

GOAL: Global Opportunity Asset Locator

Portfolio Strategy Research

Lower growth expectations, but much is priced

This week we revised our economic and market forecasts. We now expect 3.5% global GDP growth in 2012, a slowdown in US GDP growth to 0.5% qoq annualized in 1Q2012 and a very mild recession in the Euro-zone with -0.4% growth qoq annualized in 4Q2011 and 1Q2012. This is followed by a reacceleration of growth through the rest of 2012. In our view, markets have already priced a scenario which is worse than the one we forecast, but, in many places, not a broader-based or much deeper recession.

The sovereign situation is the key risk factor

This pricing reflects concerns about the European sovereign situation and the tail risks it creates. A full resolution to this involves a structural reform process which will take a long time to come to fruition. In the meantime, a lowering of the perceived tail risks on the back of further policy intervention is the best that can be hoped for. Given current pricing, we believe this alone could give a significant positive return for risky assets, even though it would not resolve all the problems. In the absence of intervention, deteriorating growth and tail-risk concerns which continue to build are likely to lead risky assets sharply lower.

Near term neutral, long term pro-risk

As a reflection of this wide range of outcomes, with the final result being dependent upon a political process which is hard to forecast, we feel the Sharpe ratio on risky assets is not good from either an overweight or an underweight perspective in the near term. We therefore overweight cash, neutral weight commodities, corporate credit and equities and underweight government bonds. Over a 12 month horizon there is more time for a policy response, we will see a growth rebound on our forecasts, and valuations start to matter more. Consequently we have more confidence and overweight commodities and equities, neutral weight corporate credit and cash and underweight government bonds.

Expected returns and recommended allocation

New Recommendation						
3-Months Horizon			12-Months Horizon			
Asset Class	Return*	Weight	Asset Class	Return*	Weight	
Cash	0 %	OW	Commodities	20 %	OW	
Commodities	5	N	Equities	23	OW	
Equities	5	N	5 yr. Corporate Bonds	4	N	
5 yr. Corporate Bonds	-2	N	Cash	1	N	
10 yr. Gov. Bonds	-2	UW	10 yr. Gov. Bonds	-3	UW	

* Return forecasts assume full currency hedging

Source: Goldman Sachs Global ECS Research.

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Sovereign risks in the driving seat

Our GOAL product highlights key forecast and investment opportunities across the asset classes and regions that we cover. The GS GOAL – Global Opportunity Asset Locator draws on research from across ECS (Economics Commodities and Strategy research) to focus on key drivers, themes, investable recommendations and how to implement them.

Tightening financial conditions and lower expected growth

In our latest GOAL report (published on August 12, 2011) we maintained our overweight in equities, our neutral on corporate credit and our underweight in government bonds. We upgraded commodities and cash to overweight and neutral respectively. While we acknowledged the very uncertain environment, the significant downside risks and our generally low levels of conviction, we still felt that markets had priced an outcome which was sufficiently bad compared to our forecasts to justify these overweights in risky assets.

Since August, volatility has been extremely high as markets have balanced cheap valuations of risky assets with the risks from the sovereign situation in Europe and the related slowdown in global growth. The result of this process has been continued pressure on risky assets and a poor performance of our allocation, with the return of +2.6% from our underweight in government bonds beating our overweights in equities (-6.1%) and commodities (-7.8%).

In the process, financial conditions have continued to tighten, increasing the pressure on economic growth as reflected in our downgrade earlier this week of our economic forecasts to 3.5% global growth in 2012 from 4.3% previously (see our October 3 Global Viewpoint for details). We now expect a slowdown in growth in the US to 0.5% qoq annualized in the first quarter of 2012, and qoq annualised growth of -0.4% in both 4Q2011 and 1Q2012 for the Euro-zone, both followed by modest rebounds later in the year. We have also lowered our expectations for growth in emerging markets, but still expect 6.2% growth in 2012, reflecting the room for policy to mitigate external shocks to some degree.

The sovereign situation is the key risk factor

The shift down in both the pricing of risky assets and growth expectations leaves markets still pricing an outcome which is worse than our central economic forecasts (see our October 5 *Global Economics Weekly* for a further discussion). Given this, the key question remains to what extent and over what horizon will policy be able to contain the concerns related to the European sovereign situation, which we see as the principal driver of this valuation discount.

A full resolution would clearly be very positive for risky assets but, as discussed in our September 15 *European Weekly Analyst*, such a solution requires a broad set of fiscal, structural and institutional reforms, which will take time to take effect. In the meantime, a lowering of the perceived likelihood of tail-risk scenarios is what can be hoped for, and any such improvement needs to be measured against the further deterioration in the economic growth outlook which we now forecast.

If the perception of tail risks improves due to further policy initiatives, we do think enough has been priced – especially in Europe – to see a strong rally despite our forecast of deterioration in growth. This view is strengthened by the current strong links between economic growth and financial market performance, where any improvements in financial markets would also improve the distribution of risks around the growth outlook by leading to less tight financial conditions.

If no or very limited progress is made on the sovereign front, risky assets are likely to fall significantly further, as sovereign concerns would then continue to build at the same time as the growth outlook weakens.

This leaves a very wide range of potential outcomes in the near term, with the final result being dependent upon a political process which is hard to forecast. This situation cannot be summarized well by any point estimate, and gives us very low conviction in our near-term allocation. In this environment we focus on monitoring the conditions which are likely to be needed to see a sustained rally in line with our point forecasts. Here our research is emphasizing three significant areas: deteriorating data, tightening financial conditions and intensifying banking stresses. While we have seen some encouraging data points lately there is still no progress on the other two fronts (see Dominic Wilson’s October 3 *Global Markets Daily* for a further discussion).

Longer term we have much more confidence. A longer horizon gives more time for improvements in the sovereign situation and includes the rebound in growth momentum which we forecast in 2012. It also leaves a much bigger role for the currently very attractive valuations of risky assets to drive returns. Valuation matters little on a 3 month horizon but becomes a much more important factor over 12 months.

Our current allocation: Near term neutral, longer term pro-risk

We downgrade equities and commodities to neutral on a 3 month horizon. We upgrade cash to overweight and maintain our neutral weighting on corporate credit and underweight in government bonds. This reflects the poor Sharpe ratios in either direction for risky assets in the near term, our wish to preserve cash and our view that current levels of bond yields leave little room for a sustained rally without a significant deterioration in growth beyond what we forecast.

Our 12 month recommendation is unchanged. We are overweight equities and commodities with no strong preference between them, neutral on corporate credit and cash and underweight government bonds.

We think the best way to think about these allocations is as part of a more dynamic strategy. We would stick with our 3 month allocation until we see improvements along the three dimensions of data, financial conditions and banking stresses mentioned above. At that point we would switch to the 12 month allocation. While the timing will be impossible to do perfectly a shift into our 12 month allocation currently would require a very high ability to absorb mark-to-market risks.

Turning to the individual asset classes in more detail, the fundamental outlook for **equities** is still strong. Valuations are very attractive both on a stand-alone basis and especially relative to government bonds. This is true even taking into account the weaker outlook for earnings that we now forecast. We expect positive earnings growth in all markets in 2012, except for the European market which is the most exposed to the recession. However, the near-term Sharpe ratio is unattractive due to uncertainty about the sovereign situation.

