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## Are Credit Spreads Pricing Recession?

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Credit spreads in Europe and the US have widened sharply over the past several months. The sell-off has been most pronounced in Europe, especially in financials, where corporate spread levels have more than doubled since May. Many credit indices are indicating spread levels that have historically been seen only in recession.

In this *Global Economics Weekly*, we solve for the economic growth outlook implied by the current level of credit spreads. We conclude that credit spreads are signalling growth that is weaker than we have thus far seen in the data. That said, looking forward, the range of implied growth rates is broadly consistent with our economic forecast over the next few quarters, although more so in Europe than in the US.

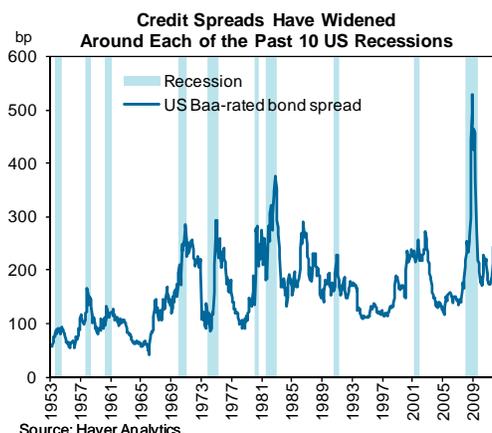
In our view, credit markets are probably no better as a predictor of future economic activity than any other market (and in many respects may be worse). Our reading of the historical evidence suggests that credit spreads are more forward-looking when the economic shock originates in the banking/financial sector. Otherwise, spreads tend to look backwards, widening out only when defaults are imminent (which is often too late). This is consistent with conventional wisdom on behaviour of credit ratings, too.

We admit important exceptions to this view, however. Credit spreads, especially on financials, ought to be more sensitive to systemic shocks than to garden variety recession shocks; they have therefore been closer to the epicentre of the current crisis than competing indicators. Given the origins of the current crisis, it merits paying close attention to what the credit markets are trying to tell us about the risks to growth.

Ratio of Current Spread Levels vs. Historical Business Cycle Peaks

Credit index	1991	2001	2008
EU: iTraxx Sub Fin 5y	-	-	1.18
EU: iTraxx Senior Fin 5y	-	-	1.13
EU: iTraxx Main 5y	-	-	0.82
EU: iTraxx XO 5y	-	-	0.66
EU: BAML EUR Fin 5-7y	-	4.49	0.65
US: iBoxx USD Fin 5-7y*	1.41	1.66	0.58
EU: BAML EUR Nonfin 5-7y	-	1.28	0.57
US: CDX IG 5y	-	-	0.49
US: CDX HY 5y	-	-	0.48
US: BAML High Yield*	0.69	0.76	0.39
US: iBoxx Nonfin BBB 5-7y*	0.65	0.47	0.32

\*The spread histories for these indices were extrapolated back in time using GS historical indices matched by sector and broad rating.  
Source: Goldman Sachs Credit Strategy, iBoxx, Haver, Bloomberg.



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# Are Credit Spreads Pricing Recession?

## Credit Spreads Signal More Trouble Ahead

Credit spreads in Europe and the US have widened sharply over the past several months. The sell-off has been most pronounced in Europe, and especially in financials, where corporate spread levels have more than doubled since May. The correlation between European and US financials has been high (as usual), with the iBoxx USD index of bank spreads widening by roughly 2.5x for senior 5-year bonds, vs. the iBoxx EUR broad financials index which has widened by 2.4x. The sell-off has been only somewhat less pronounced for US nonfinancials, where BBB and HY spreads have widened by 1.7x and 1.8x, respectively.

Many credit indices are indicating spread levels that have historically been seen only in recession. Table 1 provides some perspective by showing where current spreads are trading as a ratio to *peak* spread levels in past recessions. Consistent with the extraordinary levels to which the European sovereign crisis has escalated, the iTraxx CDS index for subordinated 5-year financials, for example, is trading at 1.18x its levels at the peak of the 2008 crisis, and the analogous index for senior debt is trading at 1.13x.

Of course, benchmarking to the 2008 crisis as shown in Table 1 is setting the bar high. Compared with the 2001 and 1991 recessions, credit spreads look a lot wider. For example, an index of USD 5-7yr financial spreads (based on the iBoxx since 1999, and extended back to 1989 using our internal data) is still just 0.58x its peak 2008 levels, but it is at 1.41x and 1.66x its peak levels reached in the 1990 and 2001 recession, respectively. Similarly for Europe, the cash market is currently at just 0.65x its 2008 peak, but is at 4.49x its peak in the 2001 recession. By these benchmarks, the warning lights on the economy dashboard are flashing, especially in Europe.

