

2009 Credit Outlook: The Sovereign Factor



The "sovereign factor" will be key in 2009

Policy will be a key swing factor in preventing growth destruction from turning into another severe stage of financial crisis. Our baseline assumption is that various policy channels will (continue to) stand up to the challenge. The sovereign-bank-corporate spread linkage will be a key dynamic to watch.

Dismal fundamentals vs. ultra-high premiums

The growth profile feeding our credit views is a protracted recession. Default rates will surge this year, with 5-year cumulative HY default losses shooting above 20%. But high risk/liquidity premiums in the cash market offer attractive risk-reward opportunities, especially in IG.

Spreads will be tighter by end-2009

Expect tighter spreads on a "constant-ratings" basis. End-09 forecasts of iTraxx 5-yr OTR indices: Main (125 bp), FNSE (75 bp), Xover (750 bp).

Financial bonds offer best risk-reward trade-off

Tier 1 bank capital securities offer the best absolute return prospects within the IG universe. New issue discounts should provide good opportunities to add exposure in senior bank debt.

Jeffery Amato

+44(20)7552-9377 | jeffery.amato@gs.com
Goldman Sachs International

The sovereign factor

5-year CDS spreads (mid-levels) on average EU3 sovereigns and iTraxx FNSE



Source: Goldman Sachs ECM Research.

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Executive summary: Our views across credit

- **Sovereigns will play a key role in European corporate credit in 2009.** Not only will policy be a key swing factor in preventing growth destruction from turning into another severe stage of financial crisis. The sovereign-bank-corporate spread linkage will be a key dynamic to watch. Much of the repricing of private-to-public credit risk transfer in sovereign spreads has already taken place, in our view. But elevated sovereign spreads effectively puts a floor on how much corporate spreads can rally this year.
- **Near-term credit fundamentals paint an ugly picture.** The baseline growth profile feeding our credit views is a protracted recession, and we expect non-financial corporate profits to fall 30% this year. The maximum depth of the recession is almost as severe as in the US recessions in the 1973-75 or 1981-83 periods. Bank lending conditions should remain tight through 2010.
- **Corporate spreads offer significant value, however, especially in bonds.** Implied risk/liquidity premiums continue to hover close to record highs. Accounting for expected default losses, the premium in non-financial IG bonds is several standard deviations above its 20-year mean. HY risk premiums are very high in absolute terms even taking into account a surge in default losses.
- **Spreads will be tighter by end-2009 on a “constant-ratings” basis.** Spreads on refreshed on-the-run indices should generally be tighter by year-end as forward expected default losses, risk premiums and liquidity premiums decline. Forecasts of iTraxx 5-year OTR spreads at end-09: Main = 125 bp, FNSE = 75 bp, Xover = 750 bp.
- **Defense still makes sense in H1.** Ratings downgrades and rising defaults will put pressure on spreads in the near term, especially in CDS. However, we believe the market has already priced a lot of sector rotation. So while we recommend staying defensive for now, we have generally become less negative on high-beta sectors given current spread levels. We recommend gradually building up exposure in IG non-financial bonds.
- **Financial bonds continue to present the most attractive risk-reward trade-off.** Tier 1 bank capital securities offer the best absolute return prospects within the investment grade universe. With high new issue discounts, the primary market should provide attractive opportunities to add exposure in senior bank debt. By contrast, CDS spreads look more stretched in many banking names. We believe insurance CDS will outperform bank CDS in 2009.
- **No rush in high yield – defaults should surge in 2009.** A dire growth/profit outlook and ongoing poor liquidity conditions are finally breaking the benign default environment. Our top-down model forecasts a European HY default rate of 8.5% by end-2009. Recovery rates on senior unsecured bonds are likely to bottom at around 20% on average. Cumulative default losses in high yield over the next five years should reach 22%. Despite a tough default environment, we expect HY spreads on a constant-ratings basis will tighten by end-2009.

Crisis, Crunch, Cycle ... Crisis?

Near-term credit fundamentals don't hold out much hope. The credit Crisis which morphed into a credit Crunch has now turned into a global recession, which means 2009 starts with the dangerous phase of the credit Cycle firmly in train – a “CCC year”, so to speak. So, as real credit losses continue to mount, the critical issue for investors is whether the credit cycle morphs into another stage of financial crisis, which then feeds back into further economic damage, losses, etc...

Policy will be the key swing factor in preventing growth destruction from turning into another severe crisis in the banking sector and financial markets. Our baseline assumption is that various policy channels will (continue to) stand up to the challenge. These include policies directed towards improving funding and capital positions of the banking sector; monetary policies to keep yields low and raise money balances; fiscal policies to stimulate domestic demand; and policies directed towards the non-financial corporate and household sectors to mitigate the effects of the credit crunch.

Despite challenging fundamentals, spreads offer significant compensation for risk – implied risk/liquidity premiums continue to be near record levels. Corporate credit would therefore seem to be attractive on a risk-reward basis, especially relative to many other asset classes. Valuations should outweigh fundamentals in determining market outcomes by year end.

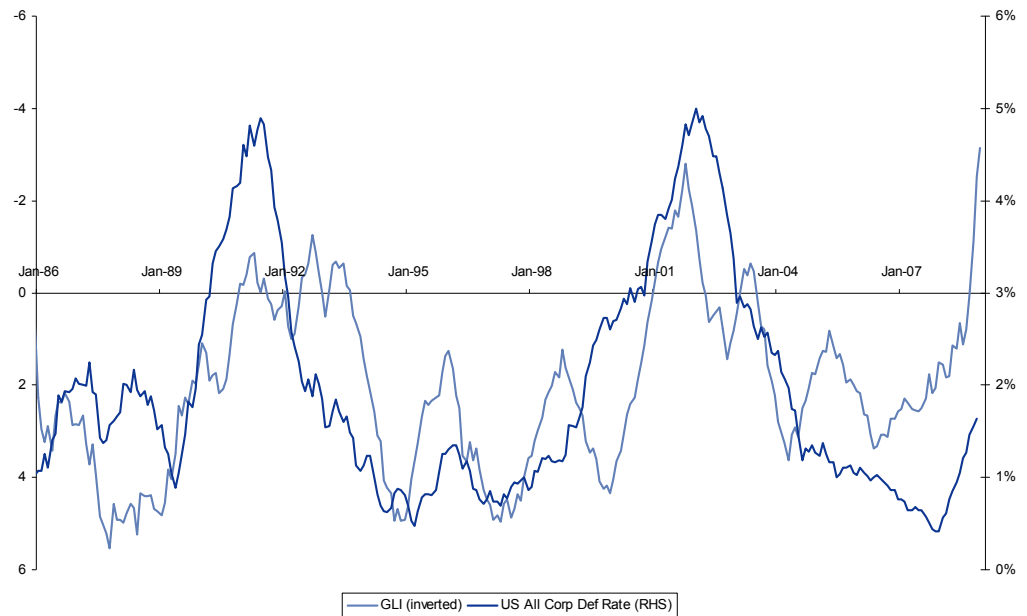
Sovereign-bank-corporate spread linkages will be a key dynamic in European credit in 2009. Any rally in corporate spreads will be constrained by financials, which in turn should be constrained by the average spread across the largest European sovereigns. On previous occasions we have argued that individual banks could trade tighter than their home country sovereign, although it is difficult to rationalize a situation where the largest sovereigns are trading wide to average senior financial spreads. In our view, much of the repricing of “private-to-public credit risk transfer” has already taken place. But mounting pressure on state coffers and increases in contingent liabilities means that sovereign spreads will likely remain far above their average levels of recent years. Elevated sovereign spreads effectively puts a floor on how much corporate spreads can rally.

