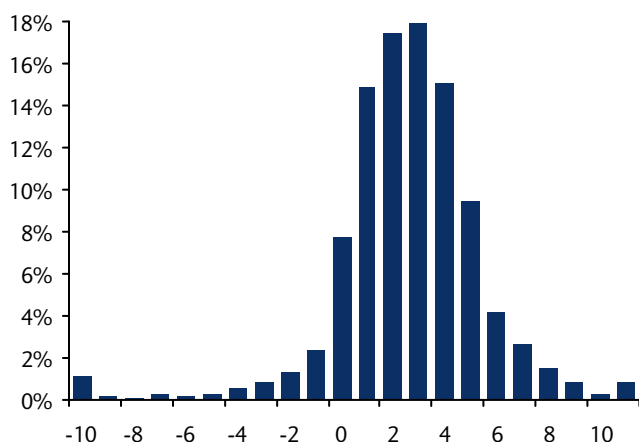
While healthy demand for spread product should allow issuance to be digested fairly easily, we note the highly positive technical facing hybrid capital from a lack of issuance. The changes implemented in the form of the Collins Amendment, as part of the Dodd-Frank Act, mean that banks will be incentivized to call trust-preferreds by 2013 and new TRUP issuance will not occur. This should lead to attractive yield-to-call opportunities.

### Will fundamentals matter?

As credit investors searching for alpha, we always hope the answer to this question is yes. However, having seen substantial beta driven markets during the past few years, fundamentals can sometimes get lost. With our belief that spreads will be more rangebound in 2011, we expect substantial earnings outperformance or underperformance as well as corporate actions to be important for relative corporate returns. Recent earnings seasons have been a good example of this. If we look at 2Q earnings season for high yield, we can see that in a generally solid market, the tails were fairly fat as far as returns are concerned because of some significant earnings beats and misses (Figure 6).

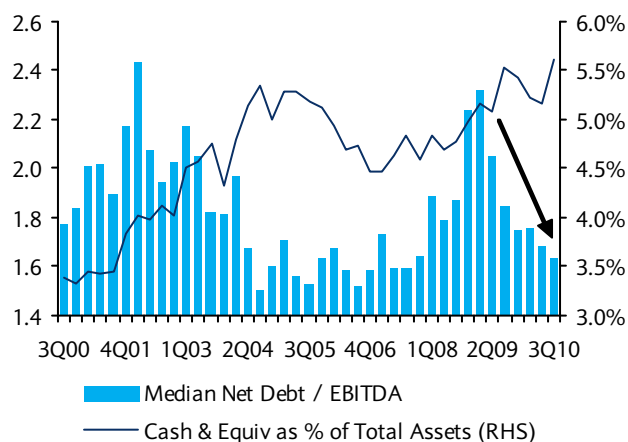
As Figure 7 shows, balance sheets are mostly healed for large corporates and we are back to pre-crisis levels of mid-2008 with respect to leverage. The same is true for most of high yield, although we would note that there are some outliers amongst the large mid-2000s LBOs. In addition, cash is near the all-time highest levels as a percentage of assets. As long as growth remains at least at trend levels, and we believe that will be the case, corporates should begin to feel comfortable enough to increase leverage. This event risk will mostly be a positive for equities and a negative for credit, although we would expect some high-yield companies to benefit as strategic M&A also picks up resulting in bids by their investment-grade peers. We have already seen this trend in the energy sector and expect it to continue there, as well as in the telecom and technology sectors.

Figure 6: 2Q earnings season – HY price change distribution



Source: Barclays Capital

Figure 7: Leverage and cash levels, US IG non-financials



Source: Capital IQ, Barclays Capital

## Regulation is everywhere

Regulation will remain an important theme for credit markets in 2011. Changes to the regulatory landscape are being discussed and/or implemented across regions, which will have implications for individual issuers, notably banks and insurance companies, as well as for the broader credit markets. In many cases the effects of measures that have already been passed are difficult to assess – understanding how all the global efforts interrelate is a significant challenge for investors in 2011. We focus on the effects on financials, including their approach to capital and liquidity management, and the form of future debt, and on the future of the CDS market.

### Banks

A variety of efforts are under way across regions to change the regulatory landscape for banks, including Dodd-Frank in the US and Basel III globally. The Dodd-Frank financial reform bill has three major implications for banks as creditors. First, it includes resolution authority, which forbids government bailouts of financial institutions and instead requires an orderly unwind in which losses are applied up the capital structure. This is bad for creditors, as it removes the implicit government support that had benefited bank spreads – and is one reason why US banks do not trade better versus European banks despite the superior fundamentals in the US. The bill also contains source of strength doctrines which we believe benefits subordinated bank debt versus senior holding company debt.

Second, the bill bans proprietary trading by banks (part of the “Volker Rule”). While the resulting decrease in risk taking is likely good for creditors, the specific implications for both banks as creditors and for liquidity in the fixed income markets broadly will depend to a large extent on the rule-writing process that is ongoing.

Finally, Dodd-Frank phases out trust-preferreds as Tier 1 capital starting in 2013. US banks have over \$120bn of TRUPs outstanding, most of which have par regulatory calls triggered by losing Tier 1 treatment. A few TRUPs have already been called as a result (eg CMA, CNY); we expect this activity to accelerate through the start of 2013. Based on the proposed limitation of non-common Tier 1 securities to 1.5% of RWAs in Basel III, US banks could replace roughly 50% of the outstanding TRUPs with new hybrids. We believe most of the new issuance will be straight preferred stock.



In September 2010 the Basel Committee announced a package of reforms targeted at strengthening existing capital requirements for banks. At the heart of the announcement were higher capital requirements and a more stringent definition of what constitutes bank capital. Figure 8 shows the proposed minimum capital ratios. New eligibility criteria for Tier 1 and Tier 2 bank capital include no call incentives (i.e. no step-ups), permanent write-down language triggered on a bailout and, for Tier 1, no must-pay coupons. The proposals incorporate a generous timeline, with capital ratios to be raised gradually and linear phasing out of ineligible securities (Figure 9) between 2013 and 2019. The September announcement was well-received by the credit markets, with a subsequent rally in bank paper and further compression of capital structures, as investors anticipated early calls of securities which are likely to become ineligible.

Despite the positive market reaction, there remain numerous uncertainties. The Basel Committee proposals are simply guidelines and may be subject to modification through the legislative process and individual countries' regulatory requirements. There is a significant risk that the final set of rules may vary substantially from region to region and bank to bank. For example, while the effective minimum Core Tier 1 ratio is 7% under the Basel proposals, Swiss regulators are considering a minimum of 19%. Also, consider the potential treatment of banks deemed to be systemically important financial institutions (SIFIs), which may be required to hold supplementary capital buffers (note that the proposed Swiss ratio of 19% incorporates such a buffer). Such discrepancies have the potential to create an uneven playing field, affecting the relative competitiveness of different banks.

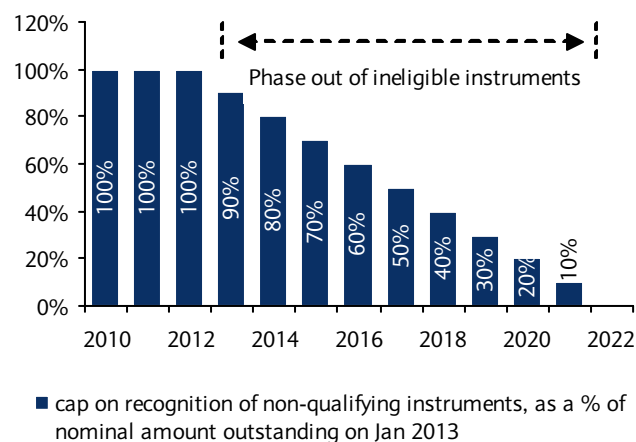
Additionally, while it is generally expected that most existing hybrid capital will be ineligible under the new framework, issuers remain uncertain as to the exact required form of newly qualifying capital. We have already seen examples of new debt structured to deal with this uncertainty (for example, subordinate paper which converts into senior with a coupon step-down if it loses its regulatory status). Capital structures will evolve further as regulatory clarity arises in 2011 and beyond. Again, these may vary across regions. For example, of the 19% capital potentially required by Swiss regulators, 9pts are in contingent capital (CoCos). It remains to be seen whether such capital will be adopted by other regulators and, furthermore, whether there would be sufficient investor demand for CoCos or indeed other new forms of regulatory capital. With embedded write-down language, new structures may well fall outside the remit of many portfolio managers and will no doubt command a higher spread than equivalent existing debt.

Figure 8: Basel III; new capital requirements

	Capital Requirements and Buffers		
	Common Equity	T1 Capital	Total Capital
<b>Absolute minimum</b> Banks would lose their license below this point	4.5%	6.0%	8.0%
<b>Conservation buffer</b>	2.5%		
<b>Effective minimum</b> If breached, will bring closer regulatory supervision and constraints on dividends	7.0%	8.5%	10.5%
<b>Countercyclical buffer</b>	0-2.5%		
<b>"Top of the cycle" target</b> National regulators decide level to enforce	7-9.5%	8.5-11%	10.5-13%

Source: Bank for International Settlements, Barclays Capital

Figure 9: Phasing out of capital instruments that no longer qualify as non-core Tier 1 and Tier 2 capital



Source: Bank for International Settlements, Barclays Capital

### *Insurance companies*

European insurers face major, upcoming changes in regulation under Solvency II, a risk-orientated solvency regime with capital requirements based upon VaR methods and market values rather than book values. Although overshadowed recently by Basel III, we expect it to garner more headlines in 2011 as the final Quantitative Impact Study (QIS5) is due from CEIOPS<sup>1</sup> in March. Within the new framework, similar themes affect insurance capital structures as those of banks. Tier 1 securities must bear loss-absorbing features and omit coupon step-up language. As most existing Tier 1 does not meet these requirements, this increases the incentive for the issuer to call at the first opportunity.

The new capital rules will also be an important determinant of insurance company investment strategies. With a 0% risk weighting for EEA government paper, and lower risk weights for shorter rather than longer dated corporate credit, we may start to see more insurance portfolios carrying a mix of longer-dated governments and shorter-dated credit. Equity capital charges are significantly higher than for these asset classes, although there are cyclical features which allow charges to be reduced following a sustained equity sell-off. Interest in simple, low leverage structured credit products may arise. For instance, CPPI bear a relatively attractive capital charge due to the principal-protected nature of the product.

### **The CDS market will be forced to change**

In the wake of the credit crisis, there was a clamoring for changes to the CDS market that would mitigate counterparty risk. The first step in this process was the standardization of contracts in order to make clearing possible. This occurred without a hitch in 2009. Dealers then began clearing index trades and some of the more liquid investment grade credits over the past year. Client clearing was slower to take off as investors realized the cost of clearing in the form of systems as well as potentially increased margins.

### *North America*

In 2011, we will finally get clearing of CDS trades for both the buy side and sell side, thanks to the provisions of the Dodd-Frank Act that was enacted in July. The Act states that as of 360 days post-enactment or within 60 days of rule writing, any swap that is accepted by a Derivatives Clearing Organization must be cleared. Therefore, we believe client clearing will happen by 3Q11, although it is possible that it is phased in beginning with the indices. There will likely be two primary clearinghouses, ICE and CME.

In addition, any cleared swap will also need to be traded on a swap execution facility (SEF). We do not have clarity on trading protocol for SEFs yet, but expect that this will mean nearly immediate pre- and post-trade transparency and exceptions for block trades. Regular trades will be posted as soon as technologically possible, and the CFTC is currently proposing a 15 minute delay for block trades. Once again it is likely that electronic trading is phased in during 2H11 and there will at least 5-10 electronic platforms.

There will clearly be a transition period where liquidity will wane as investors get used to trading in the new regime. Longer-term, we are optimistic that the greater transparency and lack of counterparty risk will eventually help volumes (Figures 10 and 11). We expect real money accounts to become more active when they can face the clearinghouse on trades, and equity accounts should implement capital structure arbitrage trades when they can trade electronically.

---

<sup>1</sup> Committee of European Insurance and Occupational Pensions Supervisors.

We also believe that clearing will have an effect on margins and the basis between CDS and cash. Since clearinghouses use portfolio based margining, the effect will be larger for accounts that use CDS directionally and minimal for those with a more balanced derivatives book. Basis traders and those using lower spread investment grade CDS primarily as a hedge will be affected the most. Generally speaking, less leverage should lead to a more positive basis.

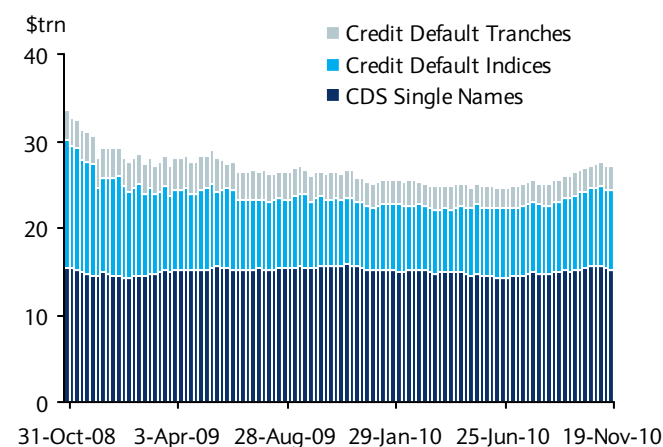
Clearing and exchange trading will be the biggest implications for credit derivatives from the Dodd-Frank Bill in 2011, but there will continue to be an overhang from the swap push-out provision and Volcker rule. These changes to the entity within a bank that can trade derivatives and what is considered proprietary trading will be settled in more of a 3-5 year timeframe. There also remains some possibility that the Volcker rule is less onerous as the Republicans have been vocal opponents. For more information on financial reform, please see *Implications of Financial Reform for Corporate Credit*, 23 July 2010.

### Europe

Negotiations continue in relation to OTC derivative market regulation in Europe. On 15 September 2010, the EC published legislative proposals<sup>2</sup> covering central clearing and trade repositories. The proposals detail central counterparty (CCP) requirements, requirements for trade reporting and obligations to clear eligible contracts. The European Parliament is expected to vote on the proposals in early to mid 2011 and the European Council is aiming for agreement by the year end, with full implementation (and any necessary secondary legislation) targeted by the end of 2012. At present, most interdealer index and liquid single-name CDS contracts are cleared. We expect this to be extended to a broader set of products and market participants (subject to regulatory decision making) over the course of the next two years, with few exemptions. Although detailed proposals for exchange trading of CDS have not yet been specified, legislation is anticipated in 2011.

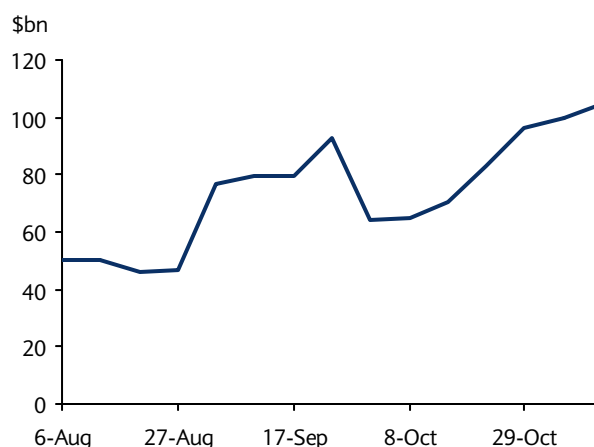
Separate deliberations are under way on short-selling regulation, with EC consultation on the matter having followed the unilateral ban by BaFin in May 2010 on naked shorting via sovereign CDS. Much clarity is pending regarding the final proposals. However, Parliamentary voting is expected in 2011, with full implementation due in the second half of 2012.

Figure 10: Gross CDS notional



Source: DTCC, Barclays Capital

Figure 11: Single name CDS volume, 4-week average



Source: DTCC, Barclays Capital

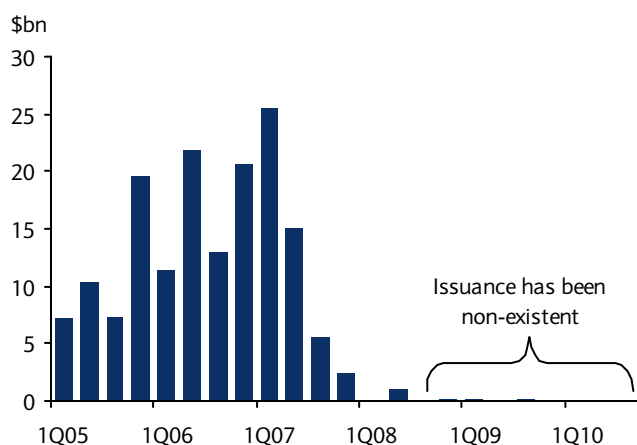
<sup>2</sup> See "Proposal for a regulation of the European Parliament and of the council on OTC derivatives, central counterparties and trade repositories", European Commission, 15 September 2010.

A further area of development, affecting the sovereign CDS market, is the potential introduction of two-way Credit Support Annexes (CSAs) for sovereign debt agencies. Currently most sovereigns maintain one-way CSAs with their dealer counterparties. This means that variation margin on underlying derivative transactions (such as interest rate swaps or currency derivatives) is passed from the dealer to the sovereign when the trade's mark-to-market is in the sovereign's favour. The sovereign, however, does not post margin to the dealer in the reverse situation. With sovereign credit risk having increased substantially of late, particularly in the peripherals, counterparty risk desks (CVA desks) have needed to buy sovereign CDS protection to cover themselves against the loss of mark-to-market gains in the event that the sovereign defaults. The cost of this protection is passed on to the sovereign, raising transaction costs. Furthermore, buying protection applies upward pressure to the sovereign CDS spread. In order to reduce transaction costs and alleviate spread pressure, some sovereigns are contemplating engaging in two-way CSAs. This could become a trend over the coming year or two, particularly if sovereigns decide to clear OTC derivatives centrally (note that in the current proposals DMOs and central banks have clearing exemptions); central clearing requires two-way posting of margin<sup>3</sup>.

### Will leverage return?

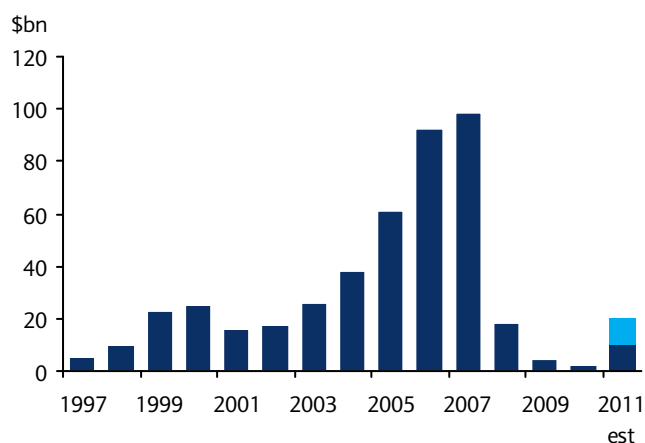
Tighter spreads and lower volatility naturally lead investors to re-examine their use of leverage. While normally the current environment would be perfect for this trend to re-emerge, the new regulatory environment will make it much more difficult. As Figure 12 shows, we have not seen a true new issue synthetic CDO since 2008, and while Axa Investment Managers are currently in the market testing the waters with a deal, we believe the CDO market will struggle to re-develop, since the treatment of correlation books will be punitive under new bank capital regulations. In addition, securitization will likely be subject to 5% risk retention rules in the US as part of the Dodd-Frank Act. This could weigh on CLO issuance as well going forward. We are forecasting \$10-20bn of CLO issuance in 2011 (Figure 13) buyers for unrated equity remain difficult to find at low-teens returns. The uptake of total return swaps in the leveraged loan market remains muted as many investors had negative experiences with the recourse nature of those transactions in late 2008 and

Figure 12: Global synthetic CDO issuance



Source: SIFMA, Barclays Capital

Figure 13: US CLO issuance



Source: Moody's and S&P/LCD, LSTA, Barclays Capital

<sup>3</sup> An alternative may be to introduce special clearing membership for sovereigns with one-way agreements. Also, two-way sovereign CSAs raise the question of suitable collateral. Would it be acceptable for Portugal, for instance, to post Portuguese government bonds?

early 2009. CLO issuance could surprise to the upside if AAA spreads tightened, thus boosting equity returns. However, we believe that without the SIVs and negative basis books, AAAs will never get back to their tight, with bids only from insurance companies and perhaps Japanese banks.

The more likely return of leverage will be in single name credit or simplified structured products. The move to a clearinghouse will increase margins for certain portfolios, but not in a material enough amount to deter levered accounts from using the product. We have also seen an increased use of leverage in what investors believe are less volatile bonds, such as shorter dated yield-to-call high yield securities. With less convexity in credit markets in addition to tight spreads, we expect increased leverage will penetrate everyday trading strategies more so than through complex structures.

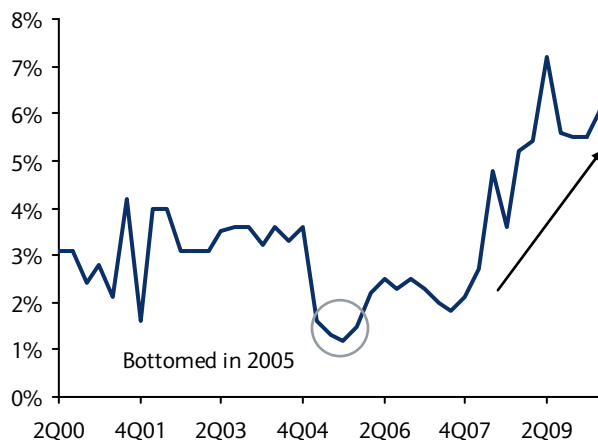
### Risks

There are a number of key risks facing credit investors in 2011. Some concerns are typical for this part of a cycle, such as the return of event risk. Others are new, such as the implications of historically low Treasury yields and the evolving sovereign risk crisis in Europe. Our base-case scenarios across credit reflect our view that these risks will not result in sustained weakness in spreads. However, each has the potential to do so, and will likely be sources of volatility throughout the year.

### Will increasing rates drive investors from fixed income?

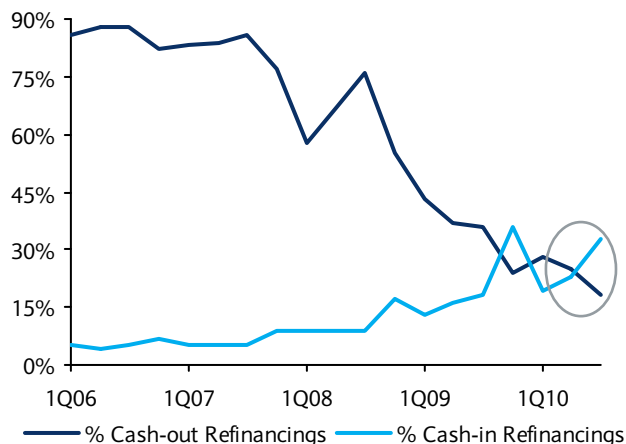
As discussed above, low interest rates in the developed world present a number of challenges for investors. One common concern is that increasing rates, and the low or negative total returns they imply, will reverse some of the flows into credit and cause spreads to widen. We believe the risk of a meaningful shift out of credit over the medium term is limited, even if interest rates rise. As our colleagues argue in the [22 November Global Outlook Update](#), the recently-initiated QE2 regime should be positive for credit despite rising rates. Investors continue to display significant risk aversion, using almost any measure that we can think of. For example, savings rates remain high (Figure 14), cash-in refinancings continue to increase (Figure 15), and the flows into fixed income have remained robust despite a 70% increase in the equity markets since the depth of the crisis.

Figure 14: NIPA personal savings rate



Source: Federal Reserve, Haver Analytics, Barclays Capital

Figure 15: Mortgage refinancings



Source: Freddie Mac, Barclays Capital

Investor risk aversion mirrors behavior across the system, such as the record high cash balances at non-financial corporates. While an improving macro outlook would benefit equities, we believe that any shift out of fixed income will happen slowly, as the lessons of 2008 and 2009 continue to resonate. As a result, we believe the risks to spreads and excess returns from a higher rate environment are limited – in fact, higher all-in yields may encourage more strategic shifts into corporate credit from investors such as corporate pension plans, which have stalled somewhat with yields at historical lows. Even a ~115bp increase in the yield of 10y Treasuries, to 4%, would only return rates to April 2010 levels.

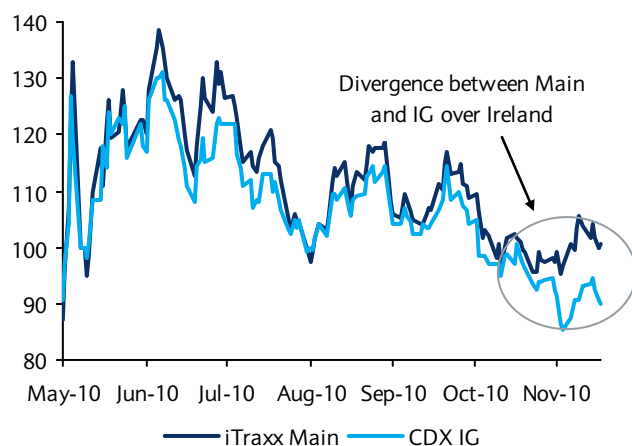
That said, total returns will suffer should interest rates rise. Investors have clearly demonstrated a concern about high duration, evidenced by steep credit spread curves, which have persisted despite limited issuance in the long end and steep Treasury curves. We believe one implication of higher rates will be normalization of spread curves, with the long end outperforming,

Although we believe rates are likely to increase, lower government yields are also a risk – there is nearly as much talk about possible deflation as about possible inflation. Below-consensus growth is one catalyst for this outcome. While flows out of fixed income and into equities are unlikely in such a scenario, low absolute yields can present an obstacle for spread tightening – evidenced by the recent outperformance of CDS over cash. In addition, corporate fundamentals would likely come under pressure if growth slows meaningfully. As a result, we believe spreads would have limited room to tighten in a disinflationary/ mildly deflationary environment.

### European sovereign risk

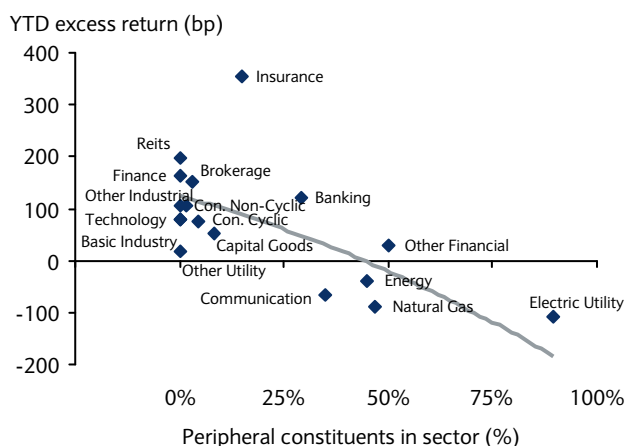
European sovereign risk will remain of critical global importance in 2011, despite the reduction in systemic risk following key events in 2010. Establishment of the European Financial Stability Facility (EFSF) and the publication of European bank stress tests (more importantly disclosures of bank sovereign exposures) both helped alleviate fears that a Greek default would lead to a renewed banking crisis, destabilise the eurozone and potentially threaten the single currency. Following recent events in Ireland, we have not observed the same substantial gapping wider of credit indices that occurred at the height of the Greek crisis (a similarly sized problem), although clearly this is the main factor in weaker credit market performance in November. Furthermore, we think a decoupling between CDX IG and iTraxx Main (Figure 16) signifies that Ireland is viewed first as a

Figure 16: iTraxx Main and CDX IG diverge over Irish crisis



Source: Barclays Capital

Figure 17: Sector excess returns by peripheral content



Source: Barclays Capital

European issue and secondarily as a global, systemic issue.

That said, one overhanging threat to the stability of global credit markets is contagion of sovereign concerns to more systemically important countries. Spain will likely come under the microscope in 2011. Derailment of fiscal reform and banking sector repair would have the potential to reignite systemic risk. The level of outstanding Spanish debt is greater than for Ireland, Greece and Portugal combined, and with Ireland tapping the facility for sovereign needs and to help recapitalize its banks, the capacity of the EFSF to handle both Portugal and Spain has been called into question. Any hint of Spain approaching the EFSF could heighten these reservations over its viability, potentially increasing the credit risk premium for all corporates and leading to the strong cross-asset and cross-regional correlations witnessed in May-July 2010. The EU will have to provide enough of a backstop that the next in line countries, such as Spain, are able to fund at reasonable levels. We do not believe Spain or its banking system has insufficient capital. However, if rising spreads cause interest costs to increase, the benefits of fiscal austerity will be undone.

Although our economists believe the cost of a pre-emptive restructuring in Greece would outweigh the gains (see [Greece - still too early to restructure](#), 28 October 2010), it is a possibility. Such an event would pose a risk for credit markets, particularly given the sovereign exposures revealed to be held by German and French banks in the bank stress-test results. Regarding sovereign restructuring, it is a positive that the European Stability Mechanism will be established as a long-term replacement for the EFSF. However, the potential preferred creditor status of these loans and the addition of collective action clauses (CACs) beginning in 2013 is a negative for recovery of defaulted sovereign bonds. In addition, the recent announcements regarding Ireland drove a wedge between senior and subordinated bank paper, which demonstrates how sovereign risk and political intervention can generate unhedgeable-gap risk for credit investors.

The sovereign-corporate link is clearly observable at the sectoral level. Figure 17 shows 2010 excess returns for European sectors as a function of the proportion of peripheral constituents in each sector. A strong relationship is evident: the greater the peripheral component, the worse the return. The traditional approach to credit selection, by sector, rating and duration has changed; the sovereign overlay cannot be omitted in the credit selection process.

### **Event risk strikes back**

One only needs to see the underperformance of names discussed as possible LBO targets, particularly in the CDS market, to understand that event risk has returned as a major concern for investors. We do expect LBOs to increase in 2011. Despite the substantial underperformance associated with an LBO (magnified by the high dollar prices of most cash bonds, which limits the efficacy of CoC provisions), we believe LBOs are less of a systematic concern than other forms of releveraging, due to limitations on the size of deals that we believe can get done in the current market. Leveraged recapitalizations and debt-funded dividends, share repurchases and acquisitions are a bigger risk, in our view, given our expectation that organic growth opportunities will remain scarce in the US. Combined with record low all-in yields and a market tolerant of increasing leverage, we foresee fertile conditions for investment-grade companies to increase equity payout ratios to above 40% of EBITDA. This is a significant increase from current levels, which are about 33%, but still below 2007 levels.

### **China is slowing, and so will global growth rates**

Abundant liquidity conditions in the US and Europe have translated to increased flows into emerging markets. The worry of runaway asset price increases is leading policymakers to evaluate options to control flows. Simultaneously, with commodity prices moving up, concerns about inflation have risen in many countries including China. China's higher than expected October inflation print has opened the door to more aggressive tightening through a variety of tools – reserve ratios, interest rates and loan targets. In early 2008, tightening measures undertaken by China resulted in a deep sell-off across risk assets. With growth in the US and Europe tepid, China contributes to a much larger portion of world growth now – and any action to slow down the economy is likely to cast a shadow on global credit markets. While the effect on growth of these measures will take time to be felt, the sentiment change is likely to be rapid and presents a meaningful risk to credit. That being said, with China still set to grow at a high single-digit rate, we think investors will focus more on European sovereigns as a concern.



*This page is intentionally left blank*

## CREDIT STRATEGY

---

## HIGH GRADE STRATEGY

### No yield, no problems

Jeffrey Meli  
+1 212 412 2127  
jeff.meli@barcap.com

Shobhit Gupta  
+1 212 412 2056  
shobhit.gupta@barcap.com

Alex Gennis  
+1 212 412 1370  
alex.gennis@barcap.com

Ryan Preclaw  
+1 212 412 4055  
ryan.preclaw@barcap.com

#### Municipals Strategy

Peter J. De Groot  
+1 212 528 1290  
peter.de-groot@barcap.com

Andrew Chan  
+1 212 528 1288  
andrew.chan2@barcap.com

Jormen Vallecillo  
+1 212 528 1289  
jormen.vallecillo@barcap.com

- We continue to have a positive outlook on investment grade credit heading into 2011. We forecast 250bp of excess returns for the year, based on carry plus moderate spread tightening of 15bp, and a slightly lower 200bp of total returns, due to our expectation of an ~40bp move higher in 10y Treasury rates. We believe the CDX.IG index will tighten 10-15bp, primarily driven by outperformance of select wider-trading pockets of the market, such as certain insurers, energy, and basic materials companies, and credits perceived as being vulnerable to event risk.
- Although tame relative to 2008 and 2009, this year has been volatile from a longer-term perspective. The OAS of the US Credit Index traded in a 55bp range in 2010, from as tight as 127bp on April 15 to as wide as 182bp on June 11. CDS was similarly volatile. Spreads tightened through mid-April due to an improving macroeconomic backdrop, before sovereign risk, concerns about financial reform, and the potential for a double dip caused a sell-off. Since then, the market has generally traded tighter, albeit not uniformly, with sovereign risk, mortgage put-backs, and other issues causing periods of weakness.
- The OAS of the US Credit Index is now 155bp, 2bp tighter than at the start of 2010, resulting in excess returns YTD of 97bp<sup>4</sup>. Clearly, the bulk of the outperformance versus Treasuries is due to carry as opposed to spread tightening. The YTD total return of the US Credit Index is over 9.25%, due to the sharp rally in Treasuries.
- Both fundamentals and technicals will be supportive of credit in 2011, in our view. Despite our expectation that share buybacks and M&A will become more of an issue in 2011, we expect companies to continue to be conservative regarding balance sheets, as evidenced by the record level of cash holdings on balance sheets. We believe flows into investment grade corporate bonds will remain robust even if yields rise, based on elevated investor risk aversion. In addition, the almost 30% drop we forecast in net corporate credit supply and the Federal Reserve buying nearly 100% of the net issuance of Treasuries through 2Q11 will further support the technical backdrop for credit.
- From a sector perspective, we believe there are long opportunities in select nonfinancial sectors such as Oil Field Services, Refining and Paper and short opportunities in Chemicals, Consumer Products, Telecom and Tobacco. We expect the compression of financials to industrials to continue next year. Although financials are unlikely to trade through industrials, as they did pre-crisis, we believe there is up to 30bp of potential compression next year, which would still leave financials significantly wide of their historical relationship. Our fundamental analysts are Overweight three major financial sub-sectors: Banks, Life Insurance, and REITS.
- Credit curves steepened in 2010, leading the long end to underperform the broader market. This trend began to reverse in October – we expect the recent flattening of credit curves to continue, the main drivers being higher long-dated Treasury yields and steeper Treasury curves - as expected by our rates strategists – and prefer to move out the curve.

<sup>4</sup> All levels are as of 26 November 2010 close.

Figure 1: Summary of views

Key Theme	Summary View	Summary Comments
Supply Outlook	Net supply down ~30%	Expect ~\$810bn of gross fixed-rate issuance (including non-corporates) in 2011, a drop of 10% from this year's annualized level. Industrials are likely to see the largest drop in gross issuance, while we expect 2011 financial issuance to stay close to flat. This translates to ~\$470bn of net issuance, down 30% from this year.
Demand Outlook	Generally strong	We expect flows into credit from the main buyer groups to remain robust, given high personal savings rates and the Fed's buying of most of net Treasury supply pushing investors into other high quality fixed-income assets, such as corporate credit.
Fundamentals	Positive and steady for most firms	Firms performed well in 2010 and, as a result, we are nearing the end of the deleveraging cycle. For the median firm, 2011 should be a steady-state year of flat to slightly improved credit fundamentals on good operating results; a few firms will continue to deleverage, and a limited number may begin releveraging to benefit equity.
Event Risk	High headline value and impact on affected credits, but low overall	We expect leveraged recapitalizations and debt-funded dividends and share repurchases to present the most risk to investment grade credits in 2011, based on our expectation of the frequency and severity of the credit impact of these events.
Overall Barclays Capital Credit Index	Excess returns of 250bp and total returns of 200bp	Forecast 15bp of tightening, primarily driven by specific sectors, such as the compression of financials to industrials.
CDX. IG	Moderate tightening	Expect 10-15bp of tightening, driven by select wider trading credits, such as certain insurers, energy, and basic materials companies and those in sectors that are perceived as being vulnerable to event risk.
Sector Positioning	Select wider-trading sectors offer value	Financials, led by Banking, Life Insurers and REITs likely to outperform due to fundamental improvements and favorable technicals for banks. The Oil Field Services, Paper and Refining sectors offer value due to strong/ improving fundamentals and wide spreads, in our view. We see short opportunities in the Chemicals, Consumer Products, Telecom and Tobacco sectors.
Cash Curves	Favor the long part of the curve	We believe 30y credit is more attractive given the steepness of Treasury curves and the underperformance of the long-end in 2010.
Spread Pickup Opportunities	Select off-the-run bonds appear attractive	Less liquid off-the-run maturities (such as 7y and 20y bonds) offer an attractive spread pick-up, even after accounting for their higher dollar price and higher transaction costs from lower liquidity.
Cash/CDS Basis	Tighter (more positive basis)	We expect cash bonds to outperform CDS, especially within the Energy, Financial, and Industrial sectors. CDS of several credits/sectors perceived as being vulnerable to event risk has lagged and may outperform as concerns about event risk subside.
Taxable Municipals	Tighter	We expect the BAB program to be extended and taxable municipals to compress versus similarly rated corporates.

Source: Barclays Capital

### Demand: Going steady...

Flows into corporate credit have remained strong through 2010 and we expect them to continue. Mutual fund flows into corporate credit have been stable and consistently positive following the peak of the financial crisis in late 2008/early 2009 (Figure 3). On the other hand, fund flows into equities have been much more volatile and have turned negative several times since the end of the financial crisis, driven by several flare-ups in investor risk aversion. The Federal Reserve Flow of Funds data confirm that the traditional buyer groups of credit continue to purchase investment grade credit, albeit at a slightly slower pace (Figure 2).<sup>5</sup>

<sup>5</sup> We do not include flows into credit from the household/retail category in these data because the Fed data calculate flows from households as the balance between net debt issuance and flows from other categories. Due to recent negative net issuance of debt (driven by large negative net issuance of ABS), the household category for past several quarters is negative. However, we find that approximately 80% of mutual fund flows and most ETF flows come from retail investors, so we estimate that at least \$90bn flows in 2Q10 (on an annualized basis) came from retail investors.

Several factors have contributed to the robust demand for credit thus far and we expect them to continue in 2011. First, the personal savings rate in the U.S. is near its highest level since the mid-1990s (Figure 4). Although it is somewhat below its peak during the crisis, we expect the savings rate to remain elevated and well above the lows reached in 2005, when households levered up significantly to fund consumption. Second, continuing economic uncertainty and high unemployment in the U.S., and developments in the sovereign debt situation in Europe are likely to put pressure on flows into riskier assets, such as equities. Third, we believe that the Fed's buying of almost all of the net supply of Treasuries through the second quarter of 2011 via its QE2 program will lead traditional buyers of Treasuries to invest in other high-quality fixed income asset classes, such as corporate credit.

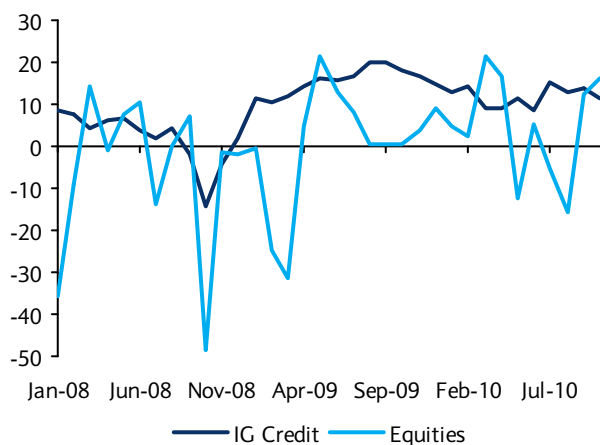
We do not believe that a moderate increase in Treasury yields, in line with our rates forecast, will result in a significant decrease in the flows into fixed income. Risk aversion remains high, despite equities having rallied ~70% from their lows, and we do not believe this will change over the course of a few quarters. A severe increase in rates would present a larger risk to credit spreads, although given the supply technicals, a material drop in demand would be necessary for the overall technical picture to turn negative for credit.

**Figure 2: Flow of funds into corporate credit (\$ bn, seasonally adjusted annual rates)**

	Q1 09	Q2 09	Q3 09	Q4 09	Q1 10	Q2 10
P&C	20	32.9	33.1	37.2	0.9	-3
Life	122.4	75.2	102.5	100.3	136.5	61.4
Private Pensions	55.3	40.6	39.5	35.7	38.5	38
State and Local Pensions	-9.3	-1.1	-10.3	9.9	0.4	2.2
ETFs	26.4	26.6	27.4	30.1	20.2	20.3
Mutual Funds	179.7	144.6	121	139.6	198.6	91.8

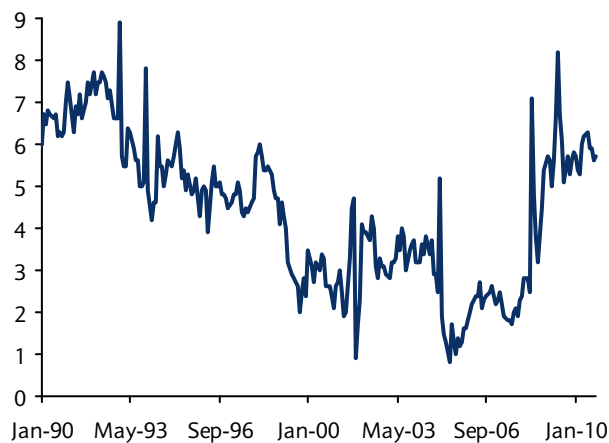
Source: Federal Reserve, Barclays Capital

**Figure 3: Mutual fund flows into equities and credit (\$ bn)**



Note: Flow data are monthly. Equities include all equity funds (domestic and foreign). Source: Lipper FMI/Thomson Reuters, Barclays Capital

**Figure 4: US personal savings as % of disposable income**



Source: Bloomberg, Barclays Capital

## 2011 supply forecast: Net issuance to fall due to higher redemptions

We expect \$810bn<sup>6</sup> of gross fixed-rate issuance (including non-corporates) next year, 10% below 2010 annualized issuance, which translates to \$470bn of net issuance, 30% below this year's level. We expect gross (net) corporate issuance to come in at \$565bn (\$340bn), down ~13% (~30%) from this year's annualized levels (Figure 5). The larger decreases in net issuance are driven by the substantial increase in redemptions next year.

This forecast is based on a top-down approach that starts with near-term redemptions and adjusts for the major themes that will likely affect 2011 issuance, such as M&A, shareholder-friendly activity, EBITDA growth and balance sheet management. We also perform a sector-specific, bottom-up approach, which is informed by the issuance expectations of our fundamental credit analysts and the key industry-wide trends relevant to supply, and yields similar results.

Below, we present a summary of our top-down approach. Please see [Dealing with Next Year's Issues: 2011 Investment Grade Issuance Forecast](#), November 5, 2010 for our bottom-up approach and further details about expected issuance.

1. **Near-term redemptions:** A natural starting point for forecasting next year's issuance is the level of 2011 redemptions. Excluding US bank debt, next year's redemptions will be ~\$285bn, which we assume will be fully refinanced. US bank redemptions in 2011 (including TLGP and FRN debt) will be approximately \$180bn (see below for further details on bank issuance). A bit less than 50% of this debt will be refinanced in the fixed-rate market, in our view, adding another \$85bn to refinancing-related 2011 supply. On top of this, we expect \$160bn of issuance from Yankee banks in the USD market, based on their funding needs and likely diversification of funding sources. In sum, we expect redemptions to drive approximately \$530bn of 2011 issuance (Figure 6).
2. **EBITDA growth, event risk, and balance sheet management:** For public U.S. based non-financial companies in the US Credit Index, the average projected NTM EBITDA growth is ~12%. Assuming that on average companies maintain their leverage at current levels, this

Figure 5: Gross issuance – 2010 annualized versus 2011 forecast (\$ bn)

	2010 Ann.	2011 Estimate	Change
Industrials + Utilities	340	255	-25%
Financials	310	310	0%
<b>Corporate Total</b>	<b>650</b>	<b>565</b>	<b>-13%</b>
Non-Corporates	250	245	-2%
<b>Total</b>	<b>900</b>	<b>810</b>	<b>-10%</b>

Note: Fixed-rate issuance only. Source: Barclays Capital

Figure 6: Major components of 2011 fixed-rate issuance

Source of Debt Issuance Needs for 2011	Amount (\$bn)
Fixed-rate non-bank redemptions	285
50% of total US bank redemptions	85
Yankee bank funding in USD	160
EBITDA growth (including M&A and debt-funded shareholder friendly activity and assuming reduction in cash balances)	235
<b>Sub-total</b>	<b>765</b>
Potential index-eligible BAB issuance	45
<b>2011 Gross issuance estimate</b>	<b>810*</b>
<b>2011 Net Issuance estimate</b>	<b>470</b>

Note: \*Assuming extension of BAB legislation. Source: Barclays Capital

<sup>6</sup> This estimate assumes that the Build America Bond program will be extended into next year and that index-eligible BAB issuance in 2011 will be ~\$45bn.

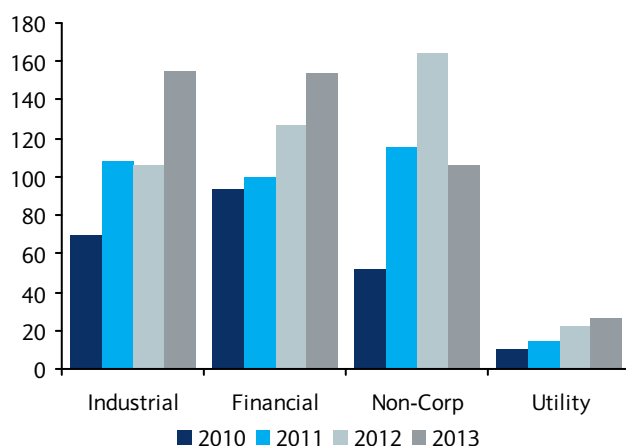
would imply an additional ~\$235bn of net debt for nonfinancial investment grade corporates (based on our sample).<sup>7</sup> We think the deleveraging cycle has come to an end, with increases in debt due to M&A, share buybacks, and increased dividends at some companies balanced by increased EBITDA broadly and slight decreases in debt at other companies that continue to deleverage. At the same time, corporate cash balances are at record highs, just below 7% of total assets. We expect investment grade companies to start reducing cash holdings to be more in line with historical levels and believe they will use a portion of this cash to fund some of the M&A and share buyback activity, limiting total debt needs. As a result, we believe that higher debt needs from EBITDA growth and increases in M&A and debt-funded shareholder friendly activity will be balanced by the use of high cash balances, having no net effect on our base estimate of ~\$235bn of additional net debt in 2011.

Our 2011 issuance estimate is predicated on several assumptions about trends in corporate fundamentals in 2011 and is therefore sensitive to certain variables, such as cash on balance sheets, the amount of M&A and shareholder-friendly activity, and leverage trends. Should companies continue to hoard cash on their balance sheets, their debt issuance needs will likely be higher than we forecast. On the other hand, if they are more aggressive in drawing down cash balances, their 2011 debt issuance may be lower than our estimates. Furthermore, a higher-than-expected level of M&A activity and/or further releveraging are other upside risks to our forecast.

### Bank issuance remains a focus for the market

Year to date, U.S. banks and GECC<sup>8</sup> have issued ~\$80bn of fixed-rate debt on an annualized basis, approximately in line with the amount issued last year. While next year's fixed-rate redemptions are relatively low (\$57bn), TLGP and floating-rate redemptions are sizeable and should be included in total redemptions for next year, as banks have largely replaced both of these sources of funding with fixed-rate debt, in our view. Assuming the recent balance sheet and deposit trends continue in 2011, we expect bank issuance to equal approximately 50% of total redemptions, in line with the ratio of issuance to redemptions in

Figure 7: Growth in redemptions (\$bn)



Source: Barclays Capital

Figure 8: 2011 US banks issuance forecast

2011 Issuance Estimate	
Gross Fixed Rate Issuance	\$85bn
Gross FRN Issuance	\$10bn
Fixed Redemptions	\$57bn
Fixed-Rate Net Supply	\$28bn
TLGP Redemptions	\$97bn
FRN Redemptions	\$28bn
<b>Total Net Supply</b>	<b>-\$97bn</b>

Source: Barclays Capital

<sup>7</sup> We estimate 2011 EBITDA growth and leverage for a universe of public, US-domiciled, non-financial corporates in the U.S. Credit Index – approximately 70% of non-financials corporates in the index. We then apply the EBITDA growth and leverage of our sample to the whole universe of non-financial corporates in the index.

<sup>8</sup> For the purposes of this analysis, the debt of General Electric Capital Corp will be counted in the same category as U.S. banks.

2010, for a total of ~\$95bn (Figure 8). Our baseline assumption is that FRN issuance recovers somewhat, but remains low by historical standards, at 10% of total supply. This leaves us with an estimate of \$85bn of fixed-rate supply and \$10bn of FRN debt. This translates to net issuance of ~\$28bn using only fixed-rate redemptions and negative \$97bn using fixed, FRN, and TLGP redemptions.

Yankee banks are likely to continue to issue actively in the USD market, in our view, given favorable currency swaps and banks' continued desire to diversify funding sources.<sup>9</sup> We expect European banks to issue approximately \$90bn in the USD market and expect another \$70bn to come from non-European Yankee banks, such as Canadian and Australian institutions, which have also been active in the USD market this year.

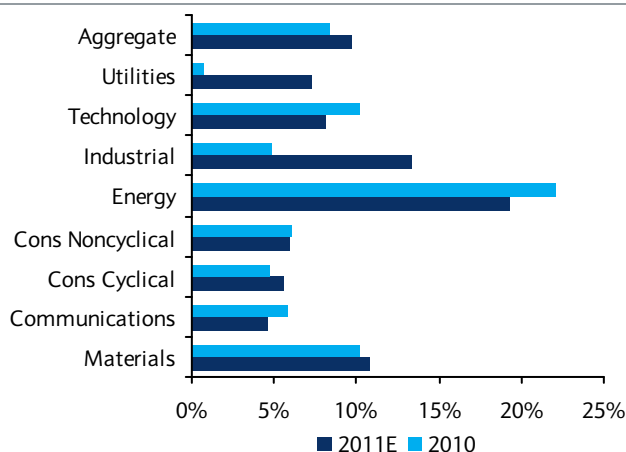
## Investment grade fundamentals

Investment grade non-financial corporate fundamentals improved in 2010 with LTM revenues, EBITDA, and operating cash flow all rebounding close to the record levels achieved prior to the 2008 financial crisis. Cash balances continued to increase among nonfinancial firms, and are now 60% higher than the 2006-08 average. Total debt increased slightly from 2009, but a greater increase in EBITDA drove a slight decrease in total leverage, and the jump in cash balances reduced net leverage to below 2008 levels.

The current equity research consensus forecast is that 2011 will be a strong year for nonfinancial firms, with US investment grade aggregate revenue projected to rise 11% (versus 8% in 2010). Figure 9 shows how strong 2010 sector revenue performance has been translated into optimistic forecasts for 2011. These 2011 projections highlight an apparent discrepancy between macro expectations and firm level projections: they suggest a year of stronger economic growth, with 2010's 8% increase in investment grade revenues corresponding with US economic growth of about 2.8%. Barclays Capital economists currently forecast 2011 GDP growth to match 2010's, making the projected 11% revenue increase mildly, but not wildly, optimistic. Perhaps more optimistic are forecasts that margins will rise above 18%, with 40% of firms expected to have record margins (Figure 10).

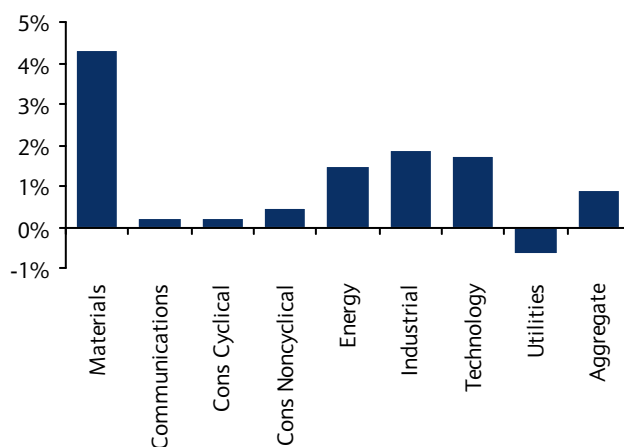
Through 2010, managements have deleveraged to about 2008 levels, with few complaints from equity holders. In 2011, however, expected EBITDA growth would reduce leverage to

Figure 9: Revenue growth, y/y



All values LTM as of November 15. Source: Capital IQ, Barclays Capital

Figure 10: Broad-based margin improvement expected – 2011E



Source: Capital IQ, Barclays Capital

<sup>9</sup> Please see the 4 November 2010 *European Credit Alpha* for details about expected EUR and GBP issuance in 2011.



below 2006-07 levels; as this threshold approaches, stock holders are likely to increase pressure on firms to make equity-friendly moves. Because of this, we expect 2011 to be the bottom of the deleveraging cycle: firms will be pressured to direct incremental cash flows to equity, though lingering macro worries should prevent them from moving too aggressively. For a majority of firms, this should mean 2011 will be a credit steady-state: deleveraging ends, leading to small increases in net debt to match operating improvements as the year progresses, and cash flows are increasingly directed towards investments or returned to shareholders. We also expect a smaller number of firms to continue deleveraging, while others will begin to increase leverage to boost equity returns.

Some of this variation will be realized across sectors: while consumer cyclicals and utilities are near historical averages in leverage and should exemplify steady-state performance, other sectors will have concentrations of firms either continuing to reduce leverage or starting to leverage back up:

- **Basic materials:** Expected revenue growth is likely to drive capital investment and returns of cash to shareholders. Use of incremental debt will likely be moderated by strong cash flows. If equity performance lags, smaller firms may become LBO candidates.
- **Communications:** Underleveraged by historical standards, with gross leverage of 1.7x (versus 1.9x during 2006-07) and net leverage of 1.2x (1.5x during 2006-07). More than half the firms are operating at historically high margins. We estimate that communications firms could double the amount of cash returned to shareholders in 2010 without increasing debt. However, given low leverage, they will likely seek out debt-funded M&A (for growth and expense management) or use debt to fund dividends and buybacks.
- **Consumer non-cyclicals:** Sector leverage is at or below 2006-07 levels, and equities have underperformed in 2010, increasing pressure to boost equity returns by adding debt.
- **Energy:** High growth expectations should spur capital investment funded by strong cash flows. Leverage remains higher than pre-crisis, but operating cash flow should provide for higher investment, continued deleveraging, and increased cash to shareholders.
- **Industrial:** Leverage is currently above historical levels, but expected growth should help companies deleverage rapidly and could encourage them to issue new debt. Projected cash flow is significantly larger than 2010 capex and cash returned to shareholders; expect these firms to increase dividends and buybacks 2011.
- **Technology:** Eleven of the 17 US technology companies in the investment grade index are operating at their highest margins since 2006, leaving limited room for performance upside. M&A (to support growth and margins) is likely to continue, as is the trend of companies increasing leverage to return cash to shareholders.

We see potential risks from revenue growth underperforming expectations that may be anchored on 2010's above-trend results, and margins that are expected to be above recent peaks for 40% of firms. For example, it is difficult to reconcile rapid revenue growth and high margins for industrial companies with rapid increases in materials and fuel input prices (as are implied by consensus forecasts). Similarly, while overall unemployment remains high, Google's 10% across-the-board increase in wages (intended to stem employee defections) is evidence that at least some highly skilled employees continue to have pricing power, which may put pressure on technology margins. If we find ourselves in an environment with high costs but low final pricing power, materials and energy firms will likely perform well, but margins will be squeezed in the industrial, consumer, and utilities sectors.

## Risky business – Is event risk making a comeback?

With the stabilization of the global economy moderating macro risks, but US firms looking forward to slower than usual growth, we expect increased pressure for shareholder friendly actions in 2011. With that backdrop, event risk is likely to be a critical theme.

Though all forms of event risk are likely to receive extra attention, not all are created equal in terms of risk to credit. The worst are likely to be leveraged recapitalizations and leveraged buyouts; while buyouts are probably a more significant risk to individual credits, leveraged recapitalizations are more likely for most investment grade companies. Regular dividends and share repurchases have potential to impact credits negatively, but that risk is moderated by the tendency of dividends to reflect strong operating expectations. M&A (for either acquirers or targets) presents a low risk on average, but has a wide range of potential outcomes, especially for inexperienced acquirers or firms that might take the opportunity to make a permanent change to capital structure. We lay out our expectations around severity and frequency of event risks to credit in Figure 11.

**Figure 11: Hierarchy of event risks**

Corporate Event	Event Effect on Single Credits	2011 Frequency	Aggregate Risk
Leveraged Recapitalizations	Very Negative	Moderate	Moderate
Leveraged Buyouts	Very Negative	Very Low	Low
Debt-Funded Dividends & Share Repurchases	Negative	Moderate	Moderate
Cash-flow Funded Dividends and Share Repurchases	Neutral	High	Low
M&A as Acquirer	Neutral to positive	High	Very low
M&A as Target	Positive	Moderate	Very low

Source: Barclays Capital

### Leveraged recapitalizations

Though leveraged buyouts (see below) generate the most headlines, we believe that levered recapitalizations present the largest risk to investment grade credit in 2011. Given our expectation that growth opportunities will remain scarce in the US, companies will feel pressure to return capital to shareholders. Combined with debt markets that allow companies to issue debt at record-low total yields (IBM, Microsoft, Johnson & Johnson) and are tolerant of increasing leverage, we believe conditions are ripe for companies to increase equity returns by ramping up leverage.

