

Europe: Portfolio Strategy

Strategy Matters

Giving Credit to Equity

We update our analysis of credit and equity risk premia for Europe. Both in IG cash credit and equities, the premia remain elevated relative to their own histories reflecting attractive valuations. But equities now look more attractive than credit even on a risk-adjusted basis.

European IG cash credit and equity are both attractive

We remain constructive on both European IG cash credit and European equity. This view is supported by our analysis of the credit and equity risk premia. Compared to our May 1 analysis, the risk premia have come down for both credit and equity, as price performance has outpaced the fundamental improvements in the outlook for earnings, defaults and losses. However, both premia remain elevated relative to their respective histories, suggesting valuations are still attractive.

But we prefer the equity

As in our May 1 report, the equity risk premium remains higher than the cash and synthetic credit risk premia on an absolute basis. As a new development, equity now outperforms IG cash credit even on our risk-adjusted basis. The high returns in IG cash credit this year have been driven by a normalization of the record high liquidity premium embedded in spreads. This normalization has led to a substantial decline in our estimate of the IG cash credit risk premium to 1.2%. Going forward, we believe that the higher absolute and relative premia available in equity compared to credit together with the improvement in the outlook for earnings growth leaves equity with more upside than credit.

Equity looks more attractive than credit in Europe

	Risk Premia			Risk-adjusted
	Current	20-yr Avg.	St. Dev	Stdevs from Avg.
Europe				
DJ Stoxx 600 ERP	5.3 %	2.9 %	1.4 %	1.6
iBoxx IG CRP (cash)	1.2	0.6	0.7	0.9
iTraxx Main CRP (synthetic)	0.6	0.5	0.5	0.2
iBoxx HY CRP (cash)	2.0	1.6	2.6	0.2
iTraxx Xover CRP (synthetic)	(2.6)	0.3	3.7	(0.8)

Source: Goldman Sachs Global ECS Research.

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Giving credit to equity

We last published our views on the relative value of credit vs. equity in our May 1, 2009 report *Relative value in credit & equity*. Our calculations of the European equity and credit risk premia (hereafter ERP and CRP) revealed that equities were more attractive on an absolute basis while IG cash credit outperformed on a risk-adjusted basis.

Since then, the price performance in both equity and credit has been impressive. European IG cash credit has returned 6% as the high liquidity premium that was still imbedded in spreads has largely normalized (see Exhibit 1). The Stoxx 600 returned 22% as risk appetite increased.

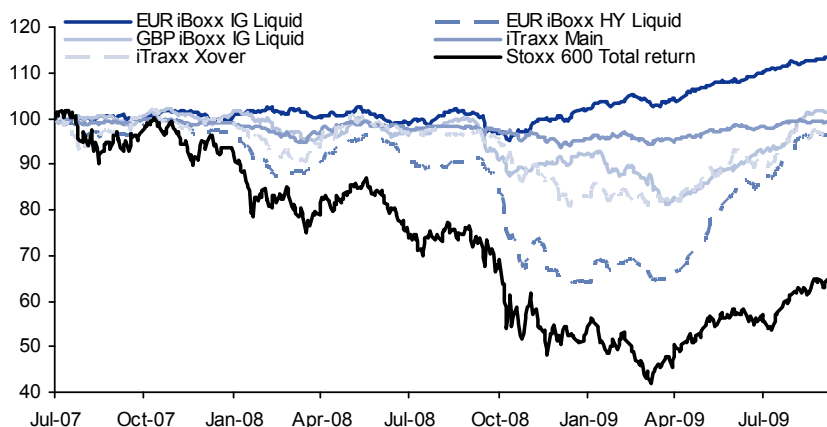
The improvements in risk and liquidity factors meant that returns outpaced the fundamental improvement that has occurred in terms of better earnings outlook, defaults and losses, thereby triggering a compression in both the ERP and the CRP. While this pattern is typical at this stage of the business cycle, we think it makes it even more important to reassess the remaining premia in both asset classes. This report addresses this question and assesses the relative value of credit vs. equity in the European market.