Fundamentals provide no support ...

There is little doubt that credit fundamentals will be challenging in 2009. The key question in H109 will be the degree of credit deterioration, which will be determined by the depth of recession and access to liquidity. The latest reading of the GLI, a proprietary Goldman Sachs leading indicator of global industrial production, is at the lowest level in its history going back to 1986. Exhibit 1 reveals the positive correlation between the GLI and the “all corporate” US 12-month trailing default rate. Although we utilize other indicators in our default models, the latest signal provided by the GLI gives little comfort and indicates that underlying credit fundamentals are under considerable stress.

Exhibit 1: The GLI and default rates

Correlation = -58% between Goldman Sachs Global Leading Indicator (GLI) and US All Corporate 12-month trailing default rate



Source: Moodys, Goldman Sachs ECM Research.

The baseline growth profile feeding our credit views is a protracted recession, but one where we may have already experienced the worst quarter of growth.

This is consistent with the prolonged adjustments following previous financial/banking crises. Average annual growth in the euro area and UK under our economists' baseline real GDP growth forecasts is a paltry 0.1% over the three-year period 2008-10 (Exhibit 2). The maximum depth of the recession is almost as severe as in the US recessions in the 1973-75 or 1981-83 periods. Moreover, our economists predict that the last quarter of 2008 will be the worst single quarter of growth in both Euroland and the UK, with year-over-year growth reaching bottom in Q209.

To some extent, the damage to credit quality through H1 is already baked in the cake. Policy is unlikely to have much effect on near-term growth and profits. Measures aimed at mitigating the credit crunch could have a more immediate impact, particularly surrounding liquidity risks, but here also we expect credit conditions to remain extremely tight for most corporates.

The key question will be whether substantive signs of economic recovery emerge in 2H09. If they do, then future default probabilities should shift materially lower, and the implications for credit would seem to be straightforward. *If economies start to turn the corner in 2H, then the peak in default rates should not be far behind. If default rates peak by year-end, then past experience suggests that spreads and risk premiums could hit their cyclical peaks this year.* Economic policies will play a key role in supporting the recovery in 2H and beyond.

Exhibit 2: The elongated recession and recovery

Goldman Sachs Economics forecasts for Europe (5/6 * Euroland + 1/6 * UK). Historical US data is matched to forecast path using Q173 and Q181 as initial quarters, respectively.

Year	Quarter	Europe	1973-75	1981-83	Europe	1973-75	1981-83
		baseline	(US)	(US)	baseline	(US)	(US)
		(QoQ, annualised)			(YoY)		
2008	1	2.6	10.2	8.1	2.1	7.7	1.7
2008	2	-0.7	4.6	-3.1	1.4	6.4	2.9
2008	3	-1.0	-2.1	4.8	0.6	4.9	4.4
2008	4	-4.9	3.8	-5.0	-1.0	4.2	1.2
2009	1	-2.3	-3.5	-6.6	-2.1	0.7	-2.5
2009	2	-1.3	1.2	2.1	-2.4	-0.2	-1.2
2009	3	0.7	-3.9	-1.5	-2.0	-0.6	-2.7
2009	4	1.6	-1.6	0.4	-0.3	-1.9	-1.4
2010	1	1.0	-4.8	4.9	0.5	-2.3	1.5
2010	2	1.7	2.9	9.0	1.3	-1.8	3.2
2010	3	1.7	6.8	7.9	1.6	0.8	5.7
2010	4	2.4	5.2	8.2	1.8	2.5	7.7
Average		0.1	1.6	2.4	0.1	1.7	1.7

Source: Haver, Goldman Sachs ECM Research.

... but pro-active policies mitigate risks to bondholders ...**Steps taken to address the more visible systemic risks in the financial sector continue to be broadly supportive for bondholders, especially in financials.**

Much has been written about this already, including by ourselves, and we will not expand much on this here. We still believe the actions by European governments and central banks to fight systemic risk (capital injections, debt guarantees and extensions of liquidity facilities) have significantly reduced default and liquidity risk in the financial sector. For example, the Irish government's announcement of the bank recapitalization plan in late December is recent encouraging news on this front. The capital injections will be pari passu with existing Tier 1 debt and will need to be replaced by core Tier 1 capital.

Monetary and fiscal policies still have room to act. We expect the ECB to cut rates to 1.5% by Q2 and the Bank of England to 1% by end-Q1. While these levels represent baseline cases for cyclical lows, the probability of even lower rates is material. Moreover, we would not rule out a move towards quantitative easing or even outright purchases of private securities by the central banks, although the mechanism for this to be achieved in Europe is less clear than in the United States at the present time. The nature and scope of fiscal policies are likely to be diverse at the national level, and therefore less easy to pin down at this stage. Furthermore, initial conditions give some countries (e.g. Ireland, Spain) a bigger buffer than others (e.g. Greece, Italy) to implement aggressive counter-cyclical measures. Yet, for the most part, it is those countries with relatively healthy government balances to begin with which are most in need of fiscal stimulus. For further discussion of the growth outlook and policies, see European Weekly Analyst, *European issues and outlook for 2009 and 2010* (December 11, 2008) and UK Economics Analyst, *The Outlook for 2009: King Kong versus Godzilla* (December 19, 2008).

Global policies also crucially matter for European credit given the global nature of this crisis. In this regard, the Fed's move to quantitative easing benefits fixed income investors by helping to pin down yields across the curve, not to mention the CPFF and purchases of MBS. On top of this are the massive fiscal stimulus proposals of the new administration.

The boost to domestic demand provided by these policies should significantly help to mitigate economic, and hence credit, tail risks.

Policy is likely to play an increasingly important role in supporting credit extension and mitigating refinancing risk in the non-financial corporate sector.

This could be directly (e.g. such as the loans to US automakers) or indirect channels (moral suasion with the banking sector). It is fair to argue that the implicit degree of state support for companies has, if anything, been higher in Europe than in the US, even outside of the financial sector. While EU rules could in some instances provide hurdles regarding the extension of government support to private industries, the possibility of state intervention, particularly if liquidity is perceived to be the factor driving credit deterioration, cannot be ignored. Recent comments by the German and French governments are consistent with this view.