Some of the pressure companies are likely to face can be seen in Pershing Square buying an apparent activist position in Fortune Brands (FO). Given that FO is expected to pay significant taxes in the future (as much of its depreciation basis rolls off), management may consider increasing debt to benefit from tax shields. While we have not yet seen many cases of shareholders pressuring companies to boost leverage, if debt markets remain stable and growth stays subdued, we expect that pressure will increase.

Levered recapitalizations are also an alternative to LBOs for sophisticated managements. If a firm receives a buyout offer, management may instead try to capture the returns of a buyout for public shareholders by leveraging up the company themselves.

## LBOs

Leveraged buyouts represent a significant risk to the credits of target firms. In the *U.S. Credit Alpha – Setting Sail on the QE2*, October 8, 2010, we estimated that tech or consumer companies trading pre-LBO at 5y CDS spreads of 120-150bp would widen about 200bp if they were taken private on likely deal terms.

While a buyout is a significant risk to a particular credit, we believe that buyouts are not a significant risk to overall investment grade credit for the following reasons:

- “Dry powder” for investment grade deals is more limited than widely believed. Although early in 2010 the press was citing available capital of \$500bn<sup>10</sup>, only a fraction of PE capacity can feasibly be used for buyouts of investment grade companies. From 2005 through 2007 there were 51 US buyouts announced greater than \$5bn; 40 of those deals (~80%) featured one or more of the top 10 buyout funds. Relative to the past, these firms are funds constrained: Blackstone was the most recent to raise a fund and currently has only ~\$13.5bn available to invest, according to a September investor presentation; press reports suggested that KKR had about \$14.5bn to invest as of March 2010.
- Concentration limits constrain the sizes of significant buyouts. Historically Blackstone has used only 25% of funds for large buyouts – that would suggest \$3.4bn available for large investments (which would likely be spread across several deals). If we assume the top 5 funds have similar capacity, the aggregate equity checks available to support IG index buyouts would be around \$15bn. Of the feasible buyout candidates among IG index companies, we estimate that the average equity check would be in the \$4bn range – suggesting enough capacity for three to four large deals, assuming other firms had as much “dry powder” as Blackstone (unlikely until they raise more funds) and were willing to form consortiums for such large bids.
- Funds have shown a preference for small deals since the beginning of 2009, with even the largest deals having equity checks under \$3bn (for example IMS Health and Burger King). This preference is evident among the firms associated with mega-buyouts in 2005-2007: in 2005 the average deal involving KKR, TPG, and GS Capital Partners was greater than \$6bn of enterprise value; since the beginning of 2009 their average deal has been under \$1bn (in line with deal sizes of 2003 and before).

While buyouts are significantly negative events for credit, we expect limited risk to IG index credits, as PE firms focus on smaller targets. If any large deals are completed, the risks to remaining credits will decline even further. Of course, if large new PE funds are established, it would increase capacity for meaningful LBOs and raise the level of risk to IG investors.

We believe there will be plenty of speculation about LBOs during the year – and CDS levels will respond, as can be seen in the spreads of names that have been mentioned as LBO candidates in the press. Some buyout trading strategies used by investors to manage LBO risk remain feasible, including buying Change-of-Control bonds outright or versus CDS (if the bond is trading close to par), or buying protection on a basket of event-risk names (naked or versus the index). Other strategies, such as CDS steepeners, are more difficult given decreased liquidity in CDS curves.

## Dividends & Share Repurchases

After a sharp drop in 2009, dividends and share repurchases began to increase in 2010. Given the stabilization in operating performance, and the current record levels of corporate

---

<sup>10</sup> “Buyout Bets Roil Computer Sciences, Lubrizol: Credit Markets,” *Bloomberg Businessweek*, March 22, 2010.

cash holdings, we expect both dividends and repurchases to increase further in 2011. Figure 12 shows that 33% of nonfinancial EBITDA was paid out to shareholders over the past 12 months, above the rate in 2009 but well below historical norms.

While we do not expect the payout to increase to 2007 levels, we expect it to move towards the 40%-plus level seen prior to the financial crisis. With an increase in dividends to 40%-45% of EBITDA, we expect total dividends and buybacks to be \$500-550bn (40-60% growth over 2010) in aggregate. For financials, we expect dividends to be a function of regulatory issues (rather than exclusively an operating decision), and we do not expect them to affect credit performance.

Dividends and repurchases are not troubling to credit in and of themselves – they are often a signal that a business is performing well. They are a risk to credit, however, when they are combined with an implicit change in leverage policy – credits tend to underperform when they simultaneously increase the amount of debt and percentage of cash flowing to equity holders as dividends and share repurchases. For a more detailed look at dividends and repurchases, see *Focus: Return to Sender*, September 27, 2010.

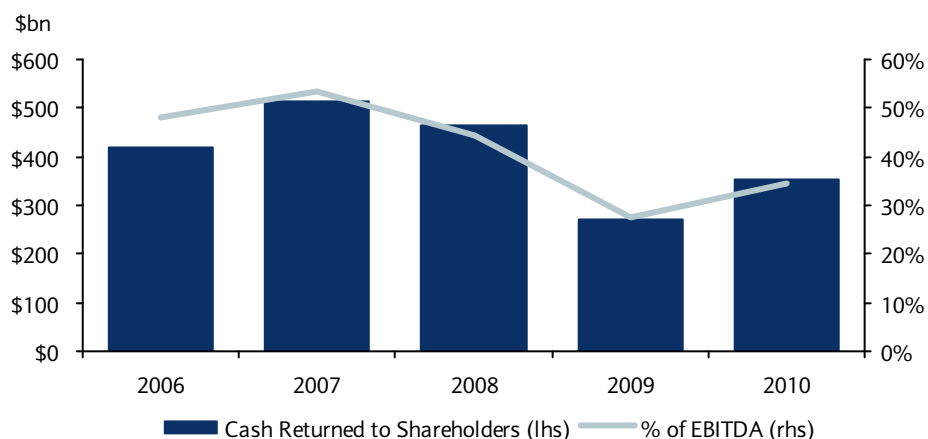
The greatest risk to credit will be firms that increase debt in order to fund dividends and share buybacks. Even the highest-rated credit can be expected to underperform if it issues debt for that purpose. As an example, on September 22, Microsoft issued debt intended to fund dividends at some of the lowest yields on record; the company's CDS spreads widened immediately after the issuance, and remain wider despite 15bp of tightening in CDX IG.

For 2011, we believe firms and sectors with few top line growth opportunities, but stable EBITDA and capex, will be most likely to add debt to boost equity performance; this risk is compounded if the company pays taxes and is in an industry where comparable firms operate with higher leverage.

## M&A

M&A has increased about 50% in value terms since reaching a low in August 2009. By the standards of past M&A cycles, however, this is a slow rebound: M&A volumes are recovering about half as quickly as after the previous trough in 2002. Given the cash on corporate balance sheets, the availability of acquisition finance, and the moderate growth prospects for many companies, we expect this recovery to continue at a similar pace or even accelerate in 2011.

Figure 12: Dividends and repurchases have increased from 2009 lows



Source: Capital IQ, Barclays Capital

While that would be a significant increase in the volume of deals, we believe that the impact to credit will not be significant in aggregate. In *Focus: M&A – Mostly Harmless*, November 12, 2010, we examined the impact of deal making on credit. In most years, acquisitions had a neutral or positive impact on spreads, while becoming a strategic target was a distinct positive. Absent a credit crisis or an LBO boom, we expect M&A to have no aggregate impact on investment grade credit.

While M&A itself does not represent a threat to credit, the collapse of the BHP Billiton bid for Potash has highlighted the correlation between corporate events. When the deal was withdrawn, both companies immediately announced an increase in share repurchases. This behavior is typical: after a deal is terminated, both acquirers and targets are twice as likely to increase equity payouts and issue debt.

Potash/BHP Billiton also illustrates why event risk will gain headlines in 2011: if companies continue to see few opportunities for growth amid moderating macro risks, more will choose to do something (anything) over doing nothing.

## Identifying relative value opportunities

### The Great Compression: Financials versus industrials

Given our Overweight fundamental outlook on three of the five main financial sectors – Banking, Life Insurance and REITs – and the fact that each of the major financial sectors still trades substantially wide of its historical average (Figure 13), we believe the financial-industrial compression trade will continue in 2011. We expect financials to tighten up to another 30bp versus industrials next year, which translates to ~9bp of index tightening based on the 29% weight of financials in the U.S. Credit Index.

The difference between financial and industrial OAS is currently ~66bp, after beginning the year at ~88bp. While compressing over 20bp YTD is strong performance, financials had compressed even further at the market tights in mid-April, before concerns about sovereign debt and financial regulation reversed the earlier gains and even led to further decompression

Figure 13: Major sub-sectors of the U.S. Credit Financial Index

OAS vs Ind Index (bp)					
Sub-Sector	% of Financial Index*	Analyst Rating	26-Nov-10	2006 Avg	Change
Banks	66%	OW	66	-34	100
Life	6%	OW	104	-13	117
P&C	7%	MW	50	7	42
Finance	11%	OW**	56	-33	88
REITs	5%	OW	81	-7	88

Note: \*The total of the sub-sectors does not sum up to 100% due to other small financial sectors, such as brokerages and health insurers. \*\*While we do not have a formal rating on the finance company sub-sector, our bank analyst Jonathan Glionna is Overweight GECC, which makes up more than 80% of the finance company sub-sector in the financial index. Source: Barclays Capital

Figure 14: Financial minus Industrial OAS (bp)



Source: Barclays Capital

(Figure 14). Since the market bottomed in early June, financials have steadily outperformed. Banks are the largest component of the U.S. Credit Financial Index, accounting for approximately two-thirds of the index by market value, and therefore are a key driver of financials' performance. From a valuations perspective they remain one of the most attractive sectors in the index, trading nearly 150bp wider than pre-crisis levels and more than 60bp wide of industrials.

Along almost any dimension banks have improved their balance sheets, supporting the case for further compression. Banks have higher Tier 1 ratios and higher-quality Tier 1 capital, given reduced reliance on hybrids than before the crisis. Asset quality has improved since the peak of the crisis and loan loss provisions have fallen. Banks are more liquid, with smaller loan portfolios, higher securities holdings, and a greatly reduced reliance on short-term wholesale funding. In other words, they are less levered and more stable credits.

The story is similar in both the Life Insurance and REIT sectors. Our insurance analyst, Thomas Walsh, upgraded the Life Insurance sector to Overweight recently, given the industry's supportive fundamentals and its attractive levels relative to the U.S. Credit Index.<sup>11</sup> Life insurers have bolstered capital and defended their ratings as the credit crisis has receded.

The REIT sector was also recently upgraded to Overweight. Our REIT analyst, Shubhomoy Mukherjee, believes the sector will see further improvements in operating fundamentals in 2011 and expects managements of many companies in the sector to remain committed to maintaining/regaining their investment grade ratings while pursuing growth opportunities.<sup>12</sup> Furthermore, in contrast to the pre-crisis relationship, the sector trades at a discount to the BBB portion of the U.S. Credit Index.

Even though financials traded inside of industrials pre-crisis and despite their improved fundamentals, we expect financials to continue to trade wide of industrials for two reasons. First, while we expect US bank issuance to remain low, we believe that the large amount of Yankee bank issuance in the USD market could pose concentration risks for investors. Given the highly correlated performance across the bank sector, the diversification into Yankee banks is worth less to investors than would be the case in other sectors. Second, before the financial crisis, US banks benefited from an implicit government guarantee. Resolution authority in the Dodd-Frank financial regulation act removed that implicit guarantee, increasing the risks to banks' senior bondholders. Notably, this affects domestic banks only.

### **Don't run away from off-the-runs**

We believe bonds with off-the-run maturities are attractive versus on-the-run issues. Since the wides of early June, 5y, 10y, and 30y spreads have rallied, but 7y and 20y maturities have lagged. Currently, 20y corporates trade ~45bp wide of a duration-weighted combination of 10y and 30y bonds, and 7y debt trades ~35bp wide of 5y and 10y bonds. Based on current spreads across rating categories in the U.S. Corporate Index, the spread pick-up from moving into off-the-run maturities is equivalent to moving down in credit quality by approximately three rating notches.

In our view, there are two main reasons for the disparate performance of off-the-run maturities: dollar price and liquidity. Prices of both 7y and 20y bonds are higher than those of on-the-run maturities (Figure 15). Bonds with higher prices should trade at wider spreads. However, we believe the difference is overdone. The higher dollar price of 7y bonds versus 5y and 10y bonds is minimal (less than \$2.75 relative to a duration-weighted

---

<sup>11</sup> Please see *U.S. Life Insurance – Recommendation Change to Overweight*, 19 August 2010, for details.

<sup>12</sup> Please see *REITs: 2011 Outlook: Upgrading to Overweight*, 15 November 2010, for further details.

combination of 5y and 10y bonds) and, in our view, does not meaningfully contribute to their ~40bp higher spread relative to on-the-run bonds. Based on our BCDS methodology,<sup>13</sup> the difference in price of the 20y bonds relative to 10y and 30y bonds is worth only 3bp of the 44bp spread premium for 20y bonds (using average OAS statistics).

**Figure 15: Average price, OAS and LCS for US corporates by maturity bucket**

	5y	7y	10y	20y	30y
Average Price (\$)	107.79	112.19	110.60	115.34	109.47
OAS (bp)	150	200	170	217	174
LCS (%)	0.57	0.95	0.75	1.73	1.19

Source: Barclays Capital

Our Liquidity Cost Score (LCS) methodology, which measures the roundtrip transaction cost of a bond, indicates that off-the-run maturities are indeed less liquid than on-the-run maturities, which explains another part of the difference in spreads.<sup>14</sup> Although this does not hold across all pairs of bonds from the same issuers at each maturity, we believe investors, in general, have become hypersensitive to liquidity given the volatility of spreads and the perceived reduction in liquidity provision from dealers. This represents an opportunity for real money investors, in our view. The high market price of liquidity is being driven by the needs of hedge funds and dealer desks, which have high turnover ratios and short holding periods. Obviously, more liquidity is preferable to less liquidity, but the price of liquidity, in our opinion, particularly compared with the price of credit risk, makes some switches into off-the-run maturities attractive.

### Towards a more positive basis

The cash-CDS basis has become too negative, in our view, driven by the relative underperformance of cash versus CDS across sectors. While both cash and CDS have rallied since sovereign risks and fears of a double dip caused spreads to widen dramatically in early June, CDS has outperformed; as of November 26, IG.14 was only 7bp off its highs of April, whereas the cash market was still nearly 30bp wider (Figure 16).

The substantial widening in the cash-CDS basis has increased the relative attractiveness of long positions in cash in certain sectors and credits, in our view. The cash bonds of energy, industrial, financial, and consumer non-cyclical companies underperformed CDS the most since June wided (Figure 17). Within these sectors, investors may consider buying basis packages on names trading with a large negative basis to take advantage of normalization. However, we believe the relative underperformance of cash bonds in some of these names has created an attractive entry point for buying bonds, even for credits with a basis close to zero.

Despite the general underperformance of cash bonds, the basis became more positive for certain pockets of the market. For example, the basis of basic materials companies has become more positive, which may be due to the rally in commodity prices boosting the performance of many basic materials companies. Cash bonds tightened more than their CDS spreads because many of these companies already traded tight in CDS. Another pocket of the market where cash bonds outperformed or moved in line with CDS comprises companies that have been identified as being vulnerable to event risk, including Sara Lee and ConAgra.<sup>15</sup>

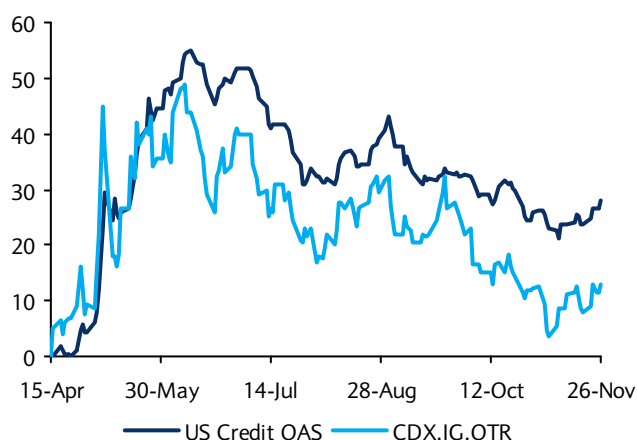
<sup>13</sup> Please see the *U.S. Credit Alpha*, 14 August 2009, for details about our BCDS methodology.

<sup>14</sup> For a detailed introduction to the Liquidity Cost Score methodology, please see our Quantitative Portfolio Strategy Team's *Introducing LCS: Liquidity Cost Scores for US Credit Bonds*. For a more in-depth analysis of the relative performance of more- and less-liquid bonds, please see the *U.S. Credit Alpha*, 6 August 2010.

<sup>15</sup> "Sara Lee LBO Speculation Triggers Record Jump in Credit Swaps," Bloomberg, October 4, 2010.



Figure 16: Cumulative spread change for cash and CDS (bp)



Source: Barclays Capital

Figure 17: Cash-CDS basis, June 11 to November 26 change (bp)\*

Sector	Change in Basis (bp)
Basic Materials	14
Communications	-1
Consumer, Cyclical	-4
Consumer, Non-cyclical	-19
Energy	-39
Financial	-25
Industrial	-31
Technology	-1
Utilities	2
<b>MEDIAN</b>	<b>-17</b>

Note: \* Includes 125 IG.15 credits and the six large U.S. banks.

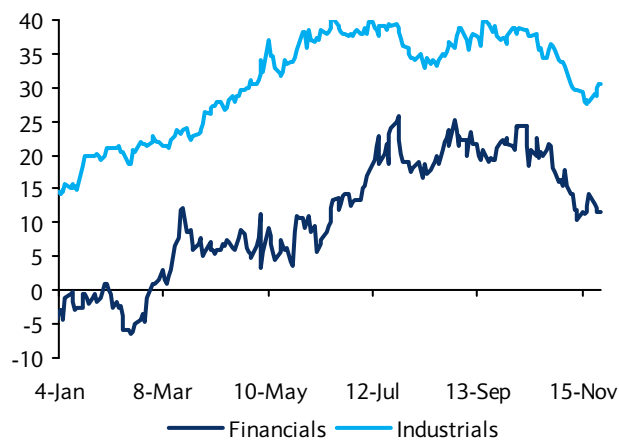
Source: Barclays Capital

Investors concerned about event risk in these (and other) names have bought CDS protection, either on specific names or on a basket of names seen as high risk, putting pressure on CDS spreads. Cash spreads have not widened as much, owing to their more limited liquidity and/or the difficulty of implementing short positions in cash bonds, and this has caused the basis to become more positive. For these names, selling CDS may offer a more attractive way of expressing a bullish view on a credit, given the relative outperformance of cash.

### Flatter curves ahead

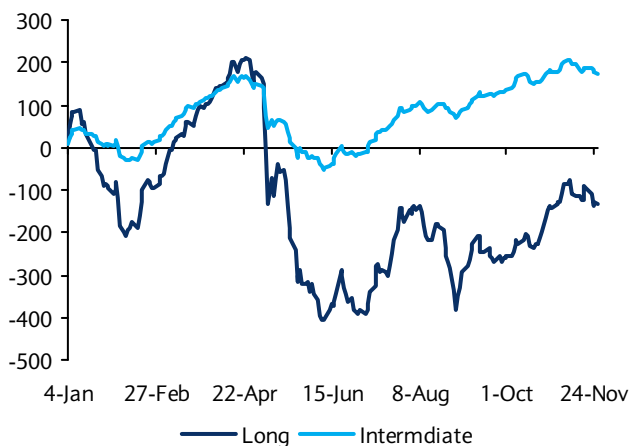
After steepening for most of the year, industrial and financial credit curves have begun to flatten in the past several weeks (Figure 18). We still view current credit curves as too steep relative to historical levels and expect credit curves to continue their recent flattening trend in 2011. Treasuries will be the major driver for this move in credit curves, in our view. The traditional inverse relationship between rates and credit curves (as rates curves steepen, credit curves tend to flatten as higher all-in yields drive investors to buy more long-dated credit) broke down for most of 2010 as both curves steepened in unison. Potential reasons for the breakdown in this relationship include the very low levels of absolute yields and

Figure 18: US Credit 10s30s curves (bp)



Source: Barclays Capital

Figure 19: US Credit Index excess returns (bp)



Source: Barclays Capital



strong near-term corporate fundamentals, combined with concerns about corporations' use of cash balances for shareholder-friendly behavior in the longer term.<sup>16</sup> We believe the inverse relationship between rates and credit curves is likely to reassert itself. Our rates strategists expect Treasury curves to remain at steep levels next year, given that the bulk of QE2 Treasury purchases will be in the intermediate sector. Higher all-in yields should make investors less reticent to buy long-dated credit, in our view, leading it to outperform.

This year's steepening in credit curves has led to a large divergence in performance between intermediate/short- and long-dated credit. As can be seen from Figure 19, long-dated credit has dramatically underperformed shorter-duration credit YTD in excess return terms; the U.S. Credit Long Index underperformed duration-matched Treasuries by 132bp this year, while the Intermediate Index outperformed by 171bp. The recent flattening has narrowed this gap in performance, and we expect it to narrow further in 2011. The underperformance of the long end has been a significant drag on excess returns for the U.S. Credit Index thus far in 2010, as long-dated credit accounts for more than 25% of the U.S. Credit Index. As a result, curve normalization could be a significant source of excess returns over the next several months.

## Municipal markets 2011 outlook: Taxable municipal market/BABs: Supply, spreads, and opportunities reach high-water marks

---

- In our view, the technical environment in the taxable municipal market has created an attractive entry point against a backdrop of elevated supply and ambiguity about the extension of Build America Bond (BAB) legislation. We expect each of these factors to be resolved by year-end 2010 and spreads to compress versus similar-structure corporate bonds in 2011 on the order of 20bp on an OAS basis.
- Municipal defaults are expected to remain low, despite the difficult budget environment, as states have demonstrated their will and ability to cut spending to offset structural imbalances. Public entities plan to spend and borrow less and have implemented policies to begin to address longer-term pension and health-care liabilities.
- State revenue is trending upward, as tax-receipts have risen for three consecutive quarters. Tax intake increased 2.5%, 1.0%, and 3.9% in 1Q10 through 3Q10, on a year-over-year basis.
- 2011 taxable municipal supply is expected to be approximately \$90bn, versus an anticipated \$145bn in 2010. Municipals are estimated to represent 4.3% of the US Credit and 17.6% of the Long US Credit Indices by the end of 2011. We expect about \$70bn in BAB bonds if the program is extended, as is likely, through 2011. We believe the subsidy will be lowered from 35% to 32% of the interest paid on the taxable securities.
- We expect taxable municipal supply to be down on a year-over-year basis, due to the reduced interest subsidy and significant acceleration and upsizing of deals in 4Q10. Supply spiked as issuers sought to take advantage of the low cost of capital, given the uncertainty over the extension of the BAB program past 2010 and the potential for benchmark yields to move higher. In addition, municipalities are increasingly hesitant to initiate projects in today's difficult fiscal environment.

---

<sup>16</sup> Please see the Investment Grade section of the *U.S. Credit Alpha*, November 19, 2010 for details.

- The spread between the OAS of the Barclays Capital Taxable Municipal Bond Index and the US Credit Index is near historic highs of 88bp. AAA taxable municipals in our index are trading 106bp wider than Aaa Corporate bonds. We believe the larger, higher-quality names will lead the sector tighter versus corporates in 2011.

### The municipal default rate should not rise materially

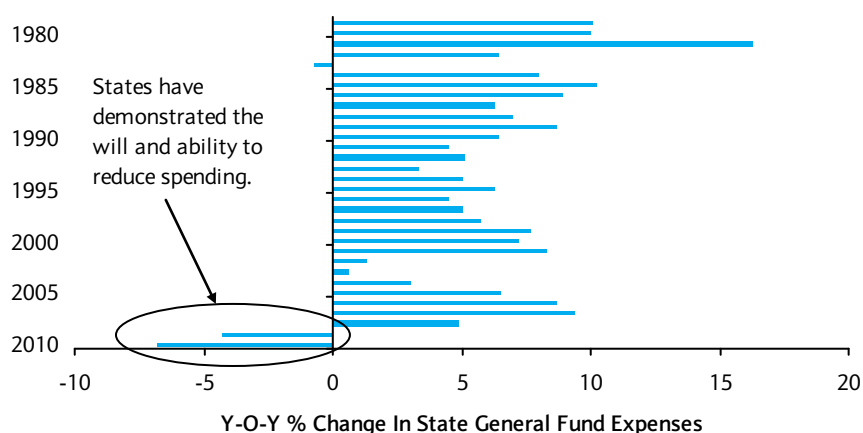
We examine the fiscal measures taken and the tools available to balance public sector budgets and address longer-term liabilities. Despite frequent media speculation to the contrary, we do not expect the level of defaults in the US public finance market to spiral higher or even approach those in the private sector. We hold this view in large part because of the steps taken thus far by the preponderance of municipalities and the control that public entities can exert over the expense and revenue portions of their balance sheets.

#### *States have cut spending since 2009*

To offset declining tax receipts, many municipalities have been trimming expenses. In fact, according to the National Association of State Budget Officers (NASBO), 43 states cut their budgets in 2009 and 42 did the same in 2010. By contrast, just two reduced their budgets on a y/y basis in 2006.

General fund spending cuts in 2009 and 2010 were the first since 1983 and the first consecutive-year contractions since NASBO records began in 1979. At the current stage in fiscal 2011, general fund spending is estimated to rise 5.3% versus 2010. Estimated fiscal 2011 spending is \$42bn and \$6bn less than in fiscal 2008 and 2007, respectively. In addition, we expect general fund spending to be below current 2011 estimates as municipalities further reduce payouts to balance current fiscal year budgets, resulting in a third year of lower expenditures.

**Figure 20: Y/y % change in state general fund expenses**



Source: NASBO

A more conservative fiscal mindset was evident in November's elections, with just \$17.08bn in new bond measures to consider – the lowest level since 1996. Many of the measures passed effectively limit government spending and the ability to raise taxes/fees. Moreover, five states voted to modify or institute the use of rainy day funds. South Carolina, Oklahoma, and Virginia approved increases in the amounts required to be held in rainy day funds, while Hawaii and North Dakota voted to institute such funds.

*Municipalities have begun to address long-term liabilities*

As of FY08, in aggregate, states' pension systems were 84% funded.<sup>17</sup> Only four states have fully funded pensions: Florida, New York, Washington and Wisconsin. By comparison, in 2000, more than half of the states had fully funded pension systems. Pension obligations and retiree benefits will clearly be an issue for many states if steps are not taken to limit current employee retirement policies and additional capital is not saved to cover these obligations. Investors in US municipal bonds may have the European debt crisis and negative financial media coverage to thank for some of the steps taken or proposed to relieve pension- and healthcare-related liabilities. Many states have taken steps to address long-term liabilities, including pension funds, by increasing employee contributions, extending vesting periods and adjusting payout formulas lower.

In FY10, 19 states took action to reduce their pension liabilities. California rolled back pension benefits for new employees to 1999 levels, increased employee contributions 3%, and passed legislation strengthening its rainy day fund policy. Illinois raised its retirement age for new employees from 60 to 67 and ended the practice of receiving a public pension at the same time as earning a second salary from a public entity.

Next year, eight states are considering pension reform proposals: Alabama, Kansas, North Dakota, Ohio, Maine, Maryland, Montana, and Oklahoma. We expect pension changes to accelerate as the economy gains momentum and tax revenues increase.

*Foregoing costly infrastructure projects and trimming benefits and payrolls*

Increasingly prudent expense management was evident more broadly across the nation, but was not applied evenly throughout. Those municipalities that demonstrate the will and ability to implement fiscal discipline will enjoy lower cost of capital and improved access to the capital markets.

Cost reductions have taken the form of delayed or cancelled projects, reduced services, and the trimming of the public sector workforce. One of the largest projects cancelled was a plan to build a rail tunnel between New Jersey and New York City. New Jersey Governor Chris Christie decided to cancel the project after a review showed that it would cost \$2-5bn more than estimated and that New Jersey would have to pay the cost overruns. Reductions in the work force are also occurring. New York City, facing a \$3.3bn budget deficit for FY12, is expected to cut its labor force by more than 10,000 over the next eighteen months.

States are also looking to the Federal government for permanent assistance with some spending, such as Medicaid. In 2009, Medicaid costs accounted for 21% of total US state spending. States have begun to consider dropping out of the Medicaid insurance program as the costs continue to accelerate – average Medicaid spending increased 8.8% in fiscal 2010. The federal government helped absorb the cost of new enrollees during the credit crisis by providing \$103bn in additional Medicaid funding through next July. In FY12, the states' share of Medicaid spending will increase by as much as 25%, because of the expiry of the federal subsidies. States are likely taking this extreme position in an effort to generate additional Federal support.

*Municipalities are instituting revenue measures to offset the slow growth environment*

In concert with reductions in spending, states have been taking steps to soften the revenue effect of the past recession and current slow growth environment. Tax receipts

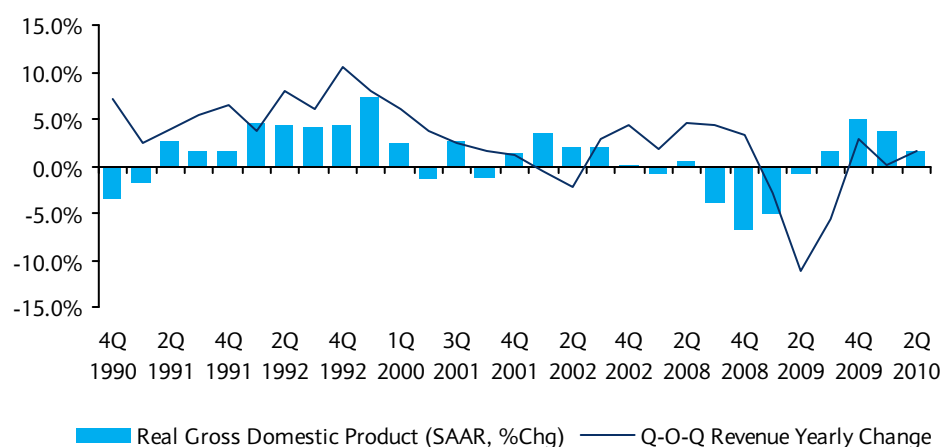
---

<sup>17</sup> PEW Center on the States.

have picked up over the first three quarters of 2010, with 3Q10 tax revenue up 3.9% over the same period in 2009. The recovery in income is consistent with the trend in tax receipts following past recessions: they increased in 1991 and 2002 after the recessionary periods of 1990 and 2001.

The rebound in tax revenue is attributable to increases in income and sales tax receipts, due partly to states enacting legislated tax increases. According to NASBO, states enacted tax increases of \$23.9bn for fiscal year 2010 and will enact another \$6.2bn in 2011. Taxes are an essential factor in debt service for general obligation bonds, as approximately 80% of General Fund revenues are composed of sales, personal income and corporate income taxes. We are confident that tax receipts will continue to accelerate, given the new policy initiatives at the state and local levels and the expected pickup in employment and the broader economy into 2011.

**Figure 22: Real GDP versus q/q revenue yearly change**



Source: Haver Analytics

### *Municipal Defaults to Remain Low*

Calls for extensive defaults in the municipal sector are inconsistent with our base line theses described above and historical precedent. We do expect an increase in the incidence of default among certain types of issuers, notably among smaller non-essential projects, from economically challenged areas, with cash flows that are not supported by taxes. However, these comprise a small proportion of the total municipal space. As a result, we believe that the municipal default rate will remain low on an absolute level and well below that of the private sector.

According to the most recent studies available from Moody's and Fitch, the 10-year cumulative default rates for all municipals, including high yield, are 0.09% and 0.58%, respectively. S&P reports a 10-year cumulative default for the housing sector of 0.29% and the rest of the public finance space of 0.16%. The vast majority of issuers in the municipal market that have defaulted do not have taxing authority. In fact, most municipal defaults are confined to the healthcare (typically special care facilities) and housing sectors. According to Moody's, these have accounted for 74% of the rated defaults, while S&P and Fitch show 82% and 80%, respectively, of defaults coming from these sectors.

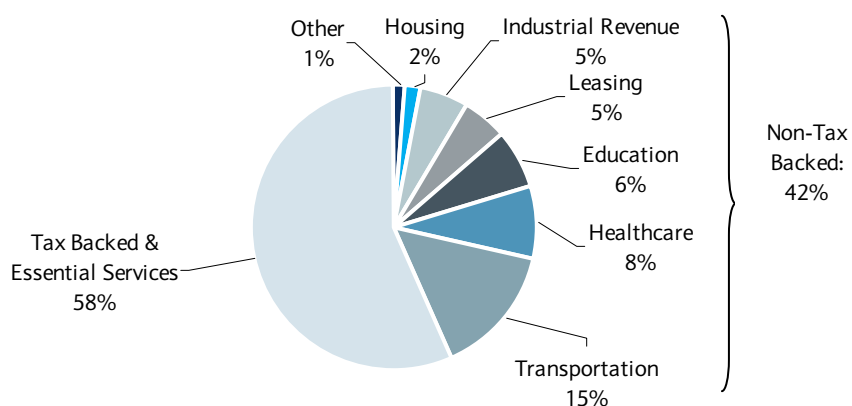
Figure 23: Moody's-rated defaults of 18,400 rated issuers from 1970 to 2009

	Number of defaulted credits	Size (\$mn)
City	1	2
County	4	427
Electric enterprise	2	2,375
Health care	21	1,328
Higher education – private	1	10
Housing facilities	19	200
Privatized student housing	1	72
Recreation	1	98
Sewer enterprise	1	3,200
Special district	1	20
Student housing	1	37
Town	1	15
Grand total	54	7,785
Total rated parity debt obligations	18,400	

Source: Moody's Housing Finance Rating Methodology & Housing Research, September 2007; Moody's U.S. Municipal Bond Defaults and Recoveries, 1970-2009, February 2010

Health care and housing bonds represent approximately 1% of the taxable municipal bonds outstanding and comprise about 10% of the entire municipal bond universe.<sup>18</sup> The lion's share of the securities in the municipal universe is essential in nature or has taxing authority. In our view, defaults will increase among smaller local issuers, non-essential projects, and relatively weak tax bases, particularly among non-rated entities.

Figure 24: Barclays Capital High Grade Municipal, High Yield Municipal, and Municipal Taxable Indices – Market value % by source and purpose class



Source: Bloomberg, Barclays Capital

### Attractive entry point for BABs

We believe the legislation extending the BABs program will pass in the lame duck session, given that it is tied to the Bush tax cuts and neither party wants to be held responsible for allowing the tax breaks to expire in the current soft economic environment. We expect it to be extended as currently defined in the legislation (32% for one year), given that there is little

<sup>18</sup> Based on Barclays Capital High Grade Municipal, High Yield Municipal, and Municipal Taxable Indices.

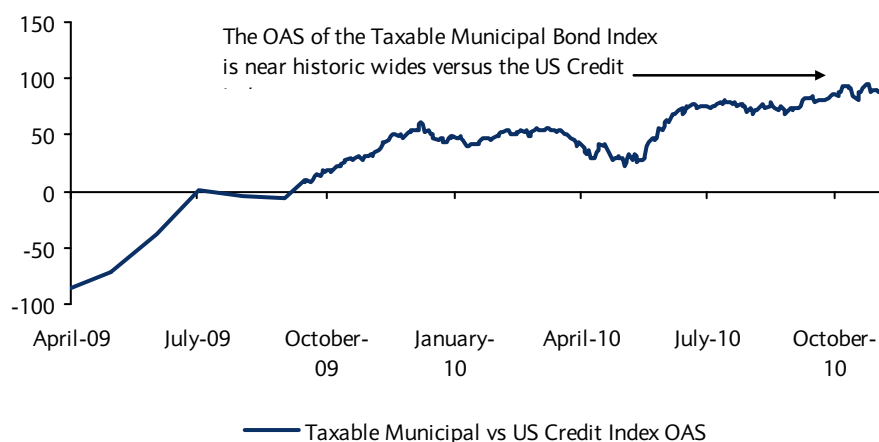
time to redraft provisions of the bill at this late stage in the year. If the BAB extension is not passed in 2010, we place a limited probability of the legislation passing next year.

In our view, some portion of the spread widening of municipal bonds will be reversed with the resolution of the BAB extension question, regardless of outcome, and a moderation of the glut of supply heaped on the market since early 2009. Longer term, spreads will likely tighten steadily as supply dwindles and bonds continue to be sought after by pension funds and life insurers. We recommend overweighting taxable municipal bonds as a result. To ensure liquidity, we recommend buying higher-quality benchmark size issues. Investors with buy-and-hold mandates can find record wider spreads in the non-index size, A and lower-rated taxable deals.

The recent surge in supply has created an attractive entry point for the asset class. The OAS of the taxable municipal index widened 8bp, to 247bp, during November. The US Credit Index widened 6bp, to 159bp. The difference between the OAS of the taxable municipal index and the U.S. Credit Index is 88bp, near its record wides of 95bp set on November 22.

The mean spread between the Taxable Municipal index and the US Credit index since the inception of the BAB program has been 53bp. In 2011, we expect the spread between the US Taxable Municipal Index and the US Credit Index to tighten about 20bp.

**Figure 25: OAS – Taxable Municipal versus US Credit Index as of November 30, 2010**



Source: Barclays Capital

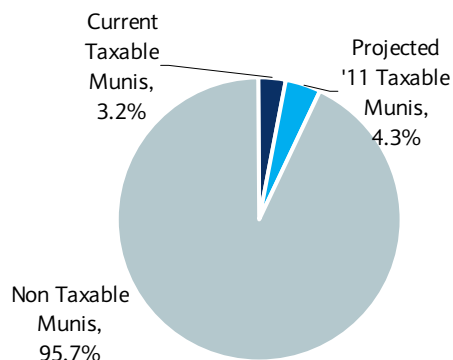
Spreads in the highest quality (Aaa) sector of the markets are surprisingly large, with the OAS of Aaa taxable municipals 106bp wider than the Aaa credit index. Similarly, the OAS of Aa municipals is 93bp wider than Aa corporates and is even 48bp wider than the A rated bonds in the US Credit Index. The OAS of A municipals is 142bp wider than A corporates and 104bp wider than the Baa rated bonds in the U.S. Credit Index.

**Figure 26: OAS by rating (bp), November 30, 2010**

	U.S. Taxable Munis	U.S. Credit	Difference
Aaa	145	39	106
Aa	214	120	93
A	308	166	142
Baa	293	204	88
Total	247	159	88

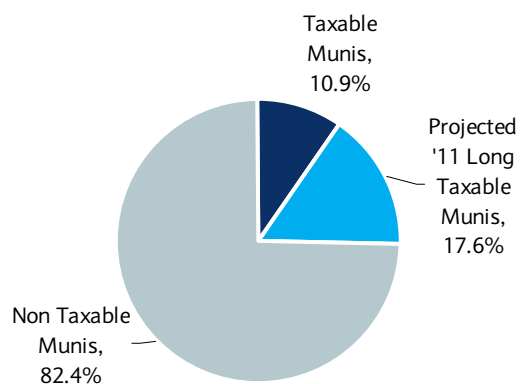
Source: Barclays Capital

Figure 27: Taxable municipals as % in Credit Index



Source: Barclays Capital

Figure 28: Taxable municipals as % in Long Credit Index

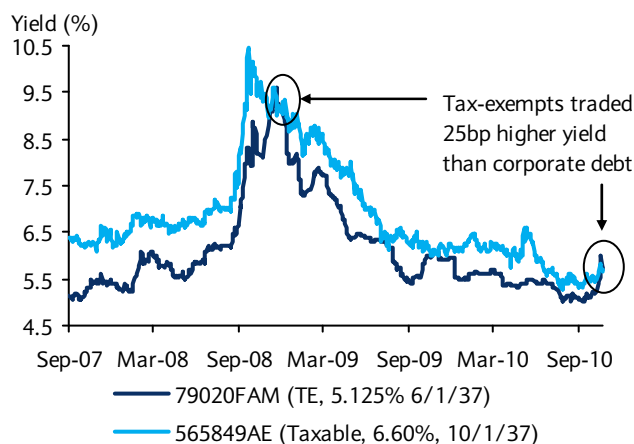


Source: Barclays Capital

As of November 30, taxable municipals had grown to 3.2% of the Credit Index and 10.9% of the long credit index. Last year at this time, taxable municipals were 1.9% and 6.7%, respectively. For 2011, we project that the sector will have grown to 4.3% and 17.6%, respectively. These estimates are based on anticipated 2011 taxable municipal issuance of \$90bn, with approximately \$45bn of index eligible securities.

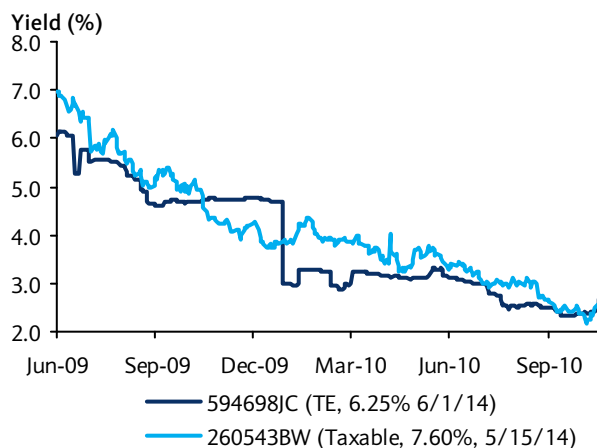
With the recent stresses in the municipal market, there are several examples of tax-exempt municipal bonds trading at higher yields than pari passu taxable bonds. We believe these opportunities will disappear as markets normalize. For example, Marathon Oil Corp has outstanding corporate debt and is the obligor for \$1bn of tax-exempt (non-AMT) revenue bonds. Its tax-exempt debt is issued by St. John the Baptist Parish, Louisiana, under the Gulf Opportunity Act of 2005 for the expansion of an oil refinery and related facilities. On November 17, the yields of municipal bonds traded 25bp higher than a similar-maturity taxable issue (5.98% versus 5.73%). The spread between Dow Chemical Company's tax-exempt and taxable bond debt provides another example of dislocation in the tax-exempt bond market.

Figure 29: Marathon Oil tax-exempts are trading at higher yields than corporate debt



Source: Barclays Capital

Figure 30: Tax-exempt Michigan Strategic Fund versus Dow Chemical corporate in 2014



Source: Barclays Capital

## HYBRID CAPITAL

### Technicals augment a strong fundamental backdrop

Jeffrey Meli  
+1 212 412 2127  
jeff.meli@barcap.com

Shobhit Gupta  
+1 212 412 2056  
shobhit.gupta@barcap.com

Alex Gennis  
+1 212 412 1370  
alex.gennis@barcap.com

Ryan Preclaw  
+1 212 526 3083  
ryan.preclaw@barcap.com

- We expect hybrids to outperform in 2011, premised on our constructive fundamental view on financials. We expect hybrid spreads to tighten 50-60bp in 2011, driven roughly equally by a rally in financials and a compression in the senior hybrid basis.
- The favorable fundamental backdrop for hybrids will likely be complemented by positive technicals emanating from the change in the regulatory treatment of capital securities, which could result in a tighter senior hybrid basis, early redemptions and negative net issuance.
- We expect net issuance of bank hybrids to be negative over the next few years – with the redemption of trust preferreds outnumbering the new issuance of straight preferreds – as Basel III capital requirements (if adopted) come into effect and grandfathering periods for trust preferreds under the Dodd-Frank act roll off.
- Trust preferreds are likely to be redeemed in the next few years, and many securities appear attractive, providing a substantial pickup in yield over near-term senior debt. Our best picks include CFC As, C Vs and JPM 6.45s. Bank DRDs including JPM 7.90s and WFC 7.98s also trade cheap to senior debt and appear better positioned to monetize a compression in spreads, owing to their longer duration.
- The supply of insurance hybrids is also likely to be small in 2011, given insurers' limited capital needs and the low equity credit assigned to most insurance hybrids under Moody's new hybrid framework. This also increases the likelihood of redemption on the first call date and buybacks. Our best picks in the insurance space are ALL 6.125s, CB 6.375s, LNC 7s, MET 10.75s and XL 6.5s.

### 2010: The calm after the storm

---

After a year of unprecedented volatility, hybrid valuations were much more stable in 2010. The average price of the Cap Sec index (ex-sub debt) moved in a \$10 range, increasing from \$91 to \$101 YTD, compared with a range of more than \$45 in 2009. Led by insurance hybrids, capital securities have generated 16.7% in total returns and 8.1% in excess returns YTD, substantially outperforming the US Credit index (total return 9.3%; excess return 1.0% YTD).

While senior spreads have also rallied (senior financials in the US Credit Index are tighter by 11bp YTD), a substantial portion of the outperformance of the Cap Sec index was driven by the compression in the senior hybrid basis. Hybrid spreads have tightened nearly 45bp more than senior financials, as the risk premia for subordination in the capital structure and deferral risk have decreased (Figure 2).

Hybrid supply remained muted in 2010, as banks waited for additional clarity on the potential size and form of regulatory capital. YTD gross issuance is \$16bn, of which nearly \$11bn, or more than 67% of total supply, was in the form of \$25 par preferreds. The largest issuers included Citi (~\$4.5bn of trust preferreds across two issues), HSBC (\$3.8bn of preferred stocks), and JPM (\$1.5bn of trust preferreds, as US and Yankee banks accounted

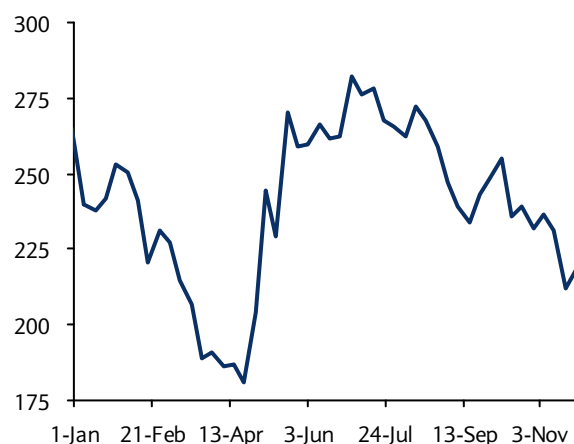


Figure 1: Hybrid performance 2010 YTD

	Fraction of Index	Total return (%)	Excess return (%)
Banks	72%	16.2	7.8
Insurance	18%	19.2	9.0
Others	10%	16.9	8.5
Cap Sec Index (ex-sub debt)	100%	16.7	8.1

Source: Barclays Capital

Figure 2: Hybrid senior basis tightened in 2010 (bp)

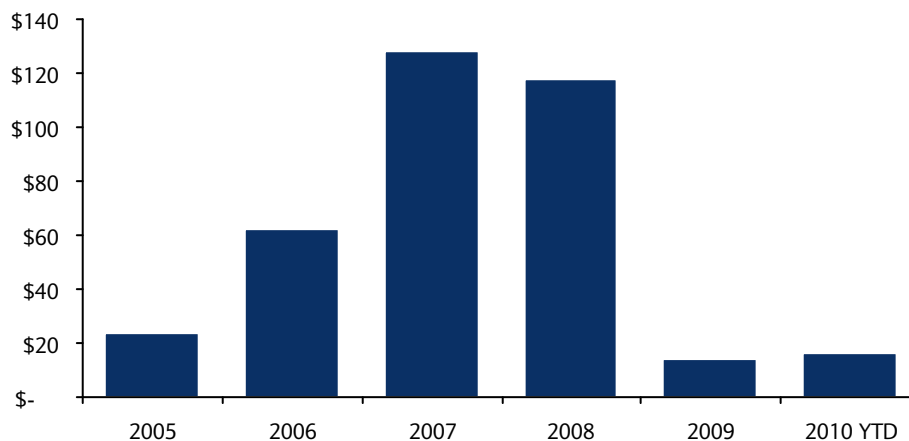


Note: Senior hybrid basis calculated as the spread difference between hybrids in the CapSec index (with first call date after January 2016) and senior financials in the US Credit Index. Source: Barclays Capital

for nearly 75% of the total hybrid supply. Most hybrids (and even Lower Tier 2 debt) were issued with regulatory calls, reflecting the prevailing uncertainty about the future structure of regulatory capital. For instance, HSBC 5% 10y LT2 notes, issued in September 2010, have a one-time regulatory call at \$101 that allows the issuer to redeem the securities in September 2015 if they have lost their LT2 status by then.

Net hybrid issuance YTD is about \$5bn, as more than \$11bn of hybrids have been called/bought back in 2010. Several Yankee issues, including UBS, HSBC, and Zurich Insurance hybrids, were called on the first call date while City National and Comerica exercised the regulatory call option on their trust preferred securities. RBS, Progressive, and Travelers bought back hybrids in liability management trades.

Figure 3: Public hybrid gross issuance (\$bn)



Source: Barclays Capital

## 2011: Changing for the better

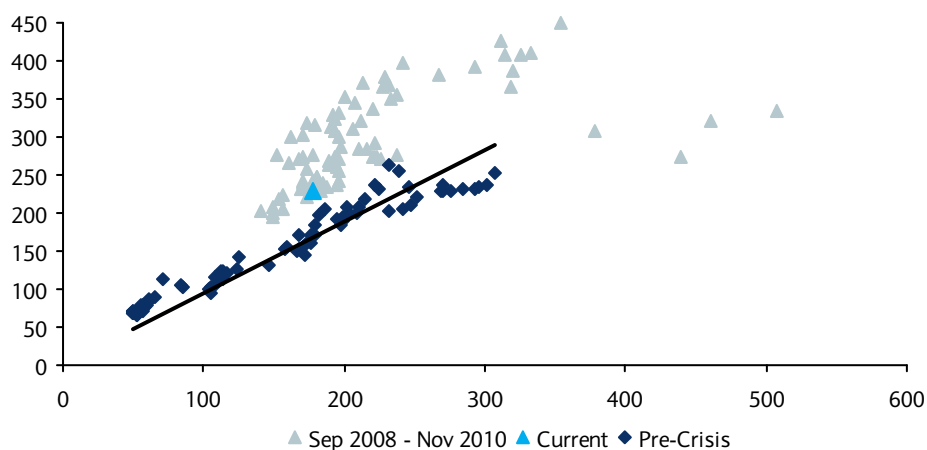
We expect hybrid spreads to tighten 50-60bp in 2011, driven roughly equally by a rally in financials and a compression in the senior hybrid basis. We remain constructive on financials, with overweight recommendations on banks and life insurers, and expect them to outperform the rest of the Credit index. The favourable fundamental backdrop for hybrids is complemented by positive technicals emanating from the change in the regulatory treatment of these securities, which could result in a tighter senior hybrid basis, early redemptions and negative net issuance.

### Bank hybrids

We expect bank hybrids to outperform both on an absolute basis and relative to senior debt in 2011. Our US bank analyst, Jonathan Glionna, has an overweight recommendation on the sector, given banks' strong capitalization, robust balance sheet liquidity and stable asset quality. This has been partly reflected in the compression of bank spreads relative to industrials YTD. However, banks still trade substantially wider than industrials, and we expect this basis to compress further in 2011. The recently proposed regulatory changes (under Dodd-Frank and Basel III) should also be beneficial for spreads, as they would serve to improve banks' credit quality by requiring higher capital ratios, better-quality capital, decreased leverage and more stable funding profiles. The risk of downgrades due to the removal of the systemic support uplift in bank debt ratings (following the passage of Resolution Authority) has also been diminished, with rating agencies indicating that any near-term ratings action is unlikely.

Bank hybrids in the Cap Sec index trade at a spread of 405bp, implying a senior-hybrid basis of nearly 230bp, slightly wider than the historical relationship (Figure 4). We thus believe that there is room for compression in this basis, especially given the passage of the "source of strength" provision as part of the Dodd-Frank act. This would give bank regulators access to bank holding company assets as needed to honour claims in liquidation, effectively making senior bank holding company bonds junior to subordinated bank bonds. This should lower the difference in recovery between senior and subordinated bank holding company liabilities – with both classes of bonds likely to receive no payout in default – likely causing the basis between senior debt and hybrids to compress.

Figure 4: Bank senior-hybrid basis (bp)



Note: Hybrid spread based on bank hybrids in the CapSec Index with first call date after January 1, 2016. Senior spreads based on senior bank bonds in the US Credit Index. Source: Barclays Capital

## Supply

Hybrids are also likely to benefit from a shrinking of the space, as Basel III potentially limits the amount of non-equity Tier 1 capital that can be included in banks' total Tier 1 capital.

We expect net issuance of hybrids to be negative – with the redemption in trust preferreds outnumbering the new issuance of straight preferreds – over the next few years as Basel III capital requirements (if adopted) come into effect and grandfathering periods for trust preferreds under the Dodd-Frank act roll off. Under the Basel III proposals, the minimum requirement for common equity will be increased from 2% (of risk-weighted assets) currently to 3.5% in January 2013 and 4.5% in January 2015. Over the same period, the minimum Tier 1 capital ratio will be raised from 4.5% to 6.0%. Consequently, at most 1.5% of a bank's minimum Tier 1 capital ratio can be composed of hybrid capital – of the minimum 6% Tier 1 capital ratio, at least 4.5% should be in the form of common equity.

Based on the current RWAs of banks in the U.S. Credit Index, we estimate that \$106bn of hybrids can be included in Tier 1 capital under Basel III (if adopted). In comparison, there is approximately \$160bn of Tier 1 capital outstanding for these institutions (Figure 5) – \$105bn in trust preferreds and \$55bn in preferred stock. However, the Tier 1 capital treatment of trust preferreds is being phased out under the Dodd-Frank Act. Therefore, we expect these securities to be called over the next few years, with redemptions likely peaking in late 2012 as we approach January 2013, when trust preferreds begin losing Tier 1 status. With trust preferreds losing Tier 1 treatment, we believe that there is room for issuance of nearly \$50bn of preferreds in the medium term.

**Figure 5: Potential size of the hybrid market under Basel III (US\$ bn)**

	US	Europe
Risk-weighted assets (RWA)	\$7,047	\$9,108
Estimated minimum size of hybrid market (1.5% of RWA)	\$106	\$137
Tier 1 capital outstanding	\$160	\$185

Note: Data for US banks include BAC, BBT, BK, C, CMA, COF, CYN, FHN, FITB, GS, HBAN, JPM, KEY, MI, MS, MTB, NTRS, PNC, RF, SNV, STI, STT, USB, WFC, ZION. Data for European banks include ACAFP, BNP, SOCGEN, CMZB, DB, ISPIM, UCG, BESPL, BCPPL, BBVASM, SANTAN, BANSAB, POPSM, CS, UBS, BACR, LBG, RBS, HSBC, STANLN.

Source: SNL, Barclays Capital

We expect most new issuance to be in the form of perpetual non-cumulative stock without write-down language. While Basel III proposals require Tier 1 capital to have explicit write-down triggers, we believe that the goal of including write-down provisions has already been accomplished in the US as a result of the inclusion of resolution authority in the Dodd-Frank act. In effect, resolution authority and the prohibition of government bailouts of financial institutions make explicit write-down provisions of the sort envisioned by Basel redundant in the US – under the new act, the scenario in which the government injects capital into an institution but no losses are imposed up the capital structure cannot occur. As a result, we believe it is possible that preferred stock issued by US banks could continue to count as Tier 1 capital in its current form, even if the US implements Basel III.

## Demand

With the yield on the US Credit Index dipping to historical lows, most new issue hybrids in 2010 were substantially oversubscribed as investors reached for yield. We expect this technical to continue to drive demand for hybrid capital in 2011. Despite compressing relative to senior debt, hybrid spreads are substantially wider than senior spreads. The yield pickup over senior debt is even more substantial after accounting for the tax-advantaged status of the DRD/QDI-eligible securities.

However, that QDI status of preferreds is a potential source of risk for retail demand. The favourable tax treatment of qualified dividends is scheduled to expire on December 31, 2010. A change in the treatment of QDI could affect valuations and demand of preferred stock. Among the many possible outcomes regarding QDI, we believe three are the most likely:

1. Extension of the 15% tax rate for QDI-eligible securities.
2. Passage of the administration's proposal, which would extend the favourable tax treatment of qualified dividends but increase the maximum tax rate to 20%.
3. Taxation of qualified dividends as ordinary income, with the top rate increasing to 39.6%.

We believe the first two outcomes are the most probable, given that neither the Republicans nor the administration supports eliminating the beneficial treatment of dividends. The first is clearly the best outcome for investors in preferred stock. Although the second involves an increase in the top tax rate for qualified dividends, we do not foresee significant implications for valuations under that outcome.

We think the third outcome, in which qualified dividends are taxed as ordinary income, is the least likely, given that the administration's own proposal is less severe. However, it is the default result should no agreements on taxation be reached before year-end. A stalemate that extends beyond the lame-duck session would result in at least a temporary rise in dividend tax rates (which could be retroactively reduced once an agreement on taxes is reached). We believe that a sizeable portion of the estimated \$50bn of preferred supply over the next several years could be issued in the retail space. Without the beneficial tax treatment, retail demand for hybrid product could be limited. This effect is, however, mitigated by the fact that it affects only the retail component of the market – the treatment of DRD-eligible securities will remain unchanged. US corporations will still be required to pay income tax on only 30% of dividend income, meaning their incentives to own preferred stock will remain in effect.