Exhibit 1: Performance since last GOAL and our new recommended allocation

Performance since last GOAL**			New Recommendation					
Asset Class	3-Months Rec.		3-Months Horizon			12-Months Horizon		
	In last Goal	Performance	Asset Class	Return*	Weight	Asset Class	Return*	Weight
Equities	OW	-6.1 %	Cash	0 %	OW	Commodities	20 %	OW
Commodities	OW	-7.8	Commodities	5	N	Equities	23	OW
Cash	N	0.1	Equities	5	N	5 yr. Corporate Bonds	4	N
5 yr. Corporate Bonds	N	-1.0	5 yr. Corporate Bonds	-2	N	Cash	1	N
10 yr. Gov. Bonds	UW	2.6	10 yr. Gov. Bonds	-2	UW	10 yr. Gov. Bonds	-3	UW

* Return forecasts assume full currency hedging
 **Performance since last GOAL assuming full currency hedging

Source: Goldman Sachs Global ECS Research.

We have revised down our targets for **commodities** on the back of our weaker growth outlook, moving our Brent oil forecast from an average of \$130/bbl in 2012 to \$120/bbl and our copper price forecast from \$10,790/mt to \$9,200/mt. The relatively modest revisions reflect still strong physical markets and the resilience of EM economic growth on our forecasts. The uncertainty around these forecasts has risen. On the downside, the risk of financial contagion and therefore a global recession with larger falls in commodity prices has increased. On the upside, there has been physical destocking in the anticipation of a recession, and the combination of backwardated curves and high economic uncertainty discourages investment and therefore tightens future supply. This leaves significant upside if growth surprises positively. With the uncertainty and a slightly lower near-term return forecast giving a poorer Sharpe ratio, we have downgraded commodities to neutral in the near term but maintain our overweight on a 12-month horizon.

Corporate credit has historically done well in the low but positive growth environment we are forecasting for the US and we also view valuations as attractive, especially in the light of current robust balance sheets. But credit has significant exposure to the European sovereign situation, both directly through financial credits and indirectly through the impact on broader credit conditions, and is therefore dependent upon the same dynamics as equities. Consequently, we neutral weight credit along with equities in the short term.

Government bond yields are now well below their financial crisis lows in both the US and Europe. US 10 year yields are close to two standard deviations below where our Sudoku model would suggest that they should be. The overvaluation is somewhat less extreme in Germany and Japanese yields are closer to our "fair value" measure. This leaves negative return forecasts for the asset class on both a 3 and a 12 months horizon in our central scenario. While bonds would still pay off in a broader recession scenario, the risk-reward of the asset class is skewed to the downside in our view, and we would therefore much rather use cash than government bonds to protect the portfolio from poor outcomes. We overweight cash over 3 months reflecting the uncertainty of the current environment and underweight government bonds. On a 12-month horizon, we would neutral weight cash and underweight government bonds.

Exhibit 2: Goldman Sachs 3 and 12 month return forecasts by asset class

Asset Class	Benchmark Weight	3-month Total Return		12-month Total Return	
		Local currency	In USD	Local currency	In USD
Equities		4.9	6.0	22.7	27.4
S&P 500	40	5.5	5.5	16.0	16.0
Stoxx	30	-0.8	3.1	22.5	36.5
MXAPJ (in USD)	20	12.6	12.6	37.5	37.5
Topix	10	3.8	3.4	20.6	25.1
10 yr. Government Bonds		-1.8	-0.7	-2.5	1.9
US	40	-3.1	-3.1	-3.4	-3.4
Germany	30	-0.9	3.0	-2.1	9.1
Japan	30	-0.8	-1.1	-1.9	1.8
5 yr. Corporate Bonds		-1.7	0.2	4.5	10.4
US: iBoxx USD Dom. Corporates	50	-2.0	-2.0	4.6	4.6
Europe: iBoxx EUR Corporates	50	-1.5	2.4	4.4	16.3
Commodities (GSCI Enhanced)		4.7	4.7	20.0	20.0
Cash		0.2	1.3	0.7	5.3
US	40	0.1	0.1	0.3	0.3
Germany	30	0.4	4.3	1.7	13.3
Japan	30	0.1	-0.2	0.4	4.1
FX		3 month target	Return vs USD	12 month target	Return vs USD
EUR/\$		1.38	3.9	1.48	11.4
\$/YEN		77	-0.3	74	3.7

¹ The calculation of realized volatility assumes full currency hedging

Source: Goldman Sachs Global ECS Research.

Equities: Neutral near term, overweight long term

We downgrade equities from overweight to neutral on a 3 month horizon as high uncertainty gives poor Sharpe ratios on deviations from benchmark in both directions. On a 12 month horizon, we maintain our overweight position. Here we expect attractive valuations, a decline in the perceived tail risks from the European sovereign situation, a reacceleration of economic growth and positive profit growth in all markets except Europe to drive good returns. On a 3 month horizon we have no strong view on regional allocation and are neutral across the board. Over 12 months we overweight Asia ex. Japan, neutral weight Europe and underweight Japan and the US.

Equity performance since our last GOAL report has been poor with the asset class falling another 6%, reflecting a further rise in concerns about the European sovereign situation and an associated weakening in the global growth outlook.

In our view, equity markets are already discounting an outcome which is worse than our new and weaker economic growth forecasts and we therefore see any developments in the perception of tail risks from the sovereign situation in Europe as the primary driver of equity markets in the near term. The large uncertainty in both directions related to this situation means that we see a very wide range of potential outcomes for equity returns with the final results heavily dependent upon political developments. This in our view gives a poor Sharpe ratio in both directions and we are therefore neutral in the near term.

On a 12 month horizon, valuation matters more for returns and is very supportive for equities, especially when compared to other asset classes. Also we expect a reacceleration of economic growth and a high likelihood of a decline in the perception of tail risks around the European sovereign situation. The final support for our overweight over this horizon is our expectations of

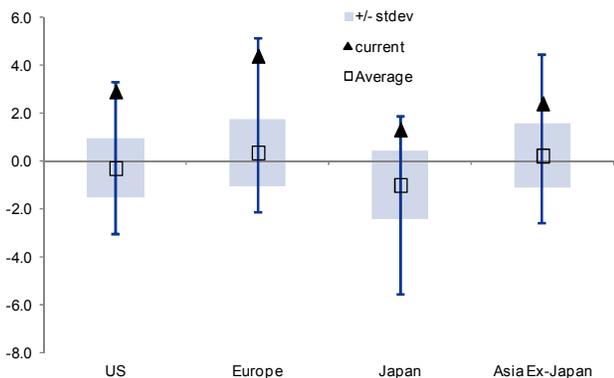
positive earnings growth in all markets except Europe in 2012, and the resilience of corporate balance sheets to get through any near-term pressures (Exhibit 4).

In terms of relative valuation, Exhibit 3 shows the difference between the dividend yield and the real 10 year government bond yield (we use five-year historical average inflation as a crude measure of inflation expectations) for the four regions we consider. In all four regions this difference is now significantly more than one standard deviation above the average since 1990 (1995 for Asia ex Japan). Similarly, our regional estimates of the equity risk premium in Exhibit 7 range between 6.9% for the US and 9.6% for Asia ex-Japan. The European ERP of 8.4% is now much higher than the 7.5% it reached at the end of February 2009, and is in the extreme end of the distribution over the last 20 years.