The out-performance of the DJ Stoxx 600 over IG cash credit since our May 1st report only closed a small part of the performance gap that had opened up since the initiation of the credit crunch (see Exhibit 1). Investment grade cash credit not only outperformed equity heading into the Lehman default, it also started recovering already in mid-October 2008, thereby leading equities all the way until March this year.

As in our May 1, 2009 report, we use our proprietary models for earnings, defaults and losses to estimate and compare the current CRP and ERP (a description of our methodology is provided later). Our estimates of the CRP and ERP rely on our most recent forecasts of earnings, defaults and losses (a description of our methodology and our main assumptions is provided later). Even though we readily admit that the ERP/CRP comparison ignores the differences in valuation characteristics of both asset classes, we believe our approach gives a comparable measure of how much risk aversion is priced into each asset class.

Exhibit 2 on the following page provides a summary of our estimates of the ERP and CRP while Exhibits 3 and 4 provide a visual inspection of the European ERP and CRP over the past 20 years.

Exhibit 1: Total return performance of European credit indexes and the Stoxx 600



Results presented should not and cannot be viewed as an indicator of future performance.

Source: Goldman Sachs Global ECS Research.

Our findings can be summarized as follows:

- Equities.** We estimate the ERP for the DJ Stoxx 600 to be 5.3% on an absolute basis. While this level is lower than our May 1 estimate of 6.5%, it is very high relative to its long-run average of 2.9%, reflecting the still attractive valuation of equities. The ERP is higher than the CRP in both IG and HY credits. A major change since our May 1 calculations is that the ERP is now higher than the IG cash CRP even on a risk-adjusted basis.
- IG credit.** We estimate the CRP on a European diversified IG portfolio to be 1.2% in cash and 0.6% in synthetic form. Our IG cash and synthetic CRP estimates assume a five-year cumulative loss rate of 1.1% for the European IG universe. While still higher than its long run-average, the IG cash CRP has significantly compressed compared to our May 1 calculations. This mainly reflects the significant improvement in funding conditions and the subsequent compression in the liquidity premia embedded in IG cash spreads.
- HY credit.** We estimate the HY cash CRP to be 2%, which is also much lower than our May 1 estimates. This forecast is based on a five-year cumulative loss rate of 23.6% for the HY European universe. As we explain below, we continue to be cautious on the European HY market and believe that current spread levels provide investors with a modest compensation for forward default and loss risks.

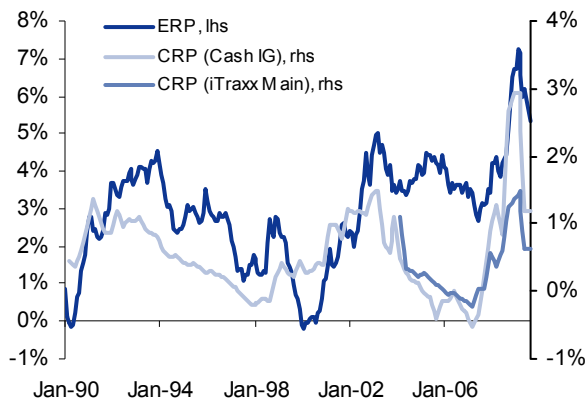
Exhibit 2: Risk premia across the credit and equity spectrum

	Risk Premia			Risk-adjusted
	Current	20-yr Avg.	St. Dev	Stdevs from Avg.
Europe				
DJ Stoxx 600 ERP	5.3 %	2.9 %	1.4 %	1.6
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iTraxx Xover CRP (synthetic)	(2.6)	0.3	3.7	(0.8)

Source: Goldman Sachs Global ECS Research.