### **US bank hybrids**

As a result of the passage of the Dodd-Frank act, the effective duration of bank hybrid paper has decreased, with high coupon trust preferred securities now pricing to be redeemed around 2013. Some of these securities provide attractive opportunities to pick up yield over senior debt in the front end but are not ideal for expressing a bullish view on the underlying credit, owing to their low duration. Instead, we believe that bank DRDs (with long non-call periods) and new generation securities (with low backend coupons) appear better positioned to monetize a compression in financial spreads and the senior-hybrid basis.

### *Trust preferreds*

Under the Dodd-Frank act, trust preferreds will lose Tier 1 status over three years starting January 1, 2013. This would reduce their attractiveness as capital, increasing the likelihood that some of the higher-coupon securities are replaced with either cheaper senior or subordinated funding or better-quality capital, depending on issuers' funding/capital needs.

High-coupon trust preferreds are likely to appear expensive as subordinated debt, from the issuer's perspective, once they lose Tier 1 status, making it likely that issuers will exercise the par regulatory call option embedded in many of these securities. Figure 6 lists select high-coupon trust preferreds with regulatory par calls, along with their yield to 2013 call. While the regulatory redemption language appears to give the issuer the flexibility to call the securities any time between now and January 2016, we believe that regulatory calls will peak in late 2012/early 2013 as trust preferreds start losing capital treatment. As long as

these securities receive Tier 1 status, they should appear cheap from the issuer's standpoint, owing to their favourable tax treatment (trust preferreds are treated as debt for tax purposes). That said, they do have potential downside from near-term redemptions (prior to 2013), owing to their high dollar price. In Figure 6 we estimate the breakeven call date – redemption prior to this date would result in negative returns for the investor.

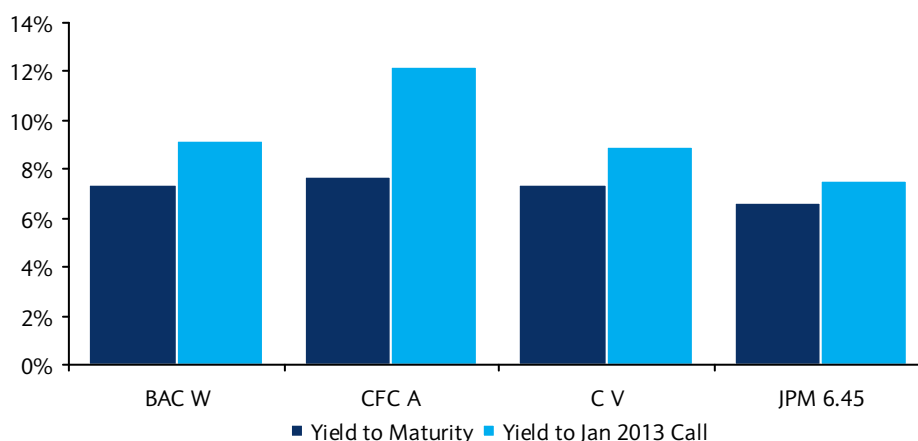
**Figure 6: Select high-coupon trust preferred securities**

	Price	Yield to Jan 2013 Call	Breakeven Call Date
C Js (\$25 Par)	\$ 26.5	6.1%	Jun-11
C 8.3%	\$ 104.0	6.2%	May-11
COF 8.875%	\$ 105.0	6.3%	Jun-11
COF 10.25%	\$ 107.0	6.6%	Aug-11
USB 6.625%	\$ 101.8	5.9%	Feb-11

Source: Barclays Capital

We find the upside/downside ratio of low coupon trust preferreds more attractive. In Figure 7, we highlight select trust preferreds trading near par with a coupon higher than the subordinated debt yield of the issuer. These securities will potentially appear expensive as Tier 2 capital from the issuer's standpoint, making them candidates to be called once they lose Tier 1 capital treatment. They yield 8-12% to a 2013 call date. The key risk to the trade is that a substantial increase in rates between now and 2013 could change the economics of the transaction, reducing the likelihood of early redemption.

**Figure 7: Select low-coupon trust preferreds**



Source: Barclays Capital

### *DRD securities*

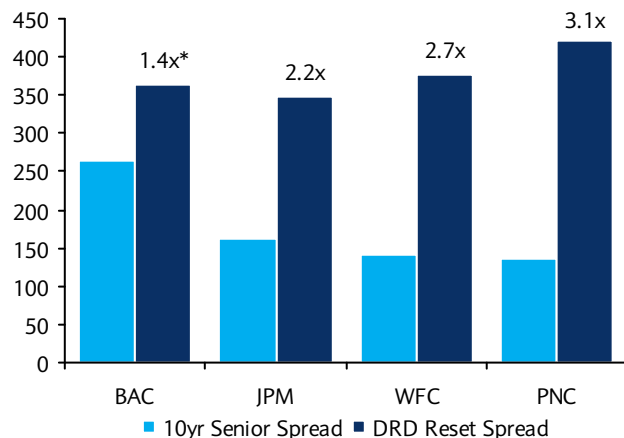
While medium-term coupon deferral risk for large US banks has decreased amid their improving capitalization, the spread compensation for non-cumulative preferreds still appears attractive. Pricing to the call date, the DRDs yield 6-8%; accounting for the tax-advantaged status of these securities, the effective yield increases to 8-11% (Figure 8). These securities do have extension risk; however, with the exception of BAC, they reset substantially wider than underlying senior spreads, with the ratio of back-end to senior spreads ranging from 2.2x to 3.1x (Figure 9). Consequently, we believe that these securities are unlikely to be extended past the first call date unless spreads widen substantially.

Figure 8: US bank DRDs appear cheap

	Call Date	Price	Yield to Call	Tax-adjusted Yield
BAC 8.125	May-18	\$ 100.5	8.0%	11.1%
JPM 7.90	Apr-18	\$ 106.0	6.9%	9.4%
WFC 7.98	Mar-18	\$ 105.3	7.0%	9.7%
PNC 8.25	May-13	\$ 105.8	5.7%	7.9%

Source: Barclays Capital

Figure 9: DRD back-end spreads are substantially wider than senior spreads



Note: \*Ratio of DRD reset spread to senior spread (over swaps). DRD reset spreads are for BAC 8.125, JPM 7.90, WFC 7.98 and PNC 8.25. Senior spreads based on BAC 5.625% 20, JPM 4.25% 20, WFC 5.75% 18 and PNC 5.125 20. Source: Barclays Capital

### New generation securities

New generation hybrids will continue to count as Tier 1 capital under Dodd-Frank, as they convert into perpetual non-cumulative preferred stock after the first call date. However, junior subordinated debt sold during the remarketing process of new generation securities will lose their capital treatment under the act. Consequently, we believe that issuers may seek to avoid going through the remarketing process in order to forgo the need to sell junior sub notes in the open market. This will likely result in an early redemption for the high-coupon new generation securities. On the other hand, securities with low back-end coupons are unlikely to be called, owing to their low interest cost. Instead, issuers may seek to convert these securities directly into non-cumulative preferreds without going through the remarketing process, similar to the USB exchange. The maximum premium an issuer will be willing to pay in such a transaction depends on the coupon expense saved by avoiding the remarketing process, which we estimate to be about 5pts (please see “At WIT’s End?” *US Credit Alpha*, August 6, 2010).

The WFC 5.8% WITS are first callable in March 2011, and the remarketing for the underlying junior subordinated debt will occur in February 2011. The outcome for these securities – whether the issuer exchanges them for straight preferred stock (like USB) or goes through the remarketing process – will be an important indicator of the potential outcome for other new generation securities.

### Replacement capital covenant

One key obstacle to tendering for or exercising par regulatory calls is the presence of replacement capital covenants (RCC) in most enhanced trust preferreds and several insurance hybrids, which require any call to be financed with the proceeds from the sale of capital securities. Although the exact language varies across issues, RCCs are generally written with respect to a specific series of more senior debt, called the “covered debt,” and can be terminated/modified if a majority of holders of the then-covered debt agree. Issuers can also change the RCCs without approval under certain circumstances, typically requiring that there be no adverse effects on the current series of covered debt. Based on a number of recent developments, RCCs do not, in our view, present a meaningful hurdle to calling or

tendering for hybrids. We expect issuers to change or eliminate RCCs through consent solicitations to the covered debt rather than issue new capital securities or common stock.

### Yankee bank hybrids

Low coupon Yankee bank securities have rallied owing to Basel III proposals to phase out the capital treatment of securities “with an incentive to redeem” after the effective maturity date (which we interpret as the first call date), increasing the likelihood that step-up securities will be redeemed on the first call date. Securities with the most upside from a call – low-coupon step-ups with near-term call dates – have outperformed the rest of the space in anticipation of early redemption. These securities have an attractive spread to call but appear rich assuming they get extended past the first call date. Indeed, they are trading only 1.3-1.5x wider than senior debt in spread to worst terms (Figure 10). In comparison, JPM and WFC DRDs trade more than 2x senior spreads.

While so far most European Tier 1 hybrids have been called on their first call date, even when uneconomical to do so, three factors may increase the extension risk of the low-coupon step-up securities. First, the Basel proposals still need to be passed and could be modified to push back the transition period for Tier 1 status, making issuers less likely to call them. Second, they may appear cheap as senior funding even if they lose Tier 1 status, given their low interest expense, and may be left outstanding past the first call date. Third, regulators may enforce extension where economically beneficial for the issuer.

**Figure 10: Select low-coupon Yankee bank step-ups**

	First call date	Price	Spread to call (bp)	Spread to worst (bp)	10yr Senior spread (bp)	Hybrid/senior spread*
BNP 5.186	Jun-15	\$ 93.0	572	203	143**	1.4
CS 5.86	May-17	\$ 95.0	491	212	168	1.3
HSBC 4.61	Jun-13	\$ 96.0	572	193	133	1.5
UBS 6.243	May-16	\$ 96.0	556	210	163	1.3

Note: \* Based on hybrid spread to worst. Senior spreads based on CS 4.375% 20s, HSBC 4.125% 20s, and UBS 4.875% 20s. \*\*10y BNP senior spread estimated based on BNP 3.25% 15s. Source: Barclays Capital

Given the rally in the low-coupon securities, the upside/downside ratio looks heavily skewed against them – the upside from redemption is substantially lower than the potential downside from extension. Consequently, we recommend switching out of the low back-end coupon step-ups and into higher coupon hybrids, which are much less likely to get extended (Figure 11). The high-coupon securities generally trade at a premium to the low-coupon securities, but we believe that the give in spread is justified by the substantial decrease in extension risk.

**Figure 11: Comparison of low to high back-end coupon hybrids for select Yankee issuers**

Ticker	Low back-end coupon bonds			High back-end coupon bonds			Difference in spread (bp)
	Coupon	Spread to call (bp)	Back-end coupon (bp)	Coupon	Spread to call (bp)	Back-end coupon (bp)	
BNP	\$5.186 2015	572	3mL + 168	€8.667 2013	620	3mE + 405	<b>+48</b>
CS	\$5.86 2017	491	3mL + 169	£8.514 2014	411	5y UKT + 440	<b>-80</b>
HSBC	\$4.61 2013	572	3mL + 200	£8.208 2015	442	5y UKT + 465	<b>-130</b>
UBS	\$6.243 2016	556	3mL + 162	€7.152 2017	505	3mE + 345	<b>-51</b>

Source: Barclays Capital

### RBS

RBS preferreds have rallied substantially in 2010 and are up nearly 40% in price YTD, despite the recent pullback. Fueled earlier in the year by expectations of a preferred buyback (which was announced in April), the rally has since been driven by the improvement in RBS' credit quality.

Despite the rally, RBS preferreds appear attractive – they trade substantially wider than senior debt and we have an overweight recommendation on the credit. From a yield to worst standpoint, the NW Cs and RBS Fs appear the cheapest, yielding 8.9% and 8.6%, respectively, among the must-pay securities. The RBS S and T \$25 par preferreds and the 7.64s are the highest yielding may-pay securities (Figures 12 and 13).

With Basel III proposals increasing the likelihood of an early call, the low coupon step-up securities (4.709s and 5.512s) have outperformed other RBS preferreds. These securities now appear rich from a yield to worst perspective, although the yield to call still looks attractive. We believe that both securities have substantial extension risk, owing to their low back-end coupons – they pay less than a 190bp spread over 3m Libor after the call date, well inside RBS senior debt, which trades at about 280bp spread (over 10y swaps). That said, for investors who believe early redemption is likely, the 4.709s are the most attractive, yielding more than 18% to the first call date. Additionally, while the 7.64s also appear attractive from a yield to call perspective, they are not step-ups. As a result, their Tier 1 treatment would be phased out over a longer period (ten years) under the Basel III proposals, resulting in a lower likelihood of being redeemed on the first call date, in our opinion.

### Contingent capital

Regulators globally have focused on contingent capital, with equity conversion and/or write-down triggers, as a potential instrument to replace traditional hybrid structures in response to the perceived ineffectiveness of the latter as loss-absorbing capital during the credit crisis. For example, nearly half of the 19% capital potentially required by Swiss bank regulators can be in the form of contingent capital (CoCos). However, it remains to be seen whether such capital will be adopted by other regulators and, furthermore, whether there is sufficient investor demand for CoCos or other new forms of regulatory capital. In particular, many traditional fixed income accounts may be unable to buy securities with explicit equity downside, owing to charters and investment restrictions.

Figure 12: RBS \$25 par preferreds

	Price	Yield to worst*	Coupon deferral
RBS F	\$22.3	8.6%	None
RBS H	\$21.4	8.4%	None
NW C	\$22.3	8.9%	None
RBS Q	\$15.4	9.7%	Deferred
RBS T	\$16.5	9.7%	Deferred

Note: \* Yield accounts for the announced coupon deferral period.  
Source: Barclays Capital

Figure 13: RBS institutional preferreds

	Reset spread (bp)	Price	Yield to worst*	Yield to call*	Coupon deferral
RBS 7.648	250	\$89.0	8.4%	8.8%	None
RBS 7.64	232	\$67.0	9.5%	13.0%	Deferred
RBS 6.99	267	\$78.0	8.2%	11.3%**	Deferred
RBS 5.512	184	\$68.0	8.1%	14.5%	Deferred
RBS 4.709	186.5	\$68.0	8.0%	18.6%	Deferred

Note: \* Yield accounts for the announced coupon deferral period. \*\* Includes the two years of deferred coupons that the company must pay prior to redeeming these securities. Source: Barclays Capital



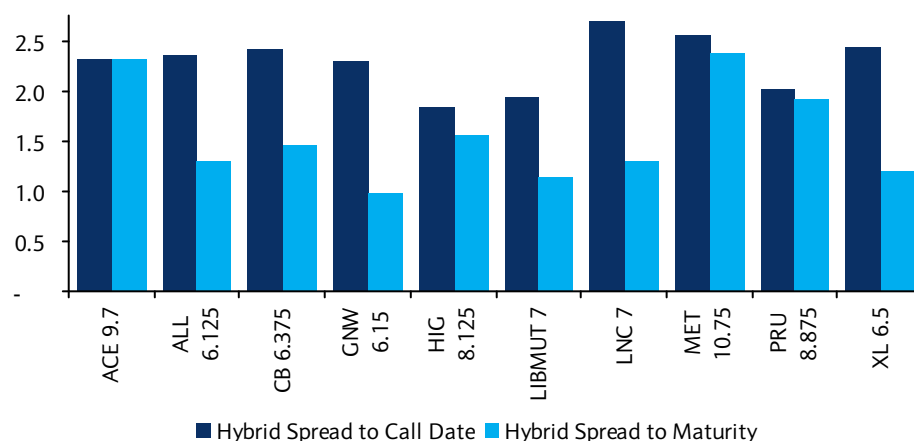
As issuers look for structures that conform to the new regulatory requirements while still appealing to investors, we expect there to be more innovation in the Tier 1 space. However, given our view that traditional preferred stocks will continue to count as Tier 1 capital in the US, this trend should be confined primarily to Yankee banks. For instance, ISPIM issued a perpetual security with write-down language, as required for Tier 1 capital under the proposed Basel III regime, which allows the principal amount of the note to be written down “to the extent necessary to enable the Issuer to continue to carry on its activities” in case of a capital event (as defined in the prospectus). However, the securities have a principal write-up provision that is expressly prohibited for Tier 1 capital under the Basel III proposals.

## Insurance hybrids

Led by life insurers, the insurance sector outperformed the US Corporate index in 2010. Senior insurance bonds in the index have tightened 32bp YTD as insurer capital ratios have improved, helped by increasing asset valuations and capital raising undertaken by the industry. The rally extended to the junior parts of the capital structure, with insurance hybrids tightening 79bp.

Despite the rally in insurance spreads, it is one of the widest sectors in the index, and Thomas Walsh, our insurance analyst, remains constructive on the sector, with overweight and market weight recommendations on Life and P&C insurers, respectively. We thus expect senior insurance spreads to outperform the rest of the Credit index, which should also drive hybrid spreads tighter. However, the upside for hybrids from a further compression in the senior hybrid basis appears more limited. In Figure 14, we compare the ratio of hybrid to long-term senior spreads for select insurers in two scenarios: assuming hybrids are called on the first call date or are extended to maturity. Subsequent to the 47bp tightening in the insurance senior hybrid basis, hybrids now appear fair/slightly rich compared with corresponding senior debt, assuming they are extended to maturity – the average hybrid/senior spread ratio is about 1.6, at which level hybrids barely provide enough compensation for their subordination risk.<sup>19</sup> GNW 6.15s and LIBMUT 7s look particularly rich, trading less than 50bp wider than senior debt. In general, higher-coupon securities still appear cheap relative to senior parts of the capital structure. For instance, ACE 9.7s and MET 10.75s trade more than double senior spreads.

Figure 14: Ratio of hybrid to senior debt spreads for select insurers



Source: Barclays Capital

<sup>19</sup> Assuming hybrids recover 0% in default while senior debt recovers 40%, the ratio of hybrid to senior spreads should be at least 1.67x, which is the ratio of the expected loss of the two instruments in default.

While hybrids look rich from a spread to worst perspective, we believe that some securities have potential upside from early redemption, through either par calls or liability management trades. Moody's modification to its hybrid toolkit has resulted in lower equity credit for most insurance hybrids. Many life and P&C hybrids, which initially received Basket D treatment (75% equity credit), have been lowered to Basket B (25%). The loss in equity credit increases the likelihood of redemption of these securities on the first call date. Priced to the call date, they appear cheap, trading on average more than double the spread of senior debt. ALL 6.125s, CB 6.375s, LNC 7s, MET 10.75s and XL 6.5s appear attractive from this perspective – they look substantially cheap relative to senior debt, and we have market/overweight recommendations on these credits.

We believe that supply of insurance hybrids is likely to be small in 2011, given insurers' limited capital needs and the low equity credit assigned under Moody's new hybrid framework to cumulative and dated junior subordinated debt, a structure commonly used by insurers. Net issuance may, indeed, be negative. We believe that some well-capitalized insurers may seek to buy back hybrids prior to the first call date to reduce interest costs along the lines of the Traveller's (TRV) transaction, which replaced the 6.25% hybrids with senior debt. Figure 15 lists several P&C insurers and compares current hybrid pricing with senior debt spreads. In each case, the pickup over senior debt is substantial (although actual savings would be lower, assuming that hybrids are tendered for at a premium to market prices). The ACE hybrid has a fixed 2030 maturity and is trading at a spread of 218bp to long-dated senior debt. For ALL and CB, we compare hybrids with senior debt maturing near the first call, based on the fact that they are trading at a premium. By this measure, the hybrids are 231bp and 207bp wider than seniors, respectively.

**Figure 15: Comparisons of senior and hybrid spreads across P&C insurers**

	Spread (bp)*			Total debt/capitalization		
	Hybrid	Senior	Difference	Current	Pro forma	Increase (bp)
ACE 9.7% 2030	383	165	218	14.6%	15.1%	50
ALL 6.125% 2017	389	158	231	23.7%	24.9%	120
CB 6.375% 2017	342	135	207	18.7%	20.3%	160

Note: \* Spread is to first call for the hybrids and to maturity for the senior debt. Source: Barclays Capital

We also compute each company's current and pro forma debt-to-capitalization ratios, assuming that they tender for the hybrids at a 5pt premium to current market prices.<sup>20</sup> In general, P&C companies prefer to keep this ratio below 25% (ALL would come close to breaching this under our assumptions).

Issuers may also need to pay a consent fee to terminate the RCC for securities with this covenant. The ACE 9.7% does not have a replacement capital covenant, but the ALL and CB hybrids do. The covered debt for the ALL hybrids is the 6.9% senior unsecured bonds maturing in 2038, which is a \$250mn issue. The covered debt for the CB hybrid is the 6.8% senior unsecured bond maturing in 2031, which is a \$200mn issue. Given the size of the hybrids (\$500mn for ALL and \$1bn for CB), consent fees to the covered debt are unlikely to materially affect the economics of any decisions to tender, in our view.

<sup>20</sup> We assume Basket B treatment for each of the hybrids.

## Non-financial hybrids

Non-financial hybrids appear substantially cheap relative to senior debt. Even from a spread to worst perspective, the pickup over senior parts of the capital structure is attractive – the hybrids are trading 1.5–2.3x wider than senior debt (Figure 16). Assuming redemption on the first call date, the spread pickup is materially higher. Under Moody's revised hybrids framework, these securities will receive worse capital treatment, losing 25% equity credit in many cases. Combined with the fact that their reset spread is substantially wider than the senior spread, this increases the likelihood of redemption on the first call date, in our opinion. Many of these securities have replacement capital covenants (RCC); however, based on recent consent solicitations to eliminate RCCs, we do not expect these covenants to be a meaningful hurdle to calling or tendering for hybrids (see discussion above).

**Figure 16: Non-financial hybrids appear cheap relative to senior debt**

	Call date	Price	Spread to call (bp)	Spread to worst (bp)	Senior spread (bp)	Hybrid/senior spread*
CVS 6.302	Jun-12	\$ 95.8	901	224	145	1.5
D 7.5	Jun-16	\$ 105.0	469	277	142	2.0
EEP 8.05	Oct-17	\$ 105.5	486	354	176	2.0
EPD 8.375	Aug-16	\$ 107.5	508	353	180	2.0
NEE 7.3	Sep-17	\$ 104.0	442	314	134	2.3

Note: \* Based on hybrid spread to worst. Senior spreads based on D 7% 38s, EEP 5.5% 40s, EPD 6.45% 40s and NEE 6% 19s.  
Source: Barclays Capital

## HIGH YIELD STRATEGY

### Almost priced out

Bradley Rogoff, CFA  
+1 212 412 7921  
bradley.rogoff@barcap.com

Gautam Kakodkar  
+1 212 412 7937  
gautam.kakodkar@barcap.com

Eric Gross  
+1 212 412 7997  
eric.gross@barcap.com

Mike Kessler  
+1 212 412 3031  
michael.kessler@barcap.com

- The High Yield Index has never produced a total return close to its coupon in the past 20 years. The market has produced double-digit returns 11 times and for the other nine years, returns were less than 6%. Despite an environment of low rates, improving fundamentals and high spreads, we do not believe 2011 will break that streak. With substantial negative convexity in the market, we conclude that a 5-6% return is more likely than returns above 10%.
- Our forecast of a 5-6% total return for 2011 is based on the modest backup in rates expected by our interest rate strategists and the call-constrained nature of the high yield market, which is preventing significant spread tightening beyond the rate move. While high yield is very weakly correlated with interest rates, the effect in any given year can be significant, as evidenced by 2010 total returns. Our excess return forecast is 6-7%.
- The 2009-11 returns environment reminds us of 2003-05, when substantial high yield returns in the first year were followed by a very solid year, but low overall yields at the start of the third year (YE 04 yields of 6.74% are the all-time low) and slightly higher rates led to a low single-digit return in 2005.
- For the Index to return more than 10% in 2011, the dollar price would have to exceed the all-time high of \$105 set in 2004. To highlight how difficult this will be for the current index, we note that when the Index traded to \$103 in early November, the gap between yield-to-maturity and yield-to-worst hit an all-time high, as over one-third of the market was trading to its first call.
- The pace of recovery is a risk for high yield, as 1.5% of GDP growth tends to be the inflection point for returns. However, we believe the greater risk is to the upside for our return forecast, as we anticipate a low default rate (2.0-2.5%) and continued earnings growth.
- The demand picture should remain steady, with yields sufficiently in excess of other fixed income assets and a lack of issuance in other asset classes. However, investors may look to the underperforming equity market if sentiment improves. On the supply side, we are expecting another near-record year of \$225-250bn, which may lead to periods of indigestion.
- Ratings migration should be a net positive as part of the cyclical recovery. We focus on ratings cliffs as one of the key areas of outperformance. While the BB/BBB spread gap is slightly inside of its 2010 median, it remains compelling when normalized for market spread levels. Investors tend to focus less on the CCC to B ratings jump, but we find upgrades from CCC can have just as significant an effect on performance.
- Event risk will also be a major factor for high yield. We expect an increase in LBOs, with BBB and BB companies in the paper/packaging, healthcare and retail sectors particularly vulnerable. Dividend deals will also likely rise if the equity market continues to languish. On a positive note, high yield companies should benefit from M&A, as investment grade corporates may deploy their large cash balances, especially in the energy, technology, software and services sectors.

Figure 1: Projected high yield returns by quality

	BB	B	CCC & Below	High Yield
Price Return	-0.5 to -1.5%	-2 to -3%	-3 to -5%	-2 to -3%
Coupon Return	~7%	~8%	~10%	~8%
Total Return	5.5 to 6.5%	5 to 6%	5 to 7%	5 to 6%

Source: Barclays Capital

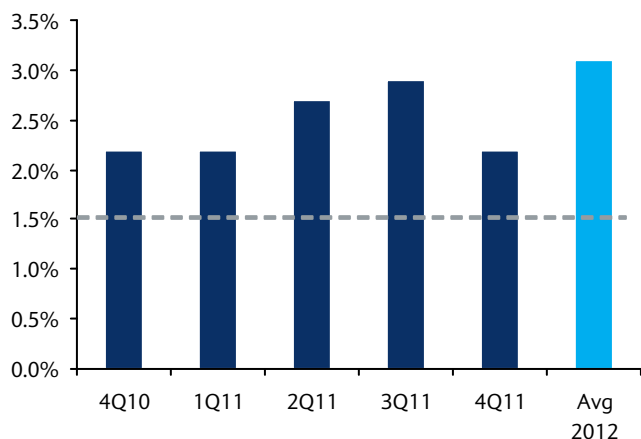
## Macro backdrop

The pace of economic recovery has slowed since 2009, as macroeconomic concerns, driven especially by European sovereigns, have brought the health of the global economy into question. Nonetheless, the microeconomic picture has steadily improved in the U.S., as earnings reports through 3Q have shown that most companies are now quite lean, and fundamentals are healing across many sectors. Further, consensus estimates of average quarterly GDP show the U.S. economy growing at a 2-3% rate over the next five quarters and above 3% in 2012 (Figure 2).

While 2-3% economic growth may not be considered particularly robust, high yield returns have generally been positive in that context. Moreover, returns by credit quality have historically flipped at around the 1.5% of GDP level (Figure 3). Better economic outcomes have traditionally allowed higher beta credits to outperform, while weaker environments, not surprisingly, have been bad for high yield generally and the CCC index in particular. Highly leveraged capital structures, lack of security, and exposure to cyclical industries make the CCC index very sensitive to broad economic conditions, and many CCC credits require sustained economic expansion in order to grow into their capital structures.

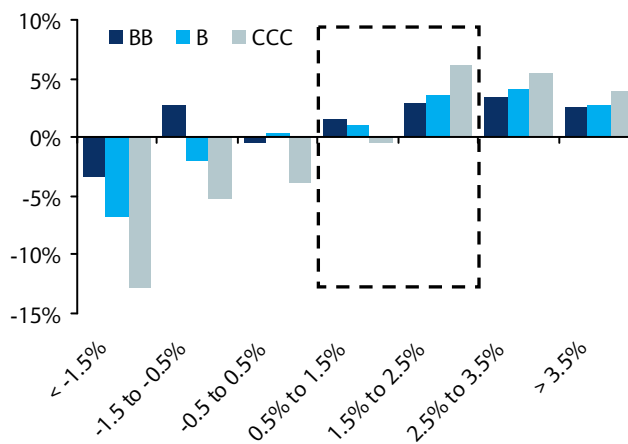
While we remain cautiously constructive on the macro backdrop for credit in 2011, we acknowledge that there are other key areas of risk that could hamper returns. With Treasury rates still near all-time lows and the Fed encountering increasing resistance to quantitative easing, duration risk cannot be ignored. This is of particular concern for BB credits, as we discuss in greater detail in later sections. Primary market indigestion, particularly for lower-rated issuers, is another potential risk. With all-in yields at five-year lows, issuers are flocking to the high yield market to term out loans, finance M&A, and proactively manage their

Figure 2: Median consensus real US GDP forecasts



Note: All figures are annualized quarterly rates.  
Source: Bloomberg, Barclays Capital

Figure 3: High yield returns versus GDP



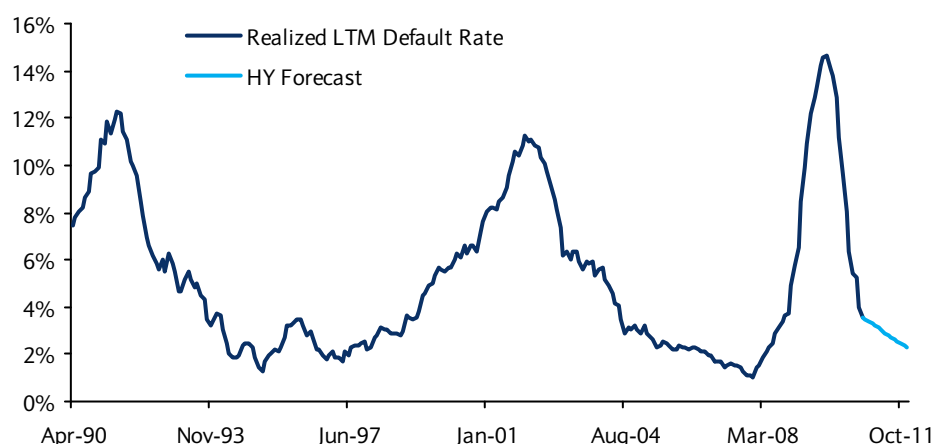
Note: GDP rate is the q/q SAAR. Returns are lagged by 1 quarter.  
Source: Bloomberg, Barclays Capital

maturity schedules. We expect high volumes to persist in 2011, as we highlight in our section below on supply. Finally, as we cover more fully in our section on event risk, re-leveraging is an increasing concern. The combination of low yields and reasonable equity valuations may fuel new deal-making, and the somewhat tepid IPO market may convince sponsors to delay exits and pursue dividend deals in the interim. Re-leveraging is a much greater concern for BB credits, as most lower-rated credits cannot support enough additional leverage to satisfy equity return requirements.

### Default risk

The Moody's issuer-weighted speculative-grade default rate has dropped in a straight line over the last year, from a peak of 14.66% in November 2009 to 3.58% for the 12m period ending October 2010 (Figure 4). In 2011, we think the default rate will remain low and end the year at 2.0-2.5%.

Figure 4: Realized and forecast high yield default rate



Source: Moody's, Barclays Capital

Our default rate model, described in further detail in *U.S. Credit Alpha*, October 16, 2009, is a hybrid of a top-down factor-driven forecast and a fundamental bottom-up analysis of credits in the HYCDX. On the fundamental side, we estimate the likelihood of default for HYCDX names over different horizons, and then apply weights to arrive at a forecast for the next 12-month period. As a sanity check, we perform a similar exercise on the broader cash bond universe with input from our fundamental and distressed analysts. Using this bottom-up approach, we arrive at a default rate of about 2.5%.

Our top-down approach consists of a two-factor regression model of default rates versus C&I lending and the fraction of the U.S. High Yield Index trading below \$70. The latter is both a proxy for market distress and a threshold below which distressed exchanges – which count in the Moody's default rate – become more prevalent. Currently, available data allow us to forecast through the end of October 2011, and this method arrives at an LTM default rate of 2.0% at that time.

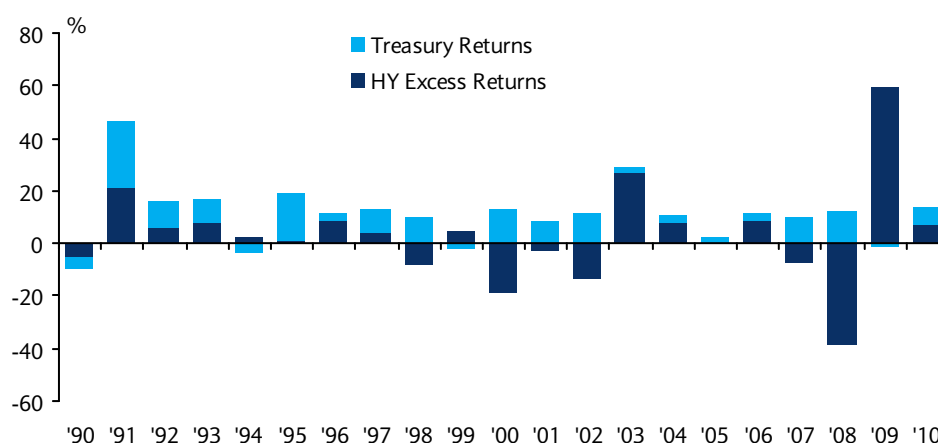
Many of the more at-risk issuers have already taken advantage of the open primary market to push out maturities, clearing their runway for multiple years. Admittedly, our bottom-up approach is prone to missing smaller issuers outside the indices, or our fundamental team's coverage universe; the top-down model can also produce errors to the extent that the Fed lending standards survey decouples from the high yield primary market. Recognizing these

potential sources of error, we believe there is some upside to our 2011 projection of 2.0-2.5% on an issuer basis (ie, a larger number of smaller issuers may default) and downside risk on a par value basis.

### Duration Risk

While high yield investors are generally more focused on total returns than excess returns, with rates so low it is rational to be concerned about duration risk in the coming year. Nearly half of the 2010 total return came from a rally in rates, but, as Figure 5 shows, the large effect of Treasuries on total returns last year was hardly an exception. Moreover, with the Fed committed to purchasing most of the Treasury supply for the first half of 2011, investors should expect rates volatility to materially affect 2011 total return volatility.

Figure 5: High yield excess returns and Treasury component to total returns

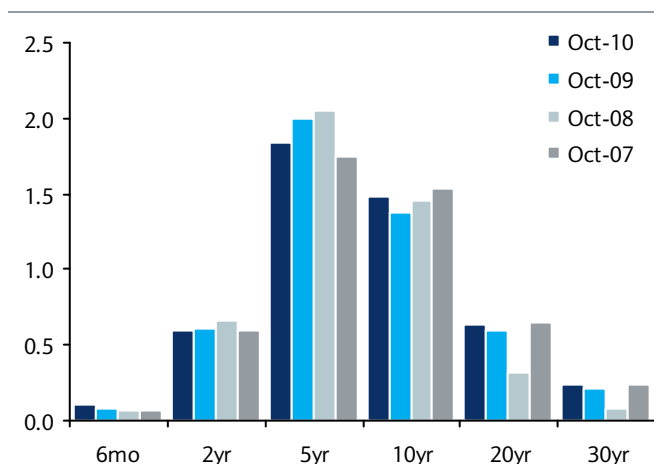


Source: Barclays Capital

Parsing out the spread effect from the rates effect on returns is complicated by the relationship between these two components. The High Yield Index is most sensitive to 5y and 10y Treasuries, as evidenced by its key-rate duration distribution (Figure 6). However, while overall regressions of monthly changes in high yield OAS on changes in 5y and 10y Treasury yields produce highly significant betas, they also produce very low correlations (Figure 7). The weak correlation can be explained by asset allocation decisions in different stages of the economic cycle. In recessionary periods, the flight to safety tends to amplify the negative excess returns, while leading to a rally in Treasuries; in subsequent recovery periods it is not uncommon to see positive returns in both asset classes. The correlation is therefore reduced as excess returns shift more frequently between positive and negative than Treasury returns. However, in either period high yield total returns can be materially affected by Treasuries, underscoring the point that a weak correlation does not imply a low effect.

We believe spread cushions remain sufficiently wide to absorb a significant proportion of any initial backup in rates. Turning once again to the historical data to test this idea, we repeated the regressions in Figure 7, applying two additional constraints which we believe are relevant to current duration risk concerns. First, we included only months in which Treasury yields increased. Second, we re-ran the analysis including only the first month in a sequence of Treasury yield increases. The results (Figure 8) confirm a stronger correlation and a more negative beta for the first monthly increase in the 5y or 10y yield, consistent with our thesis. However, we also find that high yield's ability to absorb Treasury moves wanes over extended

Figure 6: Key rate durations of the U.S. High Yield Index



Source: Barclays Capital

Figure 7: Monthly regressions of changes in HY OAS versus changes in Treasury yields

Quality	5y Treasury			10y Treasury		
	Beta	Beta t-stat	R <sup>2</sup>	Beta	Beta t-stat	R <sup>2</sup>
BB	-0.81	-7.29	20%	-0.79	-6.50	17%
B	-1.20	-7.01	19%	-1.13	-5.94	15%
CCC	-1.47	-4.98	11%	-1.37	-4.24	8%

Note: Regressions were performed on monthly data for the June 1993 to October 2010 period. Source: Barclays Capital

periods of increasing rates, especially for higher rated bonds. We therefore expect to see some pressure on yields if the recent increase in Treasuries is prolonged.

It should be noted that R<sup>2</sup> remains low for all of these regressions, indicating that despite strong relationships, Treasury yield changes are not highly predictive of OAS changes. In addition, duration sensitivity at the 10y point is slightly higher y/y (Figure 6), driven to some extent by the heavy supply calendar this year. Nonetheless, we believe the data provide strong evidence of high yield's resilience to duration risk.

Figure 8: Constrained regressions of changes in OAS versus changes in Treasury yields

	5y Treasury Yield Increasing				10y Treasury Yield Increasing			
	All Months		First Month Only		All Months		First Month Only	
	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>	Beta	R <sup>2</sup>
BB	-0.80	14%	-1.10	21%	-1.00	9%	-1.53	30%
B	-1.32	14%	-1.85	20%	-1.61	11%	-2.43	23%
CCC	-1.63	7%	-2.24	10%	-1.66	4%	-2.48	10%

Source: Barclays Capital. Regressions were performed on monthly data for the June 1993 to October 2010 period.

### Event risk

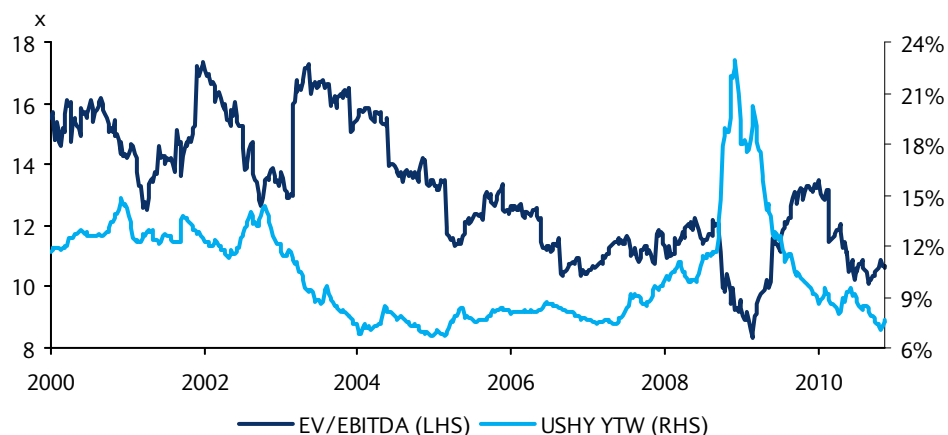
Event risk may cut both ways for high yield credits in 2011. On the positive side, investment grade companies have largely repaired their balance sheets following the credit crisis and are now sitting on near record cash balances. In addition, investment grade issuers have access to very cheap funding. With organic growth prospects still somewhat muted due to the slow pace of the recovery and the cost cutting cycle nearly complete, investment grade management teams may turn to M&A to boost revenue and EPS. The result for high yield credits can sometimes be a dramatic deleveraging event, as was the case for Alltel and Centennial, both of which went from a CCC credit rating to investment grade overnight after being acquired in 2009. We believe the energy and technology sectors are among the most likely to produce this type of windfall deleveraging event in 2011.



Investors should also concern themselves with avoiding potential downside event risk in 2011, as conditions point strongly toward an increase in releveraging transactions. Like their investment grade counterparts, high yield companies have repaired their balance sheets and are struggling to find attractive projects. Moreover, the current combination of low all-in yields and reasonable EV/EBITDA valuations is highly reminiscent of market conditions from the late 2006/early 2007 peak of the LBO cycle (Figure 9). Activity has picked up recently, and substantial dry powder still exists with estimates of the P/E overhang ranging as high as \$485bn, according to Pitchbook Data. Based on a proprietary screen requiring a 30% purchase premium, a 45% minimum equity check, and pro forma leverage and cash flow tests, we would highlight the paper & packaging, specialty chemicals, and retail industries as having above-average LBO risk. Investors considering these industries should carefully examine covenant structures to assess the vulnerability of individual credits to potential releveraging.

Finally, the perceived softness in equity valuations has caused some equity sponsors to postpone IPOs in favor of dividend deals. Recent examples include HCA, Goodman Global, and West Corp, and we believe this trend is likely to continue in 2011 unless the equity market rallies sharply. BB credits, fallen stars, and the more mature LBO names would have above-average risk of a sizeable dividend deal or leveraged recapitalization being done.

Figure 9: S&P 500 LTM EV/EBITDA and US High Yield Index yield-to-worst



Source: Barclays Capital

## Supply and demand

### Demand

As we highlighted in *Focus: Supply Side Performance Boost in 2010*, August 16, 2010, demand has been robust enough for new issue to outperform the overall market this year. Despite this strength, the increase in par amount outstanding of the U.S. High Yield Index from \$651bn in 2008 to \$870bn as of November 26, 2010, is arguably somewhat alarming. Annualized par growth rates for 2009 and 2010 of 18.3% and 14.1%, respectively, outpaced a CAGR of just 6.1% during the LBO boom period of 2004-07. The last time the high yield market experienced a two-year par growth spurt of similar magnitude was 2002-03, when the amount outstanding was less than half of what it is today.

Huge retail inflows into domestic taxable bonds funds have boosted mutual fund holdings to one-third of the high yield market and contributed more than half of its growth (Figure 10). While yields have gradually become less compelling for traditional high yield investors, they are extremely attractive to non-traditional investors, who face a dearth of yield in all other asset classes. The lack of alternatives has also increased the amount of the \$77bn in annual coupon generated by the high yield market that is likely to be reinvested. As long as our forecast for lower defaults comes to fruition, retail investors will likely be forced to remain in speculative grade bonds to obtain income until rates are at much higher levels.

Over the past four years, ETF flows have become a larger portion of the overall total, with assets increasing from virtually nothing in 2007 to \$13.4bn in 2010 (Figure 11). ETF flows continue to demonstrate remarkable volatility relative to their asset size, an indication that investors may be using them to manage high yield market exposure tactically rather than for longer term investment purposes. Nevertheless, we do not foresee a mass exodus from high yield ETF products, and would expect their flow volatility to moderate somewhat in the coming years as the investor base utilizing them continues to broaden.

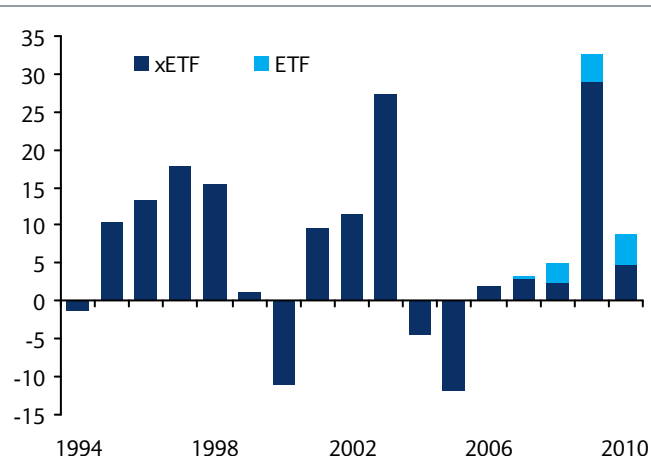
Overseas investors have also flocked to the high yield market for fixed income returns that are not achievable in domestic assets. The U.S. high yield market has a distinct advantage in terms of maturity and relative size to the \$200bn European high yield market and miniscule Asian high yield market. Asia has been the primary source of foreign flows, with the attraction strongest from Japan, where government yields are extremely low and an aging

Figure 10: Estimated US high yield market ownership and growth since 2008

	% Owned	% Growth
HY Mutual Funds	18-20%	36-38%
IC/Income Funds	15-17%	18-20%
CLO's / Loan Funds	2-4%	5-7%
Insurance Portfolios	8-12%	5-7%
Pension Funds/Separate Accounts	15-25%	8-10%
Hedge Funds	15-25%	0-5%
Offshore	5-10%	12-15%
Other (includes Banks)	5-10%	5-7%

Source: AMG Lipper

Figure 11: US high yield mutual fund flows (\$bn)



Source: S&P LCD, SNL Financial, HFR, IGI, Bloomberg, Barclays Capital

population is in search of income. These dynamics should persist in 2011, given the persistent lack of yield available in most developed markets worldwide.

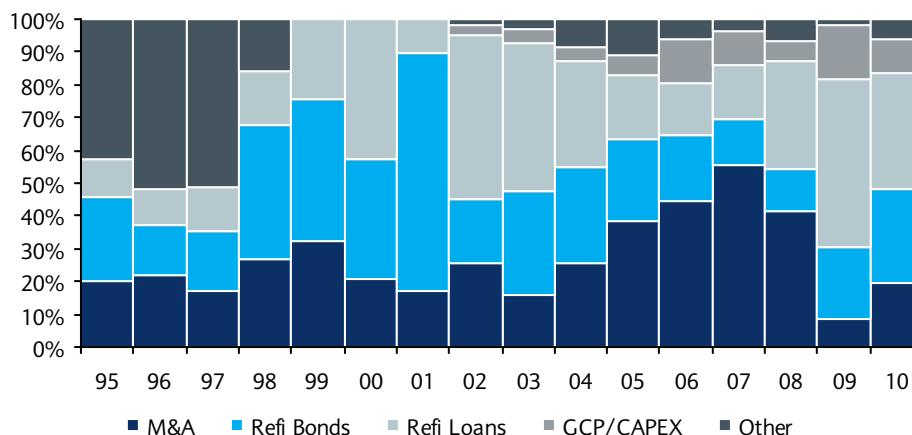
Smaller sources of demand growth in 2009 and 2010 have been CLOs and loan funds, hedge funds, insurance portfolios, and pension funds/separate accounts. CLOs are restricted in their fixed-rate bucket and hold less than \$20bn in high yield bonds, while leveraged loan funds hold at most another \$5bn. The low level of high yield holdings among loan managers reduces the risk of a substitution effect, should the loan market begin to grow again. Insurance allocations to high yield have recovered somewhat from 2008 lows, but remain constrained by regulatory limits and their large holdings of downgraded structured paper. Improvements in RMBS and CMBS credit ratings would allow insurance companies to grow their high yield allocations from current levels. Hedge fund intentions remain hard to judge, but macro concerns appear to be keeping many managers on the sidelines, for now. Collectively, these demand sources have contributed only modestly to the growth of the high yield market, and therefore do not represent incremental downside demand risk.

## Supply

With just four weeks left before year-end, dollar-denominated high yield issuance stands at \$240bn. Put in perspective, that total represents more than 2x average issuance over the past 10 years and is 57% above 2009's record-setting total. By our estimates, approximately two-thirds of this year's supply has gone toward refinancing bond and bank debt, with another 20% financing M&A transactions, 10% for general corporate purposes/capex, and the remaining ~5% funding dividends and exits from Chapter 11 (Figure 12). While the use of proceeds was more diverse than in 2009 – as M&A activity picked up from its 2008 trough – the sheer volume was highly unexpected. Opportunistic refinancing at near record-low rates accounted for close to 75% of the 2010 surprise, and more robust-than-expected M&A activity accounted for most of the remainder.

As we look to 2011, we see the potential for another very strong year, with new issuance of \$225-250bn. Low rates increase the economic benefit to issuers of early take-outs, which should fuel a continuation of the heavy refinancing aimed at tackling 2013-15 bond and loan maturities (Figure 13). Furthermore, an anticipated increase in M&A volume and a decent coupon to reinvest should also be supportive of volumes. We expect the \$225-250bn of 2011 supply to break down as follows:

Figure 12: Historical use of high yield proceeds

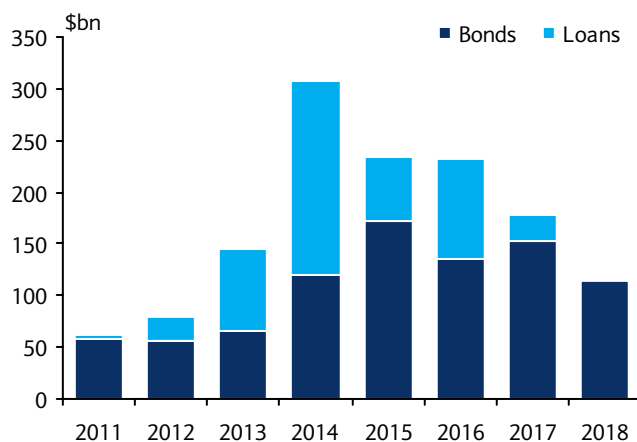


Note: 2010 supply data through November 26, 2010. Source: Barclays Capital

- **Refinancing:** While yields have admittedly backed up from their early-November lows, a 7-handle average yield remains attractive to issuers in the context of both recent and longer-term history. Corporates have already made noticeable progress in addressing the bond and loan maturity wall, reducing 2011-14 maturities by \$150bn in 2010 year-to-date. However, much work remains to address 2013-15 debt. In particular, the \$224bn in LBO-era loans maturing in 2014 looms large in light of the loan market's reduced capacity. We expect issuers to continue to pre-emptively address near- to mid-term maturities while yields – and, thus, coupons – remain low (Figure 14). We anticipate that bond-for-loan volume will keep the secured component of issuance at about 30% and believe refinancing will represent 55-60% of the 2011 total.
- **M&A/LBO:** As was widely expected, strategic acquisitions and private equity purchases have rebounded from the 2008 lows. Furthermore, the combination of reasonable equity valuations and cheap debt suggests that M&A and LBO activity is likely to pick up significantly next year. High corporate cash balances may dampen the need for debt-financing somewhat, as will higher equity checks on larger LBOs. Nonetheless, we expect this component of issuance to climb from its 20% 2010 level to 25-30% in 2011.
- **Other:** The balance of the issuance will probably finance GCP, capex, dividends, and bankruptcy exits. Capex will likely remain low as a primary use of proceeds, outside of high-investment sectors such as E&P, as overall capacity utilization remains somewhat depressed. On the other hand, if the equity market remains soft, we may see more dividend deals as private equity sponsors seek to boost investment returns by issuing debt.

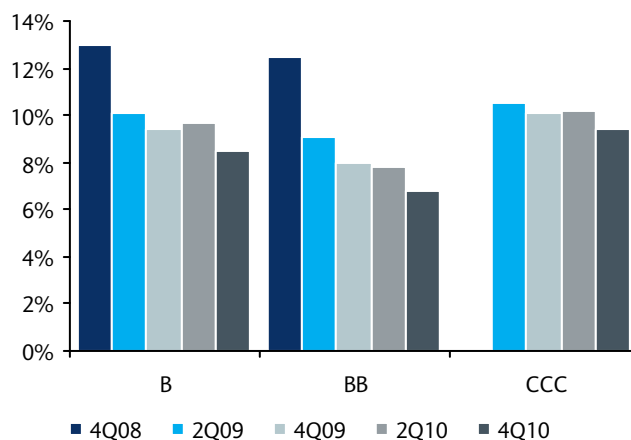
As the high yield market rallied from June to November, new issues performed well in general, outperforming the broader market by a decent margin (see *Focus: Supply Side Performance Boost in 2010* for details). New issues traded especially well from early September to early November, when a growing share of the High Yield Index was call-constrained and the average BB and B bonds traded up to \$106.25 and \$105.00, respectively. However, the recent pullback was in part due to some primary market fatigue, as investors have become less interested in low coupon, low current yield bonds. If demand wanes because of insufficient yield on new deals, investors may be forced to trade yield for more issuer-friendly call structures, such as the increasingly popular 10% call at \$103, or Dunkin Brands' more drastic example of bonds that are immediately callable at \$100.5.

Figure 13: High yield and leveraged loan maturity profile



Note: Totals as of November 26, 2010. Source: S&P LCD, Barclays Capital

Figure 14: High yield new issue coupon by credit quality



Note: 4Q10 data points as of November 26, 2010. Source: Barclays Capital

## Relative value across quality and duration

### Quality

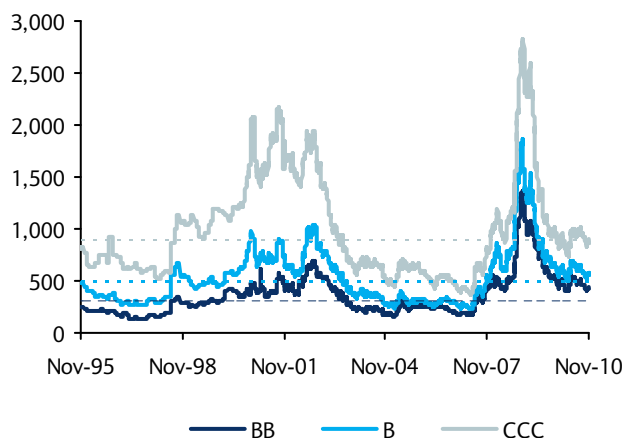
When assessing the performance potential of the three major quality buckets within high yield, we believe investors should consider multiple factors affecting the relative risk-reward profiles. When building our returns forecasts across the quality spectrum, we consider coupon levels, the default outlook, duration risk, spread levels and the gaps between them, non-default loss compensation, call constraints, and the shape of return distributions. Taking all of these factors together, we generally find single B credits to be the least compelling subcategory and, thus, repeat our barbell recommendation from 2010, albeit with a few more caveats and concerns this time around.

High yield returns begin with carry. As of November 26, the BB index had a current yield of 7.3%, single Bs offer a current yield of 8.4%, and CCCs have a current yield of 10.2%. This carry will likely be partially offset by defaults. As mentioned previously, our default forecast for 2010 is 2.0-2.5%, which is lower than the 25-year median of 3.6% reported by Moody's. Defaults should skew heavily towards the bottom of the credit spectrum, as the credits most at risk are highly leveraged CCC companies that are struggling to grow into their capital structures. That said, the generally low default environment should allow CCCs to perform the best from a carry minus default loss perspective.

We continue by decomposing yields into their duration and spread components. Duration risk skews towards the higher end of the quality spectrum, as the BB index has an option-adjusted duration of 5.1, vs. 3.9 for single Bs and 3.6 for CCCs. Spreads have compressed relative to year-ago levels, with only BBs remaining significantly wide of the 15-year median (Figure 15). As spreads have come in, the gaps between quality buckets have narrowed in absolute terms. In Figure 16, we normalize spread gaps by expressing them as a percentage of the US High Yield Index OAS. When viewed in this context, the CCC-B and BB-BBB cliffs appear reasonably wide, while the gap between BB and B credits is fairly narrow.

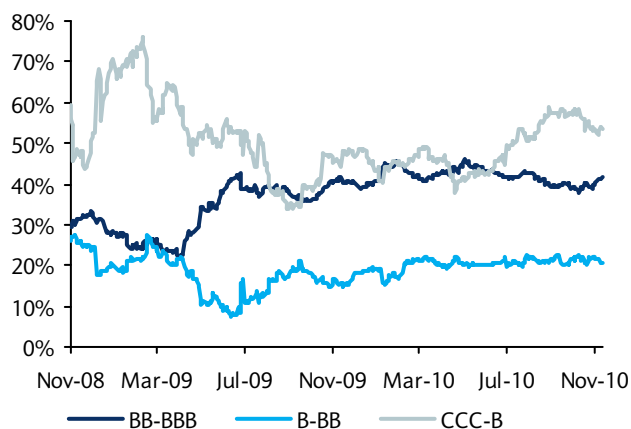
We further decompose spreads into default-related and non-default components, to see how differing sources of risk are compensated (investors often refer to non-default loss spread as compensation for mark-to-market risk and illiquidity). We do this by comparing the risk-neutral default probabilities implied by historical spreads with realized default rates,

Figure 15: Option-adjusted spreads by quality (bp)



Source: Barclays Capital

Figure 16: Spread gaps as % of US High Yield Index OAS



Source: Barclays Capital

with the difference being attributed to non-default loss compensation. Figure 17 shows that current levels will be wide of historical averages if our low default forecast for 2011 is realized. This makes sense to us, as spreads should reflect some expectation of rising default rates in future years following a likely trough in 2011. Across credit buckets, CCCs appear to offer the greatest non-default loss compensation relative to historical averages at +81bp, followed by BBs and then single Bs. In absolute terms, however, CCCs offer the lowest level of non-default compensation, both historically and in our 2011 forecast.