On an absolute valuation basis, the NTM P/E ranges between 8.6x for Europe and 14.0x for Japan. Exhibit 8 puts this in a historical perspective. Across all regions, the P/E is now at or close to the lowest levels we have seen since 2001 (on monthly data), reflecting that earnings expectations have held up relatively well, while prices have collapsed.

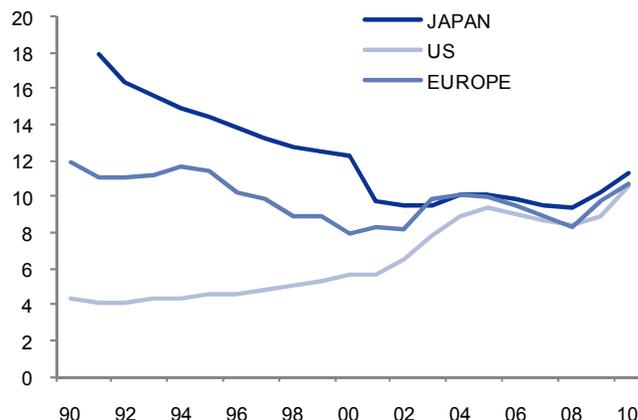
Exhibit 3: Dividend yields are high vs. real bond yields

Dividend yields minus 10-year real government bond yields. We use five-year avg. inflation as a proxy for inflation expectations. The distribution uses data from 1990 except for Asia ex-Japan where it is from 1995.



Source: Datastream, Haver Analytics, Goldman Sachs Global ECS Research.

Exhibit 4: Cash/Asset above peak from the last cycle



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

We now expect earnings to fall in Europe in 2012, but even on our significantly below-consensus forecasts the 2012 P/E would be 10.5x, which is still inexpensive versus history. On a P/B basis, the US is slightly more expensive, but still at least one standard deviation below average. Japan's P/B is already back to its post-bubble trough and Europe's and Asia ex-Japan's P/B are also close to their historical lows.

While valuation matters little in the short run, it has historically been an important determinant of long run returns. The current risks are admittedly high but so is the compensation investors are paid for taking those risks.

Earnings have held up relatively well so far, and even after our recent downgrades we still expect positive earnings growth in all regions except Europe, where the earnings potential is most affected by the European recession we forecast.

That said, earnings revisions have been negative lately across all markets (Exhibit 6) and we would expect this to continue given our below-consensus earnings forecasts. We do not see this as a major headwind, as we believe markets have already priced a significantly worse outcome than what is embedded in consensus forecasts.

Exhibit 5: Global indices price targets and earnings growth

All data is in local currency except data for the MSCI Asia Pacific ex-Japan index which is in US\$

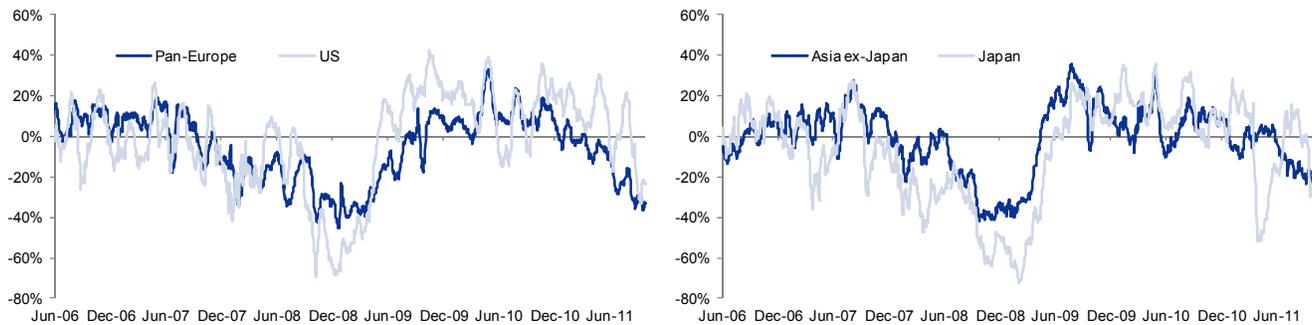
Index	Current Price 5-Oct-2011	GS Target			Upside to target (%)			Earnings Growth			
		3-months	6-months	12-months	3-months	6-months	12-months	GS top-down 2011	2012	Consensus bottom-up 2011	2012
MXAPJ	357	400	425	480	12.2	19	35	10	7	10	12
Stoxx Europe 600	224	220	240	265	-1.9	7	18	3	-10	6	11
S&P 500	1,144	1,200	1,250	1,300	4.9	9	14	14	2	17	13
TOPIX	726	760	800	870	4.6	10	20	7	11	7	16

Note : TOPIX EPS is based on fiscal, not calendar, years

Source: Goldman Sachs Global ECS Research.

Exhibit 6: Earnings sentiment by region

Upgrades less downgrades, as percentage of changes in estimates (last four weeks)



Source: FactSet, I/B/E/S, Goldman Sachs Global ECS Research.

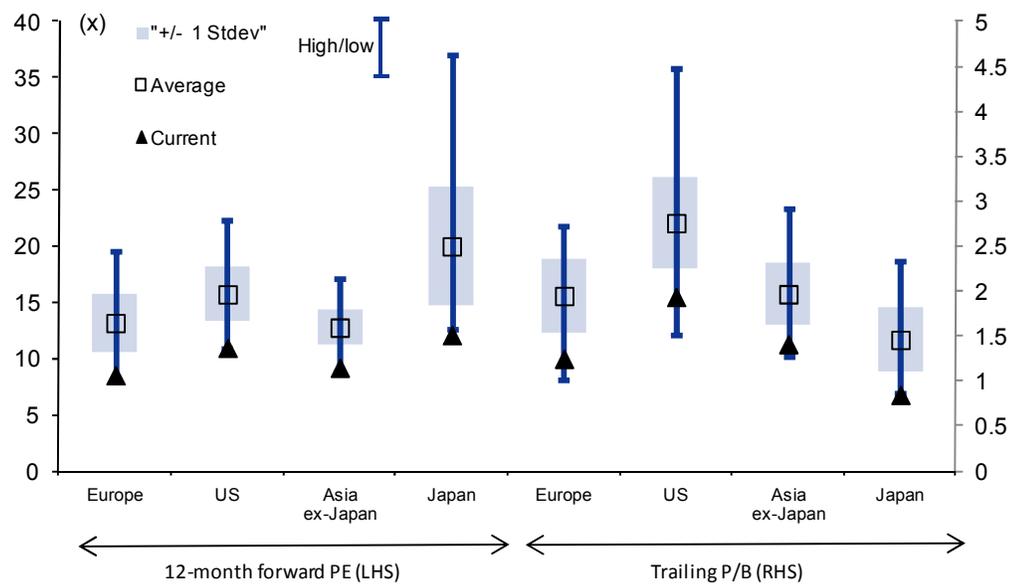
Exhibit 7: Global valuation metrics

P/E is NTM on consensus earnings, all other data is 2010 or last twelve months

	P/E	EV / EBITDA	FCF Yield	Div Yield	P/B	Operating Margin	ROE	Implied ERP
S&P 500	11.0	6.9	6.7	2.4	1.9	9.1	14.6	6.9
Stoxx Europe 600	8.6	6.0	8.0	4.3	1.3	10.5	12.0	8.4
Topix	14.0	5.6	4.9	2.5	0.8	5.8	5.4	7.0
MSCI Asia Pacific ex-Japan	9.2	7.4	12.7	3.4	1.5	11.0	14.5	9.6

Source: Worldscope, I/B/E/S, Datastream, FactSet, Goldman Sachs Global ECS Research.