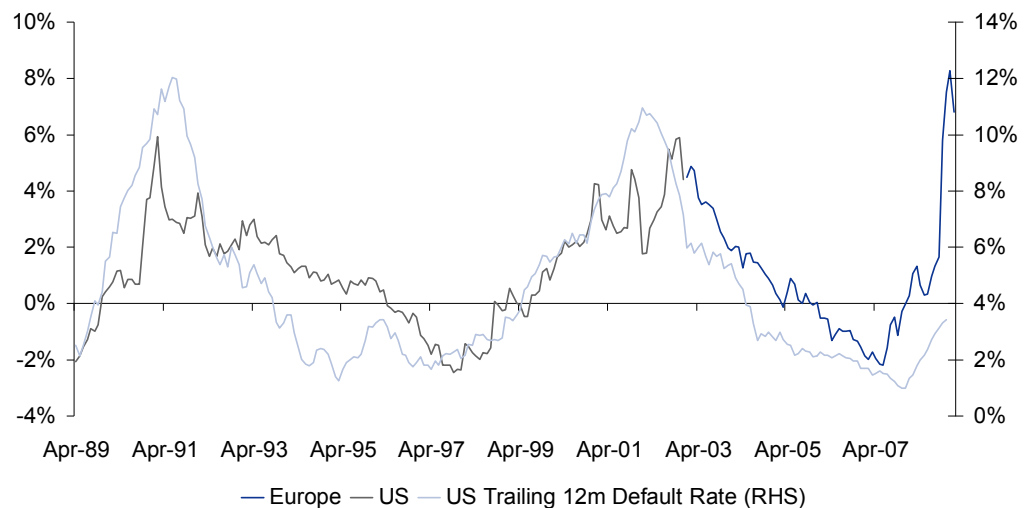
... and risk premiums are ultra-high

Risk/liquidity premiums are already at record high levels in corporate bonds and provide a significant buffer for the deterioration in credit fundamentals. As

shown in Exhibit 3, our updated estimates still put the HY risk premium near its historical peak even though we have revised upwards our default forecasts (see below) and spreads have come down slightly from late-2008 levels.

Exhibit 3: HY risk premiums and the default cycle

Risk premium estimates in an equal-weighted basket of BB-rated and B-rated bonds under our baseline default loss forecast and 12-month trailing US high yield default rates. Based on market data as of January 9 close.

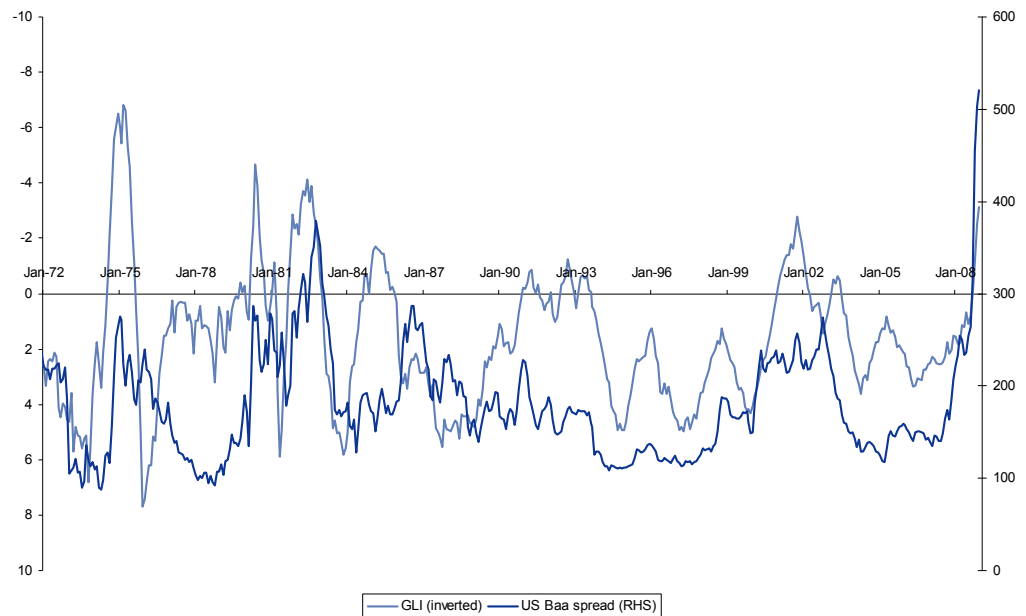


Source: Markit, Moodys, Goldman Sachs ECM Research.

Looking once again at our GLI indicator, Exhibit 4 plots the GLI against a long history of US Baa-rated industrial spreads. The correlation between these series is -42%. Baa industrial spreads were wider in the recession episodes of 1981-83 than during the past two cyclical downturns, providing some justification for the current elevated level of spreads. However, it is also evident that spreads are now at a much wider level even conditional on the severe drop in economic activity that has driven the GLI to a multi-decade low.

Exhibit 4: BBB spreads and the GLI

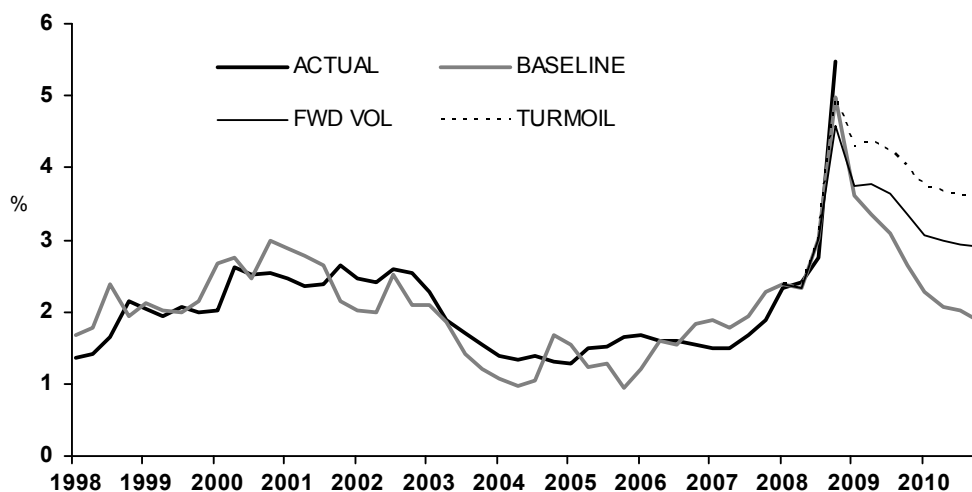
Correlation = -42% between Goldman Sachs Global Leading Indicator (GLI) and Moody's US Baa-rated industrial spreads over US Treasuries (note: official data on GLI starts in January 1986; data has been extended backwards using proxy series)



Source: Moodys, Goldman Sachs ECM Research.

Another reflection of the high risk/liquidity premium in bonds is provided by “fair value” estimates of US BBB-rated spreads from the long-standing GS-SPREAD model maintained by Goldman Sachs Research. Even taking into account the weak profile for growth and financing gap, GS-SPREAD implies that BBB industrial spreads should be 270 bp at end-2009 compared to 540 bp currently (Exhibit 5). One of the model inputs is also an assumption that equity volatility will average 25-35% from now until Q309 and then gradually revert to its long-run mean of 15%; this is the “baseline” scenario in the graph. In this sense, the model is best seen as an indicator of relative value across credit and equity volatility conditional on the other inputs: GDP growth, corporate financing gap and government bond yield. However, even if we assume there is no meaningful decline in volatility from H208 averages, the model implies spreads should still be 140 bp tighter (“turmoil” scenario).