Exhibit 3: European ERP vs. CRP (IG)

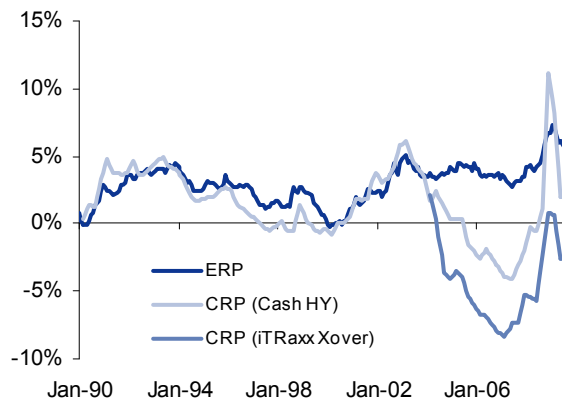
The plot shows time series of our estimates of the European ERP and vs. the IG cash and synthetic CRP



Source: Goldman Sachs Global ECS Research.

Exhibit 4: European ERP vs. CRP (HY)

The plot shows time series of our estimates of the European ERP and vs. the HY cash and synthetic CRP



Source: Goldman Sachs Global ECS Research.

Why equity is likely to offer more upside than IG cash credit

Our updated estimates of the credit and equity risk premia suggest that equity has become more attractive on a relative basis. In addition to our long-run view which is reflected in our ERP and CRP estimates, we would highlight the following near-term considerations:

1. Although we continue to be constructive on European IG cash, we believe that current spread levels are unlikely to offer investors the same level of returns that they have enjoyed so far. Our view since the beginning of the year has been bullish on IG cash both in continental Europe and the UK. Our argument has been that the record wide IG spreads were mainly reflective of a substantial liquidity premium. As funding conditions dramatically improved, this liquidity premium has collapsed which pushed IG cash spreads much tighter and allowed investors to generate double-digit returns both in continental Europe and the UK.
2. We remain cautious on the European HY market. Even though the rally in HY has been impressive (see Exhibit 1 above), we view it as more technical than fundamental in nature. In particular, we suspect that the European HY credit market, just like the US, has largely benefitted from strong mutual fund inflows. The small size of the European HY market, the technical nature of the rally and the substantial tightening in spreads make us even more cautious now.
3. Against this backdrop in credit, our outlook for European equities has also improved. While attractive valuation, as captured by the high absolute level of the ERP, has been a cornerstone for our positive view on equities since April, we have also long viewed a well functioning credit market as a sine qua non for a sustainable rally in the equity market. The full satisfaction of that condition that has now occurred was part of the reason we raised our 12-month target for the Stoxx 600 earlier this month to 275, representing 12% upside potential from here. In addition to a healthier credit market, we see at least two additional factors supporting the equity market going forward. First, valuation looks still very attractive in a long-run perspective. Second, the earnings outlook is improving, driven by a return to positive economic growth, a more profitable financial sector and rapid cost cutting.

In the next two sections, we discuss our views on credit and equity in more detail. We then provide a detailed description of our modeling framework.

Credit valuation is back to a more conventional pattern

The record-high liquidity premium in IG bonds that appeared on the back of the Lehman default has now substantially compressed. As a consequence, we believe the next phase of spread tightening will be more driven by improving macro conditions and less by funding and liquidity conditions. In such an environment, investors have to move lower in the capital structure to generate high excess returns.

The substantial widening of the liquidity premium in IG corporate bonds has been one of the most spectacular post-Lehman dislocations in fixed income markets. The spike in systemic fears in 3Q2008 resulted in an escalation of balance sheet pressures and a complete freeze of the primary corporate bond market both in the US and Europe. This forced market participants (mainly banks, dealers and hedge funds) to liquidate their inventories which resulted in a massive sell-off.

This not only pushed bond spreads to unprecedented wide levels but it also triggered a remarkable divergence between CDS and cash spreads. For high quality cash IG bonds, the enormous discount embedded in credit spreads and the dramatic widening of the CDS-cash basis (the difference between synthetic and cash spreads) were therefore essentially induced by the distressed state of the investor base rather than "asset distress".