Exhibit 8: Regional valuation relative to historical distribution (using data from 2001)



Source: Worldscope, I/B/E/S, Goldman Sachs Global ECS Research.

Within equities we are neutral weighted across all markets on a 3 month horizon. Our return forecasts give an indication of our relative preference in the near term (Exhibit 9). But, these point estimates do not capture the wide risk around outcomes and therefore the poor Sharpe ratio on any deviations from benchmark. Even though Japan and Europe are at the bottom of the pack in terms of expected returns, a perfectly plausible scenario of a relatively positive outcome on the European sovereign situation, combined with a slower fall in inflation and loosening of economic policies in Asia than we forecast, could see the complete opposite order of performance. Given this our relative preferences are not strong enough to justify deviations from neutral.

On a 12 month horizon we have much stronger views. We would overweight Asia ex. Japan, neutral weight Europe and underweight Japan and the US. On that horizon we expect the still strong growth we forecast for Asia ex.

Japan combined with the current undemanding level of valuation to drive outperformance.

Europe is the market with the most direct exposure to the sovereign situation and therefore the largest degree of uncertainty around our central forecast. This makes the Sharpe ratio on any deviation from benchmark poorer than for other markets and we therefore keep it neutral.

We believe that Japan and the US will underperform Asia ex. Japan. Valuations are less attractive despite a poorer economic growth outlook both near term and long term. The US and Japan have held up much better recently than Asia ex. Japan as concerns about Chinese economic growth have started to mount. On our forecast we would expect these concerns to gradually dissipate and that this will prove to be a catalyst for outperformance.

Exhibit 9: Our recommended weighting within equities

The table shows our total return forecasts for each region (in local currency and in USD) and the allocation we would currently make relative to benchmark on both a 3- and 12-month horizon.

Index	3-Months			Index	12-Months		
	Return Forecasts		Recommended Allocation		Return Forecasts		Recommended Allocation
	Local Cur.	In USD			Local Cur.	In USD	
MXAPJ	13	13	Neutral	MXAPJ	38	38	Overweight
S&P 500	5	5	Neutral	Stoxx Europe 600	23	37	Neutral
Topix	4	3	Neutral	Topix	21	25	Underweight
Stoxx Europe 600	-1	3	Neutral	S&P 500	16	16	Underweight

Source: Goldman Sachs Global ECS Research.

Themes and basket implementations

US

Dividend growth (GSTHDIVG): A sector-neutral basket of the 50 stocks with the strongest 2012 dividend growth and yield. We believe these will outperform as investors search for yield.

High quality stocks (GSTHQUAL): An equally weighted sector-neutral basket of 50 stocks that in our view are less likely to experience negative credit, growth, or stock price shocks, due to a combination of safe balance sheets, stable sales growth, and low downside earnings variability.

Europe

EM sales exposure (GSSTBRIC) relative to Eurozone sales exposure (GSSTDOME): We believe there is room for more differentiation between European companies exposed to fast-growing emerging economies and European companies exposed to the domestic market.

High dividend yield and growth (GSSTHIDY): Our high dividend yield basket consists of companies that have high and sustainable dividend yields with the potential to grow dividends.

Pressure on companies exposed to capex spending (GSSTCAPX): We recommend investors to go long the index against a basket of European companies with sales highly correlated with the share of investment in world GDP, as economic uncertainty is likely to hurt capex in the near term.

Japan

Japan stable growth basket (GSSZSTGR): Japanese firms that have historically had high and stable growth in sales and operating profits as well as ROE.

Strong balance sheets/cash-rich firms: Since we expect credit risk concerns to linger from now until year-end, we believe investors will seek refuge in firms that are cash-rich and whose earnings outlooks are positive.

Japanese companies with exposure to India (GSSZJIND): We see substantial long-term synergies between Japan and India. Growth-starved Japanese firms need to tap into India's vast infrastructure and consumer market, and India can look to Japan to help develop and deepen its manufacturing base to absorb its massive labor pool. We identified 25 Japanese firms that have or are in the process of building strategic exposure to India.

Asia ex-Japan

Long secure high yield (GSSZDIV2): We believe high dividend yielding strategies are a good investment given low interest rates globally, and our preferred implementation is stocks that offer a "secure" yield. In order to identify such stocks, we assess balance sheet strength, dividend growth track record, and geographic revenue exposure to exclude stocks with high dividend payment risk.

Global cyclicals macro slice (GSSZMSGC) relative to commodity-related stocks (GSEHCOMS): Within the cyclicals space, we recommend investors look for the heavily sold names where fundamentals look relatively intact. We would pair this against expensive Commodity Cyclicals stocks. Historically, "Value" vs. "Expensive" cyclicals has tended to outperform, and the current entry point appears attractive from a technical perspective.

Cross-regional

BRICs exposure (GSSTDM50, GSSTEM50): GSSTDM50 comprises 50 DM companies with high BRICs sales exposure. GSSTEM50 comprises 50 structurally well positioned EM companies.

Note: The ability to trade these baskets will depend upon market conditions, including liquidity and borrow constraints at the time of trade.

Our sector views

Energy and Materials: We are now broadly neutral on commodity-related sectors as we downgraded Energy to neutral and Materials to underweight in the US. For the US Materials sector we forecast 145 bp of margins contraction and EPS to decline by 15% in 2012. In Asia ex-Japan we are overweight Metals & Mining which is attractively valued and continue to be driven by Asian growth in our view. We have a neutral recommendation on Energy in this region. In Europe we continue to be overweight on both Oil & Gas and Basic Resources. In Japan, we remain overweight on Energy/Chemicals and neutral on Steel.

Information Technology: We are overall neutral on the sector but this masks some important divergence across regions. In the US (which has the largest weight in the global technology sector) we upgraded Technology to overweight as it offers strong balance sheet, high foreign sales exposure and positive seasonal patterns late in the calendar year. On the contrary, in Asia ex-Japan, we felt consensus earnings growth for Tech does not incorporate any significant slowing in the G2 economies and currently rate both Tech Hardware & Semis and Software as underweight. We nevertheless continue to recommend our Apple supply chain theme in Asia. In Japan we have not reversed the downgrades to Electronic Components and Industrial Electronics that we made after the March earthquake. We continue to be underweight Technology in Europe.

Financials: Although the sector could benefit from a risk premium led rally, given the volatility related to the Eurozone sovereign situation, we think the risk/reward offered by the sector in any direction is not attractive. As a result we have neutral recommendations on financial sectors across most markets. In Asia-ex Japan, we are neutral on Banks, Real Estate, and Insurance. In the US, we continue to be neutral on the broad financial complex. In Europe, we neutral weight Banks, Real Estate, and Insurance and have an underweight recommendation on Financial Services.