**Figure 17: Non-default loss compensation by quality, current and historical average**

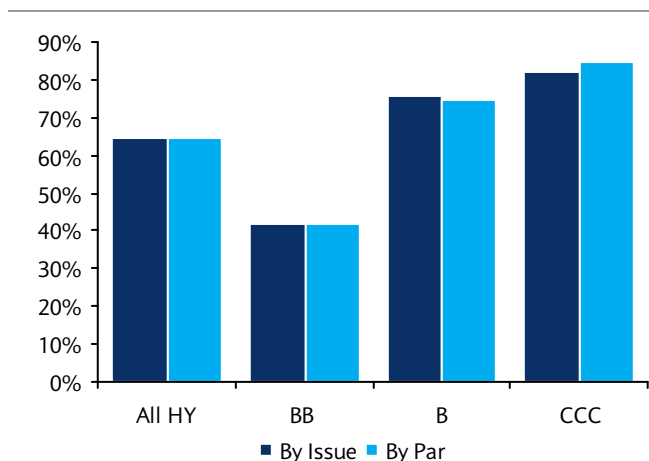
	Non-Default Loss Compensation (bp)			% of Spread	
	Historical	2011 Forecast	Excess	Historical	2011 Forecast
BB	322	391	+69	87.0%	91.4%
B	341	391	+51	62.1%	87.0%
CCC	221	301	+81	21.1%	25.3%

Source: Barclays Capital

Potential price appreciation may be significantly dampened by the negative convexity inherent in the callability of many high yield bonds (Figure 18). Across quality, the single B bucket is significantly more call-constrained at this point, as BBs are less likely to include a call feature (particularly in the case of fallen angels and crossover credits), while many CCCs continue to trade below par and thus are not yet call-constrained. In Figure 19, we perform a sensitivity analysis to determine the extent to which each quality bucket would become call-constrained per \$1 of price appreciation. BB credits profile the most favorably in this regard, particularly relative to single Bs, which would surpass the 50% threshold with just a single dollar of price appreciation from current levels. The portion of the CCC index trading to the next call also increases with price appreciation, but from a much lower starting point.

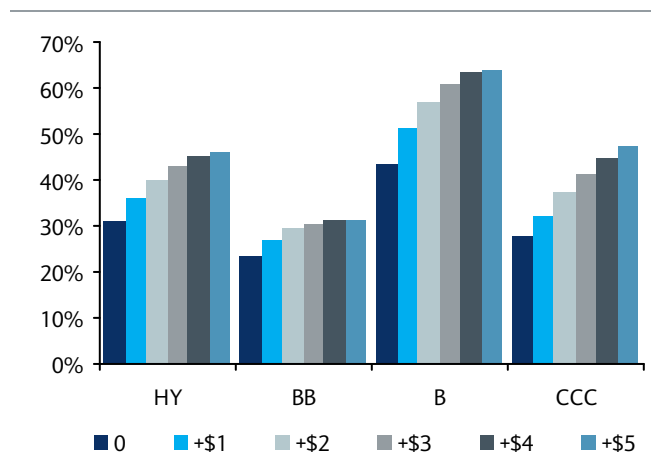
A final consideration for investors is the difference in returns distribution across the quality buckets. Higher quality credits have historically demonstrated a tighter returns distribution.

**Figure 18: % of bonds containing a call feature**



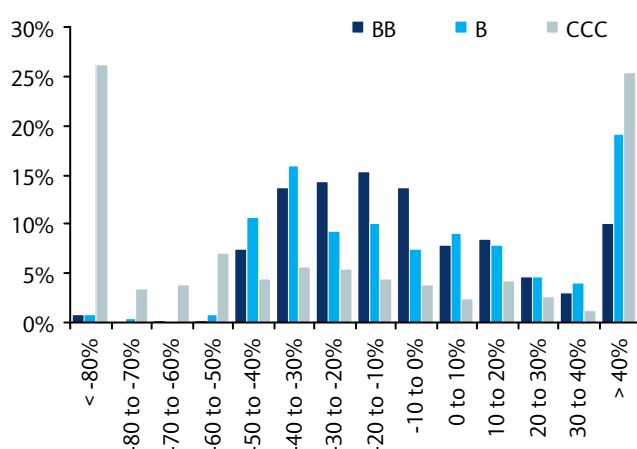
Source: Barclays Capital

**Figure 19: Percent of par trading to next call, by amount of price appreciation**



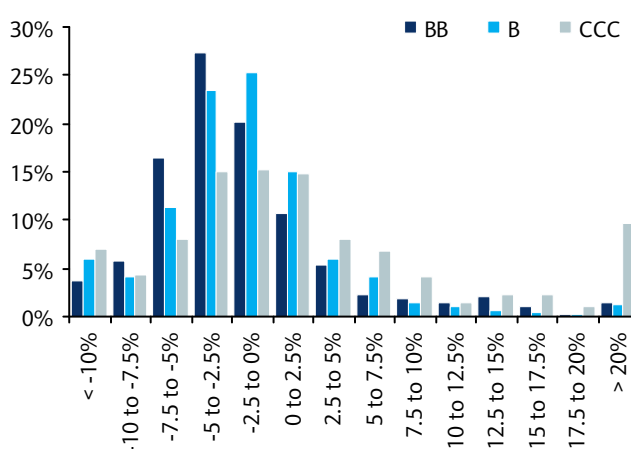
Source: Barclays Capital

Figure 20: Excess return outperformance in 2009



Note: Ratings as of beginning of period (December 31, 2008). Excess return outperformance measured relative to ratings category average excess return.  
Source: Barclays Capital

Figure 21: Excess return outperformance in 2010



Note: Ratings as of beginning of period (December 31, 2009). Excess return outperformance measured relative to ratings category average excess return.  
Source: Barclays Capital

In Figures 20 and 21, we plot the 2009 and 2010 distribution of excess return outperformance by quality bucket. Not surprisingly, CCC credits show a much wider distribution than their higher quality counterparts, underscoring the increasingly critical importance of credit selection as investors move down in quality. Given the sizeable CCC-B spread gap and the variability of CCC returns, we recommend investors position for the ratings cliff by focusing on CCC upgrade candidates. The demand technical caused by the removal of the CCC rating has resulted in an average outperformance of nearly 7% for upgraded CCCs in 2010. For more details and a list of candidate credits, please see our focus article on this topic, *Choosing Credits Carefully*, October 29, 2010.

To summarize, BBs offer excellent spread relative to historical norms and are the least call-constrained, but carry high duration risk. We do not foresee a dramatic rates move in 2011, given current Fed policy; thus, we recommend investors overweight BB credits (those taking a different view on rates can also choose to hedge their duration exposure). CCCs have the best default-adjusted carry and low duration exposure, but offer lower non-default loss compensation and the widest returns distribution. We recommend investors modestly overweight CCCs, paying particular attention to credit selection and focusing on upgrade candidates. The heavily call-constrained nature of single B credits and the lack of spread pickup relative to BBs leave us with an underweight. We summarize our views in Figure 22.

Figure 22: Summary of portfolio construction factors across credit quality levels

	BB	B	CCC
Carry Less Defaults	Good	Good	Best
Duration Exposure	Highest	Moderate	Lowest
Relative Spreads & Spread Gaps	Best	Worst	Good
Non-Default Compensation	Good	Good	Lower
Call Constraints	Low	Significant	Moderate
Returns Dispersion	Tightest	Moderate	Widest
Recommendation	Overweight	Underweight	Overweight

Source: Barclays Capital

## Rising stars/upgrades

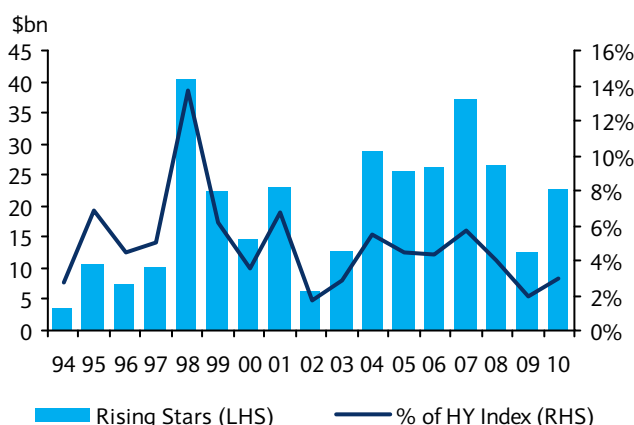
Year-to-date through the end of November, approximately \$20.5bn in par amount has left the US High Yield Index due to an upgrade (we refer to these credits as rising stars). The 2010 total will be nearly double the \$12.5bn total from 2009, a pattern which is similar to the recovery from the previous recession, as 2003 produced almost exactly double the amount of IG upgrades as 2002 (Figure 23). Encouragingly, the positive momentum continued in 2004, as rising stars doubled again by par amount. We expect a similar dynamic in 2011.

Given the pro-cyclical nature of rising star upgrades, one useful approach is to consider the relationship between rising stars and GDP growth. A simple regression of these two variables suggests rising stars should equal about 3.4% of the High Yield Index plus about half of the GDP growth rate. Barclays Capital economists forecast U.S. GDP growth of 2.8% in 2011, which would translate into a rising star forecast of nearly 4.9% of the index, or a dollar forecast of about \$42bn. This feels a bit high to us given the choppiness of the recovery, as well as the potential for heightened event risk that could cause the releveraging of some candidate credits. Combining this analysis with our fundamental views, we shade our forecast slightly lower, to a range of \$30-40bn in par amount of rising stars in 2011.

The gap between BB and BBB spreads is useful for estimating the degree of outperformance that a rising star can produce, and it is important to consider this gap in the context of overall spread levels. We feel the fairest way to assess rising star outperformance potential is to express the gap between BB and BBB spreads as a percentage of the BB spread itself. When viewed in this way, the BB-BBB spread gap remains almost a full standard deviation wide of its 10-year mean of 47%, providing substantial room for gains (Figure 24).

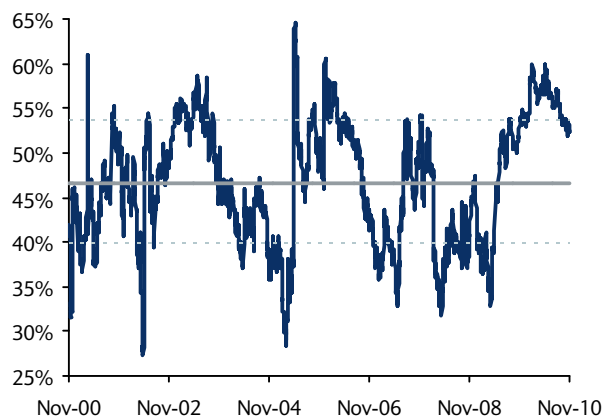
Due to the somewhat conservative nature of the ratings agencies with respect to upgrades, rising stars are generally anticipated by the market far in advance of the actual upgrade event. To determine when the upgrade-related outperformance actually occurs, we examined every rising star credit from 2009 and 2010, focusing on three time periods: the three-month period prior to the ratings change; the week immediately following the upgrade event; and the three-month period that followed. Rising stars tend to outperform the BB index during the three-month period prior to the ratings change, albeit with significant variation around the mean. The week immediately following the upgrade shows a stronger degree of

Figure 23: Rising star notional and percentage of the High Yield Index



Source: Barclays Capital

Figure 24: BB-BBB spread as a percent of BB spread levels



Source: Barclays Capital



outperformance, with less variation and a much higher Sharpe ratio as the demand technical temporarily overwhelms credit-specific factors. Thereafter, rising stars trade like strong BBB credits, outperforming the BBB index but underperforming BBs in 2009 and 2010 as lower rated credits have fared better on average during the sample period.

**Figure 25: Rising star relative performance across various periods around the upgrade**

	-3 Months	+1 Week	+3 Mos vs. BB	+3 Mos vs. BBB
Average Outperformance	0.55%	1.22%	-1.19%	0.71%
Standard Deviation	5.53%	4.20%	7.32%	7.20%
Sharpe Ratio	9.91%	29.06%	-16.26%	9.92%

Source: Barclays Capital

Rising star upgrades in 2009 and 2010 have been clustered in just a few industries, in part due to the small sample size. During the 2003 to 2005 post-recessionary period, upgrades in the consumer and technology industries began to increase during the 3<sup>rd</sup> year of the recovery. We believe these sectors, along with energy, are primed to produce a greater proportion of rising star credits during 2011 than they did in 2010. For a more complete list of specific rising star candidates, please see our focus article on this topic, *When Stars Align*, November 19, 2010.

**Figure 26: Rising stars by industry as a % of the total, 2009-10 and 2011 Forecast**

	2009	2010	2011
Financials	0.0%	41.2%	Lower
Basic Industry/Transportation	0.0%	37.2%	Lower
Capital Goods	24.5%	1.3%	Remains Low
Consumer	0.0%	8.7%	Higher
Utilities & Energy	4.0%	4.0%	Higher
Technology & Communications	71.5%	7.6%	Higher

Source: Barclays Capital

## Cash curves

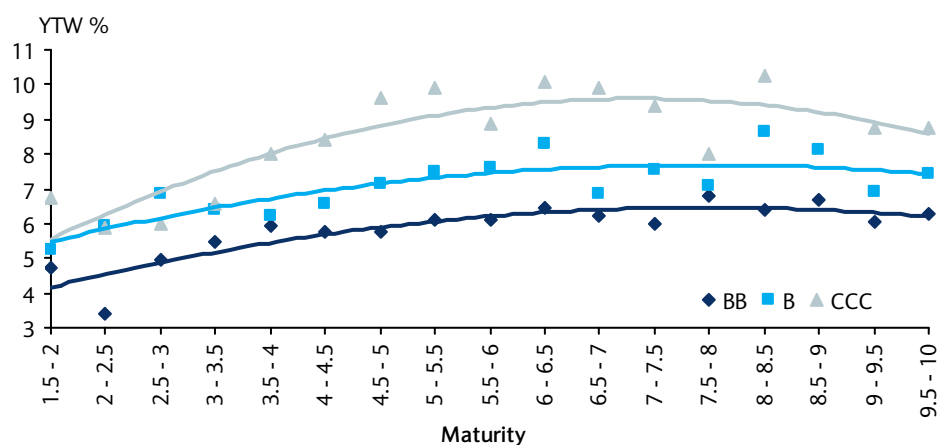
As investors stretch for increased compensation across high yield in 2011, choosing between higher spread duration and lower credit quality is a classic trade-off. With a weak economic recovery and record low rates, this trade-off is especially difficult currently. On the one hand, the outlook for credit, especially lower-rated product, is closely tied to the broader economic outlook, as we discussed above. On the other hand, with rates at record lows, there is a legitimate concern that high duration paper, especially long maturity BB, has significant potential downside risk.

To that end, we examined high yield cash curves by quality and duration. We filter for decent-sized issues (more than \$200mn) of larger issuers (more than \$1bn in par) and find that cash curves are very flat beyond the 5y point, especially when factoring in the current steep rate curve environment (Figure 27). We derive the following observations:

- There is little to no value to be gained from going out the curve past the 5y point, and yields are, in fact, diminishing in the 7-10y range. Bonds in the 7-10y range are significantly more call-constrained than the broader market, as many are higher coupon post-crisis issues that are now trading significantly above par. This point is especially salient given the steepness of the Treasury rates curve, as spreads are therefore even less enticing in that range.

- If credit risk is the main concern, investors should naturally prefer the BB quality bucket. However, the BB yield curve shows diminishing yield pickup relatively early (about 3-4 years in), and BB duration risk increases linearly with maturity. We therefore recommend staying at or about the 3-4y maturity in BB bonds.
- If rate risk is the main concern and investors believe economic data will turn more consistently positive, they should prefer the CCC rating bucket. Triple-Cs have lower duration owing to their wider spread cushion, and we expect them to absorb the first leg up in rates. We believe the 4.5–5.5y part of the curve offers an attractive balance of yield compensation for the credit and duration exposure.

Figure 27: Cash yield curves by credit quality



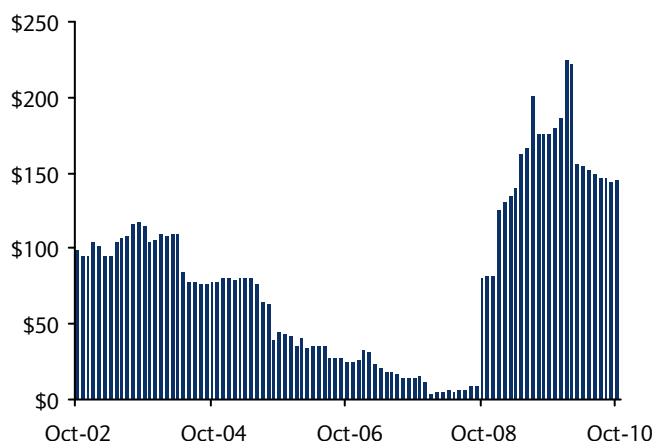
Source: Barclays Capital

## Distressed opportunity set shrinking

Default rates are headed towards 2% from an all-time high of over 14% a year ago. The opportunity set for distressed debt investors in the bond market is shrinking in conjunction with the default rate. While the Moody's Bankrupt Bond Index (BBI) still stands at \$146bn, it has declined 22% by par year-to-date (Figure 28). This number is deceptively high, though, since the average price is \$31, making the market value only \$46bn. In addition, Lehman Brothers represents 62% of the par amount. The next largest issuers as of the end of October are Washington Mutual at 12% and Abitibi-Bowater at 4%. These will both be near-term emergencies or cash distributions. Without these two credits, the market value of defaulted debt would be less than \$35bn. With our estimate of only 2.0-2.5% defaults, there should be less than \$20bn of par notional and as little as \$5-10bn of new market value opportunities in 2011. This is consistent with only 2.5% of our High Yield Index trading below 70 (Figure 29).

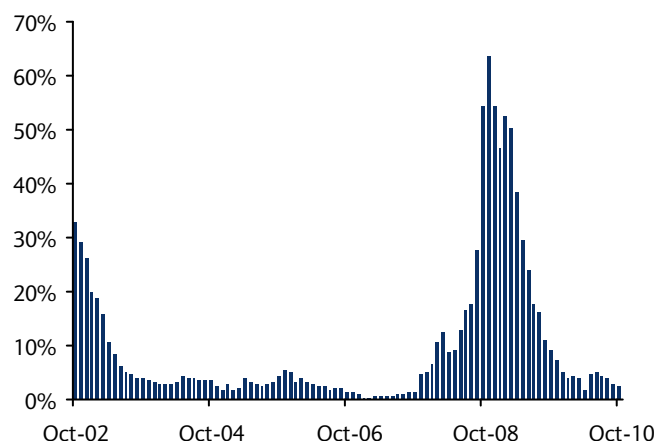
The dearth of distressed paper leaves us asking a similar question to last year, namely, towards what will distressed funds gravitate? In 2010, the BBI beat the rest of the market by returning 18.6% through October. While distressed investors obviously profited from their investments, the lack of capital has led to ballooning cash balances. From a sector standpoint, financials continue to be a focus in both the performing and distressed markets. Lehman Brothers remains far from any resolution. Distressed funds also participated in the huge rally in CLO liabilities and equity of short-dated HYCDX and LCDX tranches. In sell-offs during 2010, these investors preferred loans over bonds, but the loan market has only \$25-30bn of paper trading below \$70, including defaulted and performing loans.

Figure 28: Moody's Bankrupt Bond Index by par (\$bn)



Source: Moody's

Figure 29: Percent of US High Yield Index trading below 70



Source: Barclays Capital

In our view, the only thing that will prevent distressed cash balances from ballooning immediately in early 2011 will be re-organized (re-org) equities. While emergence from bankruptcy is conventionally thought of as the end of the distressed life cycle, for many companies, trading is restricted post-emergence. For those companies that are still private or whose stock is restricted in relation to a rights offering, the risk has not flowed into the true public equity market. The auto parts market is a good example of this phenomenon, with several companies trading in the re-org equity market. In part due to the lack of liquidity, these companies trade at multiples that represent a discount to their industry peers and, therefore, should have some upside when restrictions subside.

While there are near-term opportunities in the re-org equity market, they are insufficient to cover what we believe is a large amount of uninvested capital in the \$100+ bn that is in distressed and restructuring funds, according to HFR estimates. We continue to believe that the mortgage market is a prime opportunity, as evidenced by the recent funds raised by PIMCO, DoubleLine and Cargill to purchase distressed mortgages off the books of banks. In addition, with the struggles of certain European sovereigns and banks, distressed funds are increasing their presence abroad. Finally, we believe there are potential opportunities for distressed investors in the municipals market, but expect only significant distressed participation in the case of an actual default.

## Derivatives

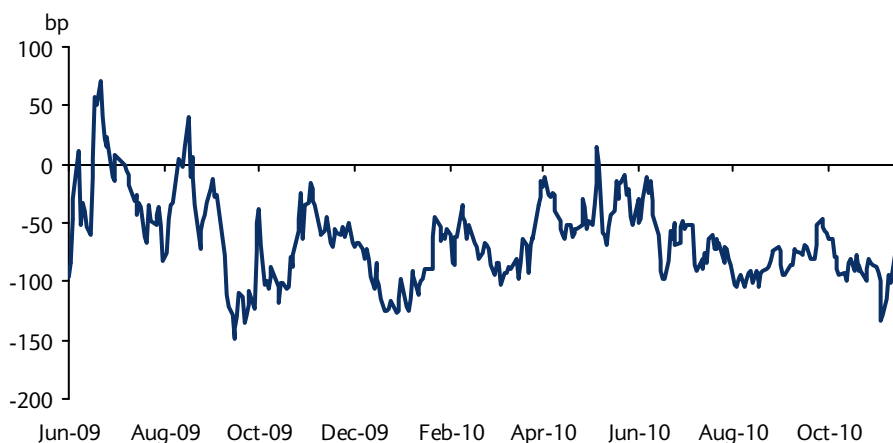
The past year brought renewed stability to the CDS market, following a credit crisis that tested investor confidence in the product's future. Obviously, the economic recovery played a key role in reviving credit derivative markets, and, while the implementation details of the Dodd-Frank financial reform bill remain to be determined, we believe the expectation of reduced counterparty risk due to central clearing has also helped. The Lincoln amendment, which will require high yield CDS to be traded out of a separately capitalized entity, may yet bring increased volatility to that market. However, we remain hopeful that regulators will strive to preserve the product's usefulness as they write specific rules.

## Basis

A few competing factors have pulled the high yield basis in opposite directions (Figure 30). On the regulatory side, the effect is for the basis to get more positive, broadly. Central clearing will likely eliminate counterparty risk and increase margins, both of which should lead CDS wider relative to cash, in our view.

On the other hand, the rally in spreads favors a more negative basis. With the average bond in the U.S. High Yield Index trading above par, the cash market has become increasingly call-constrained, as discussed above. High dollar price bonds also suffer from negative convexity, making them the less attractive alternative for going long credit. If bonds cannot benefit from further credit improvement, they will appear cheap to CDS in spread terms. Unless bonds trade off materially, which we do not expect, these factors may weigh more heavily on the basis than the regulatory changes in the coming year. In Figure 31, we identify some examples of bonds trading near their next call price with a close to even basis, where we would advise long investors to swap into CDS.

**Figure 30: High yield basis**



Note: Basis is calculated as the difference between the on-the-run 5y CDX spread and the U.S. High Yield Index OAS.  
Source: Barclays Capital

**Figure 31: Bonds trading near or above next call price with close to even basis**

Company	Coupon	Maturity	Bond Price	Next Call Price	Px - Next Call Px	CDS sprd	Z-sprd	CDS-ZSPR
Supervalu	7.500	Nov '14	101.0	103.8	-2.8	575	633	-57
American Axle	7.875	Mar '17	102.5	103.9	-1.4	564	589	-25
Goodyear Tire	10.500	May '16	111.7	107.9	3.8	655	663	-8
Mediacom	8.500	Oct '15	101.0	104.3	-3.2	728	726	2
Toys 'R Us	7.380	Sep '16	103.7	103.7	0.0	519	499	19
NRG Energy	7.250	Feb '14	102.4	103.6	-1.3	403	355	48
Iron Mountain	7.750	Jan '15	100.6	101.3	-0.7	319	257	62
Advanced Micro Devices	8.125	Dec '17	107.0	104.1	2.9	556	492	65

Source: Barclays Capital

## CDS curves

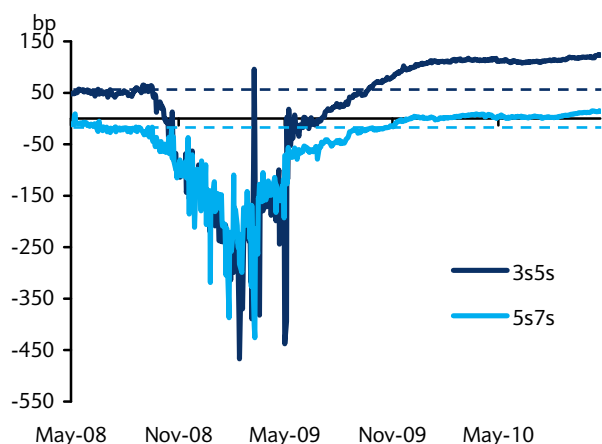
Admittedly, much of the liquidity in the CDS market remains centered on the 5y point. That said, sufficient liquidity exists in some off-the-run maturities such as 3 years and 7 years, making those feasible legs in a curve trade. Constraining our analysis to those points, we find 3s5s and 5s7s to be steep relative to pre-crisis levels (Figure 32).

In order to zero in on specific names, we examine forward breakeven levels implied by traded spreads. For example, looking at 3s5s specifically, we can infer the level at which 2y CDS must trade in 3 years for a 3s5s flattener to break even. Plotting those 2y breakevens versus current 2y spreads (Figure 33) shows us two things. First, current 3s5s levels imply that 2y levels will widen, as every single credit sits above the 45-degree line. Second, we can also identify which names are especially steep, and, in our view, the best candidates for a 3s5s flattener; Dillard's, Aramark, AK Steel, Levi, and First Data all look attractive in that context. Similarly, the 2y forward implied by 5s7s makes Dillard's and Levi look steep in the back end of the curve, as well as Avis and ArvinMeritor. Steepness in the back end of the curve can also be an opportunity for long investors to pick up additional spread. Selling longer-dated protection has two additional benefits. Margins on new trades are set to increase due to clearing, but trades done prior to mandatory clearing will have their lower margins grandfathered. In addition, for investors looking to express a ~2y view, the trade allows an exit in the most liquid part of the curve.

## HYCDX versus cash

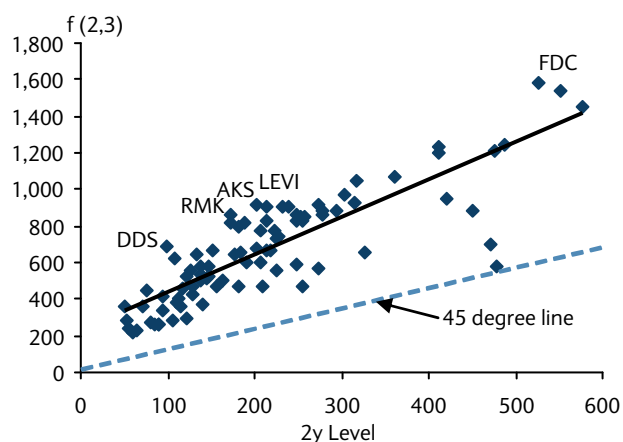
The HYCDX index is commonly used as a placeholder for fund inflows or as a cash market hedge, and investors therefore expect the derivatives index to track cash relatively well. However, many factors can lead these two indices to diverge, as they did in 2008-09 (see *U.S. Credit Alpha*, 30 October 2009 for details). While HYCDX (+8.86%) lagged the U.S. High Yield Index (+13.51%) in total returns again this year (through November 26), the strong rally in Treasuries was the main contributor to the difference, and derivatives tracked cash excess returns (+6.74%) quite well. Other factors, such as the cash-CDS basis (Figure 30) and the CDX-intrinsic basis (Figure 36), were somewhat volatile but did not drive much of a performance gap.

Figure 32: Average 3s5s and 5s7s for HYCDX constituents



Note: HYCDX constituent list based on all names in HYCDX during the period. Credits are removed from the average post-default. Source: Barclays Capital

Figure 33: 3s5s-implied 2y forward breakeven versus 2y



Source: Barclays Capital

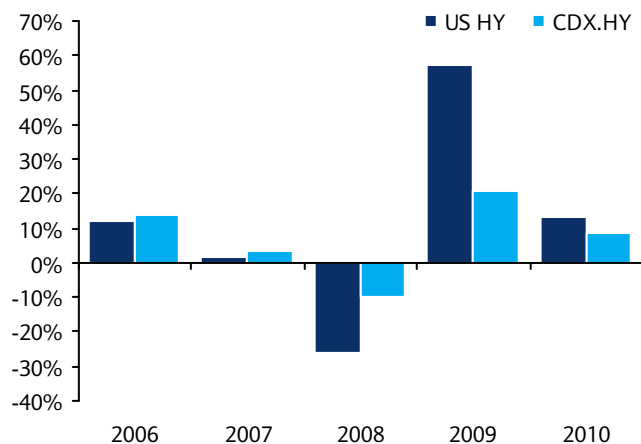
**Figure 34: Volatilities of the Cash and Derivatives Indices**

Annualized Volatility	US HY	CDX.HY
Daily Returns	6.5%	10.7%
Monthly Returns	13.5%	12.5%

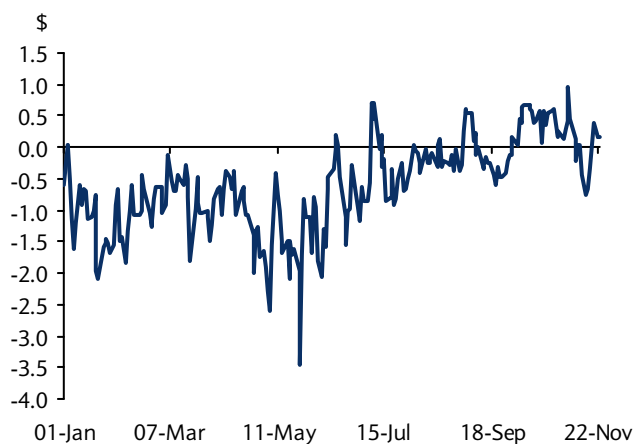
Source: Barclays Capital

Beyond the bases, compositional differences, and the higher rates sensitivity in cash, these two markets have different levels of liquidity, which clearly affect correlations and volatilities. HYCDX, the more liquid of the two, tends to lead cash most days, especially in the larger moves. At the daily level, this manifests itself in a higher volatility for HYCDX (Figure 35), and a lower correlation (0.47, since October 2005). However, the cash market does eventually catch up; monthly volatilities are commensurate, and monthly correlation is 0.73.

Next year, we expect the derivative index to remain well synched to cash market excess returns. However, we believe the Fed's program of quantitative easing may produce significant rates volatility, especially mid-year, when bond buying may come to an end. Therefore, we caution that total returns may once again diverge due to rates.

**Figure 35: Annual total returns**

Note: 2010 returns as of November 26, 2010. Source: Barclays Capital

**Figure 36: CDX-intrinsic basis**

Source: Barclays Capital

## LEVERAGED LOANS

Bradley Rogoff, CFA

+1 212 412 7921

bradley.rogoff@barcap.com

Gautam Kakodkar

+1 212 412 7937

gautam.kakodkar@barcap.com

Eric Gross

+1 212 412 7997

eric.gross@barcap.com

Mike Kessler

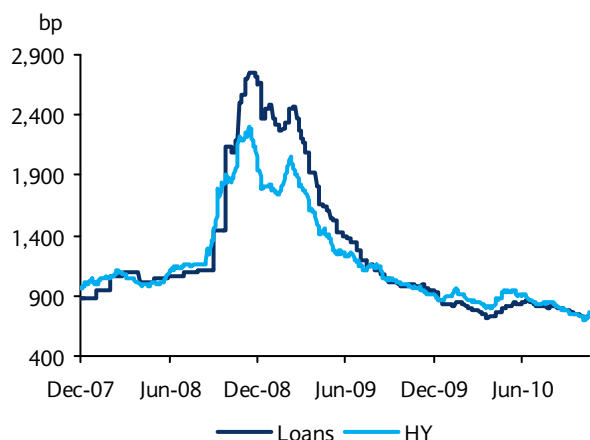
+1 212 412 3031

michael.kessler@barcap.com

### Moving from total returns to income

- We believe the risk/reward offered by leveraged loans relative to other asset classes is compelling given the lower volatility and duration, in addition to the secured position in the capital structure. Carry plus returns on loans in a low rate environment is attractive for current income seeking investors. Value in the loan market can be found predominantly in new issuance, with features such as call protection, Libor floors, and OIDs enhancing the relative appeal versus high yield bonds (Figures 1 and 2).
- Our base case for returns is 5-7% for 2011, mostly from coupon, with a modest contribution from prepayments and pull-to-par. We expect a benign institutional loan default rate of 2-2.5%.
- Loan issuers will be able to repay, refinance, and amend-and-extend their maturities within the confines of the loan and bond markets. Even in the absence of a dramatic increase in new CLO origination or a revival of favorable leverage terms for total return swaps (TRS), higher quality companies should be able to tackle their maturity walls.
- We estimate institutional loan issuance of \$150-175bn in 2011. Refinancing is likely to remain a major component of supply, supplemented by an increase in other speculative uses – namely dividend recap, leveraged buyout, and merger and acquisition-related issuance. On the pro-rata front, we expect a reasonable rebound from 2010 levels.
- Primary loans offer the most relative value versus high yield. In the secondary market, we recommend loan-bond swaps for those highly leveraged credits in which we are comfortable with the underlying asset value; we recommend investing in the secured part of the capital structure to take advantage of relative recovery trends.
- CLOs, especially those within their re-investment period, are likely to continue to maintain or improve deals, remaining active in the primary and secondary markets. CLOs should have the flexibility to engage in certain forms of trading after their reinvestment period is over, especially amend-and-extend transactions.
- There was a small trickle of new CLO deals in 2010, and we do not expect this trend to change significantly in the near term. Liability spreads need to tighten further to make the asset-liability arbitrage and resulting equity returns compelling. Returns in the mid-teens would attract more equity investors, and issuance could reach \$10-20bn in 2011. The limited sample of “new normal” structures are distinctly simpler with lower leverage.
- If risk retention requirements of the Dodd-Frank Act are significant for CLOs in the final rule writing, the bond-for-loan trade should continue at a rapid pace when the primary market is open. Depending on the final form, risk retention provisions could have a significant negative effect on new CLO origination.

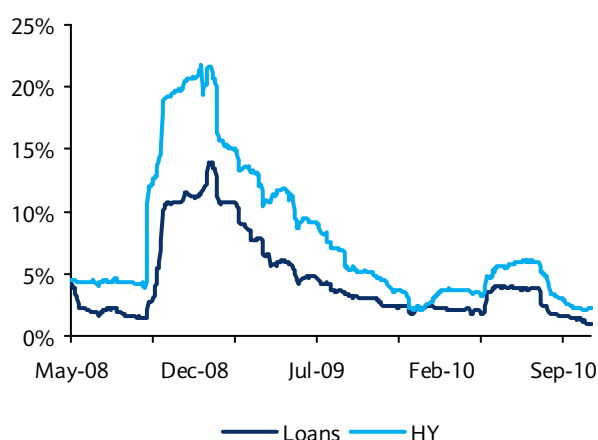
Figure 1: Loan/Bond yields



Note: Yield on loans is calculated by adding the pull-to-par over a 3-year average life to matched maturity swap rate and average coupon (grossed up by current discount from par). Yield to worst on bonds.

Source: S&P LCD, S&P/LSTA Loan Index, Barclays Capital

Figure 2: Loan/Bond price volatility



Note: Price volatility is calculated by taking the annualized trailing 3-month standard deviation of the daily percentage change (ie, the difference between the natural log of the present and prior day's prices).

Source: Barclays Capital

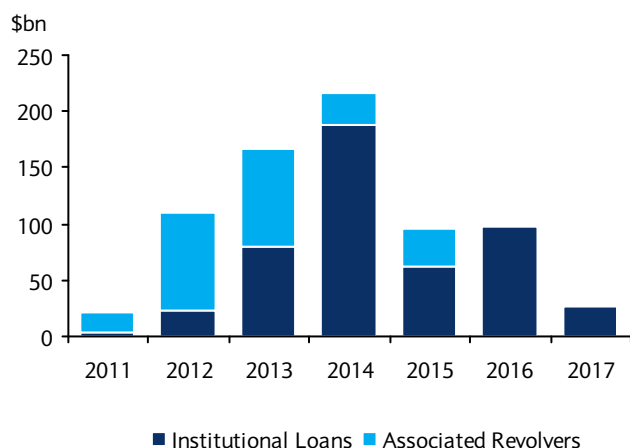
## Carry plus returns and benign defaults

Our base case for returns is 5-7% for 2011, mostly from coupon, with a modest contribution from prepayments and pull-to-par. We assume a 20% paydown rate for 2011, which adds 1% to the total return annually assuming paydowns are applied to loans with average non-distressed prices. Amendments (including covenant relief, waivers, and amend-and-extends) are likely to remain supportive of loan valuations, and coupons to rise further. We assume 20% amendments with a 25bp fee and 125bp repricing, adding to the current 370bp spread. Expectations for lower rates across the curve have been a negative for loan returns. Barclays Capital's rates strategists now expect the Fed to remain on hold well into 2012. We assume an average 3m Libor of 0.80% in 2011.

Similar to high yield, we estimate institutional loan default rates will be 2-2.5% in 2011, which would have a smaller effect on loan returns than bond returns because of the higher recovery rate (70% versus 40%). We expect mid-market issuer default rates to continue to trend slightly higher than large cap. Our default rate model, described in further detail in *U.S. Credit Alpha*, October 16, 2009, is a hybrid of a top-down factor-driven forecast and a fundamental bottom-up analysis of credits in the LCDX. S&P LCD's LTM issuer-weighted loan default rate has fallen sharply from 8.1% at the end 2009 to 3.2% for the 12m period ending October 2010. To arrive at our default rate, we began with a fundamental approach similar to our high yield methodology. We flagged credits in the LCDX based on their likelihood of default over different horizons. Our probability-weighted bottom-up approach arrived at a default rate of about 2.5%. Our macro default arrives at a similar LTM default rate of 2.0%. Default rates may climb in 2013 and 2014, but we do not expect an increase that is much above long-term averages of approximately 4%.

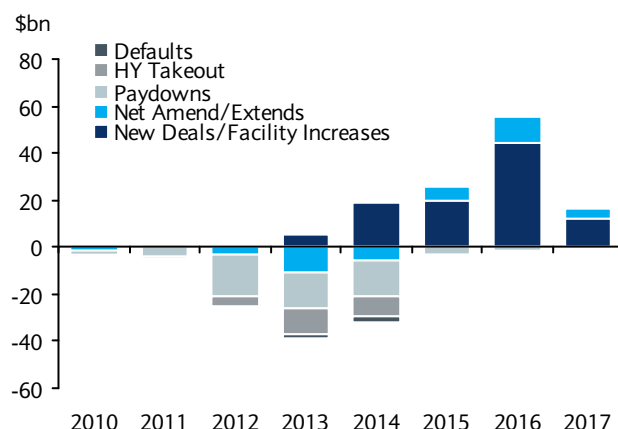


Figure 3: The institutional loan and revolver maturity wall



Source: S&amp;P LCD, S&amp;P/LSTA Performing Loan Index, Barclays Capital

Figure 4: Changes to institutional loan maturities in 2010



Source: S&amp;P LCD, S&amp;P/LSTA Performing Loan Index, Barclays Capital

## Scaling the maturity wall

Loan issuers will be able to repay, refinance, and amend-and-extend their maturities within the confines of the loan and bond markets. Year-to-date in 2010, an estimated \$40bn of the performing S&P/LSTA Institutional Loan Index was repaid with high yield bond proceeds, and \$38bn was extended approximately two years, allowing issuers to push out their 2012-14 maturity walls. This 2012-14 institutional loan maturity wall currently amounts to \$290bn, down from \$405bn at year-end 2009, with associated revolvers expiring approximately one year earlier (Figures 3 and 4). While the primary market remains open, it is difficult to foresee defaults for all but the most unsustainable LBO-era capital structures and some lower rated CCC issuers. Sponsors will continue to employ a mixed strategy of fixing portfolio company balance sheets by paying down loans and bonds while seeking partial exits.

Even in the absence of a dramatic increase in new CLO origination or a revival of favorable leverage terms for total return swap (TRS) investors (neither of which we expect), higher quality companies should be able to tackle their maturity walls. We expect the loans-to-bonds (especially secured) theme to persist until the loan maturity wall is addressed and believe the combined loan and bond primary markets will be able to handle the refinancing burden.

## Demanding supply, supplying demand

We estimate institutional loan issuance will be \$150-175bn in 2011. Refinancing is likely to remain a major component of supply, supplemented by an increase in other speculative uses – namely dividend recap, leveraged buyout, and merger and acquisition-related issuance. Releveraging risk has returned steadily this year in the form of LBOs, share buybacks, and dividend recaps. Approximately \$33bn of high yield (\$8bn) and loan (\$25bn) issuance this year has supported dividend deals and stock repurchases. In arriving at our estimates, we take into account the relative dynamics between the high yield and loan markets, the maturity wall, fund flows, expected defaults and recoveries, pre-payments, Libor, amend-and-extends, the restricted ability of CLOs to reinvest after reinvestment period, and market growth due to M&A and buyout activity.

On the pro-rata front, we expect a reasonable rebound from 2010 levels. As lending standards ease and improving corporate fundamentals drive higher demand for C&I loans related to investment and capital expenditure, we expect the share of term loan As to pick up, especially for higher-rated issuers.

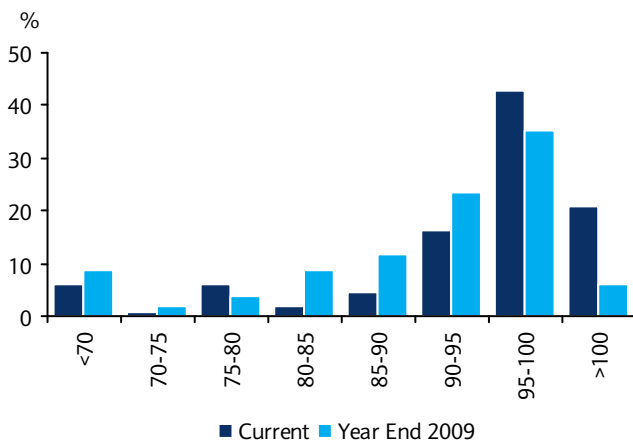
We expect demand to remain healthy from loan prime funds, hedge funds, BDCs, and secondary CLOs. We also expect some incremental demand from high yield managers and private equity. As yield differentials compress, the relative risk/reward of loans compared with other asset classes has increasingly been drawing the attention of a wider audience. Interest is apparent as loan mutual funds (open- and closed-end) retail cash inflows have swelled, increasing net assets under management by 38%, to \$45bn from \$33bn at the end of 2009. Private equity inroads have persisted with the acquisition of CLO management contracts, equity fundraising for middle-market focused BDC, and other closed-end floating rate funds.

However, in the absence of a primary structured bid, there may be negative net issuance in loans on the supply/demand imbalance, highlighted by bond-for-loan takeouts and the shrinking capacity of the secondary CLO market to absorb new issuance and reinvest higher repayments (23% repayment rate year-to-date 2010). The CLO market accounts for approximately half of the \$515bn institutional loan market and provides non-recourse leverage that can be thought of as permanent capital for 10+ years. By the end of 2012, more than half of CLOs will no longer be in their reinvestment period. We expect the total size of the loan market may gradually shrink in the absence of demand from structured investments, as it has diminished by \$80bn over the past two years.

## Recommendations: Primary loans, loan/bond swaps

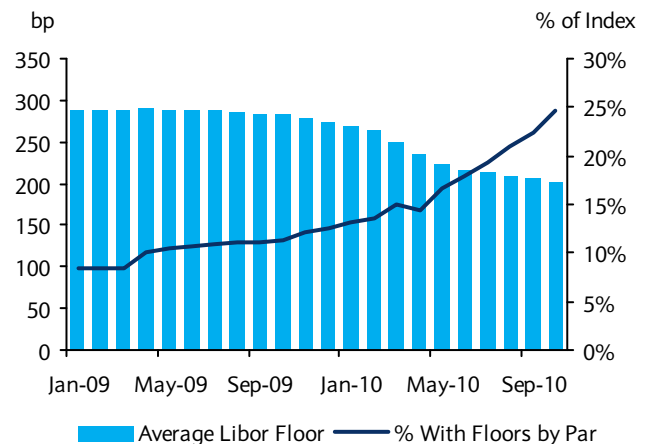
Value in the loan market is predominantly in new issuance, with features such as call protection, Libor floors, and OIDs enhancing the relative appeal versus high yield. The loan rally this past year has left few secondary loans trading at a low dollar price (Figures 5 and 6). Analyzing the Barclays Institutional Loan Index, we see that 22% of loans trade over par (especially Libor floor loans) and another 44% are priced at \$95-100. Only a third of the index displays some degree of positive convexity (16% from \$90-95 and 16% under \$90). The limited upside in secondary loans has led total return investors to move their focus to the

Figure 5: Loan index price distribution by par



Source: Barclays Capital, Barclays Capital Loan Index

Figure 6: Libor floors in outstanding institutional loans



Source: Barclays Capital, S&P/LSTA Loan Index

primary market. CLOs have also switched from building par to increasing diversity through the new issue market. Loans are inherently a negatively convex product given the lack of call protection that caps the upside over par. The introduction of modest call protection in new issue loans is a positive sign for the asset class since it will make them more attractive to a wider audience, reducing the risk of refinancing or repricing at lower spreads.

To illustrate the relative value offered by new-issue loans, we sampled recent double-B rated bond and loan issues (Figure 7). The presence of Libor floors in loans boosted their current yields to 6-7%. Meanwhile, the current yield on new issue high yield bonds is also 6-7%, but the average coupon has been receding. For example, double-B rated CMS Energy and Jarden issued senior notes recently with low coupons that priced to yield 5-6%. While total yields on loans are lower, the current yields on those with Libor floors have recently been more comparable with high yield bonds. That said, the level of the Libor floor has been falling as well. Please refer to our focus piece from October 1, 2010, [Getting More from a Libor Floor?](#) Secondary CLOs, managing to equity's best interests, have also preferred the higher current yield of Libor-floor loans.

**Figure 7: BB-rated loan/high yield bond issuance statistics, October/November 2010**

BB rated	Size (\$mn)	Coupon	Floor	Current yield	Yield
Institutional loan	600	L+430	1.7%	6.0%	6.3%
Unsecured bond	360	6.4%	NA	6.4%	6.4%

Note: Yield to three-year repayment with matched maturity swap rate and on loans, yield to maturity on bonds. Sample size of secured bond issuance was too small over the timeframe. Source: Barclays Capital

In the secondary market, for those highly leveraged credits in which we are comfortable with the underlying asset value, we recommend investing in the secured part of the capital structure to take advantage of relative recovery trends. A slow growth scenario may be negative for the survival probability of many overleveraged credits, but a strong bid for secured assets should greatly limit the downside in the loans of these companies. Loan price volatility remains significantly lower than that of high yield. Climbing recovery values are increasingly supportive of loan prices in highly leveraged capital structures, while unsecured recoveries have come down after being artificially elevated in the second half of 2009 due to an abundance of debt exchanges. With enterprise values still under pressure, the difference between secured and unsecured recoveries should continue to increase over time.

Sensitivity to rates is another factor to consider when allocating capital between loans and bonds. Loans provide a floating-rate hedge against rising rates, while Libor floors provide a bottom for the coupon in lower rate regimes, such as the current environment. A more measured Fed tightening to accommodate macro concerns would slow the speed of rate hikes, benefiting fixed-rate high yield bonds in the short run while curbing floating-rate loan returns. While expectations for lower rates across the curve have been a negative for loans, those with Libor floors are shielded. If rates do rise, non-Libor floor loans have durations close to zero since they float and the benchmark Libor rate resets periodically.

## The shrinking structured bid

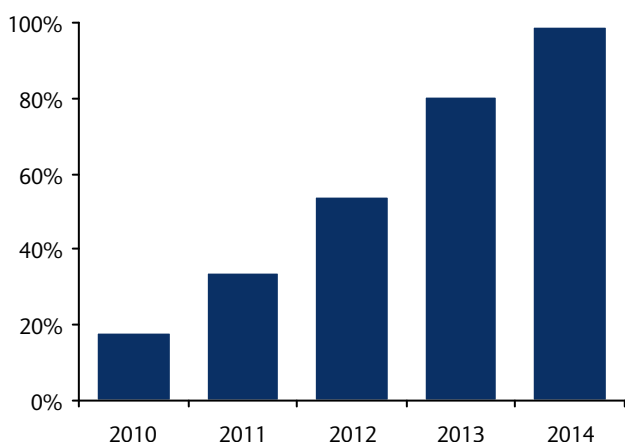
Secondary CLOs should be able to soak up a significant amount of loan supply, with potential incremental demand coming from new CLOs and TRS vehicles. We estimate that secondary CLOs should be able to support \$55-70bn in loan supply in 2011. However, over the next 2-3 years, secondary CLO capacity will shrink meaningfully. Liability tranche repayments will erode the CLO share of the loan market as more than one-third of US CLOs end reinvestment periods in 2011, more than half in 2012, and finally all become static in 2013-14 (Figure 8). While there is some leeway to re-invest optional prepayments and credit risk obligation<sup>21</sup> (CRO) sale proceeds after the reinvestment period, loan repayments will have to be soaked up by capital from the non-CLO institutional loan market.

## Secondary CLO demand

The fundamental rally in the loan market improved the collateral quality of CLO portfolios significantly this past year. Higher asset prices, along with par building, allowed a majority of CLOs to heal OC tests and diminish the CCC haircut effect. This released deferred and other sub fees and drove higher equity distributions, buoying CLO valuations and leading to a significant tranche spread tightening across the capital structure (Figure 9). Rising prepayments increased cash balances, and the burgeoning loan supply meant CLOs could reinvest in higher current yielding Libor floor loans, improving their asset spreads further. Cash balances in US cash flow CLOs are approximately 3-5% of assets. With the rampant bond-for-loan takeout and new loan issuance, we expect obligor diversification to continue. According to Moody's October *CLO Interest* newsletter, only six CLOs triggered an event of default (EoD) through the recession, with three subsequently being cured. Improved OC levels and the mitigation of CCC haircuts should limit the risk of EoD.

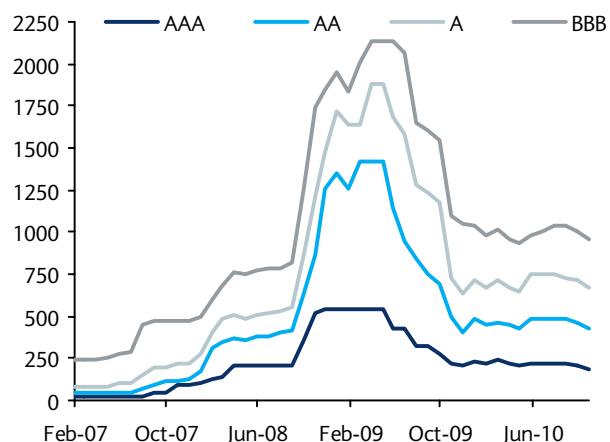
We expect CLOs within their re-investment period to continue to maintain or improve deals, remaining active in the primary and secondary markets. After focusing on par building to fix OC test and alleviating CCC haircuts in 2010, CLO managers will continue to

Figure 8: Cumulative % by par of US CLOs ending reinvestment



Note: Based on a sample set of 614 US CLOs (~\$250bn by par), as of November 19, 2010. Source: Barclays Capital

Figure 9: US CLO spread performance by rating (bp)



Source: Barclays Capital

<sup>21</sup> CRO: A credit risk obligation is one that, in the manager's judgment, has significant risk of declining in credit quality and becoming a defaulted asset and meets one of the following conditions: 1) has been downgraded or put on downgrade watch since purchase; 2) has underperformed a nationally recognized benchmark (e.g., S&P/LSTA Leveraged Loan Index) or 3) has decreased in price by a specified percentage.

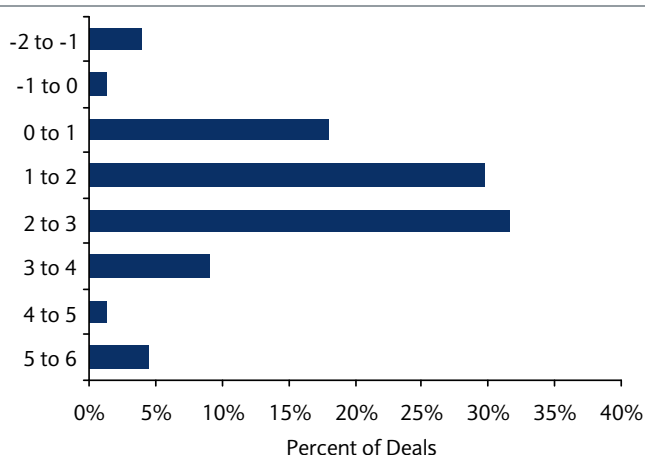
improve collateral quality through building diversity, adding higher current yielding Libor floor loans, and through amend-and-extends. Most CLOs within their reinvestment period can reinvest principal prepayment and sale proceeds from credit risk/credit improved obligations (CRO/CIO)<sup>22</sup>. Reinvestment criteria include meeting/maintaining or improving coverage (OC/IC), WAL (weighted average life), and collateral quality (WARF/WAS/CCC) tests. We estimate the average WAL test cushion is approximately two years (Figure 10) – the average deal WAL is ~4 years, which is below the average WAL test trigger level of ~6 years. **Hence, we believe most CLOs will actively try to buy primary and secondary loans to improve their collateral quality over the next 1-2 years. In our view, the best candidates are higher-rated loans with Libor floors, which have tenors that maintain or improve the WAL.**

After the reinvestment period is over, we believe CLOs will continue to have the flexibility to engage in certain forms of trading that maintain or improve deals, especially amend-and-extend transactions. In order for CLOs to engage in post-reinvestment trading, the restricted trading condition (degree of tranche ratings downgrades) appears to be the most limiting. Further restrictions include passing the OC test and, in some cases, the WAL test on the last day of the reinvestment period. If these conditions are met, most CLOs outside their reinvestment period can reinvest principal prepayment and sale proceeds from credit risk assets. Reinvestment criteria call for the substituted asset to have a shorter or equal maturity, an equal par amount, and equal or improved ratings. Since CLO managers do not typically consider amend-and-extend transactions as a sale/reinvestment, the former constraints do not apply to those situations.

### Primary demand

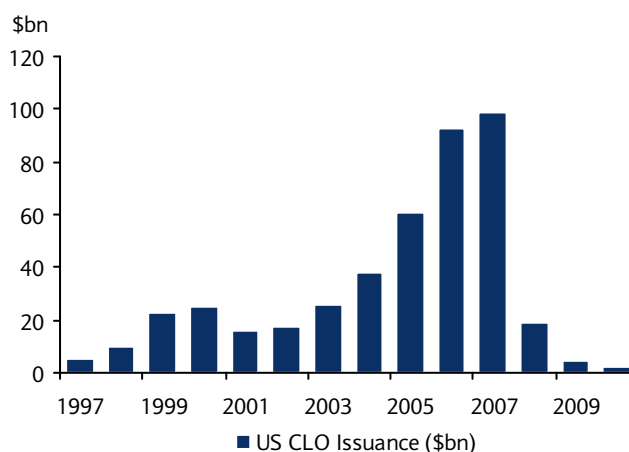
There was a small trickle of new CLO deals and partial refinancing in 2010, and we do not expect this trend to change significantly in the near term. Liability spreads need to tighten further to make the asset-liability arbitrage and resulting equity compelling. Equity returns in the mid-teens could attract more equity investors, and issuance could reach \$10-\$20bn in 2011. The limited sample of “new normal” structures are distinctly simpler than previous vintages. While deal structures are still evolving, new deals in general

Figure 10: WAL test cushion for US CLOs



Note: Based on a sample set of 200 US CLO deals in our universe, as of November 19, 2010. Source: Barclays Capital

Figure 11: US CLO issuance



Source: Moody's and S&P/LCD, LSTA, Barclays Capital

<sup>22</sup> CIO: A credit improved obligation is one that, in the manager's judgment, has improved significantly in credit quality since purchase and meets one of the following conditions: 1) has been upgraded or put on upgrade watch since purchase; 2) has outperformed a nationally recognized benchmark; or 3) has increased in price by a specified percentage and sale would result in trading gains.

have had higher subordination, lower leverage (thicker equity tranche), shorter re-investment (2-3 years) and non-call periods (1-2 years); more restrictive buckets for second liens, unsecured, and revolvers; and lower fees. The CCC limits are slightly higher in some cases, reflecting the current makeup of the market.

That said, the resurrection of the primary structured demand is still up in the air, especially due the uncertain financial regulation climate. On the TRS front, while financing spreads of L+100-150bp and haircuts of 20-30% might not present as attractive deal economics as pre-crisis terms, spread compression may lead to the return of TRS leveraged structures (the \$100bn+ in loan TRS issued prior 2008 have almost completely run-off). Libor floors in loans are likely to benefit TRS and primary CLOs, enhancing current yield in a low rate environment. New TRS and CLO vehicles could create some incremental demand for leveraged loans, but not to the levels seen in 2005-07 (Figure 11).