Prompted by the above heuristics, this *Global Economics Weekly* solves for the economic growth outlook implied by the current level of credit spreads. We conclude that credit spreads are signalling growth that is weaker than we have thus far seen in the data. That said, looking forward, the range of implied growth rates is broadly consistent with our economic forecast over the next few quarters.

## Reverse Engineering Credit Spreads

Econometricians these days have access to a sophisticated toolkit of models and computational techniques that can be deployed to explore statistical relationships in complex data sets. But to understand the behaviour of credit spreads over the business cycle, there's no getting around the shortcomings of the data. The modern US high yield market, for example, is no more than 25 years old.

The missing values in Table 1 for most of the 1990 and 2001 entries convey the scope of the problem: most macro indices of credit spreads are exceedingly short. With a fair bit of work, we are able to extend some of these indices back to 1989. A few more start in the late 1990s, and the CDX and iTraxx CDS indices have less than 10 years' worth of history. But for the most part, it's thin gruel for macroeconomists.

The sole exceptions to this are the two yield indices on Moody's Aaa and Baa bonds published in the Federal Reserve Board's H.15 release. At a monthly frequency, these series extend all the way back to the 1920s. But these indices have two significant shortcomings:

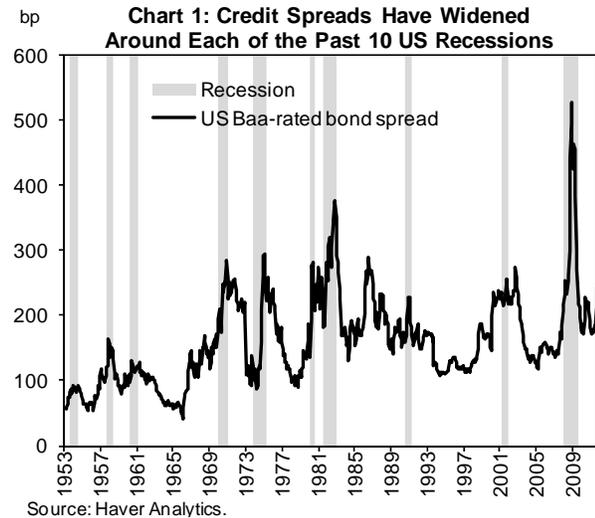
- For one, the **structure and composition of the corporate bond market has changed significantly** over the years. The early market was dominated by railroads, industrials, and utilities which tended to issue bonds with significantly longer maturities than are common today (and, to this day, it remains an index of long-maturity bonds which aims to include 30-year maturities; bonds are dropped when their remaining life falls below 15 years). A Baa-rated issuer issuing 30-year bonds is generally going to be a much different issuer (generally of much higher credit quality) than a Baa-rated company that has trouble issuing maturities beyond five years. Financials, for example, tend to be under-represented at long maturities.
- A second shortcoming of the Moody's Aaa and Baa indices is the distinctly **different investor base**. The **long end of the market** is segmented to a degree from the front end and therefore has its own set of supply and demand technicals. A rough empirical assessment of the consequences of these differences in sectoral composition, maturity and market technicals can be quantified by using the iBoxx investment grade history

**Table 1: Ratio of Current Spread Levels vs. Historical Business Cycle Peaks**

Credit index	1991	2001	2008
EU: iTraxx Sub Fin 5y	-	-	1.18
EU: iTraxx Senior Fin 5y	-	-	1.13
EU: iTraxx Main 5y	-	-	0.82
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US: iBoxx USD Fin 5-7y*	1.41	1.66	0.58
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US: CDX IG 5y	-	-	0.49
US: CDX HY 5y	-	-	0.48
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US: iBoxx Nonfin BBB 5-7y*	0.65	0.47	0.32

\*The spread histories for these indices were extrapolated back in time using GS historical indices matched by sector and broad rating.

Source: Goldman Sachs Credit Strategy, iBoxx, Haver, Bloomberg.



since 1999. Regressing monthly changes in the broad 15-yr+ index on, say, monthly changes in the 5-7yr bucket yields a coefficient of 0.60 with an R-squared of 74%. So there is non-trivial ‘slippage’ associated with the use of long maturities as a proxy for the front-end of the market. This is especially true around recessions when the error term from this regression tends to be larger.

That said, there is no getting around the fact that most widely used credit indices span three recessions *at most*, and usually fewer. Hence, we rely on both long and short series for the analysis below. We use the longer time series to establish some basic facts about business cycle properties of credit spreads, and then use the shorter but more granular series to extract growth views from different parts of the credit market.