Industrials: We moved towards a marginally less positive view on the industrial complex and are now on balance neutral on the sector globally. In the US we downgraded Industrials to underweight as we expect industrials to grow revenues at a slower pace than the market in both 2011 and 2012. We favour the more defensive groups within US Industrials (Packaging and Aerospace). In Europe we continue to be neutral on the sector. Although we still think

it is structurally well positioned, the combination of macro headwinds and still rich relative valuation continue to justify a neutral recommendation. In Japan we maintained our overweight on machinery.

Defensives: Since our last GOAL report, we have moved our sector portfolio towards a more balanced stance by selective upgrades of defensives. We are now overweight on Telecoms and neutral on Utilities in all regions except Japan. Our top overweight sectors in Asia ex-Japan are Consumer Staples and Telecom Services which derive over 90% of their revenues from the Asia region, which in our view affords them a relative high amount of earnings visibility. In the US, we upgraded Telecom Services to neutral given a challenging growth outlook and investor appetite for yield (Telecom Services is the highest yielding sector in the US). We also upgraded Utilities to neutral and continue to be overweight on Consumer Staples and neutral on Healthcare. In Europe, we upgraded Telecoms to overweight as the sector is offering high dividend yield (above 7%) with a good cash-flow cover (cash flow yield is close to 13%). We also upgraded Utilities to neutral as we felt negative news was increasingly priced in and the sector still offers attractive yield.

Construction: We remain overweight of the sector in Japan, where potential reconstruction demand has improved the outlook for the Infrastructure sector. We continue to be underweight Construction & Materials in Europe, where government contracts are at risk considering the fiscal adjustment in most European countries. Additionally, with energy costs representing c.30% of costs for cement companies we expect further pressure on that part of the sector.

Consumption: We continue to differentiate within the broad sector where we favour the more defensive part of it as well as the slices exposed to emerging market demand. In Asia ex-Japan, we are overweight both Consumer Staples and Consumer Retail and Services which offer exposure to Asian domestic demand. Similarly, in Europe, we are overweight Personal & Household Goods which offers good EM exposure while we are underweight the more domestic facing Retail and Travel & Leisure. In Japan we remain underweight Consumer Staples, Entertainment/IT Services and Services. Finally, in the US, we favour the more defensive and margin resilient part of the broad consumer group and are overweight Consumer Staples and underweight Consumer Discretionary.

Exhibit 10: Recommended sector weightings by region

Overweight	Neutral	Underweight
US	US	US
Information Technology Consumer Staples Telecom Services	Financials Energy Healthcare Utilities	Materials Consumer Discretionary Industrials
Europe	Europe	Europe
Automobiles & parts Basic resources Oil & Gas Telecommunications Personal & Household Goods	Banks Insurance Real Estate Industrial Goods & Services Chemicals Health Care Utilities Media	Construction & Materials Retail Technology Travel & Leisure Food & beverage Financial services
Europe Subsectors	Europe Subsectors	Europe Subsectors
Global Banks* Luxury Goods* Oil Services Tobacco		Domestic Banks* General Retail* Defense
Japan	Japan	Japan
Banks Insurance Infrastructure Machinery Trading Companies Consumer Electronics Precisions Energy/Chemicals	Steel/Nonferrous metals Electronic Components Automobiles Retail Industrial Electronics Communications Securities Specialty Finance Transportation	Consumer Staples Healthcare Entertainment/IT Services Services Utilities
Asia ex-Japan	Asia ex-Japan	Asia ex-Japan
Consumer Staples Telecom Services Consumer Retail & Services Metals & Mining Autos & Components	Utilities Banks Energy Real Estate Insurance & other Financials Chemicals & other Materials Capital Goods	Tech Hardware & Semis Health Care Software & Services Transportation

*Denotes trades recommended as Long/Short

Source: Goldman Sachs Global ECS Research.

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Commodities: History likely to rhyme, not repeat

The lesson learned from 2008 is that EM growth can be relatively resilient to a slowdown in DM growth, barring a global financial crisis. With recent GDP revisions by our economists falling hardest on Europe but EM growth expectations still relatively solid, we continue to believe that demand growth in 2012 will be sufficient to tighten major commodity markets. However, we now see a flatter upward trajectory for commodity prices, with increasing risks to both the up and downside.

Since August, commodity markets have been caught between the reality of tight current physical markets, particularly in food and fuels, and substantial concerns about future demand driven by events in Europe. While for most of this time commodity markets remained resilient, pricing the current physical realities, in the past several weeks this resiliency has been tested with the more forward looking markets like copper making new lows for the year. In contrast, the less forward looking markets like oil, and particularly the physical markets that price current fundamentals, have seen much less price depreciation, further underscoring the dichotomy between the current environment and the outlook.

Driving these concerns over future demand are fears that the current events in Europe are going to create a repeat of the events of the fall of 2008. However, we find ourselves in sympathy with the view that history does not repeat itself, but it does rhyme. In our view, the lesson of the events of 2007-08 is that the emerging market economies, and by extension the world economy, can be relatively resilient to a slowdown in the developed market economies like the United States and Europe, as long as they are facing simply the transmission of real economic weakness, and not financial stress either to trade channels or their own banking systems. In short, if we can avoid a global financial crisis, we can avoid a global recession.

Despite the weak macroeconomic backdrop, many key commodity markets have continued to tighten with low and/or declining inventories due to a combination of relatively strong EM demand growth and supply disappointments. Going forward, we expect anemic supply growth in many commodity markets will require that demand growth be limited next year. Consequently, the only question is whether demand will need to be restrained by higher prices, or will be undercut by a return

to world economic recession as a result of the ongoing events in Europe.

At this point, the concerns over European sovereign debt and the European financial sector are considerable. However, our economists do not expect the financial stress in Europe to trigger a world economic recession, as was experienced in 2008. Consequently, we view the turmoil in Europe as a headwind to world economic growth, which we expect will only take away some of the upside to commodity prices, not reverse it. Specifically, with our economists lowering their outlook for 2012 world economic growth to 3.5% from 4.3%, we are lowering our Brent crude oil price outlook for 2012 to \$120/bbl, from \$130/bbl, and our 2012 copper price outlook to \$9,200/mt, from \$10,790/mt.

Accordingly, we are now near-term neutral on commodities, but maintain our overweight recommendation on a 12-month horizon with an expected 20% return for the S&P GSCI Enhanced Commodity Index. Nevertheless we recognize substantial downside risk should the transmission of financial stress lead to a global financial crisis. We expect the market to remain volatile, and should global growth slow to 2.5%-3.0% we would anticipate prices falling to marginal costs of production, which for oil is \$80-90/bbl.

While the downside risk surrounding the events in Europe is considerable, it is important to bear in mind that an event this widely anticipated also has important effects if it does not occur. Specifically, many commodity markets continue to destock in anticipation of a new economic recession, suggesting a much greater risk of running into supply constraints if economic growth surprises to the upside. This is on top of delayed investment resulting from the economic uncertainty, which further tightens the forward-supply outlook.

Barring a global financial crisis, we view the European turmoil as a headwind to global growth, which we expect will only take away some of the upside to commodity prices, not reverse it. Accordingly, we are now near-term neutral on commodities but maintain our overweight recommendation on a 12-month horizon.