### **Effect of financial regulation**

If risk retention requirements of the Dodd-Frank Act are significant for CLOs in the final rule writing, the bond-for-loan trade should continue at a rapid pace when the primary market is open. Depending on the final form, risk retention provisions could have a **significant negative effect on new CLO origination**. If CLO origination is hampered, the obvious conclusion is that the bond-for-loan trade will need to continue in order to cope with the maturity wall. Generally, this would be negative for lending to corporates and could be exacerbated by banks' inability to hedge individual loans if CDS on less liquid non-cleared credits become prohibitively expensive.

*Please refer to the "Structured Credit and Volatility" section for a detailed discussion on secondary CLO performance, our primary CLO outlook, and the effect of risk retention rules on CLOs.*

## STRUCTURED CREDIT AND VOLATILITY

### Testing the waters

#### Europe

Matthew Leeming

+44 (0) 20 7773 9320

matthew.leeming@barcap.com

Arup Ghosh

+44 (0) 20 7773 6275

arup.ghosh@barcap.com

Dominik Winnicki

+44 (0) 20 3134 9716

Dominik.Winnicki@barcap.com

#### U.S.

Gautam Kakodkar

+1 212 412 7937

gautam.kakodkar@barcap.com

Praveen Korapaty

+1 212 412 7942

praveen.korapaty@barcap.com

- **Multiple upcoming regulatory changes, including risk retention rules for securitisations and increases in risk weights, are likely to impede the revival of primary synthetic CDO or CLO issuance in 2011.**
- **Secondary CLO market conditions continue to improve and we expect further activity next year. Primary issuance should remain muted; we forecast \$10-20bn of new deals.**
- **Given the low and uncertain interest rate environment, we expect ongoing interest in simple, low-leverage, single-name CLNs as a way to generate credit exposure, enhance yield and manage interest rate risk.**
- **In options, we like: opportunistic 1x2 payer spreads as moderate spread-widening hedges and to take advantage of steep volatility skews; buying equity index calls funded by CDS index receivers; and selling iTraxx Main straddles to fund EUR/USD FX straddles when cross-asset correlations are high to monetise the discrepancy in volatility risk premiums between the two markets.**
- **In tranche markets, we recommend that investors sell protection on junior CDX IG9, CDX HY9 and CDX HY10 tranches, given our low default rate outlook for 2011.**

### Talking 'bout regulation

In last year's outlook we highlighted yield enhancement and regulatory uncertainty as two key themes for structured credit in 2010. These are just as relevant today, if not more so.

The hunt for yield has intensified as interest rates have declined further, the credit risk spectrum has compressed and default rates have fallen. Consequently, in 2011 we expect growing interest in simple, low-leverage structures designed to boost yield. Furthermore, with rate risk increasingly asymmetric, credit investor concerns are growing about the impact of rising rates on total returns. The application of credit/interest rate hybrid structures is therefore likely to become more popular as investors seek to enhance returns through credit exposure while simultaneously managing rate risk.

Regulatory developments remain critical to the evolution of structured credit. Under the Dodd-Frank act in the US and CRD II (the first set of amendments to the Capital Requirements Directive, effective 1 January 2011) in Europe, risk retention constraints for new securitisations will have a bearing on the economic viability of primary CLOs. New issuance in the synthetic CDO market has been virtually non-existent and the number of operative dealers continues to shrink in advance of what they still view as excessive capital charges under the Comprehensive Risk Measure (CRM - now postponed until end-2011). Solvency II will likely garner more headlines as rulebook clarity develops, the implementation deadline (end-2012) draws closer and European insurers focus on the investment incentives generated by the new rules. Furthermore, with ongoing bank focus on balance sheet shrinkage, we envisage further bespoke transactions (for instance, the selling-off of portfolio equity risk) aimed at reducing regulatory capital charges.

In 2010, macroeconomic and sovereign-led systemic risks were strong themes that drove relatively high levels of volatility, particularly at the height of the European sovereign crisis in May. This brought into focus the potential use of CDS indices and index options as tools for

managing spread volatility and tail risk. We envisage further analysis and application of these strategies, as the same risk factors extend into next year.

In the sections that follow, we examine the structured credit and volatility products that we think will register the most activity in 2011 and we expand upon some of the themes highlighted above, beginning with a review of the major regulatory changes set to affect the structured credit market.

## Regulatory developments

---

Structured Credit incentives for both issuers and investors will be significantly affected by a number of upcoming changes in regulation. In particular, risk retention rules for CLOs and substantial anticipated increases in capital requirements for synthetic CDOs will likely impede new issuance in these products. Most of the important modifications are now due within the next year or two. We highlight them below.

### **Risk retention rules for CLOs (and other securitisations) set to go live**

Risk retention rules for securitisations are imminent. Under European law, these will take effect on 1 January 2011 as part of CRD II. In the US, the Dodd-Frank act enables comparable regulations that are likely to become effective in mid-2011. Despite the similarities, there are several important differences, with European regulation appearing somewhat more stringent.

In Europe, credit institutions investing in securitised assets must ensure that the originator, sponsor or lender holds an economic interest amounting to at least 5% of the securitisation (eg, through a vertical slice of the tranches). In the absence of such retention, capital charges are expected to be sufficiently punitive so as to make the investment economically unviable. Grandfathering rules will permit existing securitisations to be exempt until the end of 2014, after which any change to the collateral will render the grandfathering protection void. Note that, in Europe, most existing CLOs will have reached their reinvestment period end-dates by then (see Figures 5 and 6 in the CLO subsection below).

In the US, under the Dodd-Frank act passed earlier this year, federal banking agencies (OCC, Fed, and FDIC) and the SEC are to prescribe regulations through a 270-day rule-writing process, and will require that securitizers retain an economic interest in the underlying assets. The securitizer, defined as the issuer or organizer of an asset-backed security, is required to retain 5% of the unhedged credit risk of the assets, although, at the behest of regulators, this can be shared with the originator. In addition, regulators can allow exemptions for a lower degree of risk retention or hedging. However, a number of uncertainties remain. Since this section of the bill was written for the asset-backed market generally and not the CLO market, it is not entirely clear which party to a managed CLO qualifies as the securitizer and which is the originator. The Dodd-Frank Act specifically references CDOs when defining “asset backed securities”. Since there is no explicit exemption for CLOs, it appears likely that they are also included.

Although implementation of risk retention rules is fast approaching, much-needed guidance is still pending from individual regulators on several issues, including the economic interest that must be held, by whom and for which types of securitisation.



### Basel “2.5” changes just around the corner<sup>23</sup>

Risk charges on securitizations and correlation positions are still set to increase, with implementation expected no later than 30 December 2011. Key changes include the following:

- The application of banking book charges for securitizations held on the trading book, which we expect to be more onerous.
- Correlation positions (ie, synthetic CDOs) are to be carved out of the above, as the separate application of CDO charges on the banking book and CDS hedges on the trading book was deemed too punitive. Instead, correlation deals (and associated hedges) will remain under trading book rules, though a supplementary Comprehensive Risk Measure (CRM) will apply (subject to a capital floor, currently under discussion at 8%). Note that CRM was originally to be implemented on 1 January 2011 but this has been postponed for a year.
- Introduction of an Incremental Risk Capital (IRC) add-on for trading book positions to account for default and migration risks. (This excludes positions subject to CRM.)
- Re-securitizations such as CDO-squareds, ABS CDOs, and CLOs that permit a small proportion of other CLOs within their underlying portfolio will have risk weights that are significantly higher than equivalently rated regular securitizations. Leveraged Super Senior positions are also treated as re-securitizations, and are thus also subject to higher charges.

Generally, these changes will mean higher capital charges for securitisations, resecutisations and correlation books and may create economic impediments for new issuance. The number of banks maintaining synthetic CDO books continues to dwindle and, in advance of large rises in capital requirements (3-4 times current levels, under CRM proposals) this is likely to be an ongoing trend. We do not expect to see the re-emergence of CDO-squareds or ABS CDOs.

### Solvency II draws closer

Next year, we anticipate increasing attention on Solvency II, the upcoming solvency regime for European insurers. Results from the latest Quantitative Impact Study, QIS5, are due in March. With the current implementation deadline set for the end of 2012, greater focus on the investment incentives generated by the framework is likely. While high-quality, short-dated corporate credit appears to carry attractive capital charges, Solvency II rules may also spawn renewed interest in structured credit products such as CPPI. With only a 20% capital charge, low-leverage CPPI referencing simple, liquid underlying products may offer attractive risk return profiles relative to a similarly leveraged position in the underlying.

### Collateralised loan obligations

---

Over the course of the credit crisis there has been a distinct switch in CLO market activity. In 2007, all activity was primary and the debt investor base was largely real money. In 2010 the situation is the reverse: most activity is in the secondary market, with hedge funds the main buyers and insurers buying senior tranches in the US. Initial growth in secondary trading volumes was for higher quality paper, but interest is moving down the capital structure as conditions improve, tranche spreads tighten and equity starts to perform again.

---

<sup>23</sup> Note that the BIS treat all of the changes listed under the umbrella term Basel III.

We expect secondary market activity to continue in 2011, with secondary CLO debt increasingly seen as providing an alternative investment opportunity to High Yield bonds<sup>24</sup>. We have also begun to see a tentative revival in primary transactions, although many examples are special cases for balance sheet management or to deal with old warehouses. For this to develop further, the real money investor base needs to redevelop, more available underlying collateral is required, further regulatory clarity is needed, as is a renewed appetite for loan warehousing and further improvement in the asset-liability arbitrage.

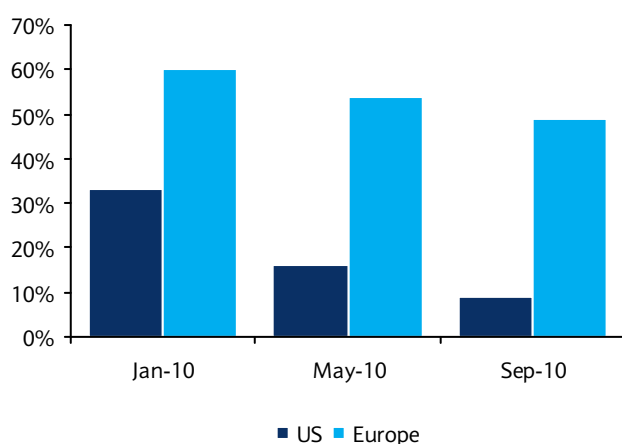
### Secondary market – conditions continue to improve

Collateral improvement, falling default rates and rising prepayment rates in 2010 have contributed to a general improvement in secondary CLO performance over the past year. In tandem, trading volumes have ratcheted up as price discovery has grown and opportunistic sellers (and liquidation agents) have tapped the market via BWICs. We note the following trends:

- Secondary mezzanine CLO spreads have tightened significantly since the start of 2010.
- OC cushions continue to improve, as do triple-C bucket compliance levels. We estimate that 8% of US CLOs are out of OC test compliance, compared with 34% at the beginning of 2010 (Figure 1). Also, 85% of US CLOs have CCC concentrations below the average 7.5% CCC bucket level and, hence, are not subject to haircuts, compared with 38% at the beginning of 2010 (Figure 2).

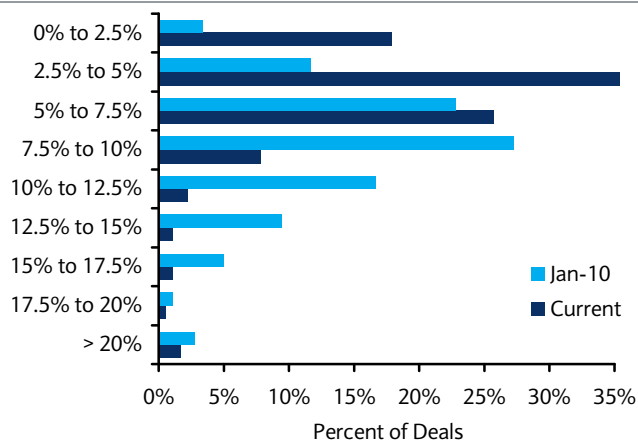
These trends look set to continue through 2011. We anticipate a low loan-default rate next year as banks amend and extend, the low rate environment keeps funding costs down and the loan maturity mountain remains a few years away. Furthermore, in its September CLO Interest newsletter, Moody's said that despite cracks in the economic outlook, it expects CLO ratings to drift higher, with Europe lagging the US, reversing the downward rating transition bias of 2008-09. The upward momentum in tranche ratings is predicated on a benign default rate forecast and support from amortizing transactions. AAA CLO levels still

Figure 1: % CLOs Failing Senior OC Tests



Source: Moody's, Barclays Capital

Figure 2: Change in CCC bucket size for US CLOs



Note: Based on a sample set of 200 US CLO deals in our universe, as of November 19, 2010. Source: Barclays Capital

<sup>24</sup> In the US, we estimate the size of the CLO market at about \$275bn, incorporating approximately 670 deals and 4000 tranches. In Europe, the CLO market is roughly €100bn in size, with around €40bn free to trade (the rest being tied up in negative basis books), with slightly over 200 deals and 1500 tranches outstanding.

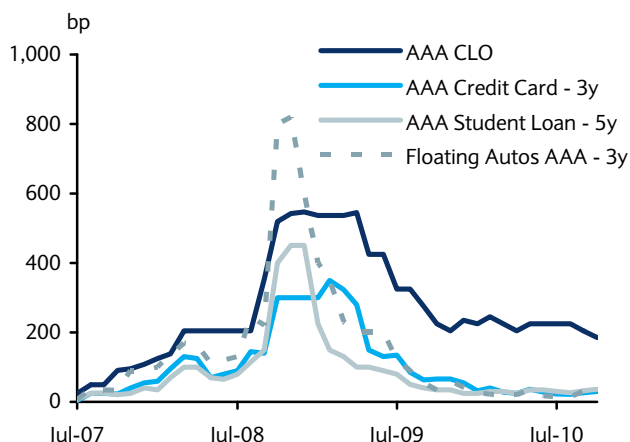
look attractive relative to other asset classes (Figure 3). That said, the AAA buyer base has diminished while fast-money investors are becoming more and more comfortable moving down the capital structure as conditions improve and equity payments increase.

Prepayment rates should continue to rise as capital structures are paid down on the back of IPOs, trade sales, secondary LBOs and maturity extensions. This will create reinvestment opportunities for CLOs. Those within their re-investment period will maintain or improve deals. After focusing on par building to fix OC tests and alleviating CCC haircuts in 2010, CLO managers will likely move towards improving collateral quality by building diversity, adding higher current yielding Libor floor loans, and via amend-and-extends. Reinvestment criteria include meeting/maintaining or improving coverage (OC/IC), WAL (weighted average life) and collateral quality (WARF/WAS/CCC) tests. For the US, we estimate that the average WAL test cushion is approximately two years (Figure 4) – the average US deal WAL is ~4 years, which is below the average WAL test trigger level of ~6 years. In Europe, we estimate the average WAL test cushion to be slightly less than three years. Thus, we think most CLOs will actively try to buy primary and secondary loans to improve their collateral quality over the next 1-2 years. With the bulk of CLO reinvestment end dates falling in 2012-2014 and the bulk of loan redemptions due 2014-2016 (Figure 5 and Figure 6), we believe refinancing of loans over the next year or two will give rise to significant CLO extension periods.

Even once the reinvestment period has expired, we expect CLOs to continue to have the flexibility to engage in forms of trading that maintain or improve deals, especially via amend-and-extend transactions. For CLOs to engage in post-reinvestment trading, the restricted trading condition (degree of tranche ratings downgrades) seems the most limiting. Other conditions include passing the OC test, and, in some cases, the WAL test, on the last day of the reinvestment period. If these conditions are met, most CLOs outside their reinvestment period can reinvest principal prepayment and sale proceeds from credit risk obligations. Reinvestment criteria require the substituted asset to have a shorter or equal maturity, an equal par amount, and equal or better ratings. Amend-and-extend transactions are not typically contemplated in CLO documentation, so the former constraints do not apply to those situations.

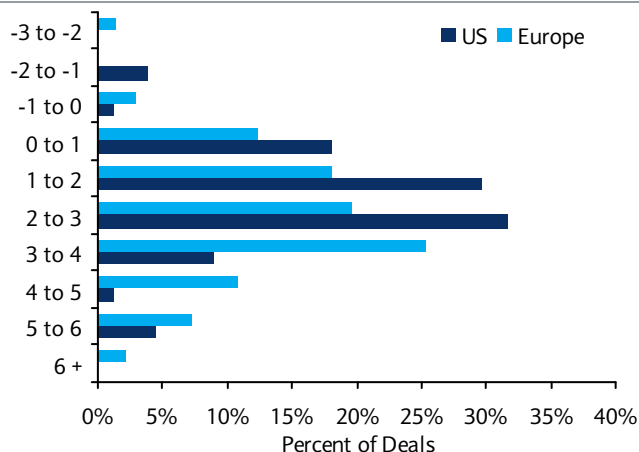
*Please refer to the leveraged loan section for a detailed discussion of our leveraged loan outlook.*

Figure 3: US structured AAA spreads



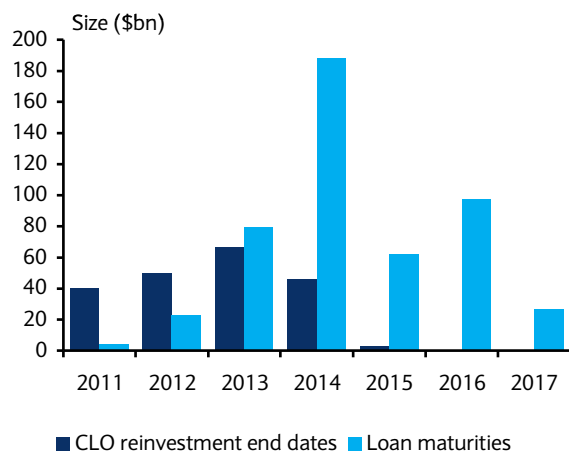
Source: Barclays Capital

Figure 4: WAL test cushion for US CLOs



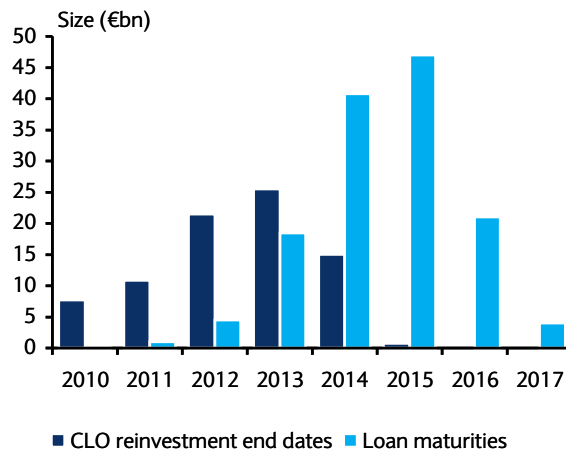
Note: Based on a sample set of 200 US and 138 European CLO deals in our universe. US data as of November 19, 2010. European data based on last reported WAL cushion available to us as of 30 November 2010. Source: Intex, Barclays Capital

Figure 5: US reinvestment periods vs. loan maturities



Note: Based on a sample set of 614 US CLOs (~\$250bn by par), as of November 19, 2010. Source: S&P LCD, Intex, Barclays Capital

Figure 6: European reinvestment periods vs. loan maturities



Source: Barclays Capital

According to Moody's, CLO managers took advantage of undervalued CLO liabilities and bought more than \$900mn of CLO tranches in 2009/10, as permitted by their structured securities buckets. Although these purchases initially consisted mostly of higher-rated senior tranches, CLOs then began dipping into higher yielding lower-rated tranches. Senior tranche purchases have generally helped improve deal performance metrics such as WARF and OC tests. Given the rally in tranche spreads, we expect such opportunities to diminish in 2011.

Finally, CLO consolidation was common last year as larger investors sought to buy the assets of smaller firms faced with limited access to capital and a frozen primary CLO market. Smaller CLO managers had an incentive to sell before their deals went static and the fees they relied on shrank as the deal was paid down. This trend could continue in 2011.

### Primary CLOs – Testing the waters

In 2010 a small trickle of new CLO deals and partial refinancing deals came to market. We do not expect this situation to change considerably in the near term. In order for a more substantial pick-up in primary issuance there are still several hurdles to overcome:

- Liability spreads need to tighten further to make the asset-liability arbitrage and resulting equity returns compelling.
- Regulatory clarity is required for many originators and investors to be comfortable with new product. Many details of the new risk retention rules remain unclear.
- Collateral supply remains an issue. Although we expect 2011 loan issuance to be slightly higher than 2010 levels in the US and Europe, a good proportion will once again be refinancing. Existing CLOs, most of which are still able to reinvest, will provide competing demand.
- Natural investors, particularly for AAA tranches, need to be found. That said, although bank appetite has been very low for the past few years, balance sheets have been shrinking, funding levels have been improving and risk weights for highly rated tranches remain relatively low (under Basel II). Solvency II rules for insurers, to be implemented by the end of 2012, suggest longer-dated, highly rated tranches may be appealing relative to similarly dated and rated corporate credit.

Given these constraints, primary issuance in 2011 should remain fairly low. We estimate that total size will not exceed \$10-20bn. Of new primary deals that do come to market in 2011, we expect generally simpler and lower leverage structures, with greater focus on underlying loan quality given the impending securitisation retention rules. We also question whether some deals will exclude structured credit buckets to avoid higher re-securitisation risk weights.

**Figure 7: The new normal versus the legacy structure**

The Funding Gap		Old Structure		New Normal	
Assets	BB Loans	25%		40%	
	B Loans	70%		55%	
	CCC Loans	5%		5%	
		Spread (bp)		Spread (bp)	
Liability	AAA	75%	25	65%	170
	AA	4%	40	5%	225
	A	4%	70	5%	300
	Baa	4%	160	3%	400
	Ba	5%	350	2%	600
	Equity	8%	NA	20%	NA
Average Leverage		~12x		~4x	
Sr/Jr Fees		25/50		15/25	

Source: Barclays Capital

Of the limited sample of new transactions in 2010, the “new normal” structures are much simpler than previous vintages. Figure 7 compares typical recent US deal structures to those of old. While deal structures are still evolving, generally new deals have had higher subordination, lower leverage (thicker equity tranche), shorter re-investment periods (2-3 years) and non-call periods (1-2 years), more restrictive buckets for second-liens, unsecured debt and revolvers and lower fees. In almost all instances, equity was retained by the CLO manager or an affiliate. More recently, examples with higher leverage and more liability tranching have arisen. Deals such as Morningside Park and LCM VIII have been leveraged at 6-7x, compared with 2-3x in early 2010 CLOs. These later deals have also increased the degree of tranching, with LCM VIII and, subsequently, Morningside Park, introducing BBB and BB tranches, respectively. The Oak Hill CLO (on-the-road) is structured without a management fee in order to boost equity returns, as long as the manager is not changed.

## Credit linked notes

In a persistently low-rate environment, single-name CLNs offer an attractive way to enhance spread and yield relative to equivalent cash securities of the same issuer, and the flexibility to tailor the risk profile to suit the needs or views of the investor. We expect ongoing interest in 2011. Below, we review typical product structure, describe various means of yield enhancement and summarise some of the optional features commonly used to customise risk.

### Single-name credit linked notes (CLNs)

Single-name credit linked notes are funded investments designed to take credit exposure to an underlying reference entity via embedded CDS contracts. Their payoff profiles often resemble those of cash bonds. They are best suited to long-term investors with a bullish

view on both the underlying credit and the issuing bank and they can provide several advantages over equivalent cash securities, including:

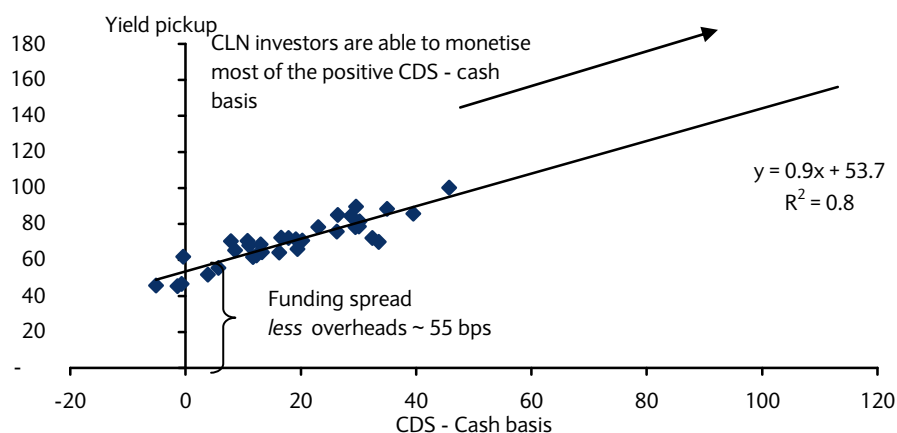
- A significant pickup in the CLN yield compared to the cash bond, particularly for names with a large, positive CDS-cash basis;
- The flexibility to modify both rates and credit related components, allowing investors to tailor instruments to their particular views and needs and for specific maturities that might otherwise not be accessible.

As the hedging costs on a CLN are linked to both the credit quality of the underlying name, as well as its correlation to the issuing bank, the following three criteria help to select names suitable for executing such strategies:

- A positive CDS – cash basis, allowing for a larger pickup.
- A low correlation to the issuer’s credit risk.
- A positive fundamental credit view on the name.

In Western Europe, most corporate names typically have a low correlation with the credit risk of the issuing bank. As a consequence, investors are able to monetise the basis almost basis point for basis point, provided the credit spread is also relatively tight. Figure 8 shows how the pickup rises with increasing basis for such names (investment grade). Higher CDS spreads would result in greater haircuts to compensate for the issuer's increased risk of loss of funding should the reference entity default. This would reduce the ability of the investor to fully capture the basis.

**Figure 8: Pickup in CLNs versus underlying cash bonds, various IG corporates**



Source: Barclays Capital

### Modifying the risk profile

Various enhancements are possible for CLNs, which can help investors source more spread, or better manage their risk profiles.

#### *Interest rate overlays*

CLNs permit investors to take credit risk while simultaneously managing rate exposure. Rate overlays can be particularly useful in the current environment, given the increasingly asymmetric rate risk profile and uncertain outlook. Examples of simple structures that match varying rate outlooks include:

- Expect rates to stay low: Fixed coupon CLNs essentially lock in current forward rates and are thus ideal for investors expecting forwards to exceed future realised rates.
- Expect rates to rise: Floating rate CLNs allow credit coupons to increase with rates.
- Expect rates to rise, but wary of an extended period of low rates: Floored floating rate CLNs let investors lock in a *minimum* floating coupon at the expense of some spread.
- Expect rates to stay low or to rise marginally: Capped floating rate CLNs allow investors to earn extra spread, at the expense of giving up some yield if rates rise by a lot.

#### *Quanto CLNs*

Quanto CLNs allow investors to access credit exposure to names domiciled or traded in other currencies, without taking on FX risk. Currency risk pertains not just to the coupon and principal payments, but, in the case of a credit event, to the recovery amount also. It is possible to structure CLNs which fix the FX rate on all payouts from the CLN, and the hedge is paid for typically by a reduced spread paid out on the note.

#### *Zero recovery rate CLNs*

Fixed recovery rate CLNs allow investors to lock in at inception the recovery they would receive on the note in case of a credit event. This structure can be used to gain leverage, without putting additional capital at risk, by fixing a recovery rate of zero. The spread multiplier will be approximately equal to  $1 / (1 - R)$ , where R is the market expected recovery on the reference entity's CDS. For example, if the expected recovery rate is 40% then the spread level on the CLN can be raised by up to a factor of 1.66.

#### *Zero-coupon CLNs*

CLNs on the same name and of the same maturity can be structured with varying coupon and reoffer levels. At one extreme of the available spectrum would be a zero-coupon instrument, which would earn its entire yield via the pull-to-par. Such structures may have accounting benefits for investors who prefer capital gains over interest income.

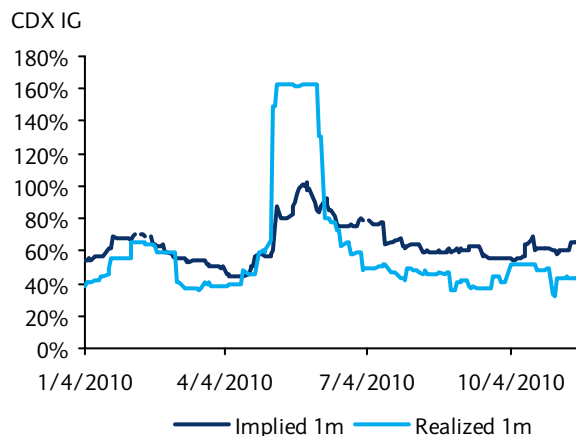
## Credit Volatility

---

### **2010 Recap**

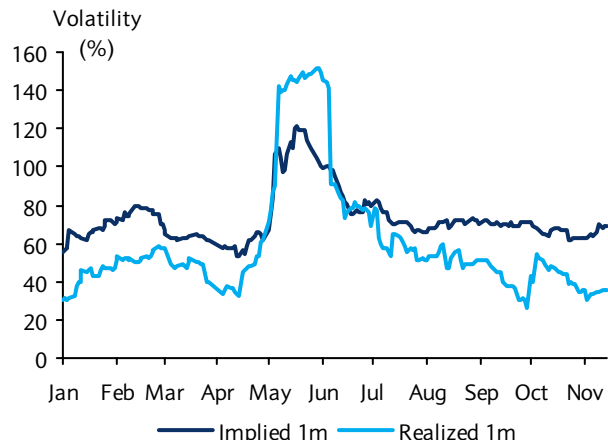
With European sovereign concerns weighing on the market for much of 2010, both implied and realized volatilities in credit look set to end the year roughly where they began. Although there were periods in which realized volatility dropped sharply (March-April and June-October), the dominant episode was the spike in May-June, when realized volatility jumped from its 40-60% range to well above 100%, with the spike particularly strong in European indices. Much of this jump may be attributed to the “flash crash” and the Greek debt crisis. Following the establishment of the EU-IMF facility for Greece, spreads began to tighten and realized volatilities fell sharply, with implied volatilities following shortly thereafter.

Figure 9: CDX IG volatility



Source: Barclays Capital

Figure 10: iTraxx Main volatility



Source: Barclays Capital

## Outlook for 2011

*Implied volatility is likely to stay range-bound, with risks skewed to the upside*

Implied-realized volatility risk premiums remain high, especially in iTraxx Main options, and we expect this premium to persist as long as the key source of 2010 market volatility – Europe's sovereign debt crisis – remains unresolved. With a solution to these woes still looking some way off, we see volatility risk as tilted to the upside. This view should continue to be reflected in elevated volatility skews.

*Market liquidity and participation will most likely improve*

We expect rising liquidity in credit index options. Typical sizes are currently \$250-500mn for CDX IG and iTraxx Main, and \$50-100mn for CDX HY and iTraxx Xover options. Bid/offer spreads are tight and comparable to the underlying index (after PV01 adjustment). We expect activity to remain concentrated in front-month expiries, though lately there has been fairly strong activity in the March 2011 expiry. Fast-money accounts have been the typical sellers of ATM volatility, especially in the front months, and we expect this to continue, except during severe market disruption. We also expect a continued bid from correlation desks, counterparty desks, and macro hedgers, with buying focused on OTM payers in CDX IG and iTraxx Main.

Recently, March 2011 OTM receivers/calls and risk reversals have been traded. We have also noted an increase in HY put buying for next-year expiries by long-only HY portfolio managers.

## Recommendations

We summarize our key volatility trading themes for 2011.

**1. Monetising volatility skew with 1x2 payer spreads.** The payer skew in out-of-the-money iTraxx Main and CDX IG options remains high, making it possible to structure an OTM 1x2 payer spread that profits for a very wide range of index levels at expiry. For example, at current levels in iTraxx Main, we favour the following implementation:

- Buy €100mn strike 135 payers, sell €200mn strike 150 payers.
- Profit if spread is below 170bp at expiry (earn 25bp upfront if the index is below 135bp at expiry; maximum profit of c. 93bp if the index is at 155bp).



In our view, only an extreme, systemic collapse in markets could push Main to 160-170bp levels in just a few months. We deem this scenario unlikely, making the risk-return profile of the trade on a hold-to-maturity basis look very attractive.

**2. Credit-equity relative value.** As we argue throughout our outlook, equities look positioned to outperform credit if a positive market scenario is realised in 2011. With index spreads at current levels, credit offers limited room for further tightening, while equity valuations provide more room for further growth. Moreover, equity implied volatility appears cheaper than credit volatility as measured in relation to realized volatilities. To position for the rally scenario we recommend buying longer-dated equity index calls (S&P 500, Eurostoxx 50) funded by selling CDS index receivers (CDX IG, iTraxx Main). The trade expires worthless if the rally does not materialize.

**3. Credit-FX relative value.** In 2010, the correlation between iTraxx Main (and, to a lesser extent, CDX IG) and the EUR/USD exchange rate rose notably, driven by the rapid emergence of sovereign risk as a negative factor for both corporate credit and the EUR. In our view, the spikes in correlation create a tactical opportunity to lock in a rich credit volatility premium relative to a cheap FX volatility risk premium. We recommend entering the trade by selling ATM straddles in iTraxx Main and buying ATM straddles in EUR/USD, on a realized-beta-weighted basis.

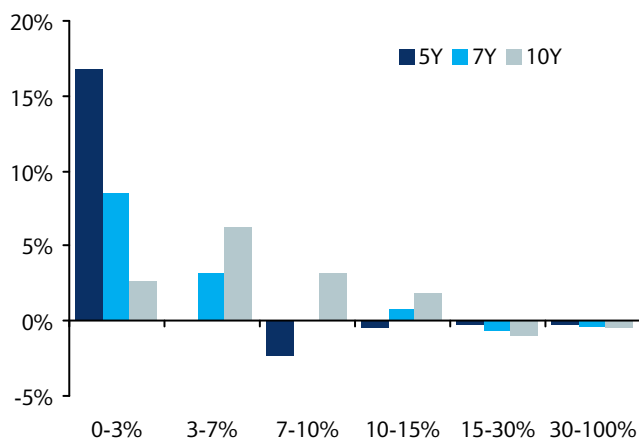
**4. Tactical portfolio hedging.** In addition to being able to express views more precisely using options due to the asymmetric nature of their payoffs, they can also be used to tailor customized hedges. In a previous article, we discussed how they may be used for hedging in a more systematic manner. For more details, see [Focus: Hedging with CDS Index Options, 22 October 2010](#).

## Tranche markets

### 2010 recap

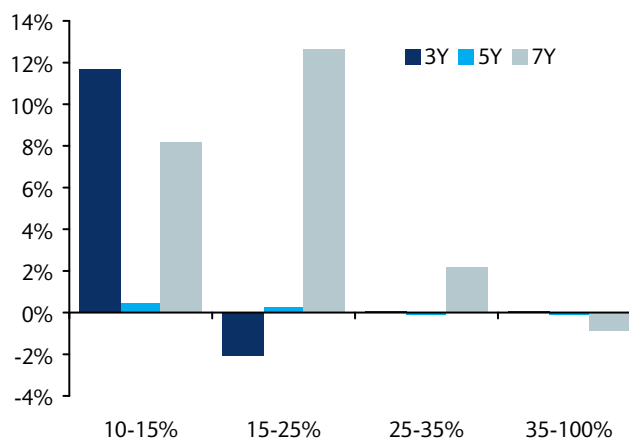
Many of 2009's themes in tranche markets carried over into 2010. One big difference relative to last year has been the lack of defaults in both the IG and HY indices. This fact, and an improving near-term default outlook, contributed to a tightening of spreads, especially at

Figure 11: IG9 delta-hedged tranche returns in 2010



Source: Barclays Capital

Figure 12: HY10 delta-hedged tranche returns in 2010



Source: Barclays Capital

shorter maturities. On a delta-hedged basis, junior tranches outperformed senior tranches substantially, both in CDX IG and CDX HY (Figures 11 and 12). As expected, the outperformance of junior tranches was generally more pronounced at shorter maturities.

There were continued unwinds of bespoke CSOs and durations shortened further; we think that about 50% of all CSOs have been unwound so far. Expected regulatory changes continue to hamper new bespoke CSO issuance. While there has been some real money activity in existing bespoke CSOs, most of this activity has been focussed on the index tranche market. Correlation desks managing risk continue to be active participants in the index tranche market, as are proprietary trading desks (and hedge funds) using index tranches as a leveraged format to express fundamental and/or relative value views.

In the US, IG9 and HY9 and HY10 index tranches remaining the most liquid. Tranches on the IG15 and HY15 indices have met with mixed success; IG15 tranches are currently the second most liquid IG series. Active maturities have included 5y, 7y, and 10y for IG9 and 5y for IG15. In the case of HY indices, activity has been mostly focussed on the 3y and 5y maturities. In European tranche market liquidity continued to decline with market participation outside the interdealer market at depressed levels. iTraxx Main S9 remains the most liquid product in the European index tranche space.

## Outlook for 2011

With the improving corporate credit environment, the outlook for defaults has brightened. A robust primary market has allowed many high yield issuers to successfully push back maturities. All else equal, this should benefit shorter maturity tranches. Further, given low levels of expected defaults, junior tranches can be expected to outperform.

From a liquidity standpoint, we do not expect any significant differences from what we have seen previously, though the somewhat more favourable response to the IG15 tranches in the US is encouraging. We expect the trend of bespoke correlation books unwinding to continue with portfolio durations gradually declining. New capital requirements imposed by Basel III and due to come into effect in January 2012 are likely to create a serious economic hindrance to future bespoke, synthetic CDO issuance.

With this outlook in mind, we suggest some trading themes for 2011.

### *Benign default outlook should benefit junior tranches*

Investors seeking fundamental long positions should consider junior tranches (in either IG9 or HY9 and HY10). On a no-delta basis, these tranches offer a leveraged exposure to the underlying portfolios.

- **Long junior tranches in HY9/HY10:** Of the widest names in HY9 and HY10, only Realogy Corp appears to have a possible near-term trigger in 2011 (covenant on leverage cushion). In 2012, only one additional credit, Hovnanian Enterprises, has liquidity issues. Four series, HY10 3y (June 2011), HY11 3y (Dec 2011), HY8 5y (June 2012) and HY9 5y (Dec 2012), mature over the next two years. Investors may prefer the 10-15% (equity) tranches on either of these series. For instance, the HY10 3y 10-15% tranche is zero-coupon and priced at 90pts. Without any defaults, the tranche will return about 11% (or ~20% annualized) to June next year. Under a similar no-default scenario until end-2012, the return on the HY9 5y 10-15% tranche is close to 50%.
- **Long junior tranches in IG9:** As with HY, we look at credits in the underlying portfolio that may be at risk over the next two years. iStar Financial and MBIA Insurance Corp appear to fit this description. Spreads on both of these credits have tightened this year

(iStar more so than MBIA), but it is unclear that bankruptcy can be avoided. Based on November 18 prices, the IG9 5y 0-3% tranche would return 42% in a no-default scenario.

Varying this theme, investors might consider various single name hedges against defaults in the junior tranches. For instance, in the 5y IG9 equity tranche trade above, investors should be able to earn a return of about 20%, even after fully hedging the two widest names. Alternatively, investors could consider going up in the capital structure as way to insulate themselves from defaults. An example of this would be going long the IG9 3-7% tranche (rather than the equity tranche).

*Senior tranches now offer attractive macro tail hedge opportunities*

European sovereign troubles have the potential to become a systemic issue, and are unlikely to be resolved in an orderly fashion next year. In our view, the presence of this overhang makes it prudent to put some macro tail hedges in place. One attractive source of such hedges is buying senior protection, especially given that the cost of buying senior protection has fallen substantially in 2010. For example, investors could consider buying the IG9 7y 10-15% tranche on a no-delta basis. Even assuming that an investor entered this trade at the beginning of this year (when it would have cost roughly twice as much as current levels), the trade would have had returns of around 20% during the peak of the European debt crisis in May. We think that at half the cost, the economics of the tail hedge is very compelling. One alternative construct, which we discussed in a previous publication [Selling the Tails \(US Credit Alpha dated 13 August, 2010\)](#), involves buying the IG9 7y 10-15% tranche protection and selling an equal notional of IG9 10y 15-30% tranche protection.

## SECTOR OUTLOOKS

---

## HIGH GRADE AEROSPACE & DEFENSE – MARKET WEIGHT

Vincent W. Foley +1 212 412 7943 vincent.foley@barcap.com

Cedric Morris +1 212 412 3659 cedric.morris@barcap.com

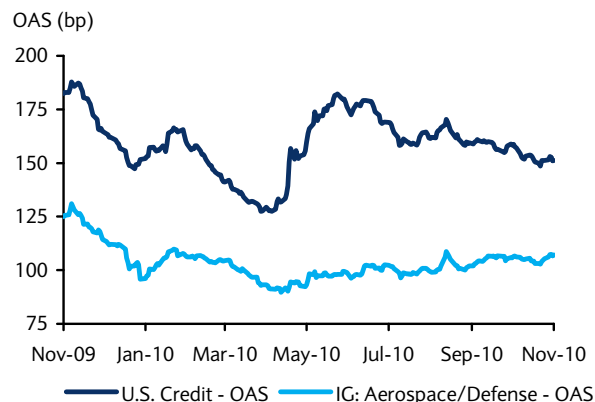
### Key recommendations

- **Sell Goodrich (GR) (OW) 5y CDS (50/55bp)**, as valuations do not reflect positive near-term fundamentals in commercial aerospace. In cash, we recommending buying GR's 6.8% notes due 2036, as the bonds look cheap relative to the U.S. Credit Index.
- **Sell Northrop Grumman (NOC) (OW) 5y CDS (51/56bp)**, as the credit trades at the steepest discount to the peer group. Over time, we believe the delta between NOC, LMT (33/38bp), and GD (37/42bp) should compress. As a pair trade, we recommend selling NOC versus buying LMT or GD.

### Sector outlook

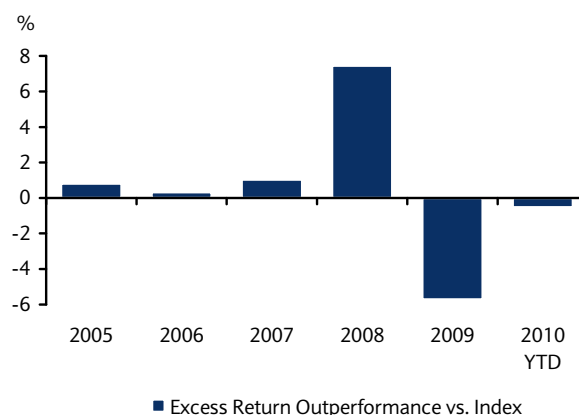
- We are constructive on commercial aerospace heading into 2011, as the sector's recovery has been more encouraging than originally expected. In our view, performance of the aerospace industry should remain favorable over the near to intermediate term. We are most encouraged by the fundamentals of the large commercial aircraft (original equipment) segment, as well as the peripheral original and after-market parts suppliers. These segments should continue to benefit from numerous positive trends, including: continued growth in passenger volumes and airline traffic (annual growth of 5% is projected), improved stability in the financial health of global airline carriers, greater cost efficiency from new aircraft, and the industry's strong backlog levels. We are less constructive on the regional and business jet sub-sectors of the aerospace industry. We expect regional jet sales to remain under pressure because of higher fuel costs and the challenged financial condition of many regional airlines that utilize the equipment. The more discretionary business jet market is in the early stages of recovery, but the industry will face mixed confidence among businesses and individuals, the continued negative public perception of corporate business jet usage, and competition in the used jet marketplace.
- We are generally comfortable with the U.S. defense sector heading into 2011. However, we recognize that modernization spending (procurement and RDT&E) is likely to moderate, perhaps as soon as with the release of the FY12 budget in early 2011. The fiscal pressures facing the U.S. economy and policymakers' push to reduce the U.S. fiscal deficit over the next several years will likely weigh on defense spending initiatives. Several large platform programs remain at risk for funding cuts/restructuring as the Pentagon shifts its priority toward unconventional warfare programs. Lastly, while it is less important to defense contractors, supplemental wartime spending will ease as the U.S. military withdraws assets from Iraq and Afghanistan.

### OAS versus Credit Index



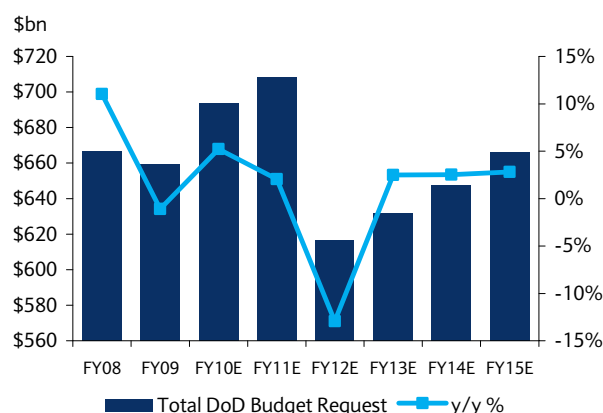
Source: Barclays Capital

### Excess returns versus Credit Index



Source: Barclays Capital

### Department of Defense budget request estimates



Source: Department of Defense, Office of Management and Budget, Fitch

## HIGH GRADE BANKS – OVERWEIGHT

Jonathan Glionna +1 212 412 5184 jonathan.glionna@barcap.com  
Miguel Crivelli +1 212 412 5231 miguel.crivelli@barcap.com

Conor Pigott +1 212 412 3441 conor.pigott@barcap.com

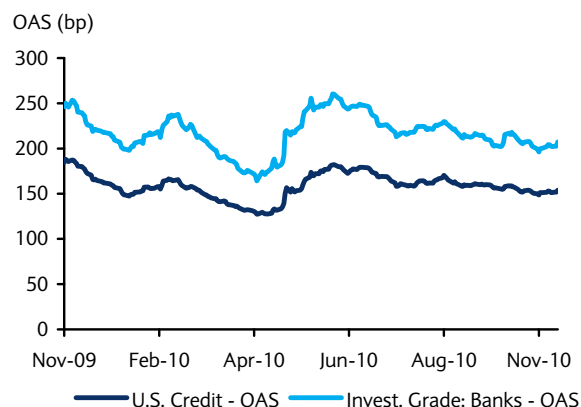
### Key recommendations

- **We recommend Overweight positions on large US banks, including Bank of America (BAC), Capital One (COF), Citigroup (C), JPMorgan (JPM), and Wells Fargo (WFC).** We think five main factors will drive these banks to outperform: 1) asset quality is improving; 2) leverage has been reduced; 3) balance sheet liquidity is strong; 4) spreads are comparatively wide; and 5) supply looks set to be limited in 2011.
- **We think subordinated bank bonds offer good value relative to senior holding company bonds.** In our opinion, the Source of Strength Law established by the Dodd-Frank financial reform bill makes senior holding company bonds junior to subordinated bank bonds in liquidation. However senior holding company bonds still typically trade tighter than subordinated bank bonds. For example, Wells Fargo 5.625% of 2017, a senior holding company bond, is quoted at T+85bp, and Wells Fargo 6% of 2017, a subordinated bank bond, is quoted at T+110bp.

### Sector outlook

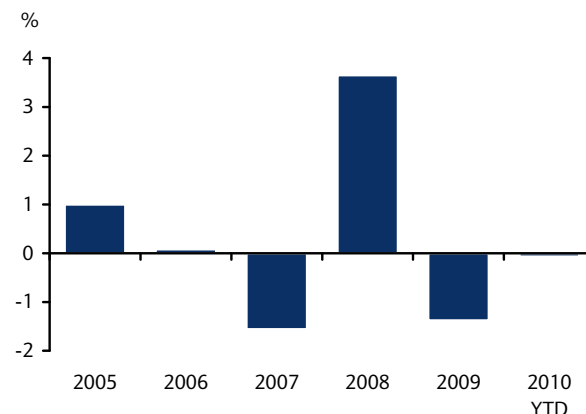
- We expect balance sheet risk to continue to decline at large US banks in 2011 as asset quality improves, leverage falls, and liquidity remains strong.
- Nonperforming assets have fallen for three quarters in a row for our 25-bank aggregate and are now 3.5% of loans, the lowest ratio since 3Q09. The favorable trends in asset quality should continue in 2011 on improved economic conditions, more conservative underwriting, and burnout of legacy problem portfolios.
- For our 25-bank aggregate, tangible common equity has increased from \$347bn in 4Q08 to \$642bn in 3Q10. This has led to a substantial reduction in leverage, with the industry's equity-to-asset ratio now the highest it has been since the 1930s. We believe regulatory reform such as Basel III will keep balance sheet leverage low, benefiting bank creditors.
- Valuation looks attractive. The bank sector's OAS is 203bp, which is 51bp wider than the Credit Index. We believe this spread differential will decline as the market recognizes the industry's reduction in balance sheet risk.
- The 25 banks in our aggregate have issued \$36bn of index-eligible debt in 2010, which is on pace to be 15% less than in 2009. We forecast supply to remain limited in 2011, with the 25 banks in our aggregate issuing less than \$40bn of index-eligible debt.

### US Banks OAS versus US Credit Index



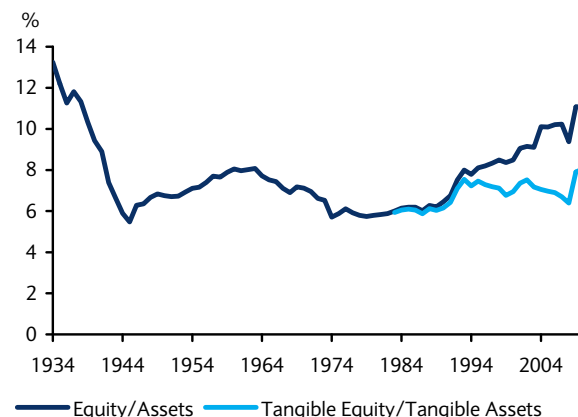
Source: Barclays Capital

### US Banks excess return versus US Credit Index



Source: Barclays Capital

### Equity/assets for US banking industry since 1934



Source: Federal Reserve

## HIGH GRADE BASIC INDUSTRIES (CHEMICALS, METALS, PAPER)

Harry Mateer +1 212 412 7903 [harry.mateer@barcap.com](mailto:harry.mateer@barcap.com) Stefanie Leshaw Chachra +1 212 412 7902 [stefanie.chachra@barcap.com](mailto:stefanie.chachra@barcap.com)

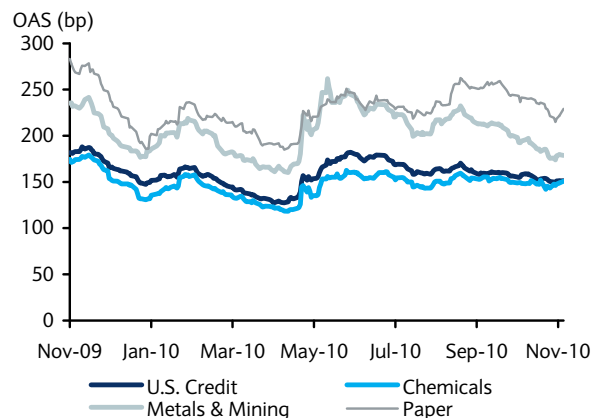
### Key recommendations

- **Metals and mining:** Long Xstrata (XTALN, OW), AngloGold Ashanti Ltd (ANGS), NR), Gold Fields Ltd (GFIS), NR); Short Nucor Corp (NUE, UW), BHP Billiton (BHP, UW).
- **Paper:** Long International Paper Company (IP, OW).
- **Chemicals:** Long The Dow Chemical Co (DOW, OW).
- **Agribusiness/Fertilizers:** Long Bunge Ltd (BG, OW), The Mosaic Co (MOS, OW); Short Potash Corp (POT, UW), Archer-Daniels-Midland Co (ADM, UW).

### Sector outlook

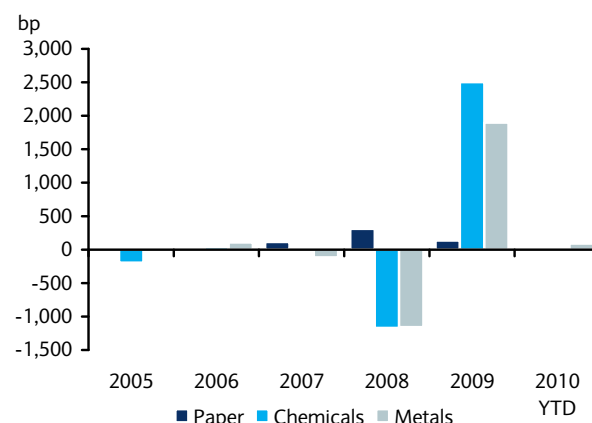
- **Underweight Chemicals:** This sector has the lowest beta within basic industries due to its specialty orientation. Although we are Overweight DOW (the largest issuer in the chemicals index), we are Underweight E. I. du Pont de Nemours and Company (DD) and Praxair, Inc. (PX), the second- and third-largest issuers. As a result, and in conjunction with overall spreads, we consider tight and event risk across the specialty chemicals sector, we are Underweight the category. The chemicals index is trading in line with its average 10-year differential relative to US Credit.
- **Market Weight metals and mining:** Although we are generally bullish on commodity prices, metals and mining is no longer as attractively priced as in 2009 and early 2010. Several key deleveraging stories (eg, Rio Tinto and Teck Resources) are complete, M&A remains a concern (eg, BHP's aborted bid for POT) and ongoing policy tightening to battle inflation in China is an overhang for the sector. Metals and mining credits trade wide to comparable energy companies because, in short, they are leveraged to urbanization, which we view as less stable than the demand for energy products. China may not need another high rise residential tower, but we expect its fuel needs to continue growing (even with the government's push for cleaner sources of energy). A potential offset to a slowdown in China would be demand from India, which we expect to expand significantly in the coming years. As for commodities, we prefer gold and copper. The metals and mining index is trading in line with its average 10-year differential relative to US Credit.
- **Overweight paper:** This rating is predicated on IP, which continues to generate free cash flow and pay down debt. The company's lacklustre equity performance in 2010 is a concern, but we expect any shareholder-friendly actions to preserve its balance sheet and credit ratings. Outside of IP, credits in our paper and packaging universe tend to be small and relatively illiquid, yet event risk remains a concern in the wake of Reynolds Group's leveraged acquisition of Pactiv Corporation. The paper index is trading roughly 10bp cheap to its average 10-year differential relative to US Credit.

### US Credit, Chemical, Paper and Metals OAS



Source: Barclays Capital

### Chemical, Paper and Metals excess returns versus US Credit



Source: Barclays Capital

## HIGH GRADE/HIGH YIELD BUILDING MATERIALS – MARKET WEIGHT

Vincent W. Foley +1 212 412 7943 [vincent.foley@barcap.com](mailto:vincent.foley@barcap.com)

Cedric Morris +1 212 412 3659 [cedric.morris@barcap.com](mailto:cedric.morris@barcap.com)

### Key recommendations

- **Owens Corning (MW):** We recommend buying 5y CDS (215/235bp) on Owens Corning, or shorting the company's 6.5% notes due 2016. Its roofing franchise continues to deliver solid performance, and its composites business has recovered quickly after bottoming in late 2009. The strength of these businesses should offset the weakness that we expect in the insulation segment. However, we are concerned about management's recent aggressive shareholder-friendly actions. We believe that if the company continues to buy back shares without also growing cash, it could result in a loss of investment grade ratings.
- **Whirlpool (UW):** We recommend buying 5y CDS (150/160bp) on Whirlpool, as demand for its appliances, particularly in North America, is likely to remain soft heading into 2011. Whirlpool's upcoming maturity schedule is fairly onerous, so consistent cash generation will be critical. Whirlpool trades well inside peers, including Mohawk (215/225bp), Fortune Brands (193/203bp), and Masco (272/282bp).

### Sector outlook

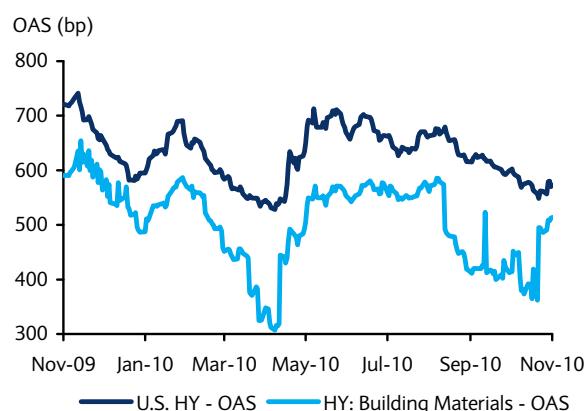
- **We are unlikely to see a meaningful improvement in demand for U.S. housing in 2011, and we expect it to be yet another challenging year for the building materials sector.** We expect 1H11 to be far more challenging than 2H11, given the difficult comps (due to last year's home buyer tax credit) and weak employment and consumer confidence. Housing starts and home prices are key drivers for the sector, and we expect both measures to remain weak. Housing starts should improve from the current pace of 519k (saar), but will face numerous headwinds. A wave of foreclosures, the lack of homebuyer demand, high unemployment, and low consumer confidence will keep starts well below the historical annual average of 1.5mn. Barclays Capital's U.S. economics team forecasts 630k starts in 2011. Home prices are expected to slip in 2011 following modest recovery in 2010. Barclays Capital economics team expects home values, measured by the S&P/Case-Shiller index, to fall 1.5% y/y in 2011 as foreclosure activity weighs on the market. Weaker home prices, low confidence, and higher unemployment will also depress remodeling spending, which accounts for ~30-40% of the sector's revenue. Rising commodity costs, particularly related to base metals, oil, and asphalt, will continue to pressure margins in 2011. Although the operating environment remains challenging, most credits in our coverage universe have sufficient liquidity to cover near-term cash needs and ample covenant flexibility.