Our view has been that the record-high level of the liquidity premium for high-quality IG bonds coupled with aggressive and unconventional policy response provided investors with a unique opportunity to capture equity-like returns with much less risk. We have therefore been recommending getting long high quality investment grade bonds and the CDS-cash basis in continental Europe and the UK since the beginning of the year. As shown by Exhibit 1, European and UK investment grade bonds have outperformed equity, yielding double-digit returns.

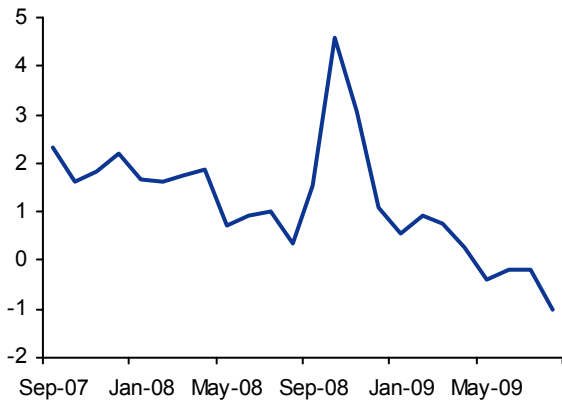
The strong performance of IG cash bonds understandably raises the question of its sustainability. As we pointed out in our September 3, 2009 Credit Line (*The liquidity "free lunch" is over*) and while we maintain our positive stance on IG cash credit, we believe the normalization of the liquidity premium has almost run its course. Our view is that funding conditions and more broadly systemic risk have now gotten very close to their steady state. Perhaps the best manifestation of the dramatic improvement in funding conditions is the tightening of our cyclically-adjusted Financial Stress Index (FSI) to pre-crisis levels (see Exhibit 5). Combined with the significant narrowing of the IG CDS-cash basis (see Exhibit 6), this clearly signals that the liquidity premium is now close to fair value. As a consequence, we think the next phase of spread tightening will be more driven by improving macro conditions and will be less related to funding and liquidity conditions. In such an environment, we believe investors should move lower in the capital structure to generate high excess returns. In our opinion this makes the cross-over space (BBB and BB-rated bonds) the sweet spot in credit. With yields of around 6%-9%, these bonds still allow investors to benefit from a high carry while reducing exposure to sub-trend growth in 2010, as well as a persistent default cycle.

While our fundamental outlook for defaults and downgrades has improved (see our August 7, 2009, Credit Line (*A better outlook for downgrades and defaults*)), we continue to be cautious on HY for the remainder of the year and also 2010. With the massive tightening in HY spreads (see Exhibit 7) particularly on CCC and B credits, we do not believe investors have a lot of upside in being long low quality HY credit. We maintain our view that the prospect of sub-trend growth in 2010 in Europe and the US is likely to keep the cash-flow environment for HY companies challenging. This should also make default losses more persistent compared to previous cycles.

We also think it is important to be mindful of the technical forces that have been driving the rally in HY. As we demonstrated in our September 11, 2009 Credit Line (*Why mutual fund money flows matter (more so than in the past)*), we believe mutual fund inflows in the United States have largely driven returns for less liquid credit instruments, HY in particular. Because of its relative small size and hence poor liquidity, we suspect the European HY market has equally benefitted, if not more, from strong mutual fund inflows. The small size of the European HY market, the technical nature of the rally and the substantial tightening in spreads make us even more cautious now.

Exhibit 5: Financial stress has dramatically decreased since the Lehman fallout

The plot shows a time series of our Financial Stress Index (FSI).



Source: Goldman Sachs Global ECS Research.

Exhibit 6: The compression of the IG bond liquidity premium is visible in the dramatic tightening of the CDS-cash basis

The plot shows a time series of the median CDS-cash basis for the constituents of iTraxx Main.