Energy

We expect 24% returns on the Enhanced Energy index on a 12-month horizon.

Petroleum: Between Scylla and Charybdis

The world crude oil market remains exceptionally tight. This summer, Saudi production hit 9.8 million b/d and the US Strategic Petroleum Reserve (SPR) released 30 million barrels of oil into the market, and yet the oil market supply-demand balance remains in a seasonally adjusted deficit. Crude oil inventories outside of the United States have drawn to their lowest levels in 9 years, and OPEC effective spare production capacity is less than 1.0 million b/d. This increasing lack of oil supply will require that oil demand growth be limited next year, and so the only question is whether demand will need to be restrained by higher prices, or be undercut by a return to world economic recession off the ongoing events in Europe, in a repeat of the events of the fall of 2008.

In terms of world oil demand growth in 2012, our economists expect the world economy to grow at 3.5%. With a flatter trajectory for crude oil prices, this suggests that oil demand will likely grow at around 1.4%, which would be the rate of growth expected under 3.4% world economic growth and stable oil prices. This compares to 2011, where year-to-date the world economy has grown by 3.9% year-over-year, but the price headwinds made it the equivalent of a world economy growing at only 3.2% with stable prices. Consequently, we expect world oil demand in 2012 to grow at about the same pace as it did in 2011, as the reduced headwinds from price increases are offsetting the slower pace of world economic growth.

On net, crude supply will likely not be able to meet demand by the end of 2012, which will in our view require higher prices in order to hold demand in line with available supply. However, the concerns over European sovereign debt and the European financial sector are considerable. While our economists do not expect the financial stress in Europe to trigger a world economic recession, as was experienced in 2008, they still expect the turmoil in Europe to create headwinds to world economic growth.

We expect this slower growth will likely flatten the upward trajectory to oil prices, not reverse it. Specifically, with our economists lowering their outlook for 2012 world economic growth to 3.5% from 4.3%, we recently lowered our Brent crude oil price outlook for 2012 to \$120/bbl, from \$130/bbl. We recognize the event risk, and expect the market to remain volatile. Should global growth slow to

2.5%-3.0% we would anticipate prices falling to \$85-95/bbl as the market finds a first floor at the costs required to continue investment in marginal oil projects to grow supply for the future. However, the market could be preparing for a crisis that may not come. Should demand growth continue to grow steadily, the oil market does not have the inventory or production capacity to meet it, and the market could hit the oil supply constraints more severely, with prices rising sharply higher to pull demand back in line with available supplies.

Natural gas: US structurally oversupplied, but global market has tightened

The US natural gas market remains in a deep surplus, created by continuing increases in shale gas production and a weak economic recovery. Even exceptionally hot weather that has generated record-high air-conditioning loads this summer has not been sufficient to meaningfully tighten the North American natural gas market. We maintain that US natural gas prices will remain under pressure in the near-to-medium term in order to curb natural gas production growth, and more importantly, to incentivize further fuel substitution in the power generation sector to rebalance the market. As a result of the lower level of economic activity in the United States now expected by our economists, we recently reduced our forecast for US industrial demand for natural gas.

In contrast to the over-supplied North American market, the global natural gas market has tightened substantially in the recent period as the wave of new liquefaction capacity has wound down at the same time that new non-OECD entrants into the LNG market and greater needs from Japan to compensate for nuclear outages have boosted demand for global natural gas supplies. We believe that the divergence between North American and global natural gas prices will remain a key feature of the markets over the next year.

Industrial metals

We expect 27% returns on the Enhanced Industrial Metals index on a 12-month horizon.

Risks have increased, but expecting higher prices ahead

Industrial metals and copper in particular have clearly borne the brunt of the growing pessimism about future economic and market conditions. While the negative

sentiment is unlikely to sustainably improve in the near term, we maintain that copper fundamentals look the tightest over the medium term as supply growth will likely struggle to keep pace with demand growth. We also expect zinc to ultimately look more like supply constrained copper on a 2-4 year horizon, while aluminum and nickel will remain more amply supplied, but closely tied from a price perspective to oil and currency.

However, the recent downward revisions to economic growth moderately push out the timing of tight copper, does the same for zinc, which was a longer-term story that gets even further pushed out, and will also likely temper the cost support for aluminum and nickel that we had anticipated to come through oil and currency to the extent that we now expect modestly lower oil and a stronger dollar. As a result, we now expect a smaller copper deficit in 2012, a zinc market in surplus rather than slight deficit and larger surpluses in aluminum and nickel. These shifts recently lead us to lower our 12-month price forecasts to \$9,500/mt copper from \$11,000/m, \$2,400/mt zinc from \$2,700/mt, \$2,650/mt aluminum from \$2,950/mt, and \$21,000/mt nickel from \$23,000/mt. Although these forecasts leave us constructive on the metals and on copper in particular relative to the current market, we recognize that notwithstanding short relief rallies, sentiment is likely to remain poor in the near term, suggesting the need for caution.

Nevertheless, the magnitude and speed of the recent sell-off in copper has very likely reflected an accumulating short position in the market at the same time that we see a potentially very strong upside catalyst ahead in China. In particular, any easing shift in China, which the recent commodity sell-off and corresponding decline in inflationary pressures may facilitate, and/or renewed China buying at current lower price levels, would lead to a sharp rebound in prices, in our view. Of course, a more negative global financial and/or economic event would lead to sharply lower prices, with the GFC likely giving a reasonable sense of how weak both demand growth and prices could move in a severe scenario.

Precious metals

We expect 11% returns on the Enhanced Precious Metals index on a 12-month horizon.

Still expecting upside on low US real rates

After exhibiting a remarkable correlation to real rates this year, particularly during the swift August rally, the sharp pullback in gold prices occurred with US real rates mostly unchanged. As we expect gold prices will continue to be driven in large measure by the evolution of US real

interest rates and with our US economic outlook pointing for continued low levels of US real rates in 2012, we continue to recommend long trading positions in gold and reiterate our 12-mo price target of \$1,860/toz. We expect that the level of concern over European sovereign debt will continue to drive gold prices, with the potential for a European financial crisis skewing the balance of risks to the upside.

Agriculture

We expect 7% returns on the Enhanced Agricultural index on a 12-month horizon, and 1% returns in the Enhanced Livestock index.

Still in deficit but higher supplies points to modest upside

We expect the recent upward revision to 2011/12 corn beginning stocks will more than offset our forecast for lower new-crop corn production. This will allow for both stronger demand and higher ending stocks than we had previously expected. As a result, the required corn demand destruction we expected will be smaller and we recently lowered our corn price forecast, although still above current prices. We expect downside from current prices to be limited barring a European sovereign default or a US recession, as prices need to remain sufficiently elevated to prevent any meaningful consumption growth in the face of still low inventories.

While we have also lowered our soybean price forecast, we still expect soybean prices will outperform corn prices. In particular, the tightening of the soybean balance relative to the corn balance will likely intensify the competition for US acreage next spring, which had been significantly skewed in favor of corn. We see upside risk to our soybean forecast on a potential return of La Niña this winter. Finally, we lowered our wheat price forecast on the back of both lower expected corn prices and higher wheat stocks.