### HG Building Materials OAS versus HG Index



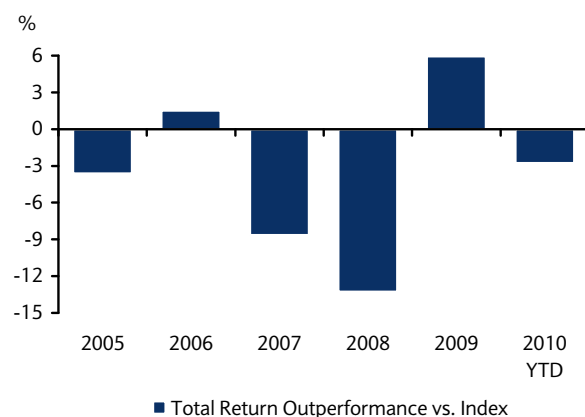
Source: Barclays Capital

### HY Building Materials OAS versus HY Index



Source: Barclays Capital

### HY Building Materials total returns versus HY Index



Source: Barclays Capital



## HIGH GRADE CABLE & MEDIA – MARKET WEIGHT

Hale Holden +1 212 412 1524 hale.holden@barcap.com

Danish Agboatwala +1 212 412 2573 danish.agboatwala@barcap.com

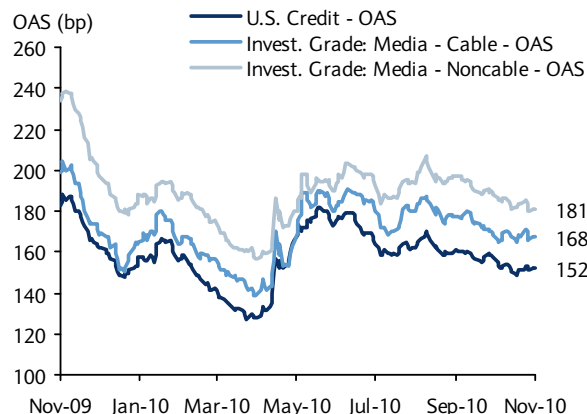
### Key recommendations

- **Buy NBC Universal (NBCUNI, OW) 2021s.** NBC is ~20bp cheap to Comcast and 30-40bp behind comparable media credits. We think NBC should trade flat to even to Comcast and view the entire Comcast/NBC capital structure as too wide, suggesting room for both relative and absolute outperformance.
- **Buy Omnicom (OMC, OW) 2020s.** OMC 2020s are quoted at T+160bp, and we think fair value is 25bp tighter. We view OMC as a high-quality credit story and expect fundamentals to improve as advertising growth accelerates.

### Sector outlook

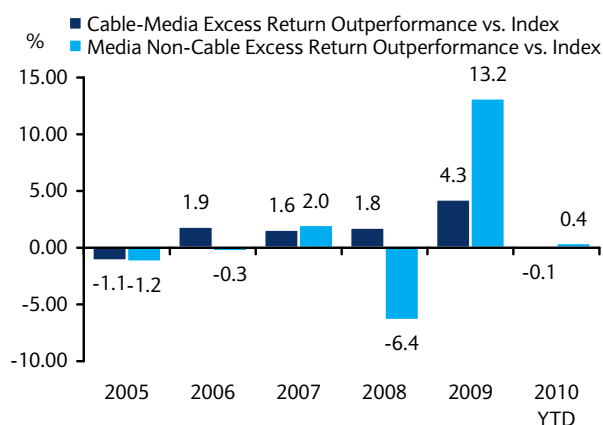
- We are bullish on cable names and believe Comcast is trading too cheap to AT&T and Verizon. Ultimately, we expect concerns regarding cord cutting and the issuance overhang to ease, and the cable basis (Cox, Comcast, DirecTV, and Time Warner Cable) to tighten versus the RBOCs and entertainment credits. Within cable, we remain Overweight on Comcast/NBC and Cox Communications. Key issues for the segment over the next 12 months include cord cutting, household formation growth, commercial growth, and potential regulatory changes in either net neutrality or retransmission consent.
- We are reaffirming our Market Weight recommendation on the Media Non-Cable/Entertainment benchmarks. Spreads for most of the credits are trading near 18-month tights. While we expect balance sheet metrics to remain relatively stable, the focus has shifted towards share repurchases, and fundamental growth will slow materially in the first half of 2011 as year-over-year comparisons become increasingly difficult.
- Within the media sub-sector, we remain Overweight News Corp, Time Warner Inc, and Omnicom. Our sole underweight is RR Donnelley, which we think faces potential downgrade risk in the next 12 months.
- Although we remain Market Weight for longer-term holders (six-plus months) given the potential for M&A and/or asset sales, over the near term, we think CBS is one of the more attractive total return candidates.

### LTM IG Cable & Media OAS spreads



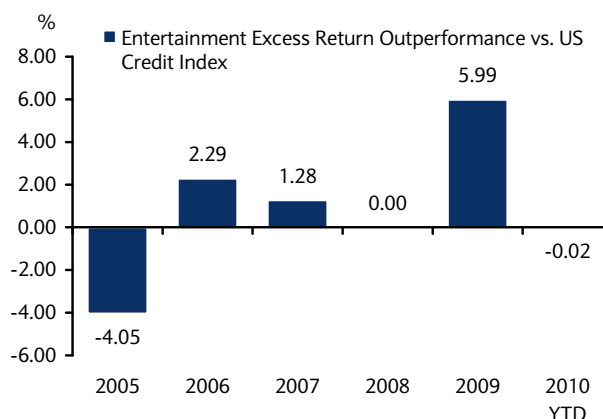
Note: As of November 22, 2010. Source: Barclays Capital

### IG Cable & Media Index excess returns



Note: As of November 22, 2010. Source: Barclays Capital

### IG Entertainment Index excess returns



Note: As of November 22, 2010. Source: Barclays Capital

## HIGH GRADE CONSUMER PRODUCTS – UNDERWEIGHT

Priya Ohri-Gupta, CFA +1 212 412 3759 priya.ohrigupta@barcap.com

Martin Fernandez +1 212 412 5392 martin.fernandez@barcap.com

### Key recommendations

- **We have a negative bias toward Avon (AVP – UW) and Kimberly-Clark (KMB – UW),** where we see downward ratings risk.
- **We have an Underweight recommendation on Fortune Brands (FO),** as headline risk is likely to drive near-term performance.
- **Fundamentally, we are more positive on Clorox (CLX – MW),** given its balanced financial policy, and **Newell Rubbermaid (NWL – MW),** which we view as an improving credit.

### Sector outlook

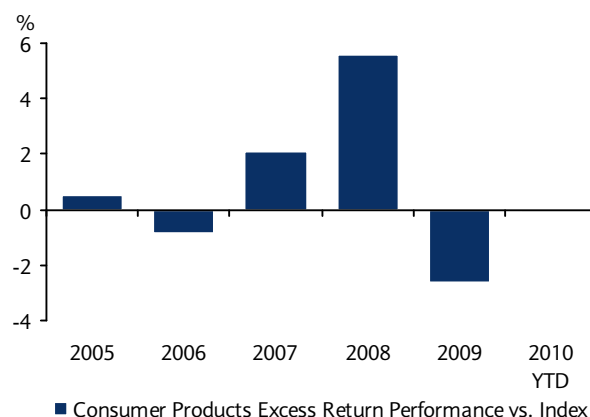
- We recently initiated on the consumer products sector with an Underweight recommendation, as we believe the bias is to be negative the space, given heightened event risk, as well as fundamental pressures such as rising commodity costs, a highly competitive environment, and weak economic conditions. The caveat to our broader view is that if potential concerns about sovereigns continue, investors could seek to increase exposure in more defensive names, such as P&G, which could be supportive of sector performance.
- We are Underweight on Avon and Kimberly-Clark, as we see room for downward ratings movement. We contend that Avon could garner greater financial flexibility by moving out of its current ratings, while Kimberly has evidenced greater vulnerability to industry headwinds, such as higher commodity costs, as well as competition from P&G. If the company is unable to demonstrate improved operational performance in the coming quarters, we think that ratings could be susceptible to a downgrade.
- We view Newell as an improving credit story and expect performance to be supported by operational improvement and positive ratings momentum. That said, we think that concerns about event risk could limit near-term upside potential, supporting performance that is more in line with the broader market.
- While Clorox looks slightly cheap for a high-BBB defensive credit, we think that this is driven by concerns related to poor operating performance of late and event risk worries in the sector. Fundamentally, the company's financial policy continues to be balanced.
- In addition to event risk in the form of activist shareholder interest, Fortune Brands remains exposed to cyclical pressures. Although financial policy has been focused on improving credit metrics through debt reduction, concerns persist as to whether the company's current portfolio is optimal.

### Consumer Products versus the Credit Index



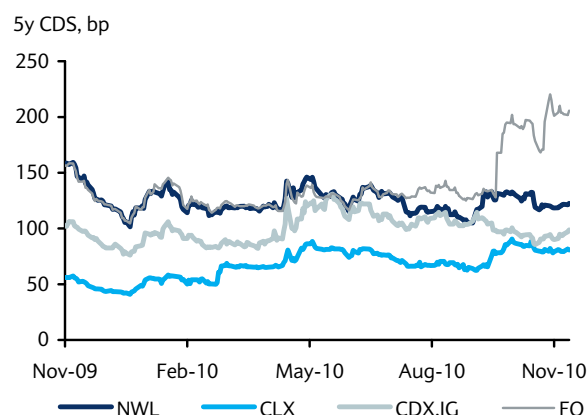
Source: Barclays Capital

### Excess return performance in Consumer Products



Source: Barclays Capital

### Consumer Products CDS performance versus IG



Source: Barclays Capital

## HIGH GRADE ELECTRIC UTILITIES – MARKET WEIGHT

Jim Asselstine +1 212 412 5638 james.asselstine@barcap.com

Timothy Tay +1 212 412 5548 timothy.tay@barcap.com

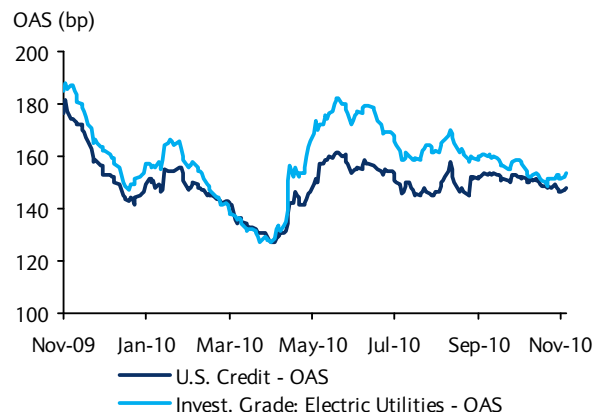
### Key recommendations

- **Buy Pepco Holdings (POM) (OW) 7.45% due 8/15/2032 bonds, quoted at +185.** Low risk fully regulated utility holding company with T&D subsidiaries following the sale of its unregulated generating and marketing businesses.
- **Buy National Rural Utilities Cooperative Finance Corp (NRUC) (OW) 10.375% due 11/1/2018 Collateral Trust Bonds, quoted at +140.** Improving financial metrics, diversified sources of low-cost funding, strong collateral, and steady performance by its low-risk rural electric cooperative buyers.

### Sector outlook

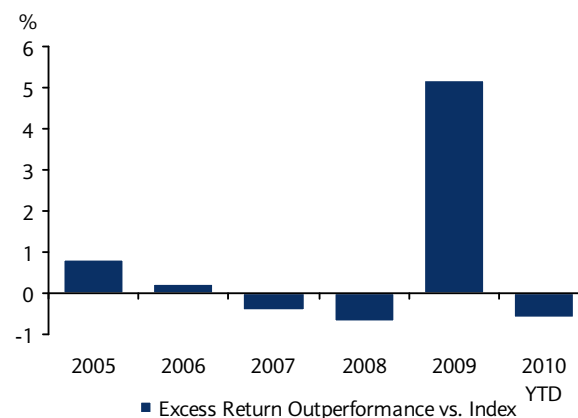
- Spreads at or near pre-crisis levels limit the potential for near-term outperformance, but the electric utility sector continues to benefit from stable credit metrics despite sales declines (on average about 6%) during the recession. Positive factors include very favorable weather during the third quarter of 2010, gradual improvement in industrial sales, and the effects of cost reductions and rate increases. The regulated electric utilities also benefit from continued low natural gas prices, which help to offset the need for rate increases to recover large ongoing capital expenditures. We expect natural gas and power prices to remain low in 2011, with flat to gradually improving industrial and residential sales on a weather-adjusted basis. These generally stable business trends and financial metrics result in stable ratings outlooks for most companies in the sector. We expect that capital expenditures in 2011 will return to 2009 levels after declining about 9% in 2010. This rebound in capital expenditures will likely result in continued elevated origination in the sector, with the majority of new issuance at the regulated utility level.
- Principal challenges include: the need to obtain satisfactory rate relief to recover continued elevated capital expenditures; for utilities with substantial coal-fired generation assets, the need to comply with a series of escalating environmental regulations from the U.S. Environmental Protection Agency that could force the premature shutdown of some smaller, older plants; and for companies with large unregulated generation businesses, the need to counter the negative effects of continued weak commodity prices, especially as existing hedges roll off in late 2011 and 2012. Thus far, event risk in the sector has been relatively low. M&A transactions in 2010 have been credit neutral to credit positive. Dividend payouts, although increasing, remain in a reasonable range, and share buybacks have been limited thus far.

### US Electric Utilities OAS versus US Credit Index



Source: Barclays Capital

### US Electric Utilities excess return versus US Credit Index



Source: Barclays Capital

## HIGH GRADE ENERGY & PIPELINES

Harry Mateer +1 212 412 7903 [harry.mateer@barcap.com](mailto:harry.mateer@barcap.com) Stefanie Leshaw Chachra +1 212 412 7902 [stefanie.chachra@barcap.com](mailto:stefanie.chachra@barcap.com)

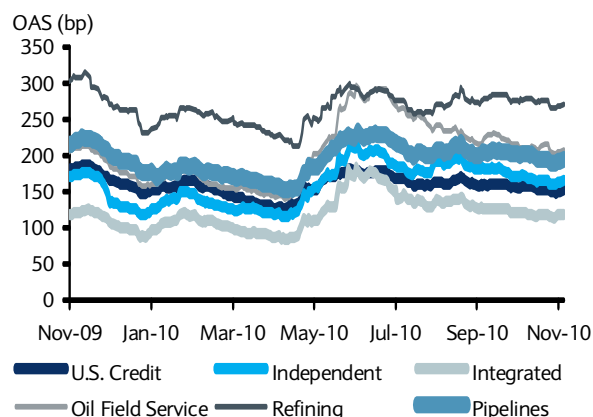
### Key recommendations

- Integrated oil and gas. Long Husky Energy Inc. (HSECN, NR).
- **Independent E&P.** Long Anadarko Petroleum Corp (APC, OW), Apache Corporation (APA, OW) and Nexen Inc. (NXYCN, OW). Short Devon Energy Corp (DVN, UW), Encana Corporation (ECACN, UW), EOG Resources Inc (EOG, NR).
- **Refining.** Long Valero Energy Corporation (VLO, OW)
- **Oil field services/drilling.** Long Transocean Ltd (RIG, OW), Weatherford International Ltd (WFT, OW), Rowan Companies, Inc (RDC, NR) and Pride International Inc (PDE, NR). Swap out of Noble Corporation (NE, NR), Diamond Offshore Drilling, Inc. (DO, NR) and Nabors Industries Ltd (NBR, NR).
- **Pipelines.** Long Energy Transfer Partners LP (ETP, OW).

### Sector outlooks

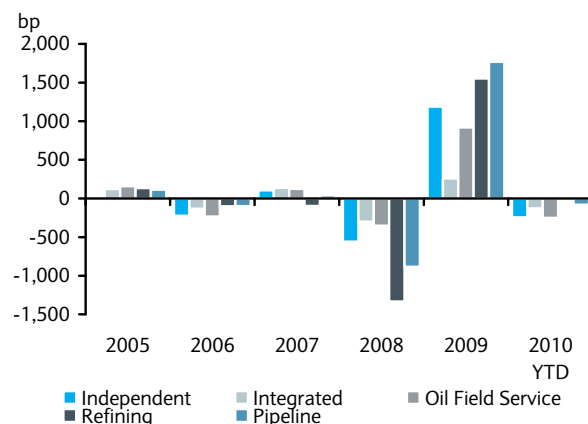
- **Underweight integrated oil and gas.** We see little value in the defensive, tight-trading integrated category, which is trading slightly through its 10-year average differential to US Credit.
- **Market Weight independent E&P.** Oil prices should remain elevated, while natural gas prices remain weak. The theme continues to favor oil and free cash flow over gas and negative free cash flow. The sector is trading slightly cheap to its 10-year average differential to U.S. Credit.
- **Overweight oil field services and contract drilling.** We expect mid- and deepwater dayrates to soften, a newbuild cycle to get underway, and M&A activity to remain robust. We are Overweight the sector due to the two largest issuers, WFT and RIG. It is trading 40bp wide to its 10-year average differential to U.S. Credit, partly due to Macondo-related RIG and HAL.
- **Overweight refining.** Management remains committed to investment grade ratings, and spreads are still cheap. We expect VLO's leverage to remain modest in 2011. Buy-and-hold accounts should continue to avoid refining exposure, given secular challenges. The sector is trading 70bp cheap to its 10-year average differential to U.S. Credit, which partly reflects potential downgrade risk in Sunoco, Inc. (SUN, NR).
- **Market Weight pipelines.** If the Fed is successful with QE2, MLPs should continue to benefit from a benign issuance environment. If not, higher interest rates could hurt credit performance as it becomes more difficult to tap the debt and equity markets. The sector is trading slightly cheap to its average differential versus US credit and in line versus the E&P bucket, but valuations are not compelling enough to garner an Overweight, in our view.

### US Credit, Independent E&P, Integrated, Oil Field Services, Refining and Pipelines OAS



Source: Barclays Capital

### Independent E&P, Integrated, Oil Field Services, Refining and Pipelines excess return versus US Credit



Source: Barclays Capital

## HIGH GRADE FOOD & BEVERAGE – MARKET WEIGHT

Priya Ohri-Gupta, CFA +1 212 412 3759 priya.ohrigupta@barcap.com Martin Fernandez +1 212 412 5392 martin.fernandez@barcap.com

### Key recommendations

- **We maintain an Overweight recommendation in Anheuser-Busch InBev (ABIBB)**, as we see continued potential for it to outperform the broader market and other consumer names, driven by continued operational improvement and positive ratings momentum.
- **We have a negative view on packaged food and find better value in moving from Kraft intermediates to ABIBB.**
- **While valuations appear to reflect a good deal of event risk associated with credits such as Sara Lee (SLE, UW) and ConAgra (CAG, UW)**, we believe the bias is to remain short given uncertainty, and we would be buyers of protection in these names on a pullback.
- **We find value in Bunge Ltd (BG, OW) relative to tight valuations in the agribusiness subsector, such as Corn Products International (CPO)**, and expect spreads to compress with the positive fundamental backdrop.

### Sector outlook

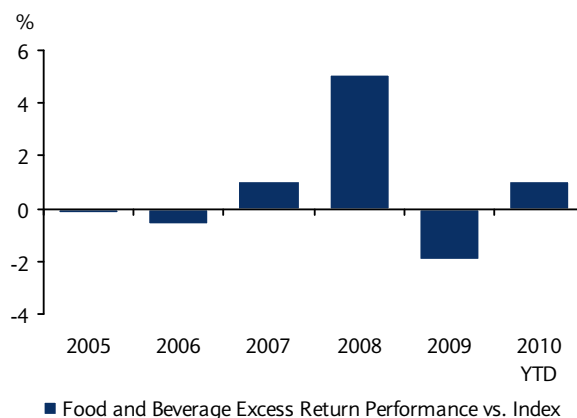
- While we maintain a Market Weight recommendation on the overall food/beverage sector, we continue to have a divergent opinion about the two sub-sectors. Within the sector, we are positive on beverages, supported by an Overweight recommendation on Anheuser-Busch InBev, while we have a negative view on packaged food.
- Headwinds within the packaged food space include rising commodity costs, aggressive competitive activity, and changing consumer preferences. The sector is also exhibiting a more aggressive financial posture due to the weakening credit metrics, coupled with increasingly shareholder friendly behaviour (i.e., a greater level of share buybacks). Potential for M&A also remains a risk.
- Within beverages, we prefer brewers to carbonated soft drinks, where valuations appear fair.
- Headed into 2011, we are positive on the underlying fundamentals of agribusiness with higher corn, soybean, and wheat prices in 2011, as well as increased commodity volatility. We find value in Bunge Ltd, view Corn Products International as fair value, and view Archer-Daniels-Midland (ADM, UW) spreads as tight within the sector (covered by Stefanie Leshaw Chachra).

### Food & Beverage valuation appears fair



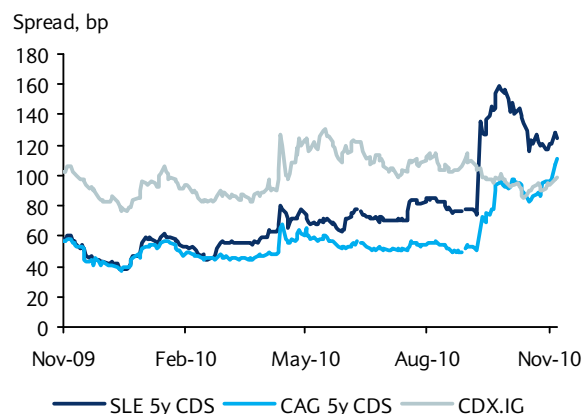
Source: Barclays Capital

### Food & Beverage expected to perform in line with the market



Source: Barclays Capital

### SLE and CAG 5y CDS performance



Source: Barclays Capital

## HIGH GRADE HEALTHCARE – MARKET WEIGHT

Shubhomoy Mukherjee +1 212 412 5245 shubhomoy.mukherjee@barcap.com

Audra Stundziaite +1 212 412 1731 audra.stundziaite@barcap.com

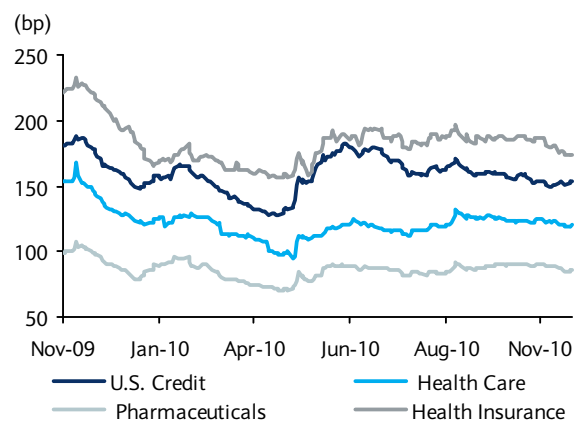
### Key recommendations

- **Buy Boston Scientific (BSX, Overweight) 2020s** – we believe it is a likely candidate for upgrade to investment grade by mid-2011.
- **Underweight Eli Lilly (LLY, Underweight)** – We are concerned about the company's ability to offset effect of patent expirations through internal product development.

### Sector outlook

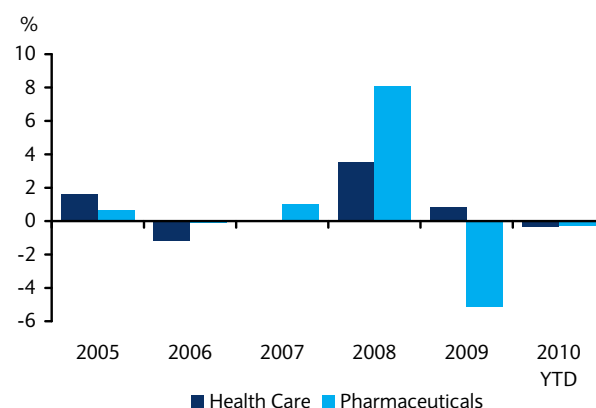
- We are constructive on IG Healthcare credit fundamentals, given healthy balance sheets, limited near-term effect from healthcare reform, and moderate event risks, but see limited upside potential from a valuation perspective. From an operations perspective, we think the healthcare value chain will be affected over the next few years by: the implementation of healthcare reform; expirations of patents on branded drugs; and healthcare utilization levels.
- We expect healthcare reform to have a limited near-term effect on companies within the sector, given that most proposals will not be fully implemented until 2014. Proposals that matter for 2011 include: the imposition of MLR caps for managed care companies; the provision of discounts for drugs purchased within the donut hole; and the imposition of a \$2.5bn industry fee on branded pharmaceutical manufacturers.
- We expect branded pharmaceutical companies to remain focused on mitigating the effect of patent expirations through cost restructuring initiatives and other strategic options – acquisitions and the advancement of product pipelines. We think acquisitions will be smaller than those executed in 2008-09, and focused on gaining access to specific products and/or growing presence in emerging markets.
- We expect PBMs and distributors to benefit from the sizeable patent expirations coming up over the next few years, given higher margins in the distribution of generic drugs. We, however, think this earnings upside will be more of a 2012 event, given that patent expirations ramp up starting December 2011.
- We expect 2011 to be a “normal” year for managed care companies from a profitability perspective, following two volatile years. Companies we cover remain well capitalised, with modest levels of leverage and sizeable unrealised gains within their investment portfolios. We think the national companies will act as consolidators, and increase share repurchases, which introduces an element of event risk into their credit profiles.

### US Credit, Healthcare, Pharma, Health Insurance– OAS



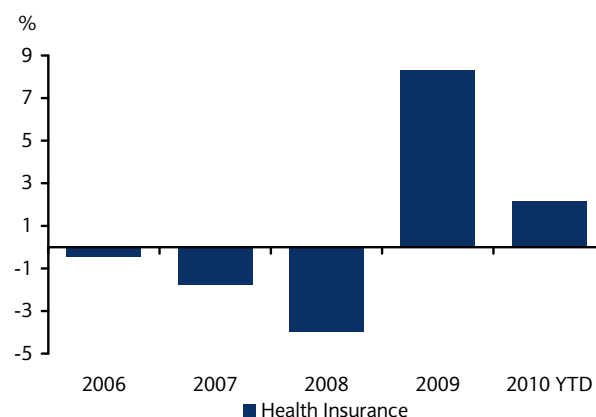
Source: Barclays Capital

### Health Care, Pharma versus Index excess return



Source: Barclays Capital

### Health Insurance versus Index excess return



Source: Barclays Capital

## HIGH GRADE/HIGH YIELD HOMEBUILDERS – OVERWEIGHT/MARKET WEIGHT

Vincent W. Foley +1 212 412 7943 [vincent.foley@barcap.com](mailto:vincent.foley@barcap.com)

Cedric Morris +1 212 412 3659 [cedric.morris@barcap.com](mailto:cedric.morris@barcap.com)

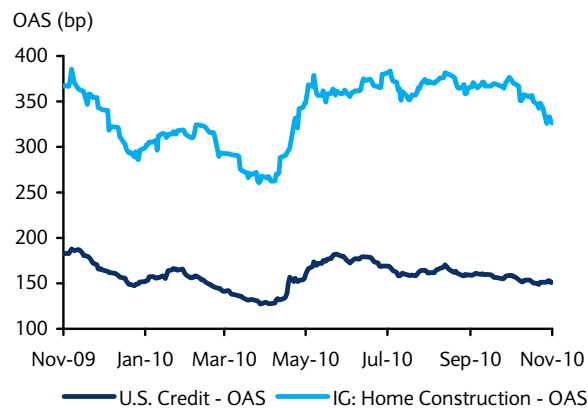
### Key recommendations

- **MDC Holdings (OW):** We recommend selling 5y CDS (188/195bp), as trading levels represent an attractive entry point to get long the credit. CDS is now ~110bp wide of LTM tights. We view MDC as the best-in-class builder, given its strong liquidity, unique net-debt position, and conservative operating posture. It is among the least exposed homebuilders to mortgage-repurchase risk.
- **D.R. Horton (OW):** We recommend selling 5y CDS (305/310bp), as trading levels are too wide relative to peers. D.R. Horton has a strong balance sheet and liquidity position, conservative operating philosophy, and was profitable throughout a very challenging 2010. In our view, mortgage put-back risk is manageable.
- **Hovnanian Enterprises (UW):** We remain cautious on the credit given its poor liquidity, aggressive land spend, lack of profitability, and the continued weakness of the US housing market. We recommend buying short-dated CDS (2y) as the optimal part of the curve to express a short. Liquidity for the company could become troublesome in this timeframe.
- **PulteGroup-KB Home (MW-MW):** As a pair trade, we recommend selling PulteGroup 5y CDS (380/390bp) versus buying KB Home (415/425bp) 5y CDS. PulteGroup has traded an average of 150bp inside KB Home year-to-date. In our view, mortgage put-back risk at PulteGroup is mostly overblown and manageable within the context of its liquidity. KB Homes' leverage is among the highest in the sector (59% net of cash), and liquidity is poor relative to PulteGroup. We peg fair value as PulteGroup trading 75-100bp inside KB Home.

### Sector outlook

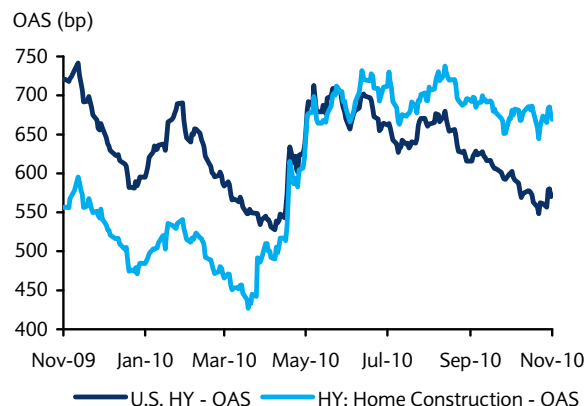
- We expect 2011 to be yet another challenging year for housing and the homebuilders. While mortgage rates remain at historical lows and measures of affordability are at all-time highs, meaningful recovery in housing demand will not occur until the US economy benefits from lower unemployment and higher consumer confidence. We expect 1H11 and the 2011 spring selling season to be disappointing due to the poor employment outlook and the challenging y/y comps caused by the tax credit in 2010. 2H11 should be stronger as comps become more favorable. As a result, we do not expect the majority of homebuilders to be profitable in 2011. The effect of foreclosure activity on inventories and pricing will weigh on the housing recovery. Aside from the macroeconomic environment, robust liquidity remains a key fundamental positive for the sector. However, we expect the pace of land investment to increase in 2011, which will deteriorate liquidity and could weaken credit profiles. Mortgage-repurchase risk will remain an overhang in the early stages of 2011. We believe the best way to position in the homebuilders in 2011 is to focus on the higher-quality credits, including D.R. Horton, MDC Holdings, Ryland, and Toll Brothers.

### HG Home Construction OAS versus HG Credit Index



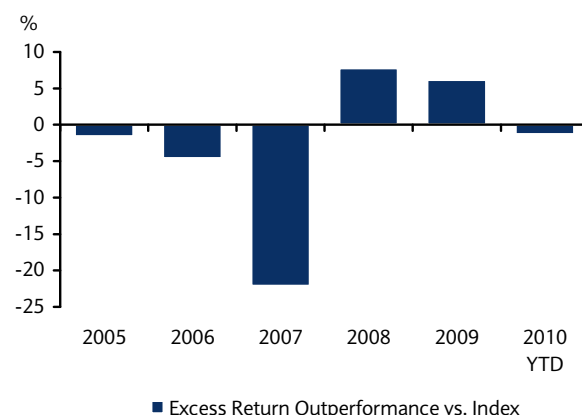
Source: Barclays Capital

### HY Home Construction OAS versus HY Credit Index



Source: Barclays Capital

### HY Home Construction total returns versus HY Credit Index



Source: Barclays Capital



## HIGH GRADE INSURANCE/LIFE – OVERWEIGHT

Thomas Walsh +1 212 412 3129 thomas.walsh@barcap.com

Ming Zhang +1 212 412 3386 ming.zhang@barcap.com

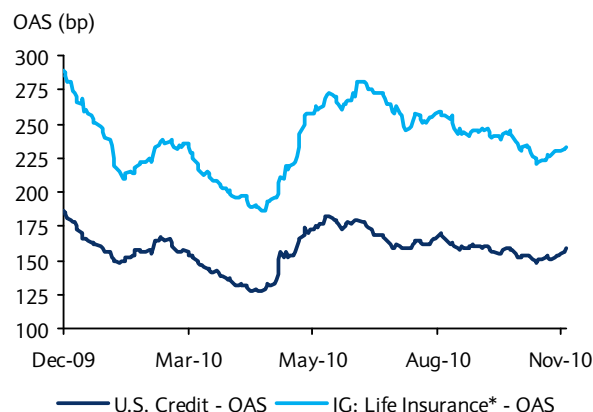
### Key recommendations

- **We recommend buying Prudential (PRU, OW) 5.375% of 2020**, currently quoted +175bp mid-market, which is 48bp back of MET 2019 bonds. In CDS, PRU 5y CDS mid-market is at +215bp, versus HIG at +233bp and MetLife at +225bp. Relative to other insurers in the property/casualty industry, including ACE (+92bp), Chubb (+72bp), Allstate (+92bp), and Travelers (+97bp), we view PRU CDS as attractive. Despite using a portion of its excess capital cushion to fund the acquisition of Star-Edison Life in Japan, PRU still holds about \$2bn of excess capital, assuming a 400% RBC ratio heading into 2011. We view PRU as one of the bellwether names in the Life sector and it is a key component of our overweight on the sector.
- **Buy Hartford Financial Services (HIG, OW).** The 5.5% of 2020 trades at +245bp mid-market, which is about 130bp cheap to TRV 5.9% of 2019, and 15bp inside of Unum Group 2020 paper. Sell HIG 5 year CDS, currently trading at +233bp mid-market. At this level, HIG trades in the context of pure-play large-cap life insurers. The market is currently discounting the company's core Property and Casualty operation, which accounted for 45% of core earnings and 50% of statutory capital in 3Q10. Large-cap P&C peers trade in the +90bp range in 5yr CDS, while HIG trades in the context of large cap life players such as MET (+225bp), PRU (+215bp) and UNM (+245bp).

### Sector outlook

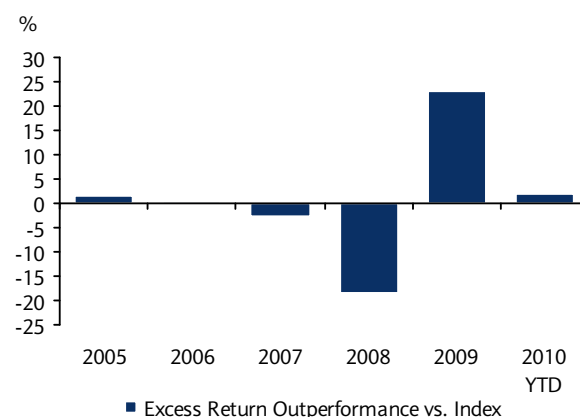
- In moving the sector to overweight in August, we posited that the industry was well capitalized, with most life insurers maintaining RBC ratios in excess of 400% and holding 12-18 months of liquidity at the holding company. The industry remains cautious with respect to capital redeployment and continues to hold excess capital and liquidity to buffer uncertain economic conditions and tepid returns on equity. In the past 6-9 months, many life insurers have reported modest unrealized investment gains, a reversal from large unrealized loss positions in 2009. Recently announced M&A activity has solidified our view that, although some excess capital is being deployed at attractive returns, management teams are not willing to sacrifice credit ratings to make acquisitions.
- The macro backdrop for life insurers remains challenging. Unemployment remains a big-picture driver of revenues, and low interest rates may present a longer-term issue if they persist at current levels. We expect operating ROE will be challenged to hit double digits in 2011 without some capital management.

### US High Grade Life Insurance OAS vs. US Credit



Note: \*Excludes AIG. Source: Barclays Capital

### US High Grade Life Insurance excess returns vs. US Credit



Note: \*Excludes AIG. Source: Barclays Capital

### US High Grade Life Insurance – 3Q10 capital position

Ticker	Excess capital comments	RBC ratio comments
AFL	375-475% RBC Target	Est. RBC above 580%
AMP	\$1.5bn excess capital	Est. RBC above 500%
GNW	350% RBC Target	Est. RBC at 365%
LNC	\$2bn above 400% RBC	Est. 518% RBC
MET	\$3bn holdco cash post-ALICO	RBC above 432%, no est.
PFG	\$2.2bn excess of 350% RBC	Est. RBC at 450%
PL	\$635mn liquidity – to be used in pending acquisitions	Est. RBC at 435-440%
PRU	\$1.8-2.3bn post-acquisition	Well above 400%, no est.
UNM	350% RBC Target	Est. RBC at 410%

Source: Company files, SNL Financial



## HIGH GRADE INSURANCE/PROPERTY & CASUALTY – MARKET WEIGHT

Thomas Walsh +1 212 412 3129 thomas.walsh@barcap.com

Ming Zhang +1 212 412 3386 ming.zhang@barcap.com

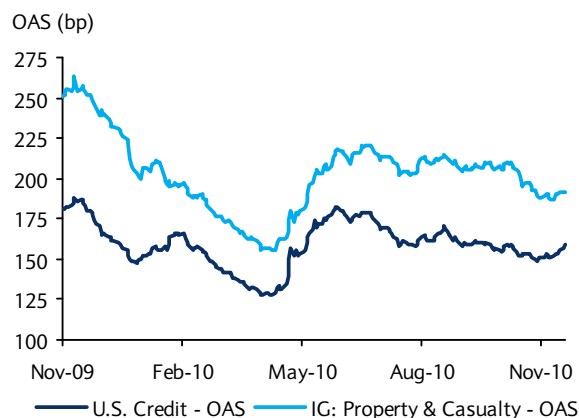
### Key recommendations

- **Buy CNA (OW) bonds, sell 5y protection.** CNA 5.875% of 2020 bonds are currently quoted at +275bp mid-market, cheap to smaller cap and less financially flexible insurers. In CDS, CNA trades at +230bp mid-market, about 130bp wide of parent Loews (LTR) and high quality large-cap property/casualty insurers. In our view, the improved quality of the company's balance sheet (including the reinsurance agreement, holding company leverage, operating leverage, and relationship with the parent), is not reflected in current spreads.
- **Buy AON (OW) bonds, sell 5y protection.** AON 5% 2020 bonds are currently quoted at +185bp, mid-market, rich to Marsh & McLennan (MMC) 19s which trade at +215bp. However, AON 20s are 60-105bp wide of high-quality P&C 10y benchmark bonds. In our view, this spread is unjustified given the lack of underwriting risk in AON's business and its increased diversification following the Hewitt acquisition. AON 5y protection is quoted at 138bp, on par with MMC. Compared with P&C insurers, we view AON 5y CDS as attractive. It currently trades approximately 40-70bp back of high quality P&C credits.

### Sector outlook

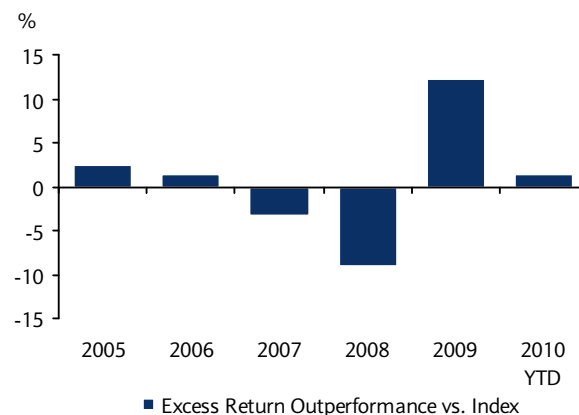
- P&C insurers have generally managed their investment portfolios conservatively, keeping asset quality strong, duration short, and liquidity high. This has helped the industry maintain a capital base that was largely immune from the global financial crisis. We consider recent reports about muni bond exposure to be overblown, given our view of municipal credit quality. As we have noted in the past, strong capital is a double-edged sword for the sector. Although solvency and rating risk remain minimal, competition shows no sign of slowing and should continue to weigh on operating income in 2011. Excluding any uplift from share repurchases, we expect ROE to be in the 9-10% range in 2011. That said, we expect more aggressive share repurchases in 2011.
- The industry's earnings dynamic is more vulnerable than current spreads might suggest. We note that favorable reserve development has shaved 3-6 percentage points off the combined ratio for our composite over the past three years and benefited pre-tax income by 15-20% between YE 2008 and 3Q10. We view the unsustainability of this trend as the single biggest risk to earnings in 2011. Our view is that the combined ratio in 2011, unadjusted for favorable reserve development, will be in the range of 102-103%.

### US High Grade P&C Insurance OAS versus US Credit



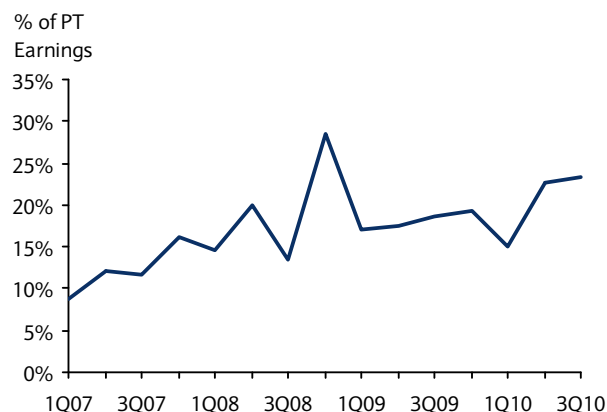
Source: Barclays Capital

### US High Grade P&C Insurance excess returns vs US Credit



Source: Barclays Capital

### Can favorable reserve development continue to prop up earnings?



Source: Company data, Barclays Capital

## REITS – OVERWEIGHT

Shubhomoy Mukherjee +1 212 412 5245 shubhomoy.mukherjee@barcap.com

Audra Stundziaite +1 212 412 1731 audra.stundziaite@barcap.com

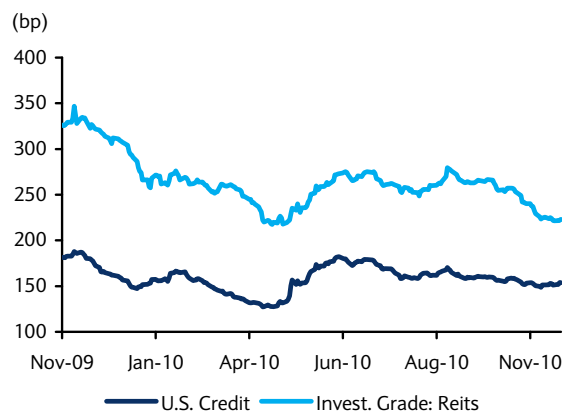
### Key recommendations

- Add exposure to credits that could get upgraded to investment grade over the next year – **Developers Diversified Realty (DDR, Overweight)**, and **SL Green (SLG, Not Rated)**
- Buy bonds issued by **Westfield Group (WDS, Overweight)**, **Duke Realty (DRE, Not Rated)**, and **Healthcare REIT (HCN, Not Rated)**.
- Reduce exposure to/buy CDS protection on the multi-family companies – **Avalon Bay Communities (AVB, Underweight)** and **Equity Residential (EQR), Underweight**.
- Buy 5-year protection on **ProLogis (PLD, Underweight)**; credit metrics remain amongst the weakest with the HG sector, despite recent deleveraging initiatives.

### Sector outlook

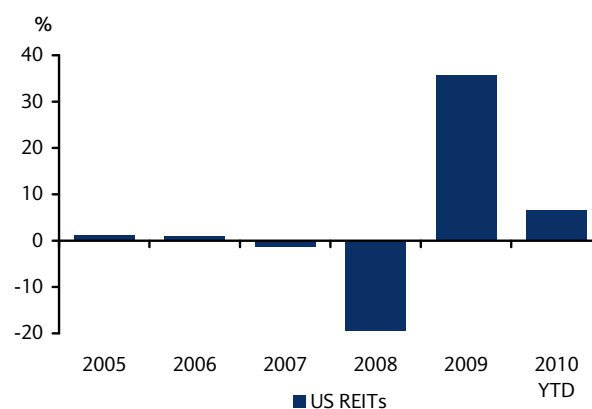
- Our Overweight recommendation of the sector reflects our constructive view on credit fundamentals, which have improved materially over the past year, and the discount at which the sector trades relative to the Barclays Capital Credit Index.
- Our constructive view on the sector reflects the significant strengthening of balance sheets over the past year. REIT balance sheets currently have lower leverage levels, more staggered debt maturities, less exposure to development projects, and lower exposure to non-core investments relative to 2008.
- We expect operating fundamentals to continue improving in 2011, aided by more demand and limited supply creation over the past few years. Operating fundamentals appear to have bottomed out in most property types (suburban office being an exception), as reflected in positive absorption levels in 3Q10, and better same-store results over the past few quarters.
- Over the past year, cap rates and financing costs have declined measurably, resulting in improved unencumbered asset coverage for unsecured investors, and have provided companies the opportunity to reduce their long-term cost of capital by refinancing near-term maturities with attractively priced, long-term debt. Should this environment continue, we would expect 2011 to be an active year for unsecured debt issuance – we think gross issuance will significantly exceed levels seen in 2010 (\$14bn year-to-date).
- We expect companies to focus on putting capital to work in 2011 via acquisitions and development initiatives. We, however, expect companies to remain prudent in managing their balance sheets, given the strategic importance of maintaining/regaining investment grade ratings.

### US Credit, investment grade REITs OAS



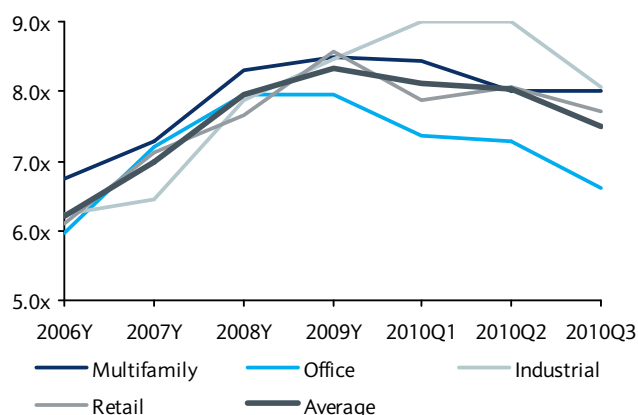
Source: Barclays Capital

### US REITs versus index excess return



Source: Barclays Capital

### Debt/EBITDA trends 2006-10



Source: SNL Data

## HIGH GRADE RETAIL & SUPERMARKETS – MARKET WEIGHT

Eric Miller +1 212 412 1147 eric.miller@barcap.com

Sarah Xue +1 212 412 1141 sarah.xue@barcap.com

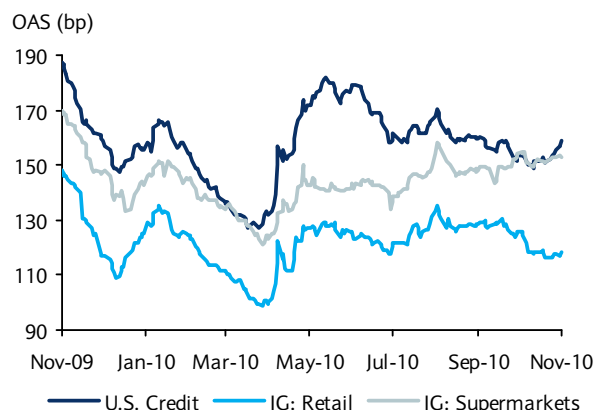
### Key recommendations

- **Buy Macy's (M, Overweight) cash bonds; sell M 5y CDS.** We believe M has the potential to return to investment grade ratings within 6-12 months. We are encouraged by its top-line growth, which is driven partly by the My Macy's localization program, as well as momentum at both Macy's and Bloomingdale's. Additionally, M maintains a conservative financial policy that prioritizes debt paydown; since January 2009, it has repaid more than \$2.2bn in debt.
- **Lowe's (LOW, Overweight) looks cheap in 5y CDS, as the single-A rated retailer is trading largely in line with BBB rated comps such as HD and CVS.** We view LOW bonds as a high quality core retail holding. As the second-largest home improvement retailer, LOW has one of the strongest profiles within investment grade retail. Although it increased its leverage target to 1.8x from 1.5x, management has reiterated its commitment to protecting its A-1/P-1 commercial paper rating.

### Sector outlook

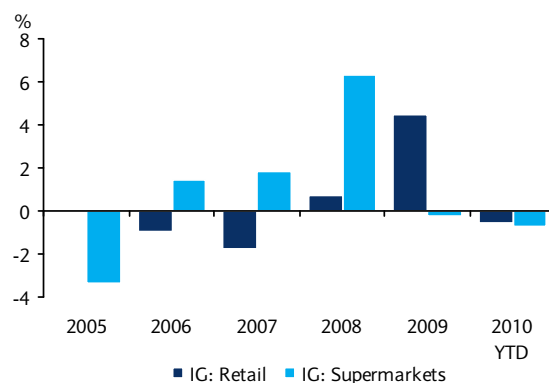
- Heading into 2011, we maintain our Market Weight recommendation on the retail and supermarket sectors. With an improved risk environment versus last year, we remain more constructive on spreads in the near term. Our recommendation on retailers reflects the fact that the sector is concentrated with higher-quality names (Wal-Mart, Target, CVS Caremark, Home Depot, and Lowe's compose ~82% of the retail index). Our view on supermarkets is indicative of the relatively defensive nature of the sector.
- **Consumer pressures remain.** Although the economy is off its lows, macro headwinds persist, given the state of the job market, the housing market, and consumer sentiment levels. The promotional environment remains, and consumers continue to shop closer to need. Thus far, retail earnings have been driven by strong inventory and expense management, given top-line pressures. We expect effective margin management to continue into 2011.
- **Potential return to shareholder-friendly activity.** Retailers prudently managed through the most recent recession by cutting capex, reining in share repurchases, and maintaining high cash balances. In the current economic environment, retailers in our coverage universe continue to maintain solid liquidity. However, with improving performance and stronger financial profiles, retailers are raising outside interest and are under pressure to return cash to shareholders. Several have authorized new share repurchase programs or resumed share buybacks, and a few have increased or are considering initiating dividends. Although retailers may engage in more shareholder-friendly activities in 2011, we believe that shareholder value-enhancing actions will be carried out with attention on ratings, an eye toward debt levels, and a consideration of the pace of the economic recovery.

### Retail & Supermarkets OAS versus Credit Index



Source: Barclays Capital

### Retail & Supermarkets: Excess return performance versus Credit Index



Source: Barclays Capital

### Retail & Supermarkets Index composition

Retail Sector Overview 2.30% of Credit Index		No. Issues	Face Value (\$000)	% Sector	% Credit Index
WAL-MART STORES, INC	25	27,942,709	37.4%	0.86%	} ~82% of retail index
TARGET CORP-GLOBAL	11	10,404,000	13.9%	0.32%	
CVS CORP	9	8,490,000	11.4%	0.26%	
HOME DEPOT	5	8,250,000	11.1%	0.25%	
LOWE'S COS	13	5,997,740	8.0%	0.18%	
AUTOZONE INC	6	2,350,000	3.1%	0.07%	}
WALGREEN COMPANY	2	2,300,000	3.1%	0.07%	
NORDSTROM INC	5	2,200,000	2.9%	0.07%	
COSTCO	2	2,000,000	2.7%	0.06%	
STAPLES INC	2	1,825,000	2.4%	0.06%	
KOHL'S CORP	3	1,300,000	1.7%	0.04%	
TIJX COMPANIES INC	2	775,000	1.0%	0.02%	
BEST BUY	1	500,000	0.7%	0.02%	
ADVANCE AUTO PARTS INC	1	300,000	0.4%	0.01%	
<b>Total</b>	<b>87</b>	<b>74,634,449</b>	<b>100.0%</b>	<b>2.30%</b>	
Supermarkets Sector Overview 0.38% of Credit Index		No. Issues	Face Value (\$000)	% Sector	% Credit Index
KROGER	15	6,446,586	51.8%	0.20%	}
SAFEWAY STORES INC	7	3,650,000	29.3%	0.11%	
DELHAIZE	4	1,845,497	14.8%	0.06%	
AHOLD	1	500,000	4.0%	0.02%	
<b>Total</b>	<b>27</b>	<b>12,442,083</b>	<b>100.0%</b>	<b>0.38%</b>	

Source: Barclays Capital

## HIGH GRADE TECHNOLOGY – MARKET WEIGHT

Hale Holden +1 212 412 1524 hale.holden@barcap.com

Danish Agboatwala +1 212 412 2573 danish.agboatwala@barcap.com

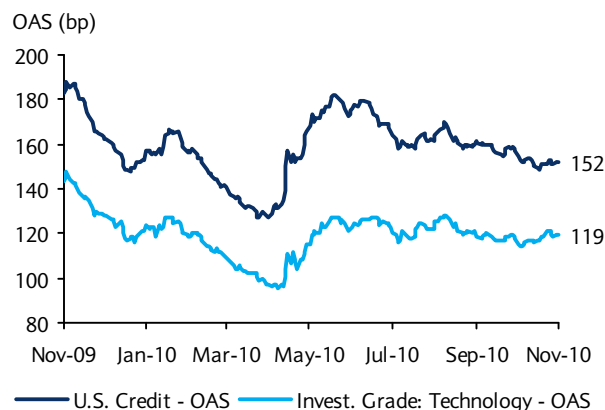
### Key recommendations

- Buy Expedia (OW) 5.95% 2020 notes at T+300/290bp. We expect Moody's to upgrade EXPE to Baa3 from Ba1, which we think could result in about 50bp of spread tightening. We remain bullish on underlying travel fundamentals.
- Basket of mid-triple tech names with improving/strong fundamentals including Xerox (MW), Fiserv (NR), Agilent (MW), and Arrow (MW).
- Reduce exposure to tech names trading rich where we see a higher potential for debt-financed M&A, including Dell (UW) and Symantec (NR).

### Sector outlook

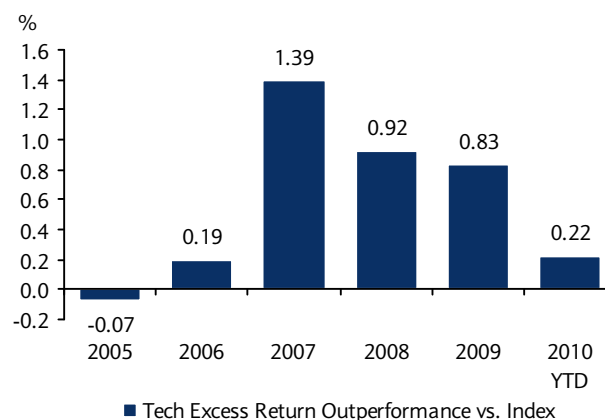
- The technology index is trading tight relative to the Credit Aggregate and other industrial sub-indices. However, we think this premium is warranted given the heavy weighting of the large cap credits rated A or better that hold significant net cash positions. In a sell-off, we expect tech to have one of the lowest betas as it is generally viewed as a safety sector.
- We expect y/y growth rates to slow in 2011 as comps become more difficult and inventory restocking stops. However, we expect enterprise spending levels to remain high, offsetting continued consumer weakness.
- The pace of share repurchases and M&A is likely to remain heavy, as the larger credits continue to consolidate the sector and adopt a universal services model. The largest swing factor in our funding/issuance assumptions is the possibility of a tax holiday, which would allow the repatriation of offshore cash.
- We do not expect tech sector leveraging/event risk fears to ease. The two names we remain most concerned about are Computer Sciences and Motorola Solutions (following the split), and we recommend buying CDS on both.
- In CDS, Xerox, and Cisco are our favorite tech longs.

### LTM IG Tech Index OAS



Note: As of November 22, 2010. Source: Barclays Capital

### IG Tech Index excess returns



Note: As of November 22, 2010. Source: Barclays Capital

## HIGH GRADE TELECOM – UNDERWEIGHT

Hale Holden +1 212 412 1524 hale.holden@barcap.com

Danish Agboatwala +1 212 412 2573 danish.agboatwala@barcap.com

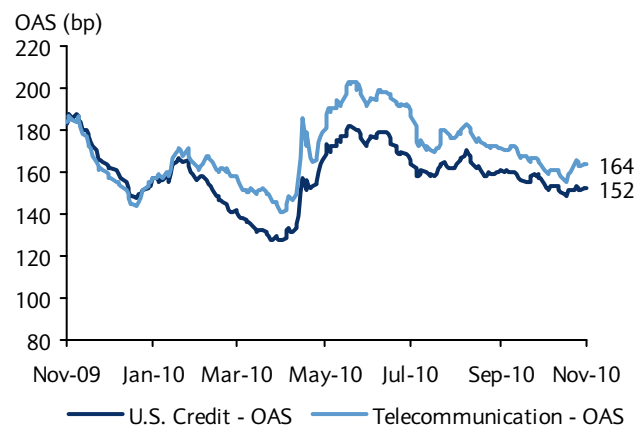
### Key recommendations

- We recently assumed coverage of Verizon and AT&T with Underweight recommendations. Our rating on AT&T reflects concerns over an S&P downgrade, recent outperformance (which causes current levels to appear rich), and potential near-term issuance. Our Verizon Underweight reflects the potential for an S&P downgrade, longer-term concerns about the Vodafone-Verizon ownership structure of Verizon Wireless, levels that appear rich to benchmarks, and potential costs associated with the iPhone.
- Our European counterpart, Sam Morton, is Overweight on levels for Telefonica and British Telecom, and Underweight on Telecom Italia and Vivendi.
- In Canada, we are Market Weight Rogers and BCE, and Underweight on Telus.