Exhibit 5: Spread scenarios under GS-SPREAD
 Moodys Baa-rated industrial spreads (over US Treasury yields)



Source: Bloomberg, Moodys, Goldman Sachs ECM Research.

Spreads will be tighter by end-2009

2009 should ultimately be a good year to invest in corporate credit. Spreads will be tighter by year-end. But we would be cautious on lower-rated and cyclical credits until the first big wave of ratings downgrades and defaults surface.

Spreads across all rating categories will likely be tighter by end-2009 on a “refreshed portfolio” basis. Exhibit 6 reports our forecasts of iTraxx spreads. These forecasts are based on refreshed (i.e. on-the-run) indices. It is important to recognize that returns are likely to be less attractive than is implied by these spread forecasts. This is because current portfolios are exposed to the mark-to-market impact on spreads from higher ratings downgrades (downgrades should outpace upgrades) and losses due to defaults.

Exhibit 6: iTraxx spread forecasts for end-2009
 Forecasts and historical data for on-the-run indices; 5-year spreads (bp, mid-levels)

iTraxx index	Forecast (End-2009)	Actual			Jul 2004 to Dec 2008			
		12-Jan-09	01-Jan-08	Avg (08)	Avg	Std Dev	Min	Max
Main 5-yr	125	158	50	114	52	38	20	217
FNSE 5-yr	75	105	45	96	35	36	7	161
Xover 5-yr	750	942	340	602	342	168	149	1123

Source: Goldman Sachs ECM Research.

Year-end spread forecasts would seem to be wrought with significant uncertainty in this environment, to say the least, so we would be cautious in placing too much weight on exact point forecasts. Nevertheless, here is how we see it:

1. Pinning down the absolute level of Western European sovereign spreads involves considerable uncertainty, as we have discussed previously. Nevertheless, our research indicates that in most countries spreads have overshot relative to Germany (see *The Credit Line, Have European sovereign spreads overshot?*, December 16, 2008); in turn, the spread on Germany implies a very high default probability relative to the average historical default rate on AA-rated corporates. In December we recommended selling protection on the UK versus Germany with a target for the difference in spreads of 30 bp. The average 5-year CDS spread on Germany, France and the UK is currently 65 bp (Exhibit 7). Assuming Germany rallies slightly and our UK-Germany target is met, this should bring the average spread on these three countries down to below 50 bp.
2. We observe that even though CDS spreads are much tighter than cash spreads, implied risk premiums in the iTraxx indices are nonetheless at elevated levels under our baseline fundamental views on default/recovery. For instance, implied breakeven default rates are c.9.5% in iTraxx Main and c.43% in Xover based on simple back-of-the-envelope calculations assuming 30% recovery. If by the end of 2009 we are well past the trough in economic growth (as implied by our economic forecasts) and near the peak in default rates (as implied by our default forecasts), then risk premiums should be reverting towards their long-run mean.
3. Looking at CDS spreads when the market started to recovery at the end of the last default cycle, we observe that senior bank CDS spreads were in the 20-40 bp range and spreads on non-financial IG corporates were around 80-110 bp (Exhibit 8). Compared to then, we would expect spreads to be wider, especially senior bank CDS given what is likely a permanent re-pricing in this sector.
4. Our equity strategists have a year-end target of 235 for the DJ Stoxx 600. When equities were around this level last autumn, iTraxx Main was trading in the range 120-140 bp. Just before the start of the last bull market in H204 when Stoxx 600 was also in the 235 range, Main 5-year was 40-50 bp. Economic theory gives little reason to believe there should be a relationship between spreads and the level of equity prices. Nevertheless, recovery in the two markets is likely to be linked and our strategists' target for equities may be a useful clue to where spreads could trade.

As we showed in a *Credit Line* report published last November (*Credit is better value than equities*, November 14, 2008), we cannot dismiss the fact that spreads and risk/liquidity premiums have tended to peak around the same time as default rates. This is evident in Exhibit 3. This positive correlation could be attributed to several factors, such as rising default rates providing a signal of broader credit quality, default contagion, capital drain, and poor risk appetite.

While these issues are relevant at the present time, other factors suggest that the peak in spreads could be earlier this time around: estimated risk premiums are close to historical peaks; the market has effectively been more "forward looking" during this cycle; risk premiums reached attractive, if not maximum, levels before 12-month trailing default rates hit their peak in past cycles.

Exhibit 7: Sovereign vs. Bank CDS

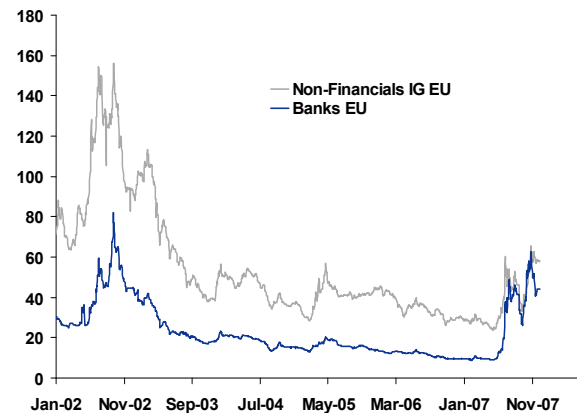
5-year CDS spreads (mid-levels) on iTraxx FNSE and EU3 (average of Germany, France, and UK).



Source: Goldman Sachs ECM Research

Exhibit 8: CDS spreads over the past cycle

Senior bank and non-financial IG 5-year CDS spreads (mid-levels) from 2002-2007



Source: Goldman Sachs ECM Research

We do not provide spread forecasts of cash indices although we believe cash spreads should rally more than CDS, with cash currently more dislocated due to liquidity/balance sheet pressures. Consequently, the CDS-cash basis will gradually narrow as liquidity premiums compress. We have recently written about the basis in *The Credit Line, Mind the Gap! Why the CDS-bond basis will narrow*, December 2, 2008.

Despite our longer-run bullish view, tactically we see significant risks in selling protection on the core indices at this time. With default rates expected to rise and downward ratings migration risk at a cyclical high, the chance of CDS spreads experiencing another bout of (potentially sharp) widening remains high. At current levels, the risk-reward in being outright short is not very attractive either, so we would stay on the sidelines for now.

In cash space we are more inclined to add credit risk exposure at this stage, especially with a longer-term (12-month) holding period objective. In general, we prefer financial debt, especially senior and Tier 1. Non-financial investment grade bonds look attractive from a risk-reward perspective, even lower-rated BBB credits given current levels. For now we recommend a neutral stance on high yield bonds. We will start to get excited about high yield after the first wave of defaults, which is likely to occur by Q3, and after liquidation pressures abate. The following sections layout these views in more detail.