Export demand likely to lend support; expect cattle to outperform lean hogs

We expect that demand for meat will continue to improve, driven largely by strong EM income growth. We expect live cattle prices to outperform lean hog prices in 2012 on tighter supplies with sharply lower cattle on feed placements in coming months against a modest hog herd expansion. A sustained slowdown in US GDP growth would put our expectation for cattle over hog out-performance at risk as it could support domestic demand of lower-cost pork to the detriment of higher-cost beef.

Performance and Forecasts of S&P GSCI Enhanced Commodity Index and Strategies

Exhibit 11: S&P GSCI Enhanced Commodity Index and strategies' total returns forecasts

	Current Weight				12-Month Forward
	(%)	2009	2010	2011 YTD	12-mo Forecast
S&P GSCI Enhanced Commodity Index	100.0	21.6	12.2	-7.9	20
Energy	68.1	23.8	5.9	-6.1	24.4
Industrial Metals	7.1	82.7	16.5	-23.7	27.2
Precious Metals	3.9	25.2	34.5	11.1	11.2
Agriculture	15.7	3.6	33.7	-13.4	6.5
Livestock	5.2	-11.3	18.5	1.8	0.7

Source: Goldman Sachs Global ECS Research.

Recent Commodity Research

Commodity Watch: *History likely to rhyme, not repeat*, October 4, 2011

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Corporate Credit: Sovereign tensions keep us bearish on spreads

Corporate credit has historically done well in the low but positive growth environment that we are forecasting. However, credit has significant exposure to the European sovereign situation, both directly through financial credits and indirectly through the impact on broader credit conditions. While we view valuation as attractive, especially in the light of current robust balance-sheet credit fundamentals, we remain bearish on the direction of credit spread in the short term. We think funding conditions for banks need to normalize before volatility can fall and allow “search for yield” motives to resurface.

Still negative directionally in the short term. Since turning cautious on credit in mid-June, our global credit view has turned progressively more bearish as the “tail risks” that we identified then have gradually grown larger due to the interaction of the Eurozone policy constraints and falling growth expectations. Earlier this week, our economists downgraded their global growth forecast to 3.5% from 4.3% previous, with significant downward revisions in the Eurozone. We now expect Germany and France to have negative growth in 4Q2011, and our 2012 growth forecast for the Eurozone now stands at 0.1%.

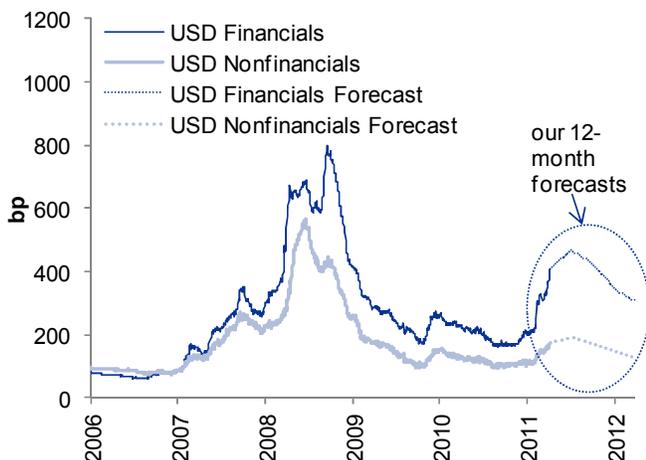
Despite hopeful headlines on European policy developments over the past week, we remain skeptical that comprehensive new measures are imminent. The policy response to escalating market pressures still appears timid, implying that volatility and spreads will remain elevated for the foreseeable future. Our 3-month forecasts are for spreads to be higher in both the US and Europe, especially in the financial space (see Exhibits 12 and 13).

But credit quality is high and valuation is getting more attractive. Admittedly, spread levels now compensate for more credit risk than they did three months ago. Five-year spreads for the broad investment grade bond indices in US and Europe have more than doubled the tightness reached in mid-May. Indeed, if not for the spillover from sovereign concerns, we think corporate credit spreads would have likely resisted this weakening growth outlook due to solid earnings growth, conservative corporate balance sheets, and search-for-yield dynamics.

Looking a year ahead, we expect improvements in the sovereign situation will pave the way for better risk appetite, and thus spread tightening. However, we also expect the tailwind from rates over the past quarter to shift to a headwind that will offset some of the gains from carry and spread compression. In local currency, we expect total returns over the next 12 months of around 4.6% and 4.4% for the iBoxx IG USD and EUR indices, respectively. This supports a neutral view for credit in our asset allocation recommendation.

Exhibit 12: We expect IG spreads to go wider in the next 3 months and tighter in the next 12 months

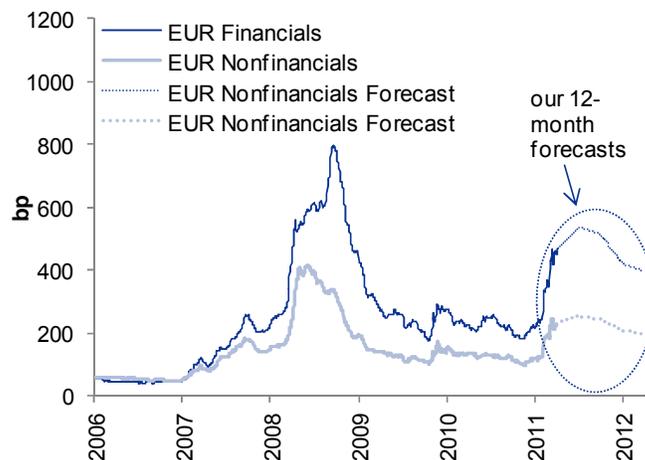
Chart shows the average of 3-5y and 5-7y IG spreads for the USD financial and nonfinancial indices.



Source: Goldman Sachs Global ECS Research, iBoxx.

Exhibit 13: While there might be more pressures in the next 3 months in Europe

Chart shows the average of 3-5y and 5-7y IG spreads for the EUR financial and nonfinancial indices.



Source: Goldman Sachs Global ECS Research, iBoxx.

Financial crises usually don't self correct

We view the banking sector as the most important channel through which sovereign pressures flow through to corporate spreads (and for that matter, to market risk premia more generally). Despite the many innovations in financial markets over the past few decades, the ultimate source of most financial leverage is still banks. When bank credit contracts, it reduces demand for the assets held on levered balance sheets, a prime example of which is corporate bonds.

Pressures on short-term bank funding spreads were not visible until recently. In our August 19 *Credit Line* ("Growth down, risk off"), we argued that in contrast to the fourth quarter of 2008, money markets are less likely to be the epicenter of a crisis this time around. This is because short-term funding stress was partially buffered by the availability of central bank funding as well as elevated levels of bank liquidity. But this buffer is evidently being overcome by market pressures. Many such indicators (like Libor-OIS spreads and Euro-USD basis swap spreads) have recently reached levels not seen since 2008 and 2009.