### Sector outlook

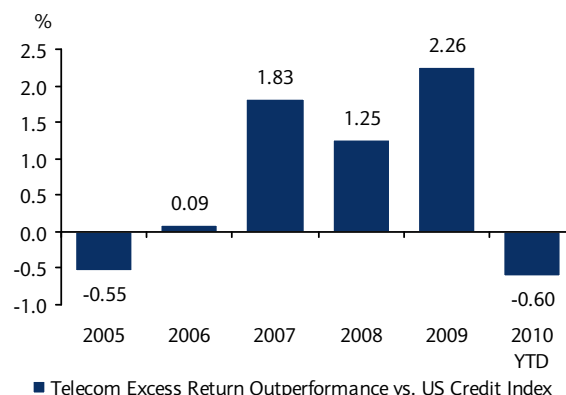
- We expect the recent focus on deleveraging to reverse since both AT&T and Verizon have hit their respective targets. In addition, we expect ratings downgrades on both from S&P. Fundamental growth could also slow as wireless penetration hits 100%, while new network builds (4G) will represent a use of capex. Finally, sovereign headlines are likely to continue to have an outsized spread effect on the EuroTels.
- Major issues in 2011 will include: 1) potential for a Verizon iPhone launch (we view this as a cost for VZ, rather than a negative for T); 2) the possibility that VZ starts to upstream dividends from VZW; 3) a potential resolution of SFR by Vivendi/Vodafone; 4) the competitive environment for Sprint, T-Mobile, Leap, Clearwire, and Metro; and 5) the potential for net-neutral regulation.
- It would surprise us if either Verizon or AT&T engaged in any material M&A over the next 12 months – their focus is likely to remain on returning capital to shareholders.
- In Canada, we expect competition to increase as Quebecor's wireless offering gains traction and Shaw launches service mid-year. In addition, the horizontal consolidation of telcom/media (Shaw, BCE, Rogers, and Quebecor) may put Telus at a strategic disadvantage.

### LTM IG Telecom Index OAS



Note: As of November, 19, 2010. Source: Barclays Capital

### IG Telecom Index excess returns



Note: As of November 19, 2010. Source: Barclays Capital

### Top issuers by size in US Communications Index

Ticker	Market Value (%)	OA Duration	Count
T	16.98	8.25	43
VZ	11.14	7.63	33
CMCSA	9.13	8.01	28
TWC	8.33	7.41	19
VOD	4.12	6.66	13
TELEFO	4.11	6.94	10
TITIM	3.93	6.78	10
NWSA	3.72	10.16	18
VZW	3.69	4.54	8
Total	100.00	7.35	309

Note: As of November 17, 2010. Source: Barclays Capital

## HIGH GRADE TOBACCO – UNDERWEIGHT

Priya Ohri-Gupta, CFA +1 212 412 3759 priya.ohrigupta@barcap.com Martin Fernandez +1 212 412 5392 martin.fernandez@barcap.com

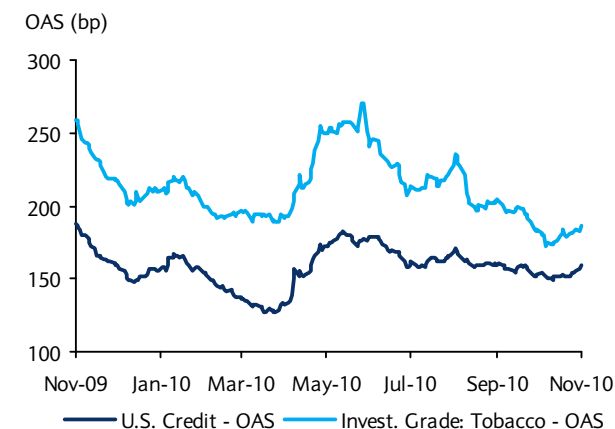
### Key recommendations

- **We would be a buyer of 5y CDS in Reynolds (RAI - MW) and Altria (MO - UW)** given current valuations and potential for widening in early 2011 on the back of headline risk in the sector.
- **We recommend switching into RAI cash**, as it is less exposed to menthol and valuation still looks attractive relative to MO, particularly on the front end of the curve.

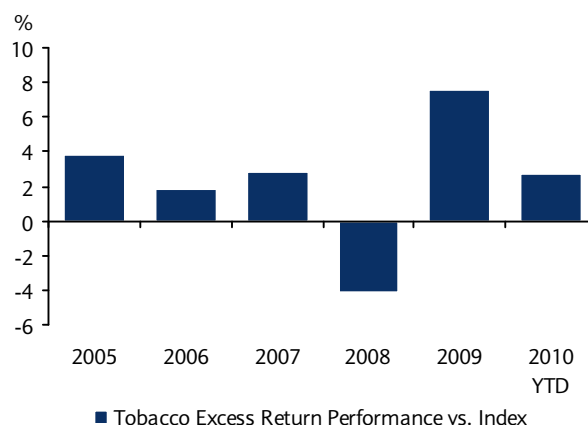
### Sector outlook

- We recently moved to an **Underweight** recommendation on the Tobacco sector given 1) current valuation levels, which appear rich relative to other BBB credits; 2) anticipated headline risk in early 2011; and 3) a change in our recommendation on Altria to Underweight. We have also shifted to a negative bias in Lorillard, which together with Altria accounts for more than half of the tobacco sub-sector. Fundamentally, we are fairly constructive on the sector, as we continue to see an overall benign litigation environment, coupled with limited M&A risk and prudent balance sheet management.
- **Regulatory Risk:** In March, the Tobacco Products Scientific Advisory Committee (TPSAC) is scheduled to release its recommendations on menthol. While non-binding, the recommendations could generate some headline risk for Lorillard and Altria, the two tobacco companies with the most exposure to menthol. Once the TPSAC recommendations are made, it could be at least 14 months before any rules subsequently created by the FDA go into effect. With menthol cigarettes accounting for approximately 30% of the market, we view an outright ban as fairly unlikely, as concerns could be raised about the emergence of a possible black market as a result.
- **Litigation:** Near-term litigation trends have been largely favorable, with eight of the past nine Engle Progeny cases found in favor of the tobacco industry. Thus far, of the approximately 7,700 Engle Progeny cases, 33 cases have been tried with verdicts to date since the trials began last year. Given this pace and the likelihood of subsequent appeals, the near-term litigatory environment is likely to remain fairly benign in terms of financial effects on tobacco manufacturers.
- Industry trends are expected to remain supportive, with more normalized volume trends. Financial policies are also anticipated to be fairly conservative with no major shift expected with new management at Reynolds and Lorillard.

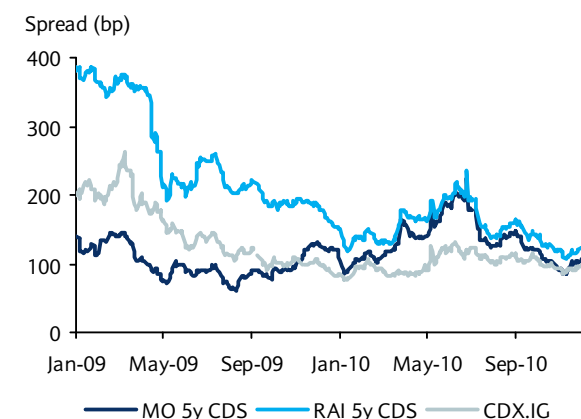
### Tobacco performance versus the Credit Index



### Tobacco excess return performance has been strong



### 5y Tobacco protection versus IG



## HIGH YIELD AEROSPACE/DEFENSE – OVERWEIGHT

Matthew Vittorioso +1 212 412 1378 matthew.vittorioso@barcap.com

Young Kwon +1 212 412 5910 young.kwon@barcap.com

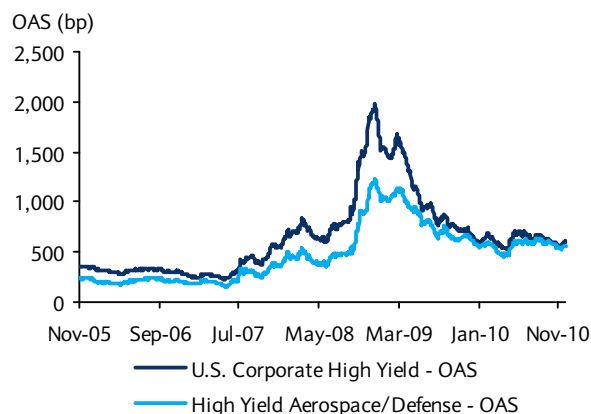
### Key recommendations

- **Buy DAE Aviation (DAEAVI, OW) 11.25% senior notes for a 9.7% yield to worst (10.9% current yield).** Stable earnings and a slowly improving credit profile (net leverage down to 5.5x at 3Q10) have us comfortable reaching for extra yield in DAE bonds. We think business jet MRO recovery and a resolution to covenant overhang will be catalysts for spread compression in 2011.
- **Buy Hawker add-on term loan at 99 for a 10.9% yield (L+850, 2.0% floor).** While Hawker's business remains challenged, the company ended 3Q10 with roughly \$490mn of total liquidity and is guiding to positive free cash flow for the fourth quarter.

### Sector outlook

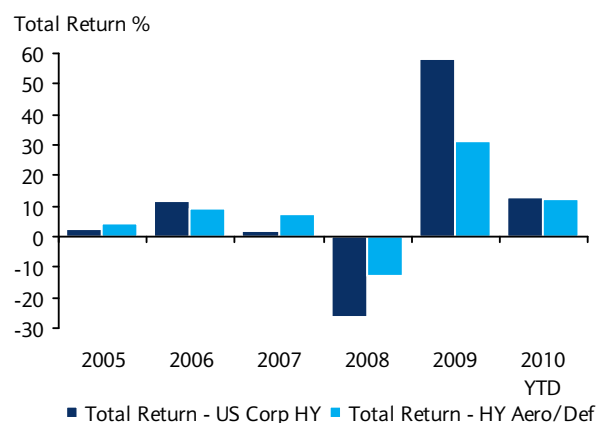
- The mean OAS for the aerospace & defense sub-index over the past five years is 480bp, 173bp inside of the high yield index. Currently, aerospace & defense trades at 566bp, roughly 40bp inside of the broader high yield market. With a solid fundamental backdrop and investor attention returning to credit quality in a lower (5-6%) return environment in 2011, we think aerospace can outperform high yield.
- Commercial aerospace fundamentals continue to improve into year-end. September global air traffic increased 10.5% versus the prior year, while available seat kilometres, a measure of airline capacity, increased 7.3% y/y. Rising air traffic/aircraft utilization should benefit aftermarket suppliers such as TransDigm (TDG) in 2011. In response to greater demand and improving fundamentals, Boeing and Airbus announced various production rate increases to be implemented over the next couple years. We expect aircraft deliveries from Boeing and Airbus to return to growth in 2011 following a pause in 2009-10. Increasing production rates and higher deliveries should benefit OEM suppliers such as Spirit Aerosystems (SPR) in 2011.
- Defense spending is holding despite continued talk of cuts in an effort to control the deficit. Outlays for hardware increased 0.3% y/y in October, following a modest 1.8% decline in 3Q10. With so much attention on the need to control deficit spending, we expect the DoD budget to remain topical, though talking about cuts and actually cutting spending are two different things. The National Commission on Fiscal Responsibility and Reform recently presented President Obama with a draft of its proposals to reduce the budget. The committee's proposals primarily include cuts to large procurement programs such as the V-22 Osprey and the F-35 Joint Strike Fighter. We think these cuts will take time to implement and are more of an issue for larger, investment-grade contractors.

### HY Aerospace & Defense OAS



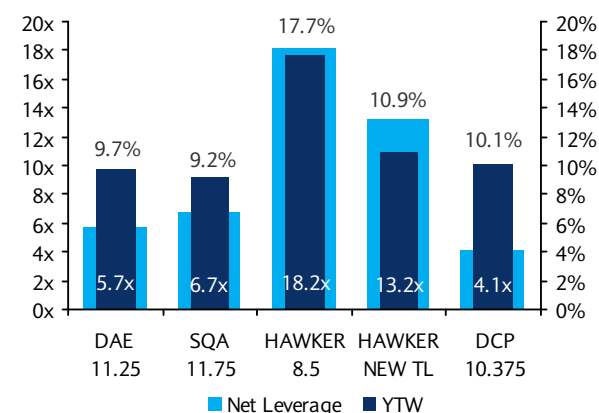
Source: Barclays Capital

### HY Aerospace & Defense total return



Source: Barclays Capital

### HY Aerospace & Defense relative value (net leverage vs. YTW)



Source: Company reports, Barclays Capital



## HIGH YIELD CABLE & SATELLITE – MARKET WEIGHT

Cable/DBS: David Sharret +1 212 412 5466 david.sharret@barcap.com

Satellite: Andrew Finkelstein +1 212 412 3619 andrew.finkelstein@barcap.com

### Key recommendations

#### ■ Charter CCOH 7.25% notes due 2017 (6.93% YTW, B2/B, OW):

We expect Charter to be one of the most conservative credits in the HY Cable/DBS sector given its significant refinancing opportunities in 2012. The company had 4.9x net LQA leverage as of 3Q10 (4.2x through the CCOH notes). We expect additional Charter issuance by 2H11 and 2012, but we expect that this refinancing will be focused on eliminating key senior notes maturities in 2012, 2014 and 2016 ahead of the 2017 notes. The one concern for the CCOH notes is the 0.7x of increased leverage from refinancing the 13.5% CCH2 notes due 2016 at the CCOH entity, but we do not expect this financing until 2H11/2012.

### Sector outlook

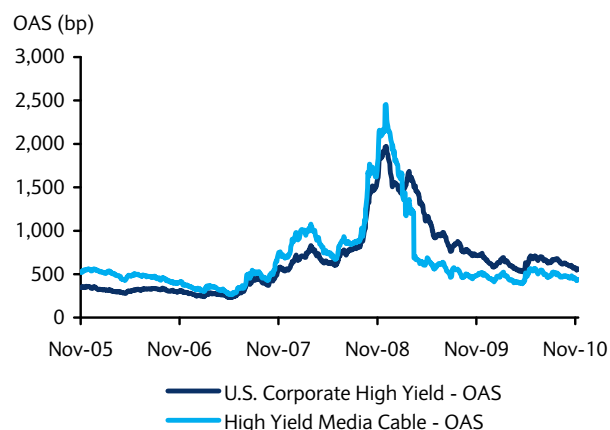
■ **Cable:** We rate the cable sector Market Weight. Given relatively tight trading levels as a high quality sector, cable has underperformed for the past two years amid strong HY returns. The cable sector (6.20% YTW) now trades in line with the BB index and 140bp inside of the HY Index. However, given expectations for lower HY returns in 2011 (5-6% Barclays Capital HY Strategy target), we expect cable sector returns to be broadly in line next year.

■ We expect RGU and EBITDA growth to slow again in 2011 given economically driven video disconnects, limited household formation and slight slowdown in data/telephony sub adds. Commercial growth should remain strong in 2011 and most providers generate strong free cash flow. M&A and shareholder returns remain key risks for increased leverage. However, apart from Mediacom's proposed take private transaction, leverage for most cable/DBS providers declined in 2010.

■ **Satellite:** We remain positive on FSS and MSS. FSS growth remains strong with solid demand from developing economies and government/military users, and long-term contractual revenues provide good visibility and stable earnings. While Intelsat's top line growth slowed, it was hit by some one-time satellite issues and we expect growth to pick up as new satellites are launched. Telesat saw rapid top line growth and margin expansion on launches in 2009, and should benefit from another in 2011. Telesat's exploration of strategic alternatives could lead to deleveraging and/or industry consolidation, with the latter likely improving pricing and the competitive environment for all operators.

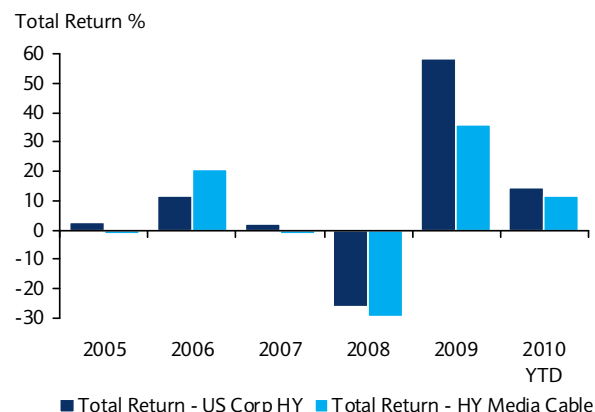
■ **We also like the MSS business.** Inmarsat continues to see solid Maritime terminal growth, and results will be positively affected by LightSquared spectrum reorg payments as well. Harbinger recently sold half of its equity stake, removing a major overhang.

### OAS



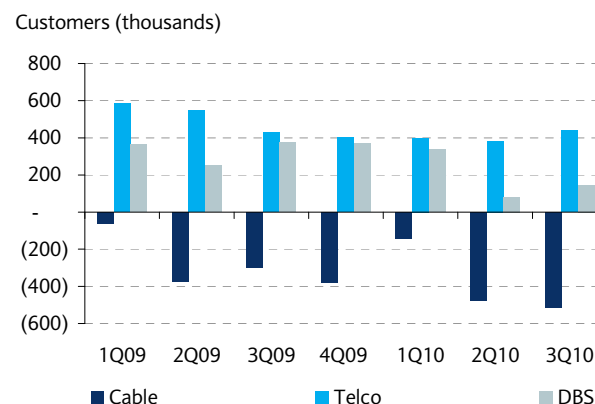
Source: Barclays Capital Live

### Total returns



Source: Barclays Capital Live

### Video customer net additions, by sector



Source: Company Reports



## HIGH YIELD CHEMICALS – MARKET WEIGHT

Brian Lalli +1 212 412 5255 brian.lalli@barcap.com

Steven Bachman +1 212 412 7686 steven.bachman@barcap.com

### Key recommendations

- **Overweight HXN/MOMENT 9% second-priority notes due 2020/21:** Recent refinancing has removed the overhang; we expect credit to continue to deleverage as Apollo works toward exiting its investment (by sale or public offering).
- **Overweight NCX unsecured notes due 2016/19:** A low-cost North American producer with significant asset value, we believe support from its AA-rated parent (IPIC) should continue to move NCX to trade more in line with BB-rated comps.

### Sector outlook

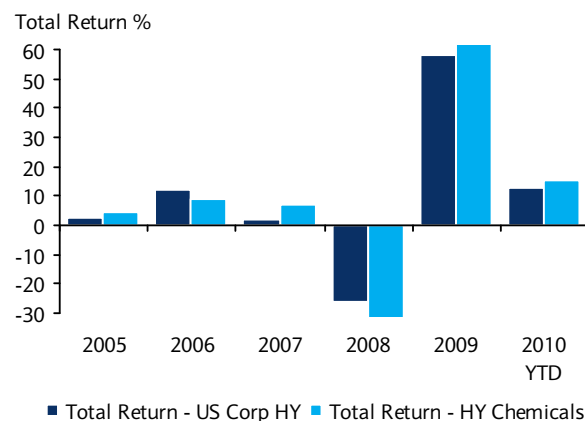
- Following the recession in 2008-09, chemical producers have bounced back strongly in 2010. In line with the rebound of the broader global economy, there has been significant improvement in the credit fundamentals of our high yield chemicals coverage universe over the past 12-18 months. We are especially encouraged by management teams shifting to more conservative policies on balance sheets and liquidity, even as EBITDA and free cash flow continue to improve. We are constructive on the high yield chemicals sector over the near to medium term, with the industry poised to continue to improve as more normalized economic growth returns.
- Despite our positive view on the industry and specific credit fundamentals, we believe index upside is fairly limited at current levels with the High Yield Chemicals sector trading ~100bp inside the US High Yield Index. In a relatively range-bound high yield market, we do not believe the chemicals sector (given its cyclical, less defensive nature) is priced to outperform materially, particularly if we begin to see weakness in the economy or credit markets.
- At current levels, we believe investors should focus on credits with either positive near-term catalysts or the potential for additional yield pickup. While any incremental market weakness may drive underperformance in the near term, we would view any material pullback as a buying opportunity.
- We believe that credits such as Hexion, Momentive and NOVA Chemicals still offer compelling relative value opportunities for investors, as highlighted in our “key recommendations”. We also view LyondellBasell and Huntsman as solid core holdings for investors, given positive operating trends and management’s conservative commentary about the balance sheet and leverage targets. Please refer to the [High Yield Chemicals Initiation](#), October 22, 2010, for additional details on the full sector.

### High Yield Chemicals Index OAS spread



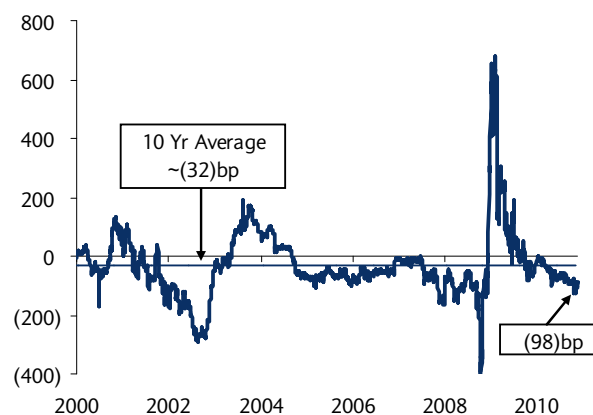
Source: Barclays Capital

### High Yield Chemicals Index historical returns



Source: Barclays Capital

### High Yield Chemicals Index less High Yield Index (YTW % bp)



Source: Barclays Capital

## HIGH YIELD CONSUMER PRODUCTS – MARKET WEIGHT

Reza Vahabzadeh +1 212 412 2166 reza.vahabzadeh@barcap.com

Elizabeth Gilson +1 212 412 3064 elizabeth.gilson@barcap.com

### Key recommendations

- **Overweight Visant senior notes**, reflecting the above average YTW (8.9%) of the bonds, expectations for flattish EBITDA trends, reasonable free cash flow generation (5% of net debt) and de-leveraging prospects (0.5x) over the next year, leading market position in the Scholastic (school yearbooks and diplomas) segment, and an experienced management team, partly offset by above average leverage (6.0x) and sluggish trends in certain non-Scholastic segments.
- Core holdings in the consumer products space include, in our view, **Jarden, Johnson Diversey opco, Acco senior secured, Scotts, and Libbey senior secured bonds**.

### Sector outlook

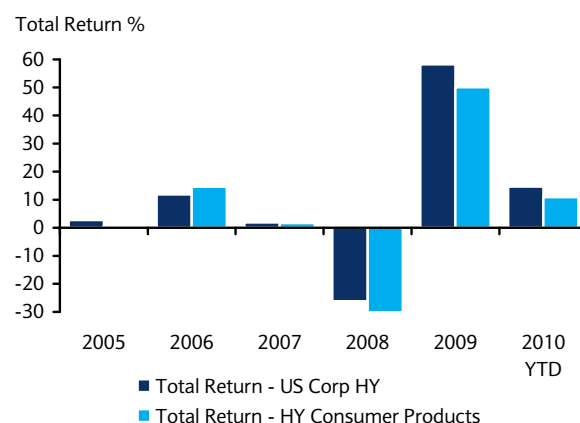
- **Our Market Weight view of the consumer products space** considers the reasonable free cash flow characteristics of most operators in this space, some encouraging signs of slowly improving consumer spending trends, and the reasonable implied enterprise value cushions enjoyed by many credits, partly offset by growing pockets of inflationary input cost pressures (resin, industrial metals, linerboard, ocean container), intense competitive dynamics in many product segments, and the average (7.9%) YTW of the sector.
- **In our view, consumer product company sales** trends are likely to improve, albeit at a sluggish pace, in FY11, reflecting manageable y/y comparisons and the potential for improved consumer spending (albeit still sluggish). EBITDA trends are likely to remain mixed overall, in our view, and dependent on pricing and cost dynamics in sub-sectors. However, balance sheets are in reasonable overall shape, in our view, considering significant refinancing activity over the past two years.

### Consumer Products Index OAS versus High Yield Index



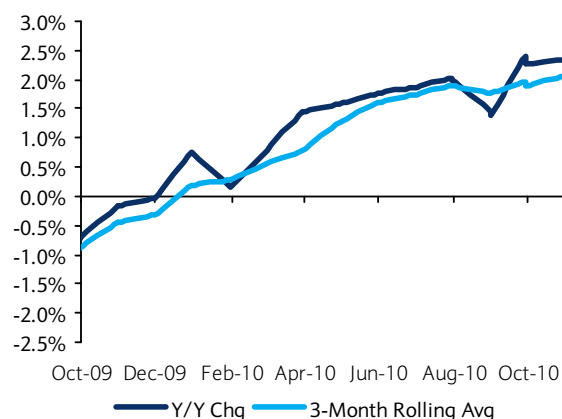
Source: Barclays Capital

### Consumer Products Index total returns versus High Yield Index



Source: Barclays Capital

### Consumer spending (% change y/y)



Source: BEA, Bloomberg, Barclays Capital

## HIGH YIELD ELECTRIC UTILITIES

Jim Asselstine +1 212 412 5638 james.asselstine@barcap.com

Timothy Tay +1 212 412 5548 timothy.tay@barcap.com

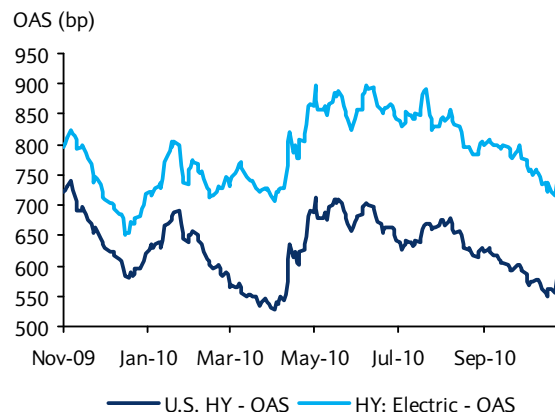
### Key recommendations

- **Buy Energy Future Immediate Holding Co 10% senior secured notes due 2020 (TXU, OW), quoted at 9.3% YTW.** The bonds have strong collateral protection in the form of TXU's 80% equity interest in Oncor, a low-risk investment grade regulated electric utility distribution company, which protects the bonds against an otherwise weak capital structure at TXU.

### Sector outlook

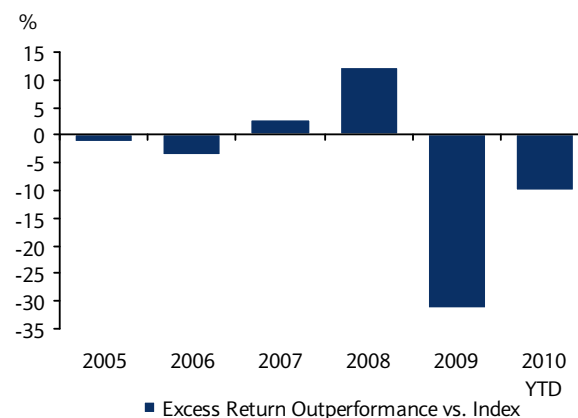
- Business conditions for HY independent power producers are likely to remain very challenging in 2011, in our opinion, due to the electric sales losses (on average 6%) during the recession, the prospects for only gradually improving electricity demand in 2011, and continued weak commodity price conditions, including low natural gas and power prices, which we expect to remain in place for the foreseeable future. We expect the effects of continued weak commodity price conditions to be somewhat muted in 2011 due to existing hedging programs, but we think the effects will be more pronounced in 2012 as the existing hedges roll off. The likely issuance of a series of new and more stringent environmental regulations for coal-fired power plants by the US Environmental Protection Agency in 2011 will likely increase capital expenditures for the coal-fired generators and may lead to the early forced shutdown of some smaller older generating units.
- Despite challenging business conditions, HY independent power producers are relatively well positioned to withstand these challenges in 2011, due to existing hedging programs, ample liquidity, and limited near-term refinancing risk. M&A activity in the sector is likely to continue in 2011. Thus far, M&A activity has focused on combinations among, or acquisitions of, the weaker companies within the high yield sector; we continue to think the acquisition of a HY independent power producer by an investment grade electric utility holding company is relatively unlikely. Although we believe the merger of Mirant and RRI Energy to create GenOn better positions both companies to meet the continued challenging business conditions in the sector, the future prospects for Dynegy remain more uncertain.

### US HY Electric Utilities OAS versus US HY Credit Index



Source: Barclays Capital

### US HY Electric Utilities excess return versus US HY Credit Index



Source: Barclays Capital

## HIGH YIELD ENERGY & PIPELINES – OVERWEIGHT

Gary Stromberg +1 212 412 7608 gary.stromberg@barcap.com

Kateryna Kukuruza +1 212 412 7647 kat.kukuruza@barcap.com

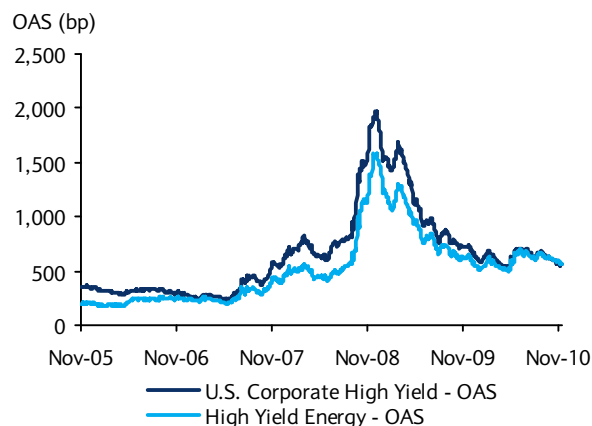
### Key recommendations

- **Buy Chaparral Energy (CHAPAR, OW) 8.5% senior notes due 2015 below par.** We expect Chaparral's net leverage to be 3.3x at year-end 2011 as the company will likely outspend cash flow to grow production. Management noted on its third-quarter conference call that it expects to be free-cash-flow-positive in 2012 and targets an IPO in 2012 or 2013, market permitting.
- **Buy Regency Energy Partners (RGNC, OW) 6.875s due 2018, sell MarkWest Energy Partners (MWE, NR) 6.75s due 2020 at even yield.** We forecast that Regency will maintain 3.7x leverage in 2010 and 2011, which, when combined with EBITDA nearing \$400mn and an ~80% fee based gross margin, should help drive ratings upgrades in the next 12 months. Although we generally like the MWE story, we think current above-par trading levels reflect the company's improved credit profile.

### Sector outlook

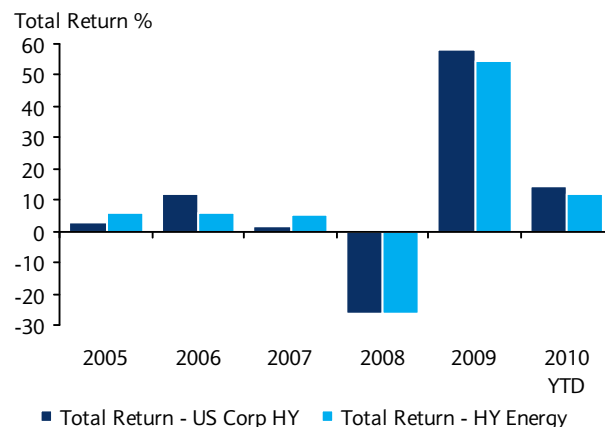
- We rate the High Yield energy sector **Overweight**. The energy sector trades close to 10-year wides relative to the High Yield Index, mostly reflecting outsized energy new issue supply and weak natural gas prices. Based on our view that oil prices will remain strong and that natural gas prices and refining margins have bottomed, we would overweight energy and look for it to trade ~50bp inside the index (currently roughly flat). At a spread of ~650bp, energy spreads are about 135bp wider than the average of the past 10 years.
- From a fundamental perspective, Barclays Capital commodities analysts believe oil and natural gas prices will average \$85/bbl and \$4.00/mmbtu, respectively, in 2011. Oil prices will likely be supported by strong global demand growth exceeding 2mbo/d in 2011, coupled with a work-off in inventories. Natural gas prices are mired in over-supply amid a stubbornly high gas rig count and producers' need to drill shale acreage to hold leases.
- We believe sector themes in 2011 will feature a continuation of oil prices outperforming natural gas, higher unit costs for producers, an uptick in M&A activity, and continued new issue supply. One notable difference is financial leverage: we estimate that leverage for our peer group of 33 energy companies will decline to 2.7x, from an estimated 3.0x in 2010 and 3.3x in 2009, reflecting moderation in spending and continued improvement in cash flow for oilfield service and refining companies. Our Overweight bond recommendations are mostly oil-focused names: **Chaparral Energy, Hilcorp Energy, Linn Energy, Plains E&P, and Regency Energy Partners.** In loans, we favor **Fairmount Minerals, MEG Energy and Venoco** second-lien term loans.

### High Yield Energy spreads



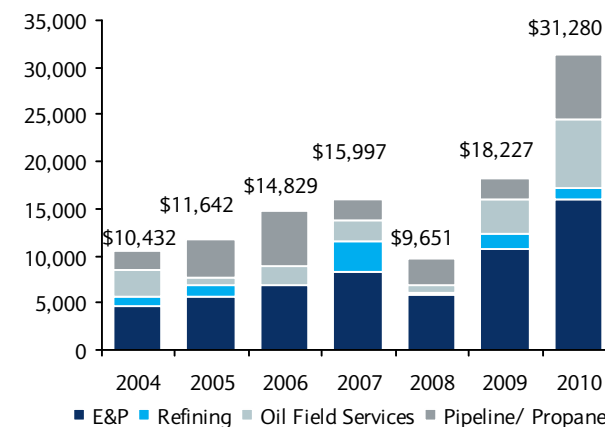
Source: Barclays Capital US High Yield Index

### High Yield Energy returns



Source: Barclays Capital US High Yield Index

### High Yield Energy new issuance (\$mn)



Source: Barclays Capital

## HIGH YIELD FOOD & BEVERAGE – MARKET WEIGHT

Reza Vahabzadeh +1 212 412 2166 reza.vahabzadeh@barcap.com

Elizabeth Gilson +1 212 412 3064 elizabeth.gilson@barcap.com

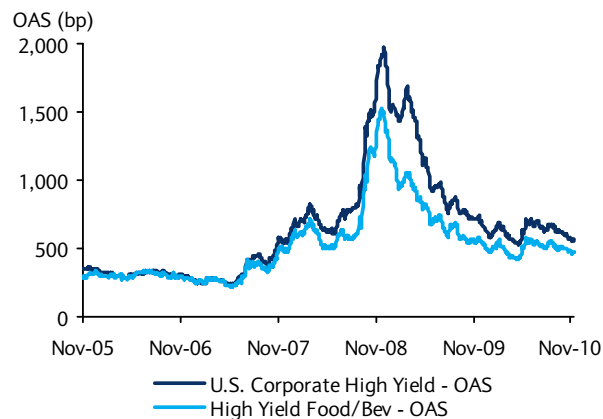
### Key recommendations

- **Overweight Pinnacle Foods senior subordinated notes**, reflecting the above-average YTW (8.7%) of the bonds, expectations for solid (5-8%) y/y EBITDA trends (driven by cost savings) and free cash flow generation (6% of net debt) over the next several months, estimated 0.7-0.9x of deleveraging through 3Q11, diversified branded packaged food portfolio, and experienced management team, partly offset by above-average leverage (6.4x) and heightened promotional activity recently in selected categories.

### Sector outlook

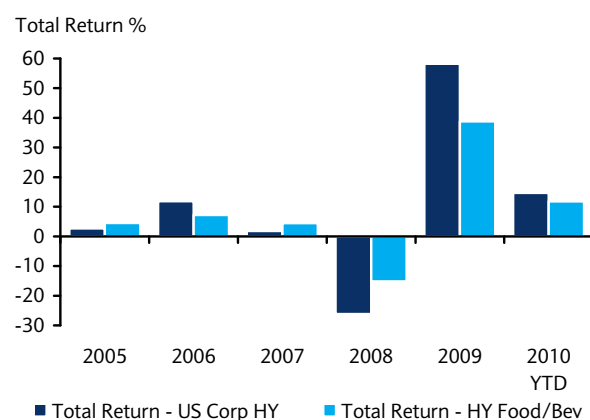
- **Our Market Weight view of the food and beverage space** considers the strong free cash flow characteristics of most operators in this space, relatively stable underlying demand trends, reasonable implied enterprise value cushions enjoyed by many credits, and the potential for heightened M&A activity, partly offset by growing pockets of inflationary input cost pressures (partly mitigated by active hedging programs) and the below-average YTW (6.5%) of the sector.
- **In our view, EBITDA trends in packaged food space are likely to be sluggish over the next several months** as operators attempt to offset higher input cost pressures with ongoing organic cost savings and improved pricing dynamics (lower promotions). Importantly, many operators have been adept at generating ongoing productivity-driven cost savings to offset the modest degree of cost inflation. Price competition has been intense in recent months, but we would not be surprised to see slightly better pricing discipline by 2Q-3Q11 as many hedges begin to expire. Meat processing EBITDA trends are likely to moderate over the next several months, but likely trough at reasonable levels, in our view, given relatively tight supply/demand balance for many proteins. Similarly, livestock raising margins could weaken through 1Q11, driven by higher grain costs, partly offset by still reasonable protein pricing.

### Food/Bev Index OAS versus High Yield Index



Source: Barclays Capital

### Food/Bev Index total returns versus High Yield Index



Source: Barclays Capital

### CRB Commodity Price Index



Source: ThomsonReuters/Jefferies, Bloomberg, Barclays Capital

## HIGH YIELD GAMING – MARKET WEIGHT

Andrew Brophy +1 212 412 3084 andrew.brophy@barcap.com

David Hendrickson +1 212 412 3213 david.hendrickson@barcap.com

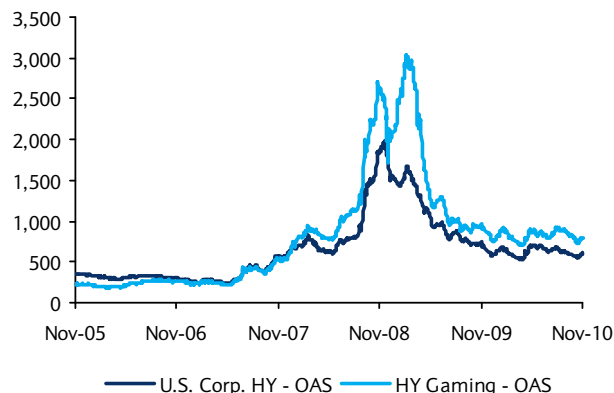
### Key recommendations

- **We remain Overweight Harrah's second-lien notes (debt/EBITDA 10.6x, 11.9-13.2% YTW) and continue to find them attractive versus MGM's similarly dated unsecured notes (debt/EBITDA 12.3x, 10.2-10.8% YTW).** In our view, Harrah's solid liquidity and limited maturities through 2014 provide it with ample time for a rebound in gaming fundamentals. Conversely, MGM has significant debt maturities nearly every year until 2020. Additionally, we continue to believe Harrah's first-lien notes trade near the cheap end of fair value at 8.6% and debt/EBITDA of 6.8x.
- **Isle of Capri's (MW) 7% subordinated notes of 2014 appear cheap at 8.7% versus Boyd Gaming's (MW) 6.75% subordinated notes of 2014 at 8.5%.** In our view, Isle presents a more stable credit story, given that the company is not exposed to deeply troubled markets such as Las Vegas Locals or Atlantic City.
- **We continue to view Penn National (MW), Wynn Las Vegas (MW), and Ameristar (MW) as defensive holdings that should provide solid principal protection if gaming fundamentals erode further.**

### Sector outlook

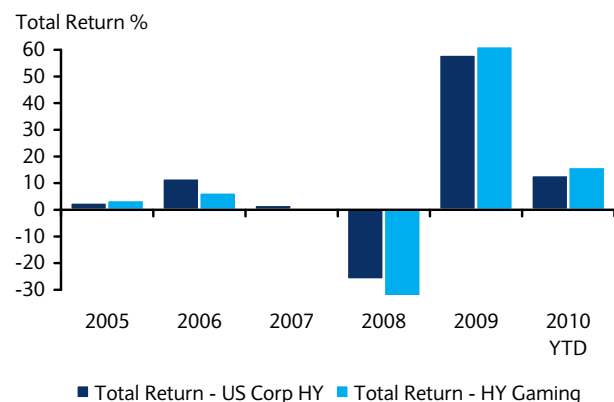
- As of November 30, the high yield gaming index trades 185bp wide to the High Yield Index, versus the 5-year average of 170bp. Given our view that industry fundamentals are likely to remain stagnant to slightly better during 2011, we believe meaningful outperformance is unlikely. We think the top line will be slow to improve through 2011 and expect limited additional cost reduction, given the aggressive measures already taken by many issuers. Leverage remains elevated in many cases, which we expect to be the norm, rather than the exception, for the near term.
- In Las Vegas, visitation and occupancy trends have shown signs of stabilization and improvement; however, average daily rates remain pressured. We expect the December opening of the Cosmopolitan (an initial 2,000 rooms) on the Las Vegas Strip to add further pressure to room rates. Gaming revenues remain supported by high-end international play rather than mass market strength, and slot volumes remain weak. The Las Vegas locals market remains under duress, given unemployment in the Las Vegas Valley in excess of 14% and a weak housing market.
- Atlantic City remains the weakest market in the US because of a combination of cyclical and structural issues that have led to accelerating declines in gaming win. Other regional markets are mixed but generally weak, with select markets outperforming due to legislative changes (Colorado), supply increases (Missouri), or both (Pennsylvania).

### HY Gaming OAS versus High Yield Index



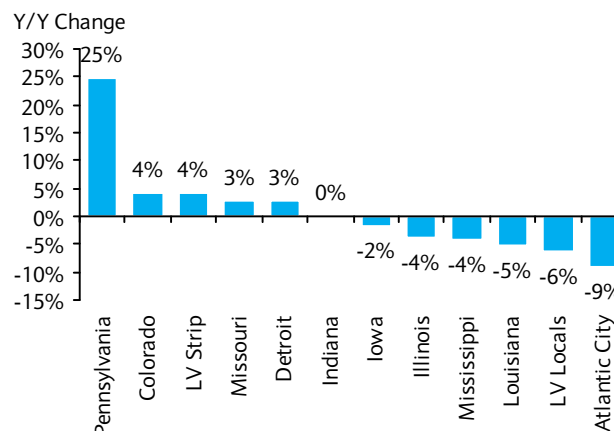
Source: Barclays Capital

### HY Gaming total returns versus High Yield Index



Source: Barclays Capital

### YTD Gaming revenues by market



Note: All figures as of October, except LV Strip and LV Locals (as of September).  
Source: State gaming revenue reports

## HIGH YIELD HEALTHCARE – MARKET WEIGHT

Scott Schimpf +1 212 412 2858 scott.schimpf@barcap.com

Stacey Schroeder +1 212 412 2376 stacey.schroeder@barcap.com

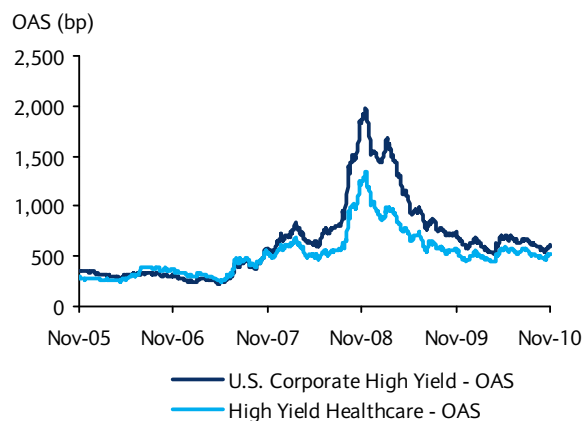
### Key recommendations

- **Buy MedAssets (MDAS) 8% of 2018 at \$100.8.** Reasonable dollar price and yield of 7.8% (versus 7.0% YTW of healthcare index) are an attractive entry point for a credit that is expected to deleverage through strong growth and free cash flow generation.
- **Swap out of Warner Chilcott (WCRX) 7.75% of 2018 into Valeant (VRXCN) 6.875s of 2018,** take out one to two points in price and give only 60bp in yield for a higher-quality pharmaceutical offering.

### Sector outlook

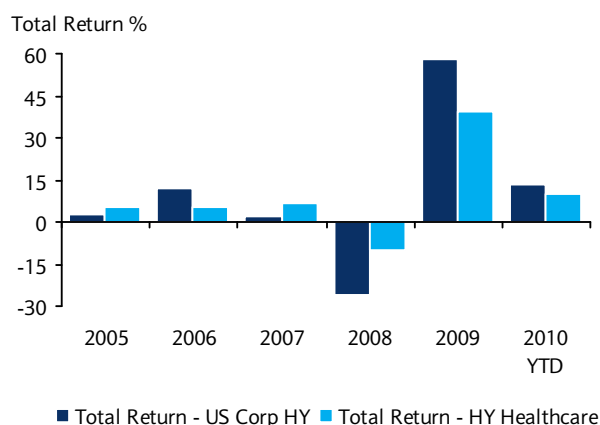
- We remain Market Weight the high yield healthcare sector leading in to 2011. Solid operating performance and improved cash flow generation at many of the credits in our universe should continue, in our view, but we see somewhat limited opportunity for significant outperformance, considering that the sector is trading 80bp inside of the high yield market on an OAS basis. That said, we believe healthcare will perform in line with the overall high yield market if the market trades sideways. Moreover, if it weakens, we like the low beta, defensive nature of the sector as a safe haven for investors.
- There are several themes within the healthcare investment space that we believe merit attention as we head into 2011, including:
  - Volume – when do volumes at healthcare facilities turn positive? Should a bottoming in volume declines occur, we believe this could reinvigorate investor enthusiasm for several names in our coverage universe as growth/deleveraging stories.
  - Negative payor mix shift should begin to stabilize, particularly if there is some bottoming out or potential improvement in the unemployment picture.
  - Challenging conditions that many state budgets face may pose greater threats in the upcoming year. Should states need to pursue deeper cuts, some Medicaid program rates and coverage levels may come under pressure.
  - We believe that M&A activity will remain elevated in 2011. A low-rate financing environment and moderate valuation multiples continue to make healthcare company transactions attractive, in our view.
- Turning to Washington DC, things should remain active – albeit somewhat less than last year, with healthcare reform legislation. We look for regulatory risk to shift more to the administrative side as the various agencies begin to implement the reform bill. That said, one clear avenue for legislative risk remains in the form of the omnipresent “doc fee fix.” The expiration of the current patch occurs on December 31, 2010, and we expect it to continue to be dealt with over the coming year, creating a legislative vehicle for other items that could affect the sector.

### HY Healthcare trades 80bp inside the High Yield Index



Source: Barclays Capital

### HY Healthcare exhibits its low beta nature



Source: Barclays Capital



## HIGH YIELD INDUSTRIALS – MARKET WEIGHT

Matthew Vittorioso +1 212 412 1378 matthew.vittorioso@barcap.com

Young Kwon +1 212 412 5910 young.kwon@barcap.com

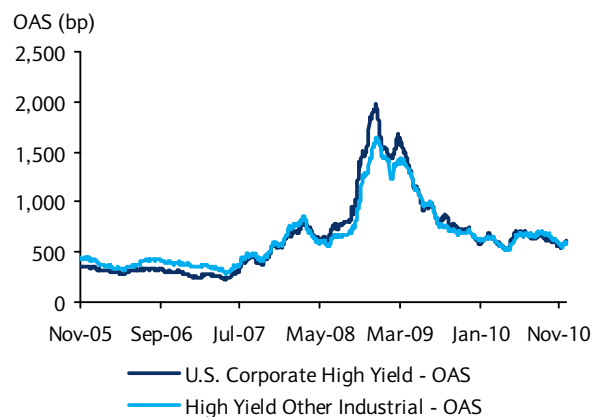
### Key recommendations

- **Buy Mueller Water (MWA, OW) 8.75% senior notes of 2020 for a 7.2% YTW (8.0% current yield) at 109.** Net leverage at the senior note level remains low 1.9x, and we expect EBITDA to improve off of trough levels in 2011.
- **Swap into Rexnord (RXN, MW) 8.5% senior notes of 2018 from Manitowoc (MTW, MW) 9.5% senior notes of 2018.** The swap reduces leverage by more than a turn (5.1x at Rexnord versus 6.3x at Manitowoc) and moves investors into an earlier cycle recovery credit (RXN is already seeing meaningful y/y improvements in revenue and EBITDA, while MTW crane business has not yet bottomed) for approximately even yield.

### Sector outlook

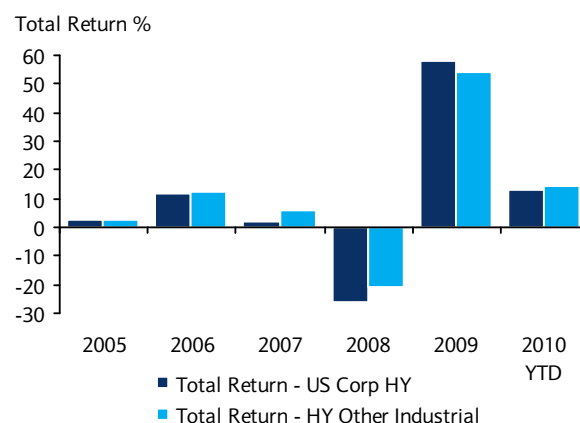
- Fundamentals behind the general industrial space continue to move in the right direction, albeit at a slower pace than earlier this year. At 93.4% of its 2007 average, total industrial production in October was 5.3% above the prior year level. More specifically, manufacturing production increased 0.5% sequentially and was up 6.1% versus October 2009. Manufacturing capacity utilization improved modestly in October to 72.7%, from 72.3% in September (up from 68.2% in October 2009). Lastly, we point out that the Institute for Supply management's PMI showed sequential improvement last month to 56.9 from 54.4 in September. October was the 15<sup>th</sup> consecutive month the ISM PMI reading came in above 50, indicating expansion in the manufacturing sector. Overall, the data appear to support a continuation of this slow growth environment.
- From a valuation perspective, the other industrial sub index has historically traded with a strong correlation to the broader high yield market (other industrial includes the broadest group of industrial credits we cover, including Baldor Electric, Hillman Group, MWA, Park-Ohio Industries, RXN, Trimas Corp, and Wesco Distribution). Other industrial currently trades at an OAS of 578, versus 608 for the broader market. If we look at the mean over the past five years, other industrial has generated an OAS of 651, versus 653 for the high yield index. We expect this correlation to hold in 2011 as generally supportive fundamental data allow industrial names to trade in line with the broader market. Drilling down a bit more specifically, we expect earlier cycle industrial names such as Rexnord and Baldor to outperform later cycle heavy equipment manufacturers as market momentum slows and credit quality becomes more important.

### HY Other Industrial - OAS



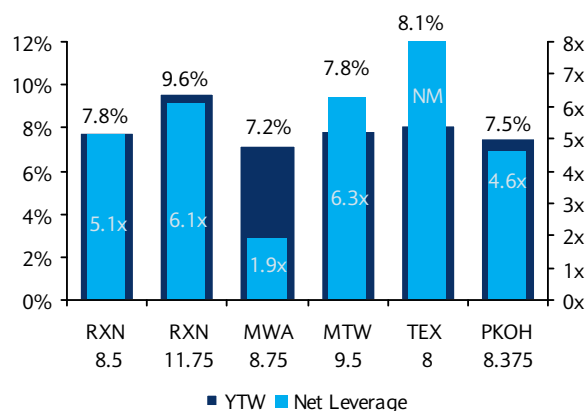
Source: Barclays Capital

### HY Other Industrial – total return



Source: Barclays Capital

### HY Other Industrial relative value (net leverage vs. YTW)



Source: Company reports, Barclays Capital



## HIGH YIELD MEDIA & ENTERTAINMENT – MARKET WEIGHT

Andrew Finkelstein +1 212 412 3619 andrew.finkelstein@barcap.com Michael Sanchez +1 212 412 3635 michael.sanchez@barcap.com

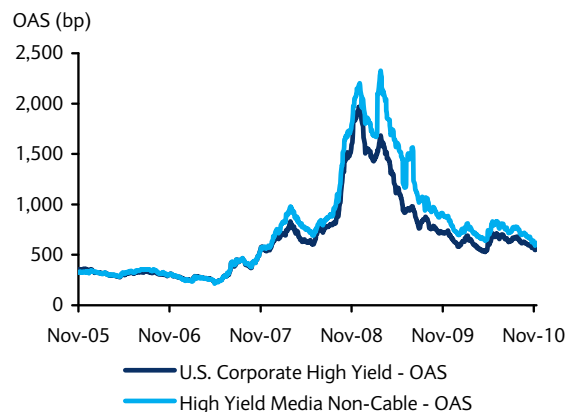
### Key recommendations

- **Buy Cengage (TLACQ) 10.5% senior notes (OW), YTW 9.9%.** The company continues to grow EBITDA and deleverage the balance sheet, with the business benefiting from its counter-cyclical exposure to college admissions, and management holding expenses in check.
- **Buy Univision (UVN) 8.5% senior unsecured notes (OW), YTW 8.7%.** We expect Univision to have a strong 2011 with accelerating television growth and better radio performance. Although leverage through the unsecured layer remains high, we expect at least a turn of deleveraging per year in the near term and see no credit or balance sheet issues on the investment horizon.

### Sector outlook

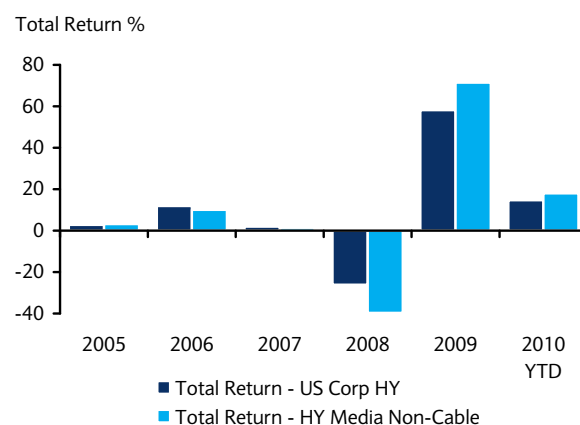
- **A tougher test in 2011.** 2010 growth was fueled by extremely easy comps and the benefits of even-year spending on political, Olympics, and the World Cup. For 2011, total growth will be more difficult as ad-based media will not have the benefit of any event-based spending. While total 2011 growth may be slower, we look at 2011 as a good proving ground for many of these businesses to show that growth has more staying power. We also think a good odd-year performance could help improve the M&A environment. In addition, while advertising did recover a decent amount of the recessionary declines (depending on the specific media) in 2010, we note spending is still well below the peak. With the economy continuing to improve, we see room for further growth for ad-based media in 2011. Auto spending continues to be a critical driver of traditional media spending and played a significant role in 2010's strong performance. We believe auto advertising spending could increase again in 2011, albeit not as much as 2010, as auto sales continue to rise (consensus expects 2011 growth of about 10% y/y) and the car companies continue to roll out new models.
- Excluding Clear Channel (CCU), the media sector currently yields 7.71%, just inside the high yield market. Looking over the next six months, we expect the sector to perform in line with the overall market. We expect fundamentals to improve steadily along with a slower economic recovery. The group's largest issuer is CCU, which is still a volatile situation, and sector performance is likely to be affected by developments at the company. However, we expect improving business trends to allow CCU to continue to deleverage and avoid a default over the next few years.
- We also expect issuers to continue to take advantage of the relatively attractive bond market and refinance more expensive debt and/or extend maturities. Some issuers we think could be in the market include UVN, VNU, and TVL.

### HY Media Non-Cable OAS versus HY Index



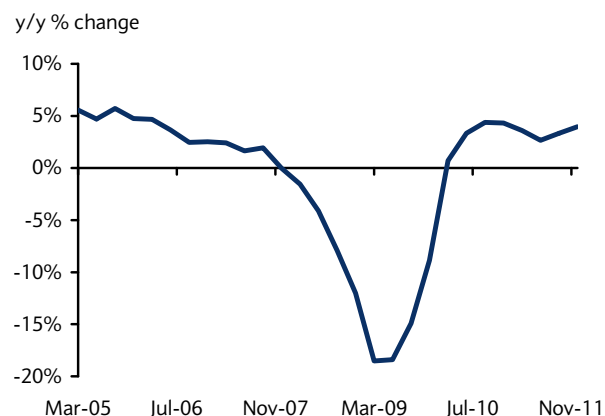
Source: Barclays Capital

### HY Media Non-Cable total returns versus HY Index



Source: Barclays Capital

### Y/y change in quarterly ad revenue (ex political and Olympic)



Source: Magna Global, Barclays Capital

## HIGH YIELD METALS & MINING – MARKET WEIGHT

Matthew Vittorioso +1 212 412 1378 matthew.vittorioso@barcap.com

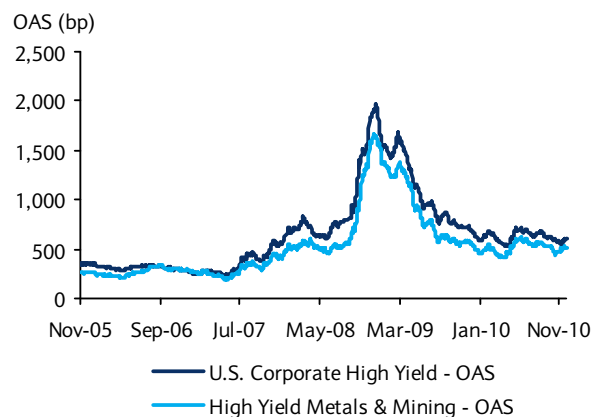
### Key recommendations

- **Buy Patriot Coal (PCX, MW) 8.25% senior notes of 2018.** Following a recent pullback in high yield, these notes are yielding 8-8.25%, versus 6.8% for the Metals & Mining sub index. We expect a meaningful increase in EBITDA in 2011, driven by higher metallurgical volume and price. Additionally, 2012 and 2013 EBITDA is expected to benefit from the roll-off of below-cost/market legacy contracts.
- **Swap into Cloud Peak Energy (CLD, OW) 8.5% of 2019 from the Arch Coal (ACI, UW) 7.25% of 2020 for a pickup of almost 100bp.** While we recognize that Arch Coal generates roughly twice the EBITDA of Cloud Peak, CLD's low leverage and solid free cash flow give us comfort enough to take the extra yield.