Chart 1 plots the history of Moody’s spreads back to 1953, annotated with shaded recession bars. We construct a measure of credit spreads based on the spreads of the Moody’s Baa index to the 20-year constant maturity yield on Treasuries (both as reported by the Fed’s H.15 release). A few basic facts are immediately visible. First, in each of the past 10 US recessions, Baa spreads generally (though not always) tend to widen gradually for several years before the recession, and tend to peak towards the end of the recession (but again, not always). This ‘typical’ recession pattern is especially visible during the recessions of 1957, 1970 and 1981.

In other recessions, the pattern is much murkier. In the 2001 recession, for example, spreads began to widen over 1998 before reaching a plateau in late 1999 (Chart 1). These levels persisted throughout the recession in 2001 and didn’t peak until 11 months *after* the recession had ended. The recessions of 1973 and 2008 are different, too, since spread levels gave almost no advance warning before the onset of recession. Indeed, in the case of the 1973 recession, spreads didn’t begin to widen until the economy was six months into the recession (by which point stock prices had already fallen by more than a

Table 2: The Peak in Credit Spreads Lags the Onset of Recession by an Average of 9 Months

Recession start date	lead/lag (+/-) wrt recession start	lead/lag (+/-) wrt recession end
1953	-11m	-2m
1957	-4m	+4m
1960	-2m	+7m
1970	-11m	-1m
1973	-4m	+1m
1980	-4m	+1m
1981	-14m	+1m
1990	-4m	+3m
2001	-18m	-11m
2008	-11m	+6m
<b>Average</b>	<b>-9m</b>	<b>+1m</b>

Source: Haver Analytics.

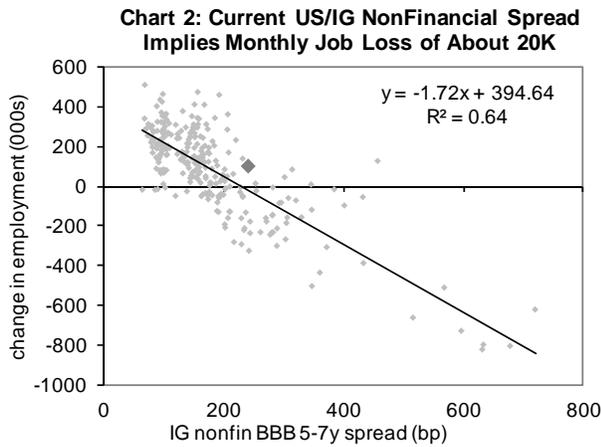
third). In the case of the 2008 recession, spreads gave more advance notice and were already materially wider by the time the recession started, but to only a quarter of their eventual peaks.

Table 2 provides a summary of these patterns, quantified in terms of the lead-lag relationship between the peaks in credit spreads and the beginnings and endings of recessions. The first column shows that credit spreads tend to peak, on average, around nine months into the recession. The second column shows that the peak in credit spreads more closely coincides with the recession trough than with its peak. The spread peaks in 1970, 1973, 1980 and 1981 all fell within one month of the recession trough, and the 1990 fell within 3 months. The two most recent recessions are among the few notable exceptions to this pattern. In 2001, spreads didn’t peak until 11 months after the recession was over. And in 2008—a relatively long recession, it should be noted—spreads began to rally six months before the economy had bottomed.

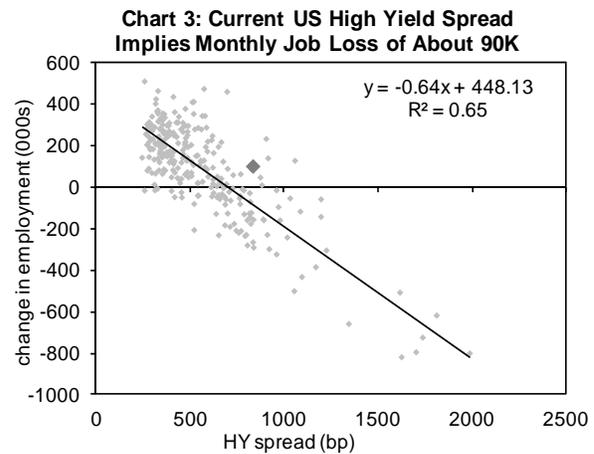
Table 2 shows that on average, credit spreads tend to peak just before the troughs of recessions. This pattern is consistent with the view that spreads tend to widen as data suggest activity is deteriorating, and then tighten as “green shoots” appear (see also: “*When markets turn,*” *Global Economics Weekly*, Jan. 14, 2009 ). We conclude that treating credit spreads as a coincident indicator of economic activity, as we do below, is reasonable.