Source: Goldman Sachs Global ECS Research.

Exhibit 7: Valuation has gotten much less attractive in European HY

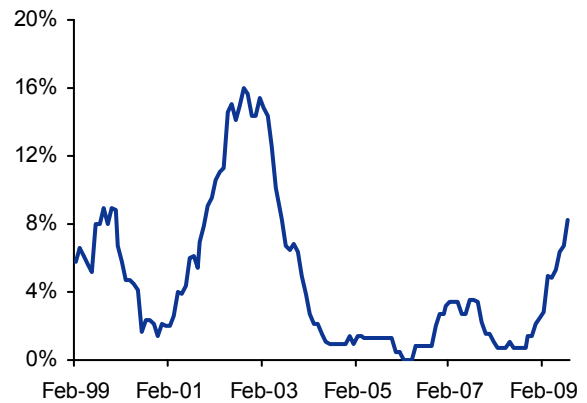
The plot shows a time series of European HY iBoxx liquid yield



Source: Goldman Sachs Global ECS Research, iBoxx.

Exhibit 8: European defaults will likely continue to increase in 2010

The plot shows a times of the 12-month trailing European HY default rate



Source: Goldman Sachs Global ECS Research, Moody's.

We expect the rally in equities to continue at a more gradual pace

We have been positive on equities since April as the conditions for a sustained rally that we set out in our Outlook for 2009 started to materialize. The four conditions were cheap valuations, a clear sign of second derivative improvement in economic activity, improvements in credit markets and an ability of the market to shrug off deteriorating earnings forecasts (see our December 4, 2008 report *Inflection Detection: Outlook 2009*).

We expect the European equity markets to continue to rise over the next year. Our year-end target for the DJ Stoxx 600 is 260 and our 12-month target is 275. The slowdown in the pace of returns from a move of 6% over the 3.5 months until year-end to a 6% move over the next 8.5 months reflects the slowdown in the recovery that our economists expect in the US and Europe in 2010 compared to the third quarter of 2009. There are three factors that we expect to drive the market higher over the next year.

1. Valuations are attractive from a long-term perspective.

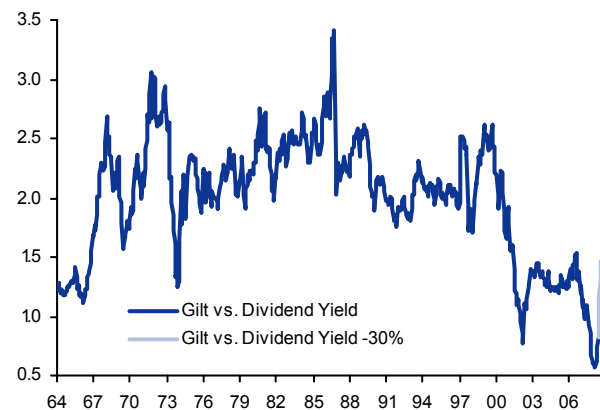
As shown in Exhibit 3 above, the implied ERP at 5.3% is far above the 20-year average of 2.9%, and is also still above the peaks in the last two recessions. The same picture emerges looking at more traditional valuation measures. Exhibit 9 shows that despite the 55% rally in equities since March 9, the P/E on trend earnings for the Stoxx 600 is still at the level of the trough in the last two recessions. Yet another perspective on this is the UK yield ratio. Even if dividends were to fall another 30% from here (which we think is highly unlikely) the ratio would still just be in line with the level between 2003 and 2006 (see Exhibit 10).

Exhibit 9: Europe P/E on trend earnings remains low



Source: Worldscope, Datastream, Goldman Sachs Global ECS Research.

Exhibit 10: UK Gilt vs. dividend yield



Source: Datastream, Goldman Sachs Global ECS Research.