### Sector outlook

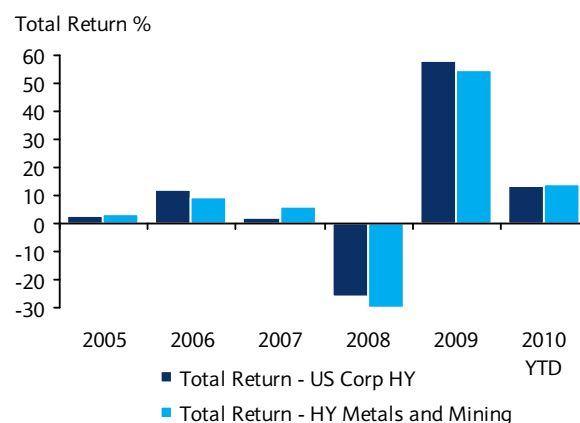
- We see better earnings for domestic coal producers in 2011, driven by stable volumes and better pricing. Most producers have 70-90% of 2011 production already committed and priced, providing strong visibility into 2011 results. On the volume side, we would characterize managements' 2011 guidance as stable, with most companies expecting to ship similar tonnage in 2011 as in 2010. With regard to pricing, most producers have been able to lock in modestly better thermal pricing for 2011, despite recent pressure (low natural gas prices and slow economic recovery). Those producers with metallurgical coal exposure (ANR, MEE, PCX, CNX) should continue to see price improve, as supply of steel-making coal remains tight and the global economy/steel production is rebounding from recessionary levels.
- We expect domestic steel results to remain challenged through at least the first half of 2011, driven by sluggish demand and elevated raw material costs. On the demand front, automobile production is expected to improve only modestly while construction activity is expected to be flat in 2011, likely resulting in muted North American steel demand. On the other hand, improving global steel demand and economic activity continue to support rising raw material prices (mainly iron ore). Muted demand and higher costs resulted in weak 3Q10 earnings (particularly for integrated companies such as AKS and X). Company guidance suggests that these conditions will persist through year-end and are likely to spill over to 1H11.

### HY Metals and Mining OAS



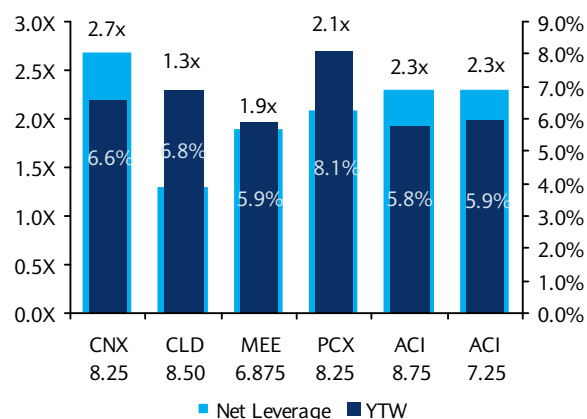
Source: Barclays Capital

### HY Metals and Mining total return



Source: Barclays Capital

### HY Metals and Mining relative value (net leverage vs. YTW)



Source: Company reports, Barclays Capital

## HIGH YIELD PAPER & PACKAGING – MARKET WEIGHT

Jeff Harlib +1 212 412 6952 jeff.harlib@barcap.com

Yung Chuan “Y.C.” Koh +1 212 412 3796 yc.koh@barcap.com

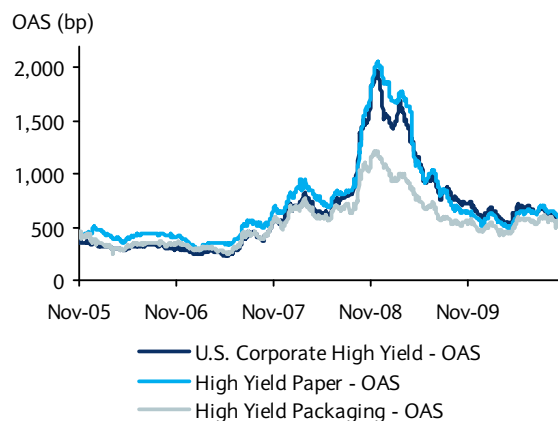
### Key recommendations

- **Overweight Verso Paper (VRS) 11 3/8% subordinated notes (\$96.5, 11.5% YTW).** We note high operating rates and low inventories in the North American coated paper sector. We expect lagging realizations of the \$40-60/ton increase in coated and SC paper grades announced for September 2010 to be fully realized through 1Q11, with some increase in raw material costs in 2011. Based on our 2011 EBITDA estimate, we forecast 5x leverage, modestly positive free cash flow, and healthy liquidity.
- **Overweight Catalyst Paper (CTLCN) 11% senior secured notes (\$92.5, 12.8% YTW).** We expect continued improvement in pricing for newsprint, CGW, and SC, and materially higher directory prices for 2011 (annual contracts). We expect pulp price realizations to decline. For 2011, we forecast healthy EBITDA improvement, secured leverage of 3.4x, modest positive free cash flow, and healthy liquidity.

### Sector outlook

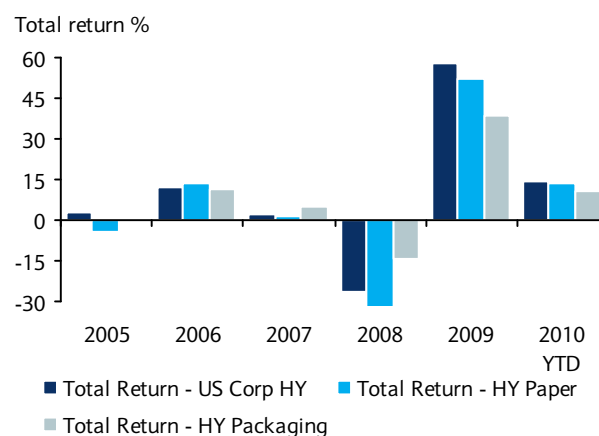
- **Paper:** We have a modestly favorable view of paper sector fundamentals heading into 2011. Overall, operating rates are fairly high across grades, inventories are low, and the trade balance favorable, with a weak USD and demand growth in Asia and South American markets. Although pricing gains have slowed or reversed for certain grades (i.e., pulp and uncoated freesheet), they are continuing for other grades, including uncoated groundwood, coated paper, and newsprint. Industry challenges include slower demand growth (including domestic secular declines in newsprint, uncoated freesheet, and, to some extent, in coated paper), rising input costs (e.g., OCC prices, chemicals, freight), and an elevated/volatile Canadian dollar. While maintaining several sector Overweight recommendations and recognizing that Georgia-Pacific (GP) may achieve investment grade status next year, excluding NewPage, the sector yields 6.35%, approximately 120bp rich to the HY Index. Based on the below-market yield, we rate the sector Market Weight.
- **Packaging:** In the Packaging sector, soft consumer spending trends should continue to translate into muted volume growth in the mature North American and European markets, while healthy demand growth should continue in Asia and South America. Volatile resin prices, with potential upside cost pressures, may affect several credits, including Reynolds Group, Berry Plastics and Solo Cup. We also think further consolidation is possible in the rigid packaging sector. The credit quality of higher-quality packaging companies (Ball and Crown) should remain fairly stable as free cash flow is used for share repurchases. The Packaging sector has a YTW of 7.71% (7.53% for the HY Index) including several higher-quality, lower-yielding names (eg, Ball, Crown, and OI) and higher-yielding, higher-levered credits, which include Reynolds and Berry Plastics. We expect the Packaging sector to perform in line with the market and recommend a Market Weight for the sector.

### Historical OAS



Source: Barclays Capital

### Historical and 2010 YTD (11/17/10) total return



Source: Barclays Capital

### Top 10 constituents of the HY Paper and HY Packaging Indices

As % of HY Paper Index		As % of HY Packaging Index	
Issuer	Index	Issuer	Index
Georgia Pacific	20%	Reynolds Group	27%
Weyerhaeuser	14%	Berry Plastics	14%
NewPage	10%	Ball	12%
Meadwestvaco	5%	Crown	7%
Cascades	5%	Owens-Illinois	7%
UPM-Kymmene	4%	Sealed Air	7%
Sappi	4%	Graham Packaging	5%
Verso Paper	3%	Ardagh Glass	4%
Graphic Packaging	3%	Solo Cup	3%
AbitibiBowater	3%	Greif	3%
<b>Top 10</b>	<b>71%</b>	<b>Top 10</b>	<b>89%</b>

Note: As of November 19, 2010. Source: Barclays Capital

## HIGH YIELD RESTAURANTS – OVERWEIGHT

Reza Vahabzadeh +1 212 412 2166 reza.vahabzadeh@barcap.com

Elizabeth Gilson +1 212 412 3064 elizabeth.gilson@barcap.com

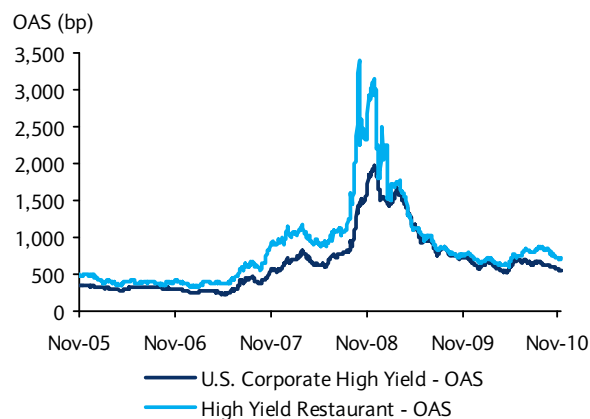
### Key recommendations

- **Overweight DineEquity senior notes**, reflecting improving casual dining restaurant sales trends, solid free cash flow generation (7% of net debt), a solid market position in the family dining and casual dining segments, a highly franchised business model (Over 80%), the above-average YTW (8.8%) of the bonds, a highly experienced management team, and the potential for 0.5x of de-leveraging over the next year, partly offset by above-average leverage (5.6x) and some sensitivity to discretionary consumer spending.

### Sector outlook

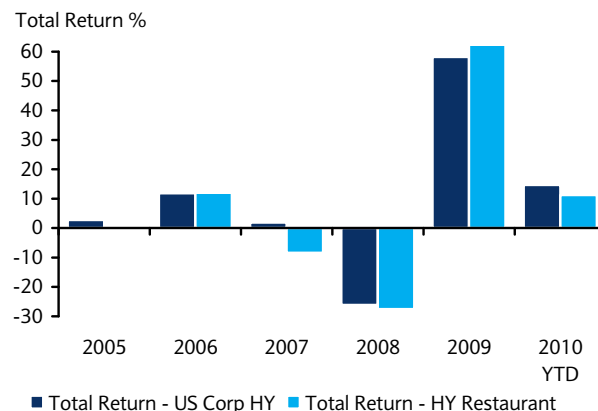
- **Our Overweight view of the restaurant space** considers the improving sales trends in the restaurant channel (particularly the casual and café/bakery channels), the above-market YTW (9.3%) of the restaurant space, signs of improved pricing discipline in the casual dining sub-sector, improving implied enterprise value cushions and heightened M&A activity, partly offset by growing pockets of inflationary input cost pressures (including proteins), intense competitive pressures, and sensitivity to discretionary consumer spending.
- **In our view, restaurant sales trends are likely to improve gradually over the next year**, as discretionary consumer spending improves at a sluggish pace and following three years of decline. The casual dining and café/bakery channels have exhibited encouraging sales trends recently, albeit the recovery remains tepid at this point. Still, after three years of decline, we see scope for continued slow (and choppy) sales recovery over the next year. In the fast-food channel, however, price/mix trends have been unfavorable over the past year and need to recover into positive territory by 2Q11 (in our view) to offset potentially higher protein costs in FY11. EBITDA trends are likely to exhibit sluggish improvement, in our view, as improving sales and pricing trends may be largely offset by higher ingredient costs.

### Restaurant Index OAS versus High Yield Index



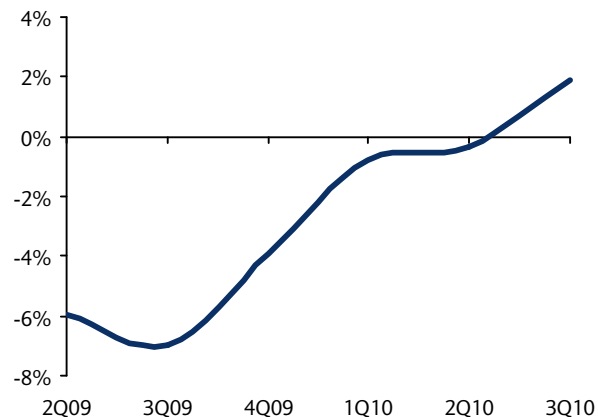
Source: Barclays Capital

### Restaurant Index total returns versus High Yield Index



Source: Barclays Capital

### Casual dining same-store sales trend



Note: Index of 17 casual dining concepts  
Source: Company documents, Barclays Capital

## HIGH YIELD RETAIL – MARKET WEIGHT

Emily Shanks +1 212 412 1355 emily.shanks@barcap.com Michael Perez +1 212 412 1194 michael.perez@barcap.com

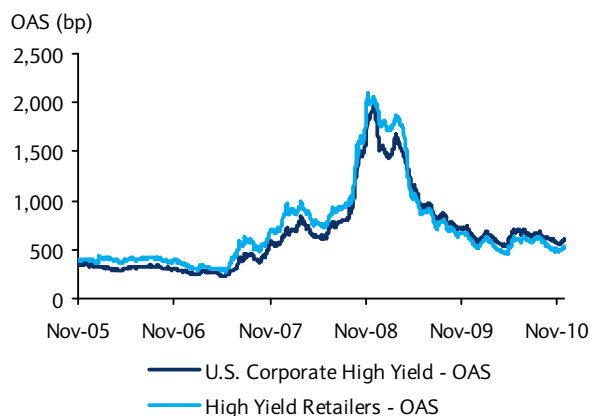
### Key recommendations

- **Buy Bon-Ton Stores, Inc. (BONT) 10.25% senior notes due 2014.** Successfully managed through consumer-driven recession, current effective \$150mn mixed securities shelf filed; we think BONT will refi 15.75% second lien TL due 2013, benefitting the seniors.
- **Buy Michaels Stores (MIK) 7.75% senior notes due 2018.** View as core holding (attractive industry dynamics, leading market share), attractive dollar price and YTW relative value.

### Sector outlook

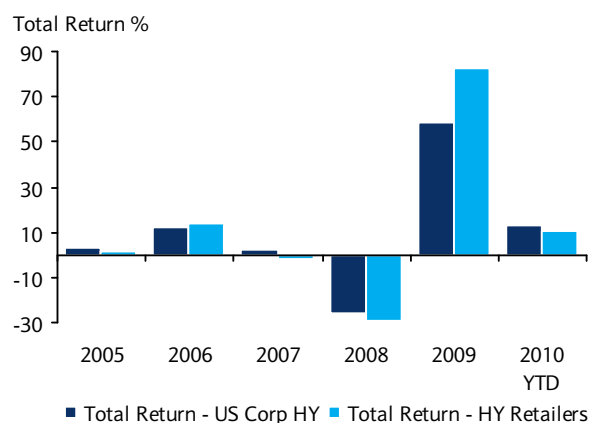
- We maintain a Market Weight recommendation on the retail sector, reflecting our constructive view of industry fundamentals, constituent weighting considerations, and relative value.
- Regarding industry fundamentals, we maintain a cautious near-term outlook on the consumer. Our outlook reflects net negative fundamentals challenging the fatigued consumer, though we do think the consumer has stabilized, just at lower levels. We consider the consumer's "willingness to spend," as measured by confidence and sentiment, which both remain depressed and at recessionary-type levels. We also examine the consumer's "ability to spend," evaluated with such data points as the job market (unemployment), housing data (price, volume, net worth), savings rate, and energy prices; all are pressuring spending, in our view. Factors supporting the stabilization of the consumer include the abatement of the unemployment rate deterioration, stronger financial markets, and easing of credit lending standards. We think this year's back to school performance of sales up +1.7% and NRF's survey results of an estimated +1.0% planned holiday spend increase are further evidence of the stabilization of the consumer.
- Away from the consumer-specifics, industry fundamentals are also defined by retailers' execution. Specifically for FY11, we are keenly focused on balance sheet management (inventory growth relative to sales changes as well as accounts payable leverage) as we do not think there is meaningful incremental room for margin improvement in gross profit, nor SG&A. Generally, the industry faces difficult GP margins comparisons in FY11 and the vast majority of retailers face supply chain cost inflationary pressures (manufacturing capacity down, labor cost increases worldwide, shipping/freight cost increases). Specific to SG&A, given most retailers began implementing substantial cost saves in 4Q08, we think there are limited additional SG&A margin benefits to be extracted, which will be pressured further in a low comp-store sales environment. Ultimately, we think inventory levels will dictate margins and rationality of price competition.
- The HY retail index performance is influenced by its significant constituent weighting with six issuers (M, RAD, TOY, JCP, LTD, DG) comprising roughly 69% of the index.

### US HY Retailers versus US HY Index



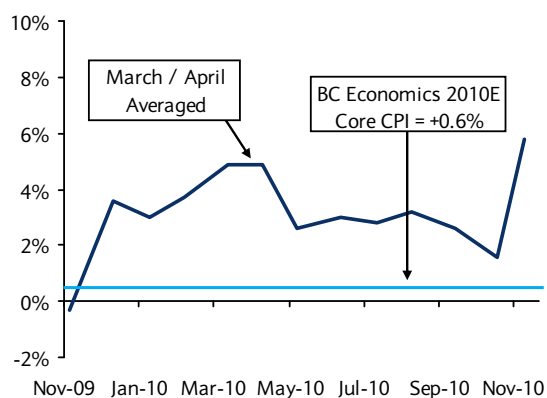
Source: Barclays Capital

### Historical returns – US HY Retailers



Note: YTD as of November 30, 2010. Source: Barclays Capital

### Selected US same-store sales data



Source: International Council of Shopping Centers

## HIGH YIELD SERVICES

Emily Shanks +1 212 412 1355 emily.shanks@barcap.com Michael Perez +1 212 412 1194 michael.perez@barcap.com

### Key recommendations

- **Buy United Rentals, Inc. (URI) 8.375% senior subordinated notes due 2020 (NR).** This is for investors with higher risk tolerance (given that this is the bottom part of the capital structure, rated Caa1/CCC+). URI exhibits strong free cash flow (BCHY FY10 E FCF/Debt +7.1%) and we think its earnings momentum will be solid in 1H11.
- **Buy The Hertz Corporation (HTZ) 7.5% senior notes due 2018 (NR),** as recommended in the publication *CCC=Choosing Credits Carefully, October 29, 2010*. We reiterate our view of HTZ as a core holding (best-in-class operator, market share, management team, revenue/profit diversity); that it is a likely upgrade candidate (B2/CCC+/\*+); and that we see operational upside potential in FY11 (HERC segment, HIP execution provides potential margin upside). We also note HTZ's commitment to investment grade ratings.

### Sector outlook

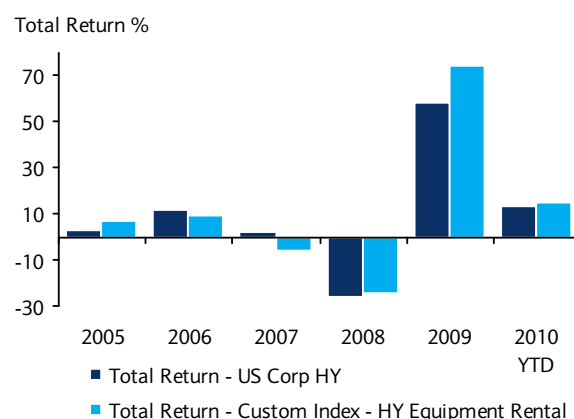
- The high yield services sector is a diverse group of subsectors falling across the consumer-cyclical services, transportation, environmental, and construction machinery indices. We continue to rank the subsectors on a "counter cyclical" to "less defensive" spectrum, except for asset-lite service models, for which industry fundamentals are too varied. Specifically, we view private corrections as most defensive, followed by deathcare, then waste, then car rental; finally, equipment rental is the least defensive of all, in our view.
- Equipment rental is one of the more topical subsectors given the significant cyclical nature of the business, and yet it has posted largely in-line bond return performance YTD. We think the equipment rental industry is at an inflection point (beginning 2Q10) and the cycle is currently at its trough. However, we think the recovery cadence will be more muted and slower than in prior cycles based on the current macroeconomic environment. Looking to FY11, we think the industry will be in recovery mode for the vast majority of the year, but y/y gains may lessen in 2H11, and we do not forecast a significant uptick in demand to drive a full recovery by year-end. Many operators need to ramp up replacement capital expenditures, given that fleet ages are close to or at the maximum, before returns begin to deteriorate. Therefore, we continue to favor operators with lower leverage and greater geographical and fleet diversity.

### US HY Custom Index-US Equipment Rental vs. US HY Index



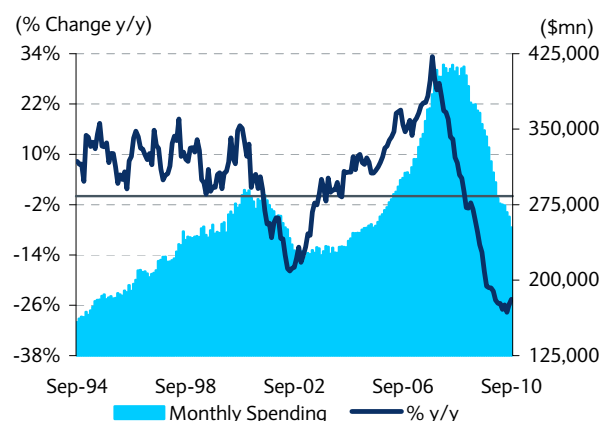
Source: Barclays Capital

### Historical returns – US HY Equipment Rental



Note: YTD as of November 30, 2010. Source: Barclays Capital

### Non-residential construction monthly spending



Source: US Census Bureau

## HIGH YIELD SUPERMARKETS – MARKET WEIGHT

Emily Shanks +1 212 412 1355 emily.shanks@barcap.com Michael Perez +1 212 412 1194 michael.perez@barcap.com

### Key recommendation

#### ■ Swap Idea:

Sell Ingles Markets (IMKTA) \$575mn 8.875% senior notes due 2017  
 – Indicative quote 107%/109% (bid/ ask price), 7.0% YTW (2015), +567bp Z-spd

Buy Stater Brothers (STBRO) new \$255mn 7.375% senior notes due 2018

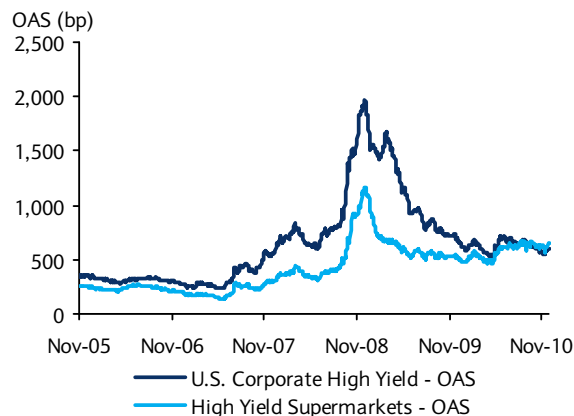
– Indicative quote 100%/101% (bid/ ask price), 7.38% YTW (2018), +503 bp Z-spd

- Take out ~7.00 dollar points, give 64bp Z-spread, extend one year
- Similar rent-adjusted net leverage at 4.3x (LTM6/26/10)
- FCF/debt greater at STBRO (+3.5% FY10 E) versus IMKTA (-0.5% FY11 E)

### Sector outlook

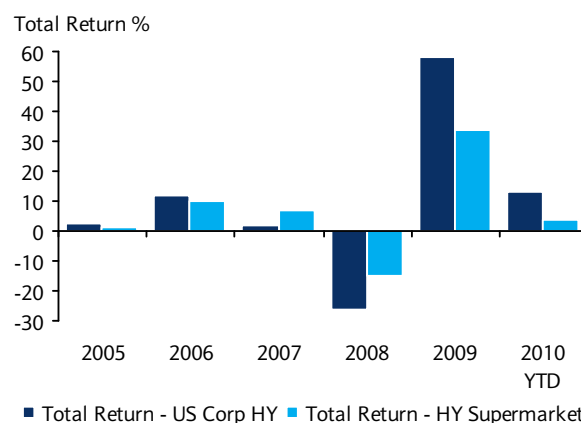
- We maintain a Market Weight recommendation on the supermarket sector, reflecting our negative view of industry fundamentals, while considering constituent weightings and relative value.
- Regarding industry fundamentals, we maintain a cautious near-term outlook on the consumer. Our outlook reflects net negative fundamentals challenging the fatigued consumer, though we do think the consumer has stabilized, just at lower levels. We consider the consumer's "willingness to spend" as measured by confidence and sentiment, both of which remain depressed and at recessionary levels. We also examine the consumer's "ability to spend," as measured by the job market (unemployment), housing data (price, volume, net worth), savings rate, and energy prices. All these factors are pressuring spending, in our view. Factors supporting the stabilization of the consumer include the abatement of the deterioration in the unemployment rate, stronger financial markets, and easing of credit lending standards.
- Counter to the stabilizing consumer, we think supermarkets' operating environment is challenged. We think price competition remains irrational and will continue to pressure margins into at least 1H11, driven in part by the blurring of channel lines as other formats, such as drug stores, dollar stores, and mass merchants continue to augment the grocery category in an attempt to drive traffic. Exacerbating this margin pressure is food inflation, which operators are not currently fully passing through to customers.
- Technicals continue to dominate the Supermarket Index performance, as it is comprised of just six constituents. Moreover, the largest, SUPERVALU (SVU), is roughly 60% of the Index.
- Notably, while we currently have a Market Weight recommendation on SVU notes, we think SVU will continue to underperform its peers due to its operational execution missteps. Our recommendation is supported by SVU's solid free cash flow characteristics (+6.6% of debt), despite EBITDA contraction.

### US HY Supermarkets versus US HY Index



Source: Barclays Capital

### Historical Returns – US HY Supermarkets



Note: YTD as of November 30, 2010. Source: Barclays Capital

### HY Supermarkets constituents weighting

Issuer	% of Index	Market Value (\$mn)
SUPERVALU	57.44	3,522.4
Stater Bros	17.84	1,094.0
Ingles Markets	10.16	623.3
Tops Markets	6.15	377.3
C&S Group	4.89	299.8
Great Atlantic & Pacific Tea Co.	3.52	215.9
<b>Total Market Value</b>	<b>100.00</b>	<b>6,132.8</b>

Note: Market Value as of November 30, 2010. Source: Barclays Capital



## HIGH YIELD TECHNOLOGY – MARKET WEIGHT

Jeff Harlib +1 212 412 6952 jeffrey.harlib@barcap.com

Matthew Fink +1 212 412 5673 matthew.fink@barcap.com

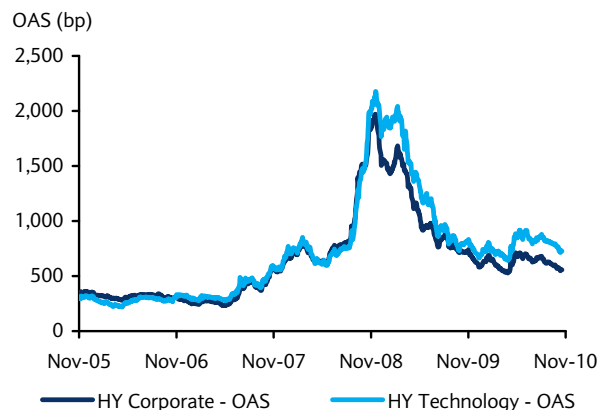
### Key recommendations

- **Overweight NXP Semiconductors 9 ¾% sr. (2<sup>nd</sup> lien) sec notes due 2018 (109, 7.75% YTW, 592 OAS):** While expecting slowing top-line growth next year, we forecast EBITDA improvement in 2011 due to continued cost savings benefits, over \$400mn free cash flow, and 2<sup>nd</sup> lien, total, and net leverage of 2.7x, 3.4x, and 2.6x, respectively.
- **Underweight Kodak 9 ¾% 2<sup>nd</sup> lien notes due 2018 (99, 9.94% YTW, 796 OAS):** Notwithstanding healthy near-term liquidity and higher-than-expected IP litigation settlements, we expect continued top-line and earnings pressure from reduced demand in traditional and entertainment film and digital cameras. We also expect continued negative cash flow trends.

### Sector outlook

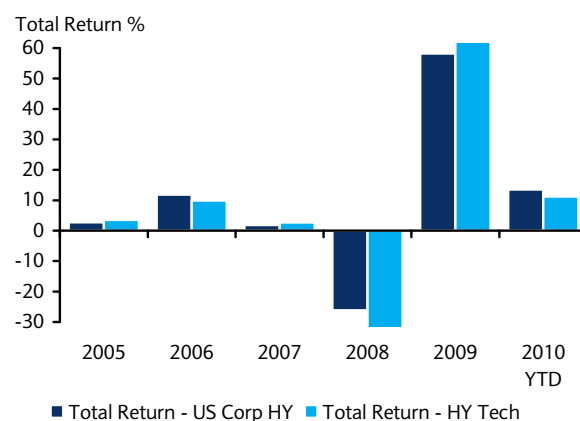
- After a strong sector demand and performance recovery beginning in 2H09 and continuing through 1H10, demand trends have slowed in late 2010 as a result of weaker demand from certain end markets (PCs, communications infrastructure, and industrial markets) and a normalizing supply chain, as technology vendors (particularly semiconductor companies) have addressed supply constraints by increasing capacity. With the outlook for some slowdown in global GDP growth in 2011 and expected slowing demand growth from several end markets (including PCs, handsets, with muted growth in communications infrastructure), we believe top-line growth will be challenging into 2011.
- We assume low single-digit gains in US and global corporate IT spending in 2011. Areas of relative weakness are expected to be consumer PCs and slowing growth in servers. Benefitting from a Windows 7 corporate upgrade cycle, software and services sectors are expected to perform relatively better. After estimated 23% growth in global semiconductor revenues in 2010, we assume low to mid-single-digit growth next year, reflecting some end demand growth slowdown and the lack of benefit from supply chain replenishment.
- To extend debt maturities, we expect refinancing activity to continue in 2011, with possible additional refinancing from Freescale and NXP. Other candidates include First Data (loan amend to extend), CDW, Sanmina-SCI, SunGard, Travelport, and Unisys.
- Excluding First Data, the technology sector YTW is 8.27%, 50bp above the 7.77% YTW for the HY index. With strong credit statistics but expected lackluster performance trends, we expect bonds in higher-quality credits (particularly in the semiconductor sector) generally to underperform the market. We expect mixed performance from more leveraged sector credits.

### Tech Index OAS versus High Yield Index



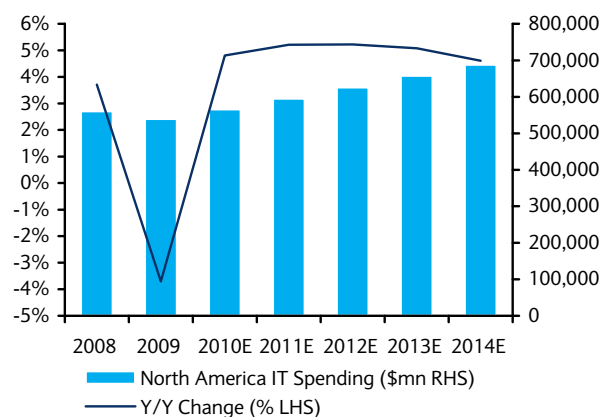
Source: Barclays Capital

### Tech Index total returns versus High Yield Index



Source: Barclays Capital

### North American IT spending 2008-2014E



Source: IDC, Barclays Capital



## HIGH YIELD TELECOM – MARKET WEIGHT

David Sharret +1 212 412 5466 david.sharret@barcap.com Keith Hanauer +1 212 412 5956 keith.hanauer@barcap.com

### Key recommendations

- **Windstream senior notes (MW):** Windstream has the most rural access line profile among its peers, improved revenue mix toward business/data and the least integration/execution risk of the larger ILEC platforms. Following significant acquisition activity over the past 18 months, Windstream has indicated it will now focus on reducing leverage to historic levels (3.2-3.4x). At recent levels, Windstream 7.875% notes due 2017 trade ~75bp behind Frontier 8.25% notes due 2017, at the wide end of the recent 40-80bp range. We continue to view Windstream senior notes (MW) as an attractive core holding.

### Sector outlook

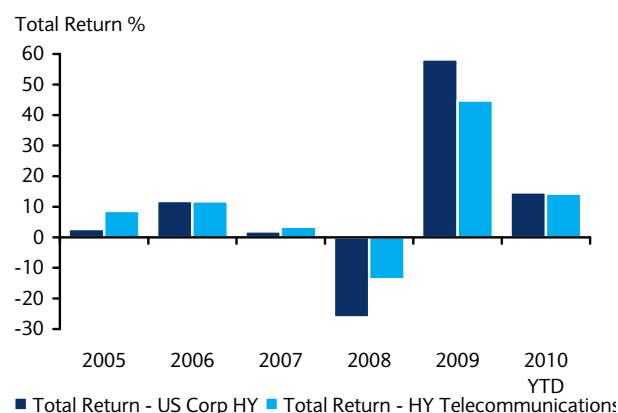
- **We rate the telecom sector Market Weight.** The sector trades 35bp inside the High Yield Index, broadly in line with the relative relationship at the start of the year. Telecom returns have recently underperformed, though, amid weakness in Sprint, Cincinnati Bell, and other bellwether wireline issuers. As outlined below, we do not see significant drivers for outperformance in 2011.
- We expect increased wireless competition in 2011, which could pressure margins. Specifically, industry competition will focus on smartphone line-ups (increasingly 4G), resulting in higher retention spending and CPGA. Key mitigants should be increased ARPU associated with higher-end devices and expected declines in handset prices over the medium term. AT&T and Verizon have experienced y/y ARPU growth, while Sprint, MetroPCS, and Leap should stabilize recent ARPU declines in 2011. We are constructive on MetroPCS, given its improving free cash flow profile (although spectrum purchases could slow deleveraging), while Leap still needs to demonstrate improved trends and fund a potential LTE overlay. We think that Sprint will be the primary funding source for Clearwire and that a downgrade to B is largely factored in. However, the bonds could be weaker on new supply to fund Clearwire and its own network upgrade.
- We expect residential wireline trends in 2011 to be broadly consistent with 2010, including a slight reduction in access line losses and declining DSL additions. DSL results should continue to be weak, as cable picks up market share, with DOCSIS 3.0 footprint expansion. We expect that competitive local exchange carrier (CLEC) revenue trends will slowly improve, with usage-based revenues tied to employment trends and the pace of economic growth. High yield CLECs have reported increased sales activity over the past 1-2 quarters.

### OAS



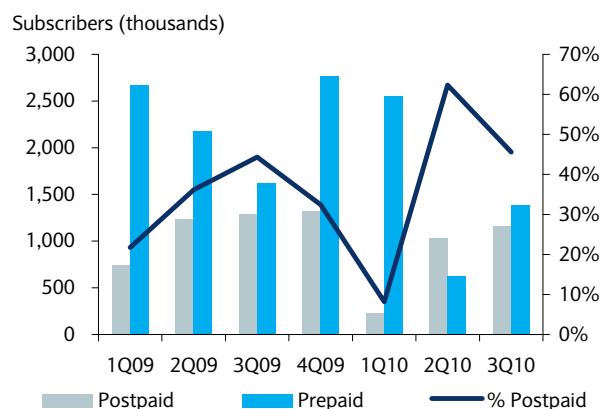
Source: Barclays Capital Live

### Total returns



Source: Barclays Capital Live

### Net additions – prepaid versus postpaid



Source: Company reports

**Analyst Certification(s)**

We, Jeffrey Meli, Bradley Rogoff, CFA, Shobhit Gupta, Alex Gennis, Ryan Preclaw, Gautam Kakodkar, Eric Gross, Mike Kessler, Peter J. De Groot, Andrew Chan, Jormen Vallecillo, Vincent Foley, Cedric Morris, Jonathan Clionna, Harry Mateer, Stefanie Leshaw Chachra, Hale Holden, Danish Agboatwala, Priya Ohri-Gupta, CFA, Martin Fernandez, Jim Asselstine, Timothy Tay, CFA, Thomas Walsh, Ming Zhang, Eric Miller, Sarah Xue, Matthew Vittorioso, Young Kwon, David Sharret, Andrew Finkelstein, Brian Lalli, Steven Bachman, Reza Vahabzadeh, Elizabeth Gilson, Gary Stromberg, Kateryna Kukuruza, Andrew Brophy, David Hendrickson, Scott Schimpf, Stacey Schroeder, Michael Sanchez, Jeff Harlib, Yung Chuan Koh, Emily Shanks, Michael Perez, Matthew Fink, and Keith Hanauer hereby certify (1) that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

**Important Disclosures**

For current important disclosures regarding companies that are the subject of this research report, please send a written request to: Barclays Capital Research Compliance, 745 Seventh Avenue, 17th Floor, New York, NY 10019 or refer to <https://ecommerce.barcap.com/research/cgi-bin/all/disclosuresSearch.pl> or call 212-526-1072.

Barclays Capital does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that Barclays Capital may have a conflict of interest that could affect the objectivity of this report. Any reference to Barclays Capital includes its affiliates. Barclays Capital and/or an affiliate thereof (the "firm") regularly trades, generally deals as principal and generally provides liquidity (as market maker or otherwise) in the debt securities that are the subject of this research report (and related derivatives thereof). The firm's proprietary trading accounts may have either a long and / or short position in such securities and / or derivative instruments, which may pose a conflict with the interests of investing customers. Where permitted and subject to appropriate information barrier restrictions, the firm's fixed income research analysts regularly interact with its trading desk personnel to determine current prices of fixed income securities. The firm's fixed income research analyst(s) receive compensation based on various factors including, but not limited to, the quality of their work, the overall performance of the firm (including the profitability of the investment banking department), the profitability and revenues of the Fixed Income Division and the outstanding principal amount and trading value of, the profitability of, and the potential interest of the firms investing clients in research with respect to, the asset class covered by the analyst. To the extent that any historical pricing information was obtained from Barclays Capital trading desks, the firm makes no representation that it is accurate or complete. All levels, prices and spreads are historical and do not represent current market levels, prices or spreads, some or all of which may have changed since the publication of this document. Barclays Capital produces a variety of research products including, but not limited to, fundamental analysis, equity-linked analysis, quantitative analysis, and trade ideas. Recommendations contained in one type of research product may differ from recommendations contained in other types of research products, whether as a result of differing time horizons, methodologies, or otherwise.

Barclays Capital is acting as financial advisor to the Special Committee of the Board of Directors of Mediacom in its merger agreement with the company's founder, Chairman and CEO, in which he will acquire 100% of public interest in Mediacom. Barclays Capital also provided a fairness opinion to the Special Committee in connection with this potential transaction.

Barclays Capital is acting as financial advisor to Plains Exploration & Production (PXP) in connection with the potential agreement with McMoran Exploration to divest PXP's interests in properties located in Gulf of Mexico shallow water. Barclays Capital also provided a fairness opinion to PXP's Board of Directors in connection with this potential transaction. The rating and estimates on PXP do not incorporate this potential transaction.

Barclays Capital is acting as dealer manager for Kraft Foods cash tender offer for up to \$1bln aggregate principal amount of its 5.265% Notes due 2011 and its 6.25% Notes due 2012.

Barclays Capital is acting as a financial advisor to Stryker Corporation in the potential acquisition of assets of the Neurovascular division of Boston Scientific. Barclays Capital also rendered a fairness opinion to Stryker in connection with this transaction.

Barclays Capital served as the exclusive financial advisor to Eli Lilly in their potential acquisition of Avid Radiopharmaceuticals.

Barclays Capital is acting as financial advisor to Motorola in the company's separation of its mobile unit, Motorola Mobility Holdings, from Motorola.

Barclays Capital are acting as financial advisor to Crucell NV in connection with the proposed approach by Johnson & Johnson.

Barclays Capital, the Investment Banking Division of Barclays Bank PLC, is acting as corporate broker to National Grid Plc.

Barclays Capital is acting as financial advisor to Vivendi on the potential sale of its 20% stake in NBC Universal to General Electric.

Barclays Capital is acting as financial advisor to Prudential Financial Inc. in their potential acquisition of American International Group's Japan-based life insurance subsidiaries, AIG Star Life Insurance Co. and AIG Edison Life Insurance Company.

Barclays Capital is acting as financial advisor to Blackstone Capital Partners V L.P., an affiliate of The Blackstone Group (BX) in their potential acquisition of Polymer Group, Inc.

Barclays Capital is acting as financial advisor to Vivendi on the potential sale of its 20% stake in NBC Universal to General Electric.

Barclays Capital is acting as sole advisor to BP on the potential sale of its oil and gas exploration, production and transportation business in Colombia to a consortium of Ecopetrol, Colombia's national oil company, and Talisman of Canada.

#### **Explanation of the High Grade Sector Weighting System**

**Overweight:** Expected six-month excess return of the sector exceeds the six-month expected excess return of the Barclays Capital U.S. Credit Index, the Pan-European Credit Index, or the EM Asia USD High Grade Credit Index, as applicable.

**Market Weight:** Expected six-month excess return of the sector is in line with the six-month expected excess return of the Barclays Capital U.S. Credit Index, the Pan-European Credit Index, or the EM Asia USD High Grade Credit Index, as applicable.

**Underweight:** Expected six-month excess return of the sector is below the six-month expected excess return of the Barclays Capital U.S. Credit Index, the Pan-European Credit Index, or the EM Asia USD High Grade Credit Index, as applicable.

#### **Explanation of the High Grade Research Rating System**

The High Grade Research rating system is based on the analyst's view of the expected excess returns over a six-month period of the issuer's index-eligible corporate debt securities to the Barclays Capital U.S. Credit Index, the Pan-European Credit Index or the EM Asia USD High Grade Credit Index, as applicable.

**Overweight:** The analyst expects the issuer's index-eligible corporate bonds to provide positive excess returns relative to the Barclays Capital U.S. Credit Index, the Pan-European Credit Index, or the EM Asia USD High Grade Credit Index over the next six months.

**Market Weight:** The analyst expects the issuer's index-eligible corporate bonds to provide excess returns in line with the Barclays Capital U.S. Credit Index, the Pan-European Credit Index, or the EM Asia USD High Grade Credit Index over the next six months.

**Underweight:** The analyst expects the issuer's index-eligible corporate bonds to provide negative excess returns relative to the Barclays Capital U.S. Credit Index, the Pan-European Credit Index, or the EM Asia USD High Grade Credit Index over the next six months.

**Not Rated (NR):** An issuer which has not been assigned a formal rating.

**Rating Suspended (RS):** The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where Barclays Capital is acting in an advisory capacity in a merger or strategic transaction involving the company.

For Japan and Australia issuers, the ratings are relative to the Barclays Capital U.S. Credit Index or Pan-European Credit Index, as applicable.

#### **Explanation of the High Yield Sector Weighting System**

**Overweight:** Expected six-month total return of the sector exceeds the six-month expected total return of the Barclays Capital U.S. High Yield 2% Issuer Capped Credit Index, or the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, or the EM Asia USD High Yield Corporate Credit Index, as applicable.

**Market Weight:** Expected six-month total return of the sector is in line with the six-month expected total return of the Barclays Capital U.S. High Yield 2% Issuer Capped Credit Index or the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, or the EM Asia USD High Yield Corporate Credit Index, as applicable.

**Underweight:** Expected six-month total return of the sector is below the six-month expected total return of the Barclays Capital U.S. High Yield 2% Issuer Capped Credit Index or the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, or the EM Asia USD High Yield Corporate Credit Index, as applicable.

#### **Explanation of the High Yield Research Rating System**

The High Yield Research team employs a relative return based rating system that, depending on the company under analysis, may be applied to either some or all of the company's debt securities, bank loans, or other instruments. Please review the latest report on a company to ascertain the application of the rating system to that company.

**Overweight:** The analyst expects the six-month total return of the rated debt security or instrument to exceed the six-month expected total return of the Barclays Capital U.S. 2% Issuer Capped High Yield Credit Index, the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, or the EM Asia USD High Yield Corporate Credit Index, as applicable.

**Market Weight:** The analyst expects the six-month total return of the rated debt security or instrument to be in line with the six-month expected total return of the Barclays Capital U.S. 2% Issuer Capped High Yield Credit Index, the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, or the EM Asia USD High Yield Corporate Credit Index, as applicable.

**Underweight:** The analyst expects the six-month total return of the rated debt security or instrument to be below the six-month expected total return of the Barclays Capital U.S. 2% Issuer Capped High Yield Credit Index, the Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, or the EM Asia USD High Yield Corporate Credit Index, as applicable.

**Not Rated (NR):** An issuer which has not been assigned a formal rating.

**Rating Suspended (RS):** The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where Barclays Capital is acting in an advisory capacity in a merger or strategic transaction involving the company.

This publication has been prepared by Barclays Capital; the investment banking division of Barclays Bank PLC, and/or one or more of its affiliates as provided below. This publication is provided to you for information purposes only, and Barclays Capital makes no express or implied warranties, and expressly disclaims all warranties of merchantability or fitness for a particular purpose or use with respect to any data included in this publication. Prices shown in this publication are indicative and Barclays Capital is not offering to buy or sell or soliciting offers to buy or sell any financial instrument.

Without limiting any of the foregoing and to the extent permitted by law, in no event shall Barclays Capital, nor any affiliate, nor any of their respective officers, directors, partners, or employees have any liability for (a) any special, punitive, indirect, or consequential damages; or (b) any lost profits, lost revenue, loss of anticipated savings or loss of opportunity or other financial loss, even if notified of the possibility of such damages, arising from any use of this publication or its contents.

Other than disclosures relating to Barclays Capital, the information contained in this publication has been obtained from sources that Barclays Capital believes to be reliable, but Barclays Capital does not represent or warrant that it is accurate or complete. The views in this publication are those of Barclays Capital and are subject to change, and Barclays Capital has no obligation to update its opinions or the information in this publication.

The analyst recommendations in this report reflect solely and exclusively those of the author(s), and such opinions were prepared independently of any other interests, including those of Barclays Capital and/or its affiliates.

The securities discussed in this publication may not be suitable for all investors. Barclays Capital recommends that investors independently evaluate each issuer, security or instrument discussed in this publication and consult any independent advisors they believe necessary. The value of and income from any investment may fluctuate from day to day as a result of changes in relevant economic markets (including changes in market liquidity). The information in this publication is not intended to predict actual results, which may differ substantially from those reflected. Past performance is not necessarily indicative of future results.

This communication is being made available in the UK and Europe primarily to persons who are investment professionals as that term is defined in Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion Order) 2005. It is directed at, and therefore should only be relied upon by, persons who have professional experience in matters relating to investments. The investments to which it relates are available only to such persons and will be entered into only with such persons. Barclays Capital is authorized and regulated by the Financial Services Authority ('FSA') and member of the London Stock Exchange.

Barclays Capital Inc., US registered broker/dealer and member of FINRA ([www.finra.org](http://www.finra.org)), is distributing this material in the United States and, in connection therewith accepts responsibility for its contents. Any U.S. person wishing to effect a transaction in any security discussed herein should do so only by contacting a representative of Barclays Capital Inc. in the U.S. at 745 Seventh Avenue, New York, New York 10019.

Non-U.S. persons should contact and execute transactions through a Barclays Bank PLC branch or affiliate in their home jurisdiction unless local regulations permit otherwise.

This material is distributed in Canada by Barclays Capital Canada Inc., a registered investment dealer and member of IIROC ([www.iiroc.ca](http://www.iiroc.ca)).

Subject to the conditions of this publication as set out above, Absa Capital, the Investment Banking Division of Absa Bank Limited, an authorised financial services provider (Registration No.: 1986/004794/06), is distributing this material in South Africa. Absa Bank Limited is regulated by the South African Reserve Bank. This publication is not, nor is it intended to be, advice as defined and/or contemplated in the (South African) Financial Advisory and Intermediary Services Act, 37 of 2002, or any other financial, investment, trading, tax, legal, accounting, retirement, actuarial or other professional advice or service whatsoever. Any South African person or entity wishing to effect a transaction in any security discussed herein should do so only by contacting a representative of Absa Capital in South Africa, 15 Alice Lane, Sandton, Johannesburg, Gauteng 2196. Absa Capital is an affiliate of Barclays Capital.

In Japan, foreign exchange research reports are prepared and distributed by Barclays Bank PLC Tokyo Branch. Other research reports are distributed to institutional investors in Japan by Barclays Capital Japan Limited. Barclays Capital Japan Limited is a joint-stock company incorporated in Japan with registered office of 6-10-1 Roppongi, Minato-ku, Tokyo 106-6131, Japan. It is a subsidiary of Barclays Bank PLC and a registered financial instruments firm regulated by the Financial Services Agency of Japan. Registered Number: Kanto Zaimukyokuchō (kinsho) No. 143.

Barclays Bank PLC, Hong Kong Branch is distributing this material in Hong Kong as an authorised institution regulated by the Hong Kong Monetary Authority. Registered Office: 41/F, Cheung Kong Center, 2 Queen's Road Central, Hong Kong.

Barclays Bank PLC Frankfurt Branch is distributing this material in Germany under the supervision of Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin).

This material is distributed in Malaysia by Barclays Capital Markets Malaysia Sdn Bhd.

This material is distributed in Brazil by Banco Barclays S.A.

Barclays Bank PLC in the Dubai International Financial Centre (Registered No. 0060) is regulated by the Dubai Financial Services Authority (DFSA). Barclays Bank PLC-DIFC Branch, may only undertake the financial services activities that fall within the scope of its existing DFSA licence.

Barclays Bank PLC in the UAE is regulated by the Central Bank of the UAE and is licensed to conduct business activities as a branch of a commercial bank incorporated outside the UAE in Dubai (Licence No.: 13/1844/2008, Registered Office: Building No. 6, Burj Dubai Business Hub, Sheikh Zayed Road, Dubai City) and Abu Dhabi (Licence No.: 13/952/2008, Registered Office: Al Jazira Towers, Hamdan Street, PO Box 2734, Abu Dhabi).

Barclays Bank PLC in the Qatar Financial Centre (Registered No. 00018) is authorised by the Qatar Financial Centre Regulatory Authority (QFCRA). Barclays Bank PLC-QFC Branch may only undertake the regulated activities that fall within the scope of its existing QFCRA licence. Principal place of business in Qatar: Qatar Financial Centre, Office 1002, 10th Floor, QFC Tower, Diplomatic Area, West Bay, PO Box 15891, Doha, Qatar.

This material is distributed in Dubai, the UAE and Qatar by Barclays Bank PLC. Related financial products or services are only available to Professional Clients as defined by the DFSA, and Business Customers as defined by the QFCRA.

This material is distributed in Saudi Arabia by Barclays Saudi Arabia ('BSA'). It is not the intention of the Publication to be used or deemed as recommendation, option or advice for any action (s) that may take place in future. Barclays Saudi Arabia is a Closed Joint Stock Company, (CMA License No. 09141-37). Registered office Al Faisaliah Tower | Level 18 | Riyadh 11311 | Kingdom of Saudi Arabia. Authorised and regulated by the Capital Market Authority, Commercial Registration Number: 1010283024.

This material is distributed in Russia by Barclays Capital, affiliated company of Barclays Bank PLC, registered and regulated in Russia by the FSFM. Broker License #177-11850-100000; Dealer License #177-11855-010000. Registered address in Russia: 125047 Moscow, 1st Tverskaya-Yamskaya str. 21.

This material is distributed in India by Barclays Bank PLC, India Branch.

This material is distributed in Singapore by the Singapore branch of Barclays Bank PLC, a bank licensed in Singapore by the Monetary Authority of Singapore. For matters in connection with this report, recipients in Singapore may contact the Singapore branch of Barclays Bank PLC, whose registered address is One Raffles Quay Level 28, South Tower, Singapore 048583.

Barclays Bank PLC, Australia Branch (ARBN 062 449 585, AFSL 246617) is distributing this material in Australia. It is directed at 'wholesale clients' as defined by Australian Corporations Act 2001.

IRS Circular 230 Prepared Materials Disclaimer: Barclays Capital and its affiliates do not provide tax advice and nothing contained herein should be construed to be tax advice. Please be advised that any discussion of U.S. tax matters contained herein (including any attachments) (i) is not intended or written to be used, and cannot be used, by you for the purpose of avoiding U.S. tax-related penalties; and (ii) was written to support the promotion or marketing of the transactions or other matters addressed herein. Accordingly, you should seek advice based on your particular circumstances from an independent tax advisor.

© Copyright Barclays Bank PLC (2010). All rights reserved. No part of this publication may be reproduced in any manner without the prior written permission of Barclays Capital or any of its affiliates. Barclays Bank PLC is registered in England No. 1026167. Registered office 1 Churchill Place, London, E14 5HP. Additional information regarding this publication will be furnished upon request.

## RESEARCH CONTACTS

**Eric Miller**

Head of Global Credit Research  
+1 212 412 1147  
eric.miller@barcap.com

**Juan C. Cruz**

Head of Latin America & EEMEA  
Corporate Credit Research  
+1 212 526 0128  
juan.cruz@barcap.com

**Jon Scoffin**

Head of Research, Asia-Pacific  
+65 6308 3217  
jon.scoffin@barcap.com

**Robert Jones**

Head of European Fundamental  
Credit Research  
+44 (0)20 777 39857  
robert.jones@barcap.com

**Gary Stromberg**

Co-Head of US High Yield  
Research  
+1 212 412 7608  
gary.stromberg@barcap.com

**Jeff Meli**

Co-head of U.S. Credit Strategy  
+1 212 412 2127  
jeff.meli@barcap.com

**Reza Vahabzadeh, CFA**

Co-Head of US High Yield  
Research  
+1 212 412 2166  
reza.vahabzadeh@barcap.com

**Bradley Rogoff, CFA**

Co-head of U.S. Credit Strategy  
+1 212 412 7921  
bradley.rogoff@barcap.com

**Thomas C. Walsh**

Head of US High Grade Research  
+1 212 412 3129  
thomas.walsh@barcap.com

**United States**

---

**Jim Asselstine**

Electric Utilities (HG/HY)  
+1 212 412 5638  
james.asselstine@barcap.com

**Andrew Brophy**

Gaming, Lodging & Leisure (HY)  
+1 212 412 3084  
andrew.brophy@barcap.com

**Stefanie Leshaw Chachra**

Agribusiness, Energy, Basic  
Industries (HG)  
+1 212 412 7902  
stefanie.chachra@barcap.com

**Peter De Groot**

Municipals Strategy  
+1 212 528 1290  
peter.de-groot@barcap.com

**Andrew Finkelstein**

Media (HY)  
+1 212 412 3619  
andrew.finkelstein@barcap.com

**Vincent Foley, Jr.**

Manufacturing  
(HG)/Homebuilders & Building  
Products (HG/HY)  
+1 212 412 7943  
vincent.foley@barcap.com

**Jonathan Glionna, CFA**

Banks, Brokers, Finance (HG)  
+1 212 412 5184  
jonathan.glionna@barcap.com

**Jeff Harlib**

Technology, Paper & Packaging  
+1 212 412 6952  
jeffrey.harlib@barcap.com

**Hale Holden**

Cable, Media & Entertainment,  
Technology, Telecom (HG)  
+1 212 412 1524  
hale.holden@barcap.com

**Brian Lalli**

Chemicals (HY)  
+1 212 412 5255  
brisl.lalli@barcap.com

**Harry Mateer**

Energy & Basic Industries (HG)  
+1 212 412 7903  
harry.mateer@barcap.com

**Shubhomoy Mukherjee**

REITs & Pharmaceuticals/Healthcare  
(HG)  
+1 212 412 5245  
shubhomoy.mukherjee@barcap.com

**Priya Ohri-Gupta, CFA**

Food, Beverage & Tobacco,  
Consumer Products  
+1 212 412 3759  
priya.ohrigupta@barcap.com

**Scott Schimpf, CFA**

Healthcare(HY)  
+1 212 412 2858  
scott.schimpf@barcap.com

**Emily Shanks**

Retail & Services (HY)  
+1 617 330 5867  
emily.shanks@barcap.com

**Dave Sharret, CFA**

Telecom (HY), Cable/DBS (HY)  
+1 212 412 5466  
david.sharret@barcap.com

**Matthew Vittorioso, CFA**

Aerospace & Defense (HG/HY),  
Transportation (HG), Industrials  
(HY), Metals & Mining (HY)  
+1 212 412 1378  
matthew.vittorioso@barcap.com