Other "non-pricing" metrics are also signaling that stress is gradually building up in the system. Two metrics are particularly informative in this respect. First, data by the Federal Reserve shows that large time deposits of US subsidiaries of foreign banks have substantially declined over the past few weeks, a sign that depositor and

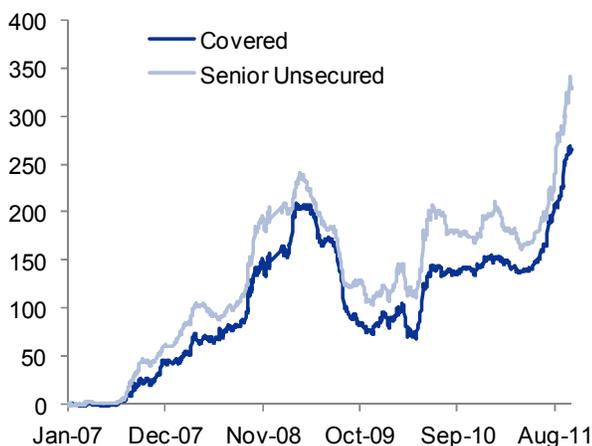
counterparty concerns are rising. Another sign of stress is the significant decline in the outstanding of commercial paper issued by foreign financial institutions in the US. The reactivation of the USD swap line between the Fed and the ECB appear to have helped these metrics falling at a slower pace.

But the existence of various short-term funding facilities does not suggest that the risk of intensifying balance sheet pressure has been eliminated. Measures of long-term funding spreads like the iTraxx senior financial index are still trading at all-time wides. In the cash space, index-level financial spreads appear to paint a somewhat less gloomy picture. But once appropriately controlling for survivorship and substitution biases, we found that banks' covered bonds and senior unsecured bond spreads are trading near record-high levels (see Exhibits 14 and 15, and October 4, 2011, *Credit Line*, "European bank spreads: more stressed than indices reveal").

These pressures on banks (and thus pressures on credit spreads) are at high risk of getting worse before they get better. Financial crises usually don't self correct until policy responds firmly – or until markets have plumbed their depths. Since a strong, confidence-restoring policy response to the European sovereign concerns does not (yet) appear to be in the cards, we think corporate credit spreads – European financials in particular – will more likely trend wider still than tighter in the next few months.

Exhibit 14: Our spread indices that control for evolving rating and country compositional differences reveal banks' covered and senior unsecured bonds trading at record wides

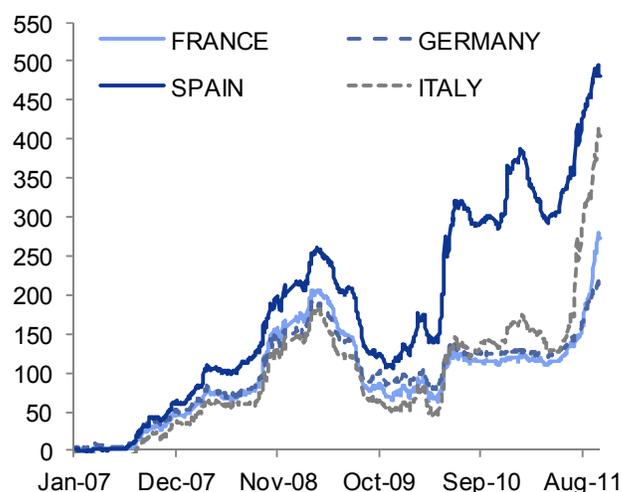
The plot shows the change in spread for two portfolios of covered and senior unsecured bonds having the same country, rating and maturity composition.



Source: Goldman Sachs Global ECS Research, iBoxx.

Exhibit 15: Our adjusted country-level spreads (less vulnerable to changes in regional composition) further confirm that bank spreads are in uncharted territory

The plot shows the change in spread for domestic bond portfolios having similar rating and maturity composition as well as the same weights of covered and senior unsecured bonds.



Source: Goldman Sachs Global ECS Research, iBoxx.

An upbeat reminder on credit quality

Our September 16, *Credit Line*, “Bearish on spreads, bullish on fundamentals” provides an update on bottom-up credit fundamentals for US nonfinancial corporates. The empirical analysis reveals that credit quality is in very good shape. Indeed, we conclude that US corporate credit quality is close to its highest level in decades.

To wit, HY default rates have been astonishingly low over this cycle, despite a recession that was the worst since the Great Depression. According to our rough estimates, the worst 5-year cumulative loss window over this recession will suffer 5-year cumulative losses that are no more than two-thirds to three-fourths of the magnitude of the worst 5-year windows over either the 1990 or 2001 recessions. To us this speaks volumes about the quality of corporate earnings power and corporate balance sheets on the eve of this recession.

Consistent with the evidence from HY default performance, the aggregate credit metrics we describe below have largely reverted to pre-crisis strengths – again, greatly outperforming the macro economy since obviously GDP growth rates, unemployment rates, and other measures of macroeconomic conditions are still far below their pre-crisis levels:

1. Corporate leverage is lowest in 25 years. Exhibit 16 shows that the median leverage ratio – measured by the debt-to-EBITDA ratio over the rated credit universe – has dropped to a historical low of 2.16x vs. 2.8x at the peak of the crisis. This result initially surprised us and we suspected outliers. But we have examined many alternative leverage measures and the deleveraging story is confirmed no matter how we measure leverage. The median debt-to-book-value ratio, for example, stands at 45% today vs. 50% during the recession. The deleveraging trend is also robust to the inclusion of non-debt liabilities (such as pension funds). The median ratio of total liabilities to total assets, for example, has dropped from crisis peak of 66% to 61% today (Exhibit 17). And it is not just median ratios: these trends are visible across all but the lowest percentiles – a finding consistent with our negative relative value view on the lowest-quality HY companies.

2. Most other credit metrics have improved, too. One key tailwind for the corporate sector over the past two years has been the ability to expand margins by keeping costs under control. Operating margin and net profit margin are both close to all-time highs.

Despite strong profits, companies have yet to spend. Instead, they have increased cash holding and improved

liquidity position over the past two years. The median ratio of cash-to-assets remains near its record high.

The low rate environment and favorable refinancing terms over the past two years have also allowed companies to trim interest expense. The median interest coverage ratio (defined as EBIT-to-interest expense) has increased from 2.6x in the first half of 2009 to more than 4x in the latest quarter.

These trends in credit metrics all suggest that the corporate sector has successfully repaired its balance sheet since the crisis. Credit fundamentals appear to be as strong as they have been over the past 25 years.

3. Balance sheet conservatism suggests the (net) upgrade cycle is likely to persist. Better credit fundamentals are also fuelling an upgrade cycle that started over a year ago. Exhibit 19 shows that the rating upgrade-to-downgrade ratio has consistently exceeded 1 since May 2010, and we think this trend will likely persist, for two reasons:

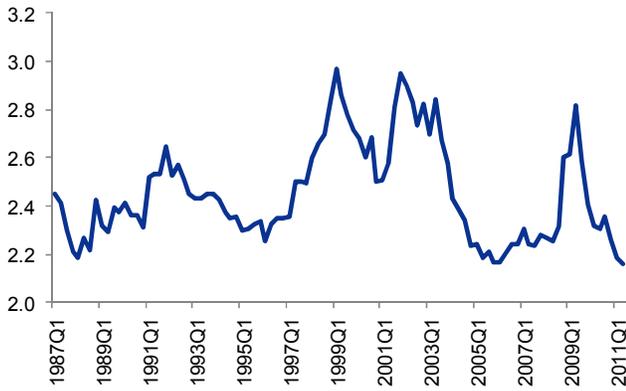
First, we think CFOs in the nonfinancial sector, having lived through the funding pressures of the 2008 crisis, will look