For more granular analysis—e.g., looking at the signal across regions, or across financials vs non-financials—there is no alternative but to rely on the shorter histories. To infer ‘spread implied’ growth rates from shorter, more granular time series, we run simple, univariate regressions of GDP on spreads with a lag length of zero. We experimented with less parsimonious regressions, but the effective size of the dataset is essentially just three data points (that is just three recessions). To attempt more seemed to risk over-fitting. We also experimented with lag lengths, but here, too, we worried about over-fitting.





The spread history for the IG nonfinancial index was extrapolated back to 1989 using GS historical index matched by sector and rating. Source: Goldman Sachs Credit Strategy, iBoxx, Haver Analytics.



\*The spread history for the HY index was extrapolated back to 1989 using GS historical index matched by sector and rating. Source: Goldman Sachs Credit Strategy, iBoxx, Haver Analytics, Bloomberg.

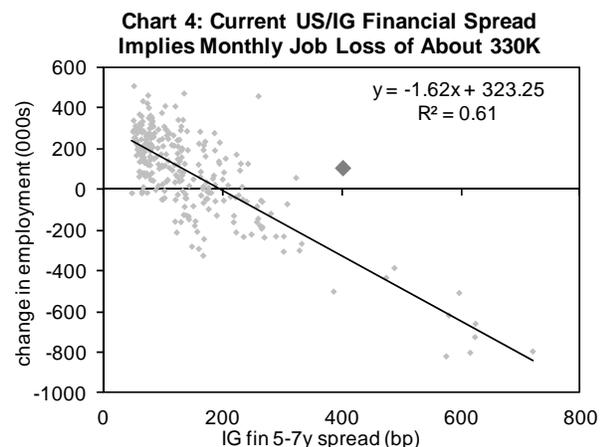
Given our desire to calculate ‘spread implied’ levels to current activity rather than forecast future activity, it seemed natural to assume a perfectly coincident relationship between credit spreads and economic activity—an assumption supported by the results summarised in Table 2.

**Credit-Implied Growth More in Line with Our View On Europe than on the US**

Our measure of economic activity varies by region. For the US, we explored several alternatives for measuring activity (e.g., employment growth, GDP growth, industrial production, activity indices, etc.), but settled on monthly employment growth as the best measure. For Europe, we settled on the EuroCOIN measure of monthly activity.

The results for the US are shown in Chart 2, 3 and 4, and can be summarised as follows:

- **Nonfinancial BBB credit spreads** are signalling roughly zero employment growth (Chart 2). To be exact, credit spreads are pricing a loss of 20,000 jobs per month, vs. the actual growth of 103,000 jobs



The spread history for the IG financial index was extrapolated back to 1989 using GS historical index matched by sector and rating. Source: Goldman Sachs Credit Strategy, iBoxx, Haver Analytics.

reported for September. To derive this estimate from Chart 2, start from the current data point, indicated by the diamond, draw a vertical line down the regression line, then read the jobs number off the left axis.

- **High-yield credit spreads** are pricing a similarly anaemic but slightly more bearish outlook, implying a loss of roughly 90,000 jobs per month (Chart 3).
- **Financial credit spreads** are pricing the most troubling outlook. Benchmarking US job growth against 5-year bank spreads suggests that employment should be falling at a pace of roughly 330,000 jobs per month. This is approximately the magnitude of the monthly job loss associated with the worst months of the 1990 and 2001 recessions—not just slow growth, in other words, but a true recession scenario (Chart 4).

The results for the Euro-zone appear in Chart 5 and 6 on the next page, and can be summarised as follows:

- **Nonfinancial credit spreads** are signalling a mild recession of roughly -0.20% real GDP growth (Chart 5). This is more bearish than our forecasts of 0.20%, -0.10% and -0.10% over the next three quarters, but not by much. To a first approximation, our forecast for European GDP appears to fall well within a standard deviation of the spread-implied view.
- **Financial credit spreads** are pricing a mild recession of -0.35% real GDP growth, which is very close to the growth rate implied above by nonfinancial spreads (Chart 6). This similarly is notable only because the results for the US differed so much. This contrast reflects the fact that nonfinancial spreads in Europe have widened sharply and in synch with financials, whereas in the US, nonfinancials have shown more resistance to the events in Europe.

Do these results imply credit risk is attractively priced? Not in our view, or at least not yet. To us, these patterns all make sense, and they are broadly consistent with our



**Chart 5: Current Europe NonFinancial Spread Implies Monthly GDP Growth of About -0.2%**

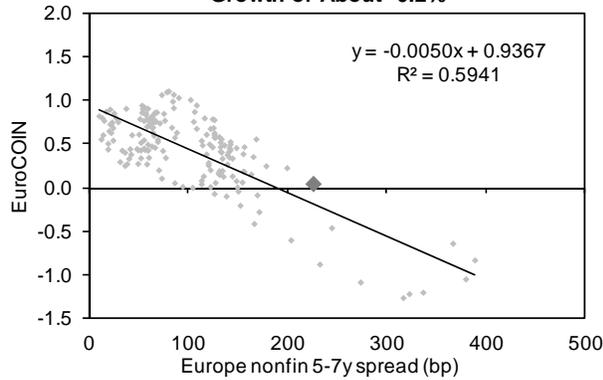


Chart shows monthly spread vs. monthly Euro Coincident Indicator from 1997-present.  
Source: Goldman Sachs Credit Strategy, iBoxx, Haver Analytics.