Investment grade: Financials cash most attractive

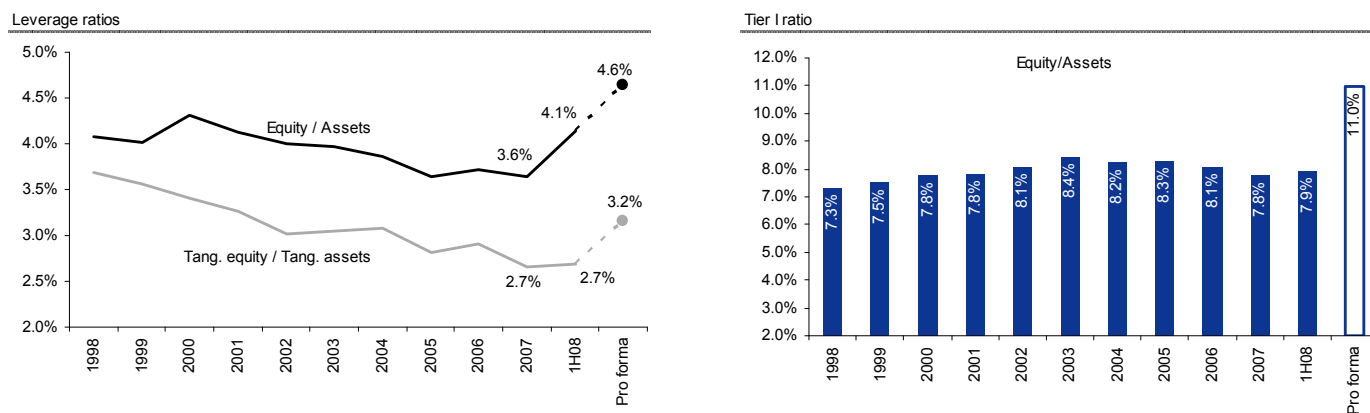
In cash space, Financials continue to present the most attractive risk-reward trade-off. Among non-financials, our bias is to stay defensive through H1, although we believe the market has already priced significant sector rotation and policy risk could cap the extent of further spread widening. The primary market should provide attractive opportunities to add exposure in Financials and defensive sectors with heavy redemption schedules, such as Utilities and Telecoms.

Financials: Cash spreads still not pricing state support

Our positive view on financial credit is largely predicated on government support. Governments have the incentive to support funding markets and investor demand for Tier 1 securities. This is not only because of the debt guarantees and direct investments the authorities have made in the sector. Getting funding markets to function smoothly and keeping the Tier 1 market viable are also important goals in seeking resolution of the credit crisis. Longer-term regulatory risk remains a key issue in the sector, but this is unlikely to be a major worry for creditors, especially in 2009.

Further deterioration in the credit cycle will challenge the asset quality of banks and insurance companies. Pro forma Tier 1 capital ratios in the banking sector are now quite large on average and have room to absorb a sharp increase in loan impairment rates (Exhibit 9). However, there is increasing focus on core Tier 1 and tangible common equity ratios as both have generally been much lower in Europe (see Exhibit 9). Core equity is likely to be needed for many banks.

Exhibit 9: Capital ratios in European banks
Based on banks covered by Goldman Sachs equity analysts



Source: Goldman Sachs Research.

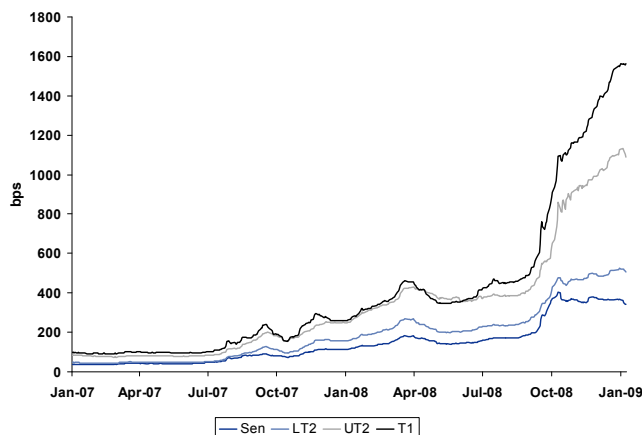
While CDS has rallied from autumn 2008 highs, cash spreads still do not reflect the high degree of state support largely due to the presence of high liquidity premiums (Exhibit 10). For investors with balance sheet capacity, these high premiums present an attractive opportunity on a 12-month holding period. A “barbell strategy” is sensible at this stage, with good risk-reward tradeoffs present in senior and Tier 1 debt securities.

Government-guaranteed issuance is likely to remain healthy throughout 2009. This new class of securities has opened up a new source of funding for banks by appealing to other classes of fixed income investors. As the lower yield on guaranteed paper holds less appeal for traditional credit investors, we also expect to see increasing issuance of non-government guaranteed senior debt. The non-guaranteed market is already active in Europe at the start of this year, with sizeable premiums back of CDS. So while we continue to see attractive valuations in secondary markets, there should be even better opportunities to add senior debt exposure in the primary market in H1.

Tier 1 securities offer the best absolute return prospects within the investment grade universe. Current valuations are attractive across many names in the space, especially in those cases where governments have made capital injections either subordinate or pari passu with respect to existing Tier 1 securities. The market is pricing in a substantial risk that securities will be left outstanding. Improvement in market liquidity of Tier 1 securities is likely to be modest, at best, in the near term; but as we have noted before, the high absolute yields achievable in subordinated financials will increasingly attract interest from alternative investors. For instance, according to the iBoxx indices, the average yield on Tier 1 securities is currently 18.4% (Exhibit 11), which compares with an expected dividend yield of 4.1% (market-cap weighted) across the European coverage universe of our bank equity analysts.

Exhibit 10: Financial cash spreads remain near historical peak levels ...

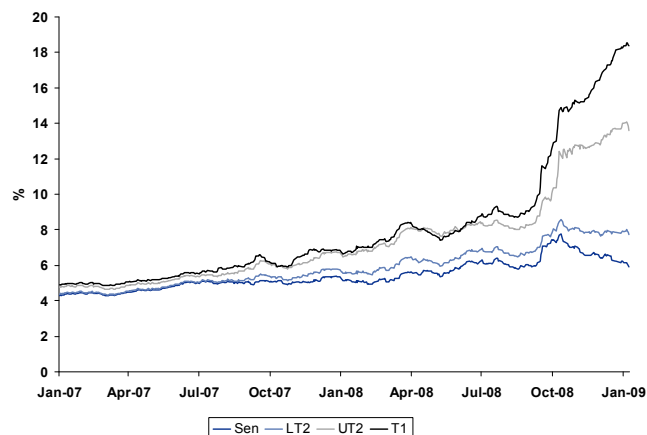
iBoxx EUR indices, spreads to government benchmarks (bp); based on market data as of January 9 close.



Source: Markit, Goldman Sachs ECM Research

Exhibit 11: ... while absolute yields on sub debt should be attractive to "alternative" investors

iBoxx EUR indices, annual yields (%); based on market data as of January 9 close.