We expect this locked up value to be realized as the economy recovers. Given the relatively slow pace of economic recovery that we expect in the developed world, this is likely to be a gradual process. In our June 19, 2009 report *The next leg: The path to mid-cycle valuation*, we estimated that a reasonable time frame for both the return on equity and the ERP to normalize was year-end 2013, and that the fair value of the Stoxx 600 index would be 420 by then. Given this time line, valuation is likely to support performance for years to come, but at the gradual pace reflected in our forecasts.

2. Earnings outlook is improving

Earlier this month we upgraded our outlook for earnings. We now expect earnings to decline 16% in 2009 (was 19%) and grow 40% in 2010 (was +34%) (see Exhibit 11).

Exhibit 11: Europe top-down profit growth forecast for 2009 and 2010 (%)

2008 figures are a combination of published results and Goldman Sachs Research analysts' estimates

	Growth rates (%)			08-10E CAGR
	2008	2009E	2010E	
Actual/ Model results (all pre excep.):				
Sales	6.3	-5.7	8.7	2.9
EBIT	1.7	-17.0	29.1	2.9
Net income ex financials	-6	-23	37	0
Net income financials pre-exception.	-77.9	34.0	54.9	-22.9
<i>Weight of financials pre-except.</i>	38%	13%	20%	
Net income pre-exceptionals DJ STOXX	-33	-16	40	-8
Level of EPS for the DJSTOXX	19.3	16.2	22.7	

Source: Datastream, Goldman Sachs Global ECS Research.

The upgrade was driven by three factors (see our report *Why the market has further to rise*, September 3, 2009):

i) The recent upgrade in our economists' forecast for economic growth. We now expect 4.1% growth worldwide next year. Given the international profile of European companies, we believe they are in a good position to benefit from this growth.

ii) A better outlook for Financials earnings. Financial earnings in the last two quarters have benefited from capital markets and mortgage refinance activities, and the outlook for losses is improving as well.

iii) Higher operational leverage. European companies have been very quick by historical standards at cutting costs in this cycle, as evidenced by rising unemployment, falling inventories as well as the commentary during earnings conference calls.

3: Equity now looks more attractive than credit in Europe

As mentioned above, improvements in the credit markets were one of the conditions we thought were necessary for a rally in equities to be sustained. The credit market is important both because it helps economic growth and because it makes an equity investment more attractive relative to credit for new money flowing into the market.

The improvements in the credit markets have been important for the rally we have already seen in equities. However, we also believe it is a significant development that risk premia in credit now have compressed to a degree where equity looks more attractive than credit even on our risk adjusted measures. In our view, this will be an important source of support for the equity market going forward.

Estimating the CRP and ERP: Our modeling framework

Our CRP model in a nutshell

We compute the CRP as the expected excess internal rate of return (IRR) on a five-year buy and hold strategy. A key ingredient in computing the CRP is therefore the stream of expected cash flows (coupon + face value) over the next five years. This requires the estimation of the “term structure” of expected losses from year 1 to year 5: that is the cumulative default rate multiplied by the loss given default at the end of each year.

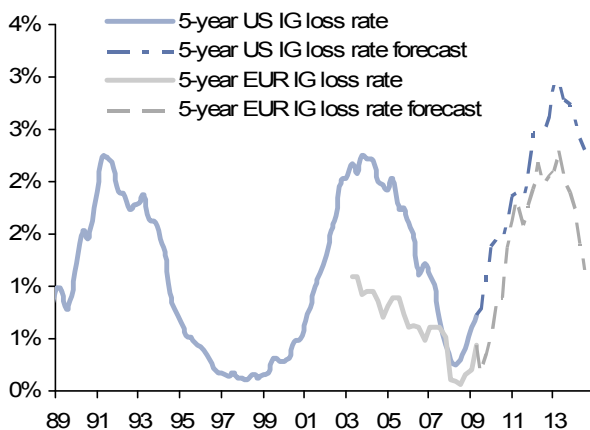
We use our top-down macro model to generate our forecasts for IG and HY default rates and losses given default. We do so by modeling the time series behavior of a rating transition matrix with the following three states: IG, HY and default. The matrix effectively includes four elements: the 12-month downgrade rate from IG to HY, the 12-month upgrade rate from HY to IG, the 12-month jump to default rate from IG and the 12-month default rate from HY.