**Chart 6: Current Europe Financial Spread Implies Monthly GDP Growth of About -0.35%**

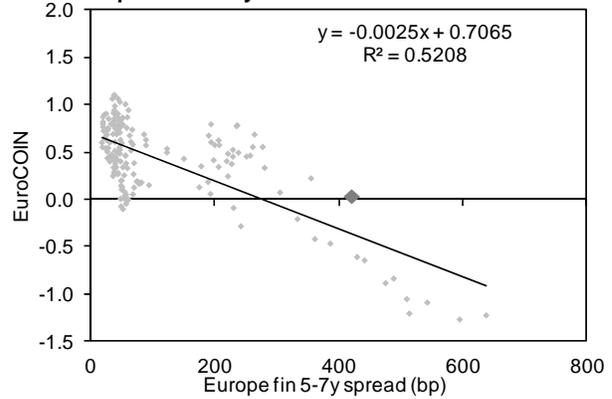


Chart shows monthly spread vs. monthly Euro Coincident Indicator from 1997-present.  
Source: Goldman Sachs Credit Strategy, iBoxx, Haver Analytics.

economic forecasts, although more so for Europe than the US. For Europe, we currently think a recession in Europe is more likely than not over the next two quarters, while in the US we see ‘only’ a 40% probability of recession. What is clear to us is that growth is going to slow considerably in both regions with risks skewed to the downside (especially in Europe).

That said, and in contrast to Europe, spread levels in the US are clearly signalling weaker economic activity than we currently see or expect. We would normally conclude from this that corporate bonds are attractively valued—especially for nonfinancial companies, where we have argued that credit quality is near 25-year highs. Moreover, we would be much more constructive on current valuations if it weren’t for Europe (see *The Credit Line: Bearish on spreads, bullish on fundamentals*, September 16, 2011).

But bottom-up credit quality is no match for the top-down pressure on the pricing of credit risk that we think is likely to continue as a result of concerns over the adequacy of the policy response to the European sovereign crisis. Until we see more concrete evidence of a significantly more robust policy response (bank recaps would check one important box for us), we think credit spreads, especially in financials, will remain high and volatile.

**Credit Spreads Are Better At Sniffing Out Systemic Shocks**

In our view, credit markets are probably no better as a predictor of *future* economic activity than any other market (and in many respects may be worse). Our reading of the historical evidence has always been that credit spreads are more backward-looking than forward-looking. Widening out only when recession and hence higher defaults are imminent. This is consistent with conventional wisdom on credit ratings, as well as the early 1990s fashion for using the equity-Merton model as a leading indicator for credit spreads (a fashion that reflected a view—since altered by the arrival of CDS markets—that equity prices were more informed about company fundamentals than bond markets).

There is one important exception to this view, however: Credit spreads, especially on financials, ought to be more sensitive to systemic shocks than to garden variety recession shocks. For this reason, they have been closer to the epicentre of the current crisis than competing indicators. When the primary risk to the macro economy is located in the financial sector, it is important to pay careful attention to what the credit markets are trying to say about the severity of the risk to growth.