Source: Markit, Goldman Sachs ECM Research

Tier 2 securities also offer attractive yields although we are more cautious owing to less visibility in this part of the capital structure. The decision by Deutsche Bank not to call a Lower Tier 2 issue last December raised fears about callable securities. In general, we believe the risk of maturity extension in Tier 1 securities is relatively low as most banks will not want to put funding costs at risk or limit access to this segment of the market; Tier 1 will remain an important source of capital for banks in coming years. That said, risk is not zero, and there is a chance that dividends do not get paid or securities called.

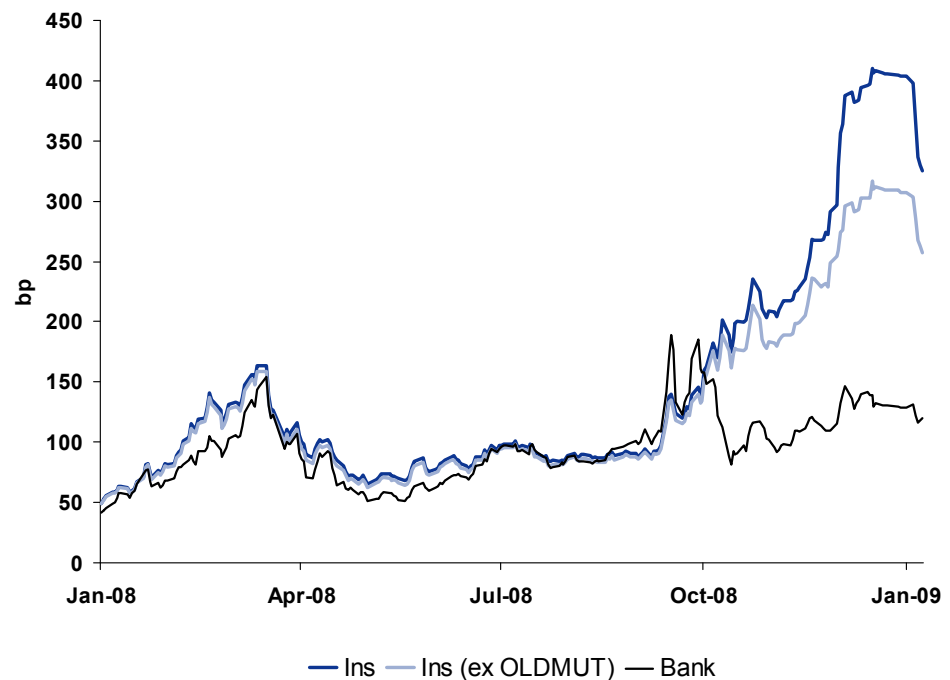
Insurance CDS should outperform bank CDS. Insurance spreads widened significantly versus bank spreads in Q4 (Exhibit 12). Several factors were at work, including rising fears over deterioration in investment books arising from the sharp sell-off in asset

markets, the impact of lower rates on the present value of liabilities, contagion from the sell-off in the US insurance sector, and the greater explicit support for banks.

The market is pricing too much fear over the sector's solvency, in our opinion. If our overall credit view is broadly accurate, and if our equity strategists are correct in their view that equities will post double-digit gains by year-end, then the negative sentiment surrounding asset deterioration should subside. Furthermore, the market appears to be attaching fairly little weight to implicit state support.

Exhibit 12: Fears over insurers are overdone; expect some convergence to bank spreads

Average 5-year CDS spreads (mid-levels) on our credit strategy sector baskets (see Goldman 360 for constituents); based on market data as of January 9 close.



Source: Goldman Sachs ECM Research.

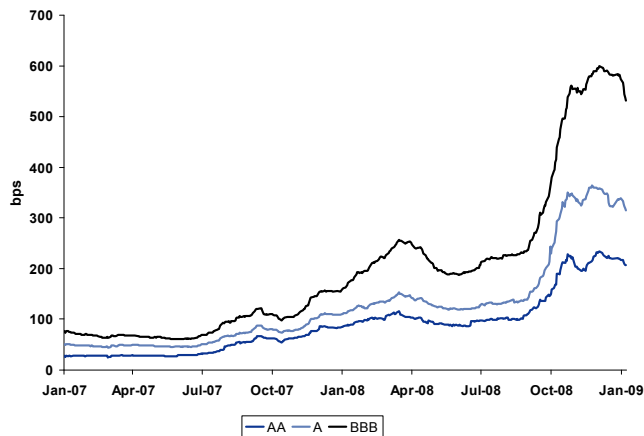
IG non-financials: Defense still makes sense (for now)

Implied risk premiums in IG non-financial bonds continue to hover close to record highs and look attractive on a risk-reward basis. We believe the market has already priced a lot of sector rotation. While a defensive bias still makes sense in H1, we have become less negative in general on high-beta sectors given current spread levels. We recommend gradually building up exposure in cash space, focusing on defensive sectors such as Utilities and Telecoms.

Non-financial IG cash spreads remain near historical highs despite a mini-rally since December (Exhibit 13). Conditional on our baseline view of 5-year forward cumulative default losses, the implied risk premium in IG non-financial bonds is also only slightly off its multi-decade peak (Exhibit 14 for a description of the methodology used to construct these estimates, see *Credit is better value than equities*, cited earlier).

Exhibit 13: IG non-financial spreads have rallied from late-08 peaks

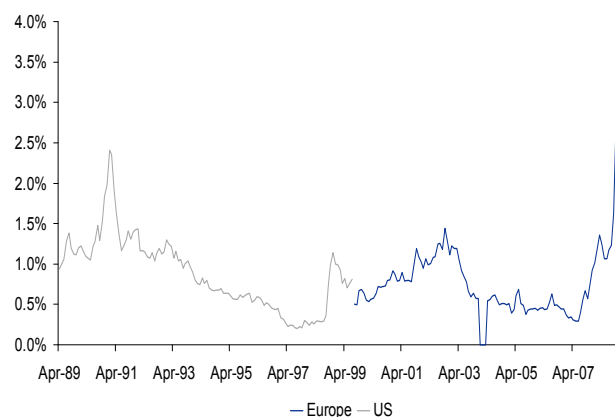
iBoxx EUR indices, 5-7 year maturities; based on market data as of January 9 close.



Source: Markit, Goldman Sachs ECM Research

Exhibit 14: Non-financial IG risk premiums remain far above average

Risk premium estimates in a basket of IG non-financial bonds (10% AA-rated, 40% A-rated, 50% BBB-rated) under our baseline default loss forecast. Based on market data as of January 9 close.



Source: Markit, Moodys, Goldman Sachs ECM Research

Further, investment grade bonds look attractive on a risk-adjusted basis relative to high yield and equities (see below for a discussion of updated HY risk premium estimates). Comparing the credit risk premium (CRP) on both investment grade and high yield to the equity risk premium (ERP) suggests that the absolute premium in IG bonds is lowest among the three asset classes, but the standardized risk premium – mean and volatility adjusted – is three times the size of our estimate for equities (Exhibit 15).