We use the iBoxx IG and HY liquid indices as proxies for bond portfolios and the iTraxx Main and Xover indices as benchmarks for IG and HY synthetic portfolios. We also use an average of the yield to maturity on the five-year German bund and five-year UK as a benchmark for the risk-free yield.

Exhibits 12 and 13 provide a visual inspection of the five-year cumulative loss rates for IG and HY both in the US and Europe. For IG, we project a five-year European cumulative loss rate of 1.1%. For HY, we forecast a five-year cumulative loss rate of 23.6%.

Exhibit 12: Our forecasts for the five-year IG cumulative loss rate suggest the peak is behind us

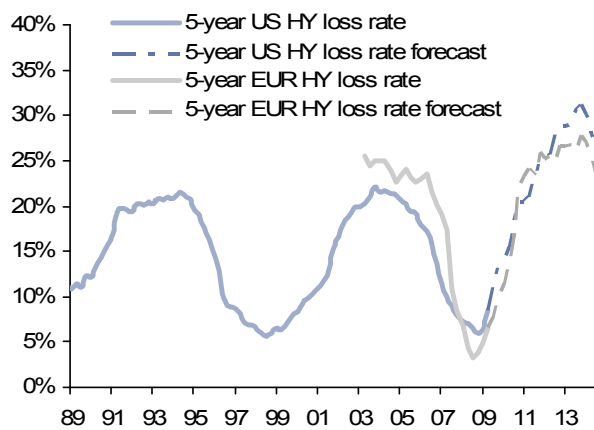
The plot shows a time series of the IG European five-year cumulative loss rate



Source: Goldman Sachs Global ECS Research.

Exhibit 13: The pattern is similar for the five-year HY cumulative loss

The European HY five-year cumulative loss rate



Source: Goldman Sachs Global ECS Research.

Our ERP model in a nutshell

Based on our models, we estimate the current implied ERP to be 5.3% for Europe, which is down significantly from the 7.3% reached at the end of February this year. However, our measure of the implied ERP remains elevated relative to its 20-year average of 2.9% as shown in Exhibit 3 above.

The implied ERP plus the 10-year bond yield is a measure of the discount rate implied by the equity market. We estimate the implied ERP by asking at each point in time which ERP is needed in order for the theoretical value from our dividend discount model (GS DDM) to equal the observed market price, given the outlook for earnings. GS DDM has four phases:

- **Phase I (Years 1-2):** Short-run earnings growth forecasts based on our top-down earnings models (since historical forward-looking estimates are not available for Europe, we use a 50/50 split of bottom-up forecasts and perfect information of actual growth rates. See *Strategy Matters: Credit versus equity: Credit offers better value*, November 14, 2008 for more details).
- **Phase II (Years 3-4):** Fade to trend ROE (return on equity). We assume that the market gets back to trend ROE by the end of year 4 and that the earnings change to achieve this occurs equally over the two years.
- **Phase III (Years 5-20):** We assume that profits grow in line with trend GDP growth, while the payout ratio equals the average over the past five years.
- **Phase IV (the terminal value):** In the very long run, we assume that the return on equity is equal to the cost of equity and that profits grow in line with trend GDP growth.

The implied ERP varies systematically with the economic cycle. It increases around recessions and decreases during prolonged economic expansions. In previous work we have found that the output gap (at home and abroad) and the lagged ERP are important drivers of the current ERP. For further details on our approach please see our reports *Finding 'Fair Value' in Global Equities; Part I*, February 9, 2009, and *Finding 'Fair Value' in Global Equities: Part II – Forecasting Returns*, March 23, 2009.

Reg AC

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