**Charlie Himmelberg, Lotfi Karoui and Annie Chu**



# Main Economic Forecasts

## Real GDP, %chg, yoy

	2009	2010	2011	2012
<b>G3</b>				
USA	-3.5	3.0	1.7	1.4
Euroland	-4.2	1.7	1.6	0.1
Japan	-6.3	4.0	-0.6	2.2
<b>Advanced Economies</b>				
Australia	1.4	2.7	1.5	3.0
Canada	-2.8	3.2	2.1	2.0
France	-2.6	1.4	1.6	0.2
Germany	-5.1	3.6	2.8	0.6
Italy	-5.2	1.2	0.8	-0.4
Netherlands	-3.5	1.6	1.7	0.3
New Zealand	-2.0	1.7	2.1	2.7
Norway	-1.6	0.3	0.9	1.4
Spain	-3.7	-0.1	0.7	-0.4
Sweden	-5.3	5.4	4.3	1.5
Switzerland	-1.9	2.7	1.6	0.0
UK	-4.9	1.4	1.1	1.0
<b>Asia</b>				
China	9.2	10.4	9.1	8.6
Hong Kong	-2.7	7.0	5.2	3.8
India	7.9	8.4	7.0	7.4
Indonesia	4.6	6.1	6.2	5.2
Malaysia	-1.6	7.2	4.6	4.2
Philippines	1.1	7.3	4.4	4.0
Singapore	-0.8	14.5	4.6	3.2
South Korea	0.3	6.2	3.7	3.4
Taiwan	-1.9	10.9	4.4	3.2
Thailand	-2.3	7.8	3.8	3.6
<b>CEEMEA</b>				
Czech Republic	-4.0	2.2	1.9	1.5
Hungary	-6.7	1.2	1.2	1.1
Poland	1.6	3.8	4.0	2.8
Russia	-7.9	4.0	4.2	3.5
South Africa	-1.7	2.9	2.8	2.5
Turkey	-4.8	9.0	7.9	1.5
<b>Latin America</b>				
Argentina	0.9	9.2	8.4	3.4
Brazil	-0.6	7.5	3.5	3.3
Chile	-1.7	5.2	6.4	4.2
Mexico	-6.1	5.4	3.6	2.8
Venezuela	-3.2	-1.5	3.8	4.0
<b>Regional Aggregates</b>				
BRICS	5.6	8.9	7.4	7.2
G7	-4.2	2.9	1.4	1.2
EU27	-4.0	1.7	1.6	0.4
G20	-0.7	5.1	3.8	3.5
Asia ex Japan	6.5	9.2	7.5	7.2
Central and Eastern Europe	-1.0	3.0	3.1	2.2
Latin America	-1.8	6.3	4.5	3.4
Emerging Markets	3.4	8.0	6.7	6.2
Advanced Economies	-3.6	3.0	1.6	1.3
World	-0.8	5.1	3.8	3.5

## Consumer Prices, %chg, yoy

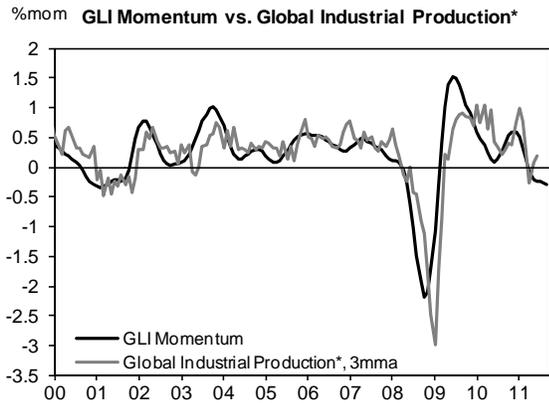
	2009	2010	2011	2012
<b>G3</b>				
USA	-0.3	1.6	3.2	2.3
Euroland	0.3	1.6	2.6	1.4
Japan	-1.3	-0.7	0.1	0.1
<b>Advanced Economies</b>				
Australia	1.8	2.9	3.5	3.1
Canada	0.3	1.8	2.9	2.0
France	0.1	1.7	2.2	1.5
Germany	0.2	1.2	2.4	1.6
Italy	0.8	1.6	2.4	1.2
Netherlands	1.0	0.9	2.4	1.6
New Zealand	2.1	2.3	4.3	2.3
Norway	2.2	2.4	1.6	1.4
Spain	-0.2	2.0	2.9	1.2
Sweden	-0.3	1.3	2.6	2.0
Switzerland	-0.5	0.7	0.5	0.5
UK	2.2	3.3	4.4	2.5
<b>Asia</b>				
China	-0.7	3.3	5.4	3.1
Hong Kong	0.6	2.4	5.3	3.8
India	3.8	9.6	8.6	5.1
Indonesia	4.8	5.1	5.5	5.2
Malaysia	0.6	1.7	3.2	2.6
Philippines	3.2	3.8	4.5	3.7
Singapore	0.6	2.8	5.0	3.2
South Korea	2.8	3.0	4.4	3.3
Taiwan	-0.9	1.0	1.5	1.5
Thailand	-0.9	3.3	3.8	3.6
<b>CEEMEA</b>				
Czech Republic	1.0	1.5	1.9	2.7
Hungary	4.2	4.9	4.0	4.9
Poland	3.5	2.6	4.3	3.4
Russia	11.7	6.8	8.6	6.2
South Africa	7.1	4.3	5.1	6.3
Turkey	6.3	8.6	5.9	7.7
<b>Latin America</b>				
Argentina	6.3	10.5	9.8	11.2
Brazil	4.9	5.0	6.6	5.9
Chile	1.5	1.4	3.2	3.0
Mexico	5.3	4.2	3.3	3.4
Venezuela	28.6	29.1	26.8	22.0
<b>Regional Aggregates</b>				
BRICS	2.5	5.4	6.6	4.2
G7	-0.1	1.4	2.7	1.8
EU27	0.8	2.0	2.9	1.7
G20	1.3	3.1	4.3	3.0
Asia ex Japan	1.1	4.7	5.9	3.7
Central and Eastern Europe	3.0	2.7	3.7	3.4
Latin America	6.4	6.2	6.7	6.2
Emerging Markets	3.9	5.8	6.8	5.0
Advanced Economies	0.2	1.6	2.8	1.9
World	1.7	3.4	4.5	3.3

For India we use WPI not CPI. For a list of the members within groups, please refer to ERWIN.