Exhibit 15: Normalized risk premiums

z-score is number of standard deviations away from average. Based on market data as of January 9 close.

	Current	Average	St. Dev	Z-Score
CRP (IG)	3.1	0.8	0.5	4.5
CRP (HY)	6.8	1.2	2.0	2.8
ERP	3.9	2.4	1.0	1.6

Source: Markit, Moodys, Goldman Sachs ECM Research.

Underlying these risk premium estimates is a view that default risk in the investment grade universe is at its highest in several years. However, the core risk to investment grade credit more broadly this year is ratings downgrades. In the past we have expressed caution on migration risk of BBB-rated cyclicals, on which we remain wary. Based on historical US data from Moodys, the maximum 1-year ratings migration rate of BBB credits to BB is almost 10% and to default is 1.6% (Exhibit 16). There is a decent chance these thresholds could be tested this year we believe.

Exhibit 16: Maximum 1-year ratings migration rates, US non-financials

	New rating:	Aaa	Aa	A	Baa	Ba	B	Caa-C	Default
Old rating:	Aaa	100.0%	30.0%	18.8%	0.0%	0.0%	0.0%	0.0%	0.0%
	Aa	3.4%	94.2%	20.5%	2.9%	2.2%	0.6%	0.0%	0.0%
	A	0.3%	6.9%	93.9%	12.1%	3.1%	1.3%	0.8%	0.5%
	Baa	0.2%	0.8%	11.6%	91.3%	9.7%	3.0%	2.5%	1.6%
	Ba	0.3%	0.3%	0.9%	9.2%	81.1%	29.1%	2.3%	4.8%
	B	0.2%	0.6%	0.8%	1.8%	12.8%	85.1%	11.6%	14.6%
	Caa-C	0.0%	0.0%	0.4%	22.2%	14.3%	23.2%	100.0%	100.0%

Source: Moodys.

The degree of sector rotation within CDS space is evident in Exhibit 17, which reports current average 5-year spreads across sectors as well as spread changes since shortly before the Lehman default and end-2007. These figures are based on our credit strategy sector baskets (constituent list can be found on Goldman 360). While some of these companies are no longer rated investment grade, this table conveys spread performance within the IG universe last year.

Exhibit 17: Sector CDS spreads

Based on 5-year CDS spreads (mid-levels) across Goldman Sachs credit strategy sector baskets

Sector	Average spread	Spread change since:	
		12-Jan-09	09-Sep-08
Aerospace & Defence	200	127	153
Automobiles & Parts	535	342	467
Basic Resources	555	363	468
Cap Goods & Transports	311	187	260
Chemicals	118	30	74
Construction & Materials	647	486	580
Consumer Goods	128	40	78
Health Care	128	77	96
Media	194	107	147
Oil & Gas	138	90	108
Retail	210	57	144
Telecommunications	135	42	84
Travel & Leisure	200	78	144
Utilities	141	80	94
Banks (sen)	123	20	82
Banks (sub)	188	-2	123
Insurance (sen)	321	228	273
Insurance (sub)	353	195	286
iTraxx Main	158	57	108

Source: Goldman Sachs ECM Research.

Our current sector preferences are shown in Exhibit 18. Compared to our previous sector rankings, we have become more negative on Consumer Goods. Weaker consumer spending in developed and emerging markets may negatively impact demand for companies in this sector, particularly luxury goods and beverages. We also see an increasing risk that companies will reduce capex next year and our economists forecast a large decline in business equipment spending. This does not bode well for companies most exposed to this type of spending, particularly in the Capital Goods and Construction sectors.

Refinancing risk is another reason to be cautious on certain sectors. For instance, Autos and Basic Resources have a relatively large amount of debt maturing in 2009-10. Apart from the significant cyclical headwinds facing these sectors, the prospect of facing large bullet payments in a year where cash flow generation is likely to be the most challenging in recent memory is a clear negative. However, as we alluded to above, re-financing risk has to be weighed against the potential for policy intervention in helping companies see through the credit crunch.

Exhibit 18: Sector rankings

Rankings across sectors, in descending order of preference

- Insurance
- Banks
- Telecommunications
- Oil & Gas
- Utilities
- Aerospace & Defence
- Health Care
- Consumer Goods
- Basic Resources
- Media
- Cap Goods & Transports
- Chemicals
- Automobiles & Parts
- Retail
- Travel & Leisure
- Construction & Materials

Source: Goldman Sachs ECM Research.

High yield: No rush

A dire profit outlook and ongoing poor liquidity conditions are finally breaking the benign default environment. Our top-down model forecast has the European HY default rate rising to 8.5% by end-2009. Recovery rates are likely to be far below historical averages, bottoming at around 20% on average on senior unsecured bonds. Despite the tough default environment, we expect HY spreads on a constant-ratings basis will tighten by end-2009.

Default forecasts revised upwards

The outlook for corporate defaults has darkened as we enter 2009. Yet despite challenging fundamentals, the high yield default rate in Europe is still well below average. According to Moody's the trailing 12-month default rate as of last November stood at just 1.3% versus an average rate of 4.7%. We have long been calling for a rise in cumulative default rates, and the emergence of some defaults at the start of this year suggests that this picture is now changing.

We have revised upwards our forecasts for default rates. Based on our "top-down" default forecasting model, we now expect trailing 12-month high yield default rates to peak at 8.5% in Q409 (Exhibit 19). The baseline forecast for the 5-year forward cumulative high yield default rate is 31%. Admittedly, there is a high degree of uncertainty surrounding the exact peak in default rates. If anything, we believe the peak could be later than Q4 in the light of our view that access to financing for low-rated firms is likely to remain very poor through 2010.

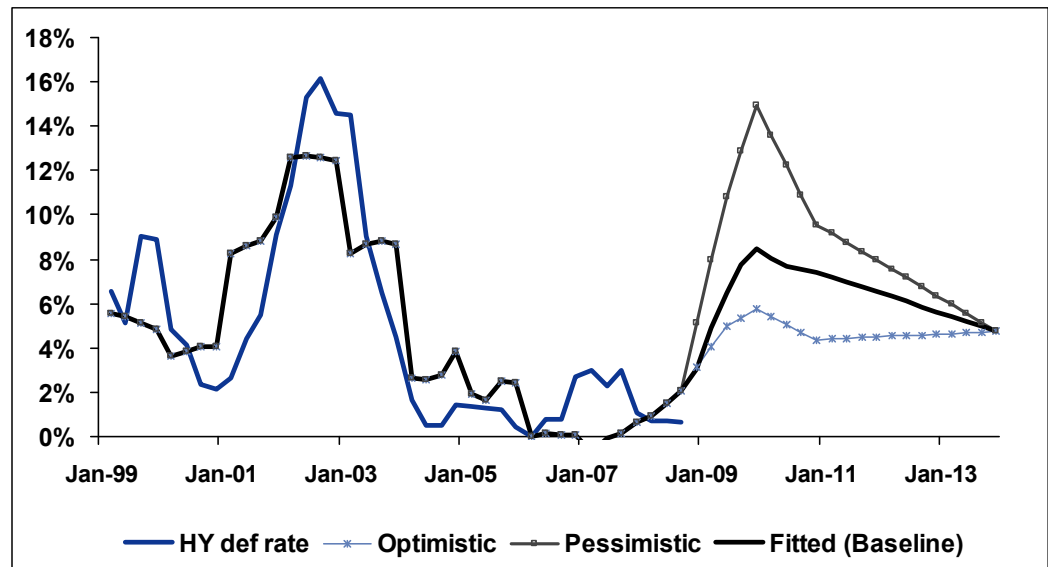
Our default forecasting model is calibrated from separate historical regression models on European and US data. The key drivers are economic growth, profit share and loan growth. The main inputs driving our default forecasts are: (1) real GDP growth bottoming at -2.4% in Q209 on a year-over-year basis (we further assume that growth will revert to a 2.2% trend slowly over the next 5 years); (2) profit share falling slightly below average before mean-reverting, which is driven in part by our Portfolio Strategy team's top-down forecast of non-financial earnings growth of -30% in 2009; (3) loan growth falling to 2% in 2009 and 1% in 2010, based on forecasts from our banking sector equity analysts.

In a more dire and yet still plausible scenario for GDP growth, profits and lending conditions, we estimate 12-month trailing high yield default rates could peak as high as 15%. In this case, the 5-year cumulative default rate would reach 41%. The projected path for default rates under this "pessimistic" scenario is also shown in Exhibit 19. Here we assume that the recession is slightly deeper than in 1973-75 or 1981-83 and more prolonged; profit share falls to its previous cyclical low; and loan growth becomes deeply negative at -5%.

By contrast, we see relatively little prospect of default rates staying below their long-term average. Even in the "optimistic" scenario shown in the graph, where we have growth bottoming at -1% and profit share simply normalizing to its long-run average, our model predicts 12-month default rates reach a maximum of 5.7%.

Exhibit 19: European high yield default forecasts and scenarios

Based on 12-month trailing issuer default rates



Source: Markit, Moodys, Goldman Sachs ECM Research.

A few additional points regarding these forecasts merit discussion. First, downward ratings drift in the HY universe (i.e. a greater proportion of B/CCC firms) implies there is a strong chance that the overall HY default rate could be higher than implied by our model's forecasts. In our assessment of market valuations below we try to mitigate this risk by focusing on an equally weighted basket of BB and B credits.

Second, default rates could reach higher levels within the leveraged loan universe. In addition, the brief history of the loan market suggests that default dynamics could also be very different during this cycle than observed in the (bond-focused) US market of the past. Leveraged loans are relatively more important in the European market compared to the US, and financial structures could limit the relevance of past US bond market experience for the current European leveraged universe.

In particular, loan structures are likely to have significant ramifications for recovery on senior unsecured bonds, as we have discussed on previous occasions. In addition, the observed pro-cyclicality in recovery rates and current distressed liquidity conditions imply that recovery rates are likely to remain challenged in this phase of the cycle. Our baseline forecast is for recovery on senior unsecured bonds to bottom at about 20% on average, although we expect significant variation around this central tendency.

Risk premiums generous but wait until first round of defaults

Implied risk premiums in HY bonds are near historical highs even when we take into account the sharp rise in cumulative default losses under our baseline view. While we see significant value in HY bonds, we would be cautious in adding exposure until the market absorbs the first wave of defaults, which are likely to occur by Q3.

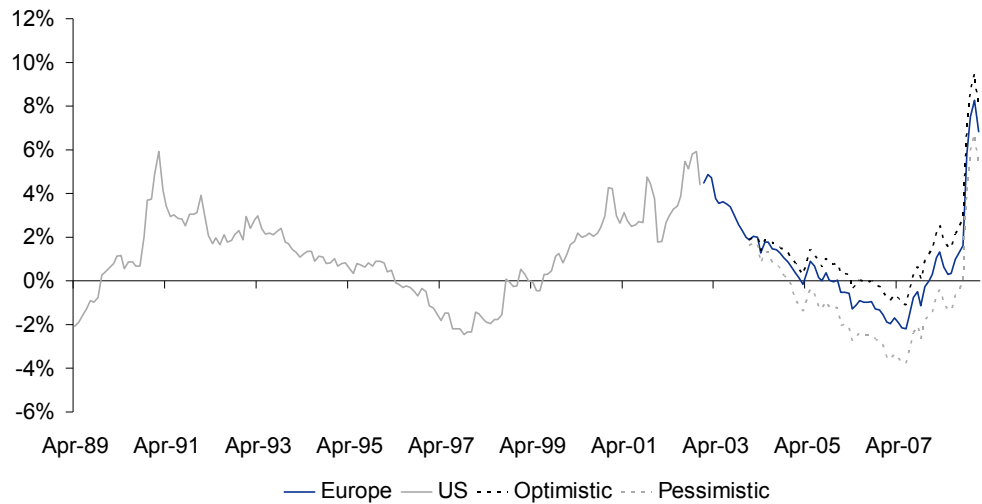
Our baseline risk premium estimates indicate there is already considerable value in high yield bonds from a long-term buy-and-hold perspective. Spreads on BB-rated and B-rated European high yield bonds remain at very distressed levels even though they have rallied from their 2008 highs. We estimate the risk premium in an equal-weighted basket of BB

and B credits is 6.8% (annualized). This estimate takes into account the expected sharp rise in default losses: the combination of our default and recovery views implies that 5-year cumulative default losses are likely to surge to 22%.

In fact, even when we condition on the more pessimistic default scenario shown in Exhibit 19, we estimate the risk premium is 5.3% (under this scenario, cumulative default losses rise to 30%). This estimate is likely biased on the high side as we have kept risky-duration constant under our simple two-regime assumption to estimating duration, whereas in reality the front-loading of deeper losses over the next two years would reduce the stream of coupon payments. Nevertheless, these estimates indicate investors are being generously compensated for holding default risk exposure over the next year.

Exhibit 20: HY risk premiums are still near historical highs

Risk premium estimates in an equal-weighted basket of BB-rated and B-rated bonds under our baseline default loss forecast and alternative scenarios. Based on market data as of January 9 close.



Source: Markit, Moodys, Goldman Sachs ECM Research.

Despite what appears to be a relatively attractive risk-reward trade-off, we believe there will be better times to add high yield risk. Poor liquidity and risk aversion should weigh on spreads through H1, and particularly until the first wave of defaults is absorbed by the market. One factor to consider is the positive correlation between risk premiums (or spreads) and default rates noted above. The lack of depth in the European leveraged loan/high yield market is another important factor to consider, particularly since the core investors in this market continue to face balance sheet pressures. CLO vehicles are unlikely to be a significant source of capital this year and demand from hedge funds will remain muted for some time. Distressed liquidity conditions and liquidations should keep pressure on spreads.

Reg AC

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