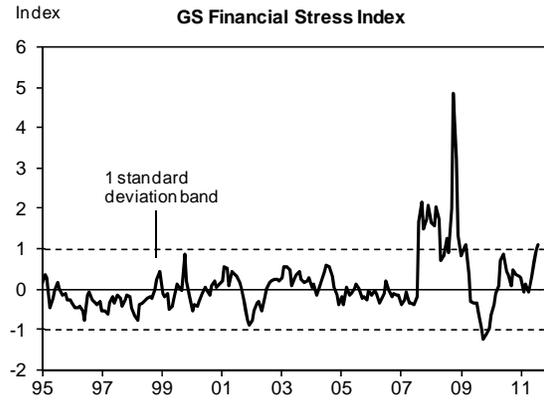
**We will be ceasing regular country coverage of Egypt, Nigeria, Kazakhstan and Ukraine. These countries will no longer form part of our calculated aggregations of economics indicators.**

For our latest Bond, Currency and GSDEER forecasts please refer to the Goldman 360 website: (<https://360.gs.com/gportal/research/econ/econmarkets/>).

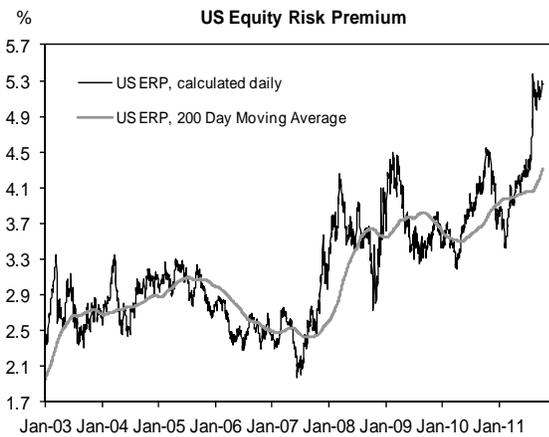
# Key Charts: The GLI, GS FSI, ERP and the Credit Premium



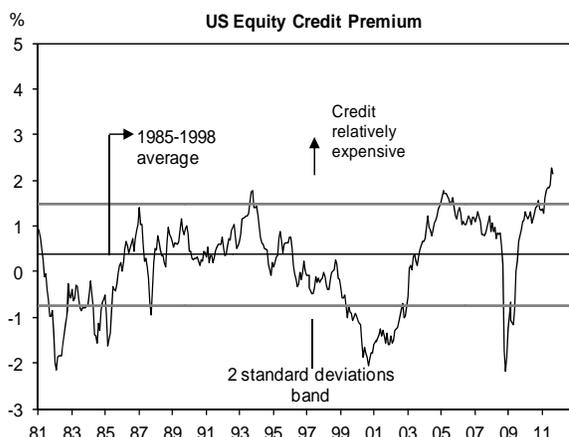
\* Includes OECS countries plus BRICs, Indonesia and South Africa  
Source: OECD, GS Global ECS Research  
See *Global Economics Paper 199* for methodology



Source: GS Global ECS Research  
See the November 2008 *Fixed Income Monthly* for methodology



Source: GS Global ECS Research See *GEW 02/35* for methodology



Source: GS Global ECS Research See *GEW 03/25* for methodology

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# The World in a Nutshell

THE GLOBAL ECONOMY		
	OUTLOOK	KEY ISSUES
<b>UNITED STATES</b>	We recently downgraded our US growth forecasts on the back of the escalation of the Euro area sovereign debt crisis. We now expect growth of 1.7% in 2011 and 1.4% in 2012, with the weakest period now a 0.5% growth pace in 2012Q4. Since this pace is below the US economy's potential, we expect the unemployment rate to rise to 9.5% by the end of 2012. The large and growing output gap will result in renewed disinflation, pushing core inflation to 1.4% in late 2012.	The US economy has not fallen off a cliff, despite the 'confidence shock' precipitated by the debt ceiling impasse, the downgrade of its sovereign rating and the recent turmoil in financial markets. We now see a 40% chance of renewed recession, primarily due to the financial crisis and darker growth outlook in the Euro area, which could affect the US economy via weaker export growth, tighter financial conditions and a reduced availability of credit.
<b>JAPAN</b>	We have lowered our Japan economic forecast to -0.6% and 2.2% in 2011 and 2012 respectively, from -0.5% and 2.6% previously, due to the loss of momentum in Europe and globally. The Japanese economy has shaken off most of the effects of the March earthquake, particularly in manufacturing, and we expect a resumption of high sensitivity to external demand.	We expect the new prime minister, Noda, elected in August, to respect the path laid out by the previous administration, and expect there to be little disruption to economic policy. Japan has fallen back into deflation, and inflationary pressure is unlikely any time soon given only a moderate narrowing in the output gap, no oil price spikes and minimal nominal wage growth.
<b>EUROPE</b>	On account of the intensifying financial dislocations in European markets, we have revised down our economic outlook in the Euro area. We now expect growth of 1.6% in 2011 and 0.1% in 2012, down from 1.7% and 1.3% previously. Our projections imply a mild recession in the Euro area as a whole at the turn of the year. While we see a return to growth in the core countries in the first half of 2012, activity in the peripheral countries will likely continue to weaken. With inflation subdued in this context, we now expect the ECB to cut rates by 50bp in December.	Given the slow pace of institutional and structural reforms, we do not believe a full resolution of the broader governance and systemic issues will emerge in the coming year. Financial tensions are therefore likely to persist. But further clarity on the overall direction envisaged for the Euro area should be forthcoming. We foresee this as supporting some recovery in the core, but expect the weakness in the periphery to be persistent. In the face of this political impasse, the ECB will continue to address financial dislocations through non-standard means.
<b>NON-JAPAN ASIA</b>	For Asia ex Japan, we have lowered our growth forecasts to 7.5% and 7.2% in 2011 and 2012 respectively, from 7.7% and 7.8% previously. We expect the external slowdown to be sufficiently large so as to make a complete offset via pro-active policy difficult, while sharp currency and equity moves should make it harder to control financial conditions.	In China, we cut our GDP growth forecast to 9.1% and 8.6% in 2011 and 2012 respectively, from 9.3% and 9.2% previously. Our forecast assumes around a 1-to-1 initial pass-through to growth from the external downturn, subsequently partially offset by stimulus. While we expect inflation to fall, policy remains constrained by recent increases in credit and debt.
<b>LATIN AMERICA</b>	Our LatAm growth forecast is now 4.5% in 2011 and 3.4% in 2012, from 4.5% and 4.0%. We expect the softer external impulse to growth and potentially less favourable external financing conditions to be partially accommodated by the respective monetary authorities through added monetary stimulus to the economy.	In Brazil, the weakening of external demand conditions, lower commodity prices and tighter external financing conditions are likely to further reduce real GDP growth in 2011 and 2012, to 3.5% and 3.3%, from a previous 3.7% and 3.8%, respectively.
<b>CENTRAL &amp; EASTERN EUROPE, MIDDLE EAST AND AFRICA</b>	We have downgraded our growth forecasts due to a weaker European and global outlook, and now expect below trend growth across CEEMEA. Downside risks remain: a weaker external demand picture would be particularly harmful for the region's small open economies, while further escalation in European stress could harm much of the region due to its high degree of integration with the European financial system.	We now see some scope for some moderate policy easing almost everywhere in the region, although we also believe that the relatively easy domestic financial conditions and the intensifying depreciation pressure on local currencies (and the implied inflation risks) may well limit the ability of local policy makers to give as robust a counter-cyclical policy response as we have seen during the 2008/2009 crises.

## CENTRAL BANK INTEREST RATE POLICIES

	CURRENT SITUATION	NEXT MEETINGS	EXPECTATION
<b>UNITED STATES: FOMC</b>	The Fed cut the funds rate to a range of 0%-0.25% on December 16, 2008.	November 2 December 13	We expect the Fed to keep the funds rate near 0% through the end of 2012.
<b>JAPAN: BoJ Monetary Policy Board</b>	The BoJ cut the overnight call rate to a range of 0%-0.1% on October 5, 2010.	October 27 November 16	We expect the BoJ to keep the policy rate near 0% through the end of 2012.
<b>EUROLAND: ECB Governing Council</b>	The ECB hiked rates by 25bp to 1.5% on July 7, 2011.	November 3 December 8	We expect the ECB to cut the policy rate by 50bp in December.
<b>UK: BoE Monetary Policy Committee</b>	The BoE cut rates by 50bp to 0.5% on March 5, 2009.	November 10 December 8	We expect the BoE to keep the policy rate on hold through the end of 2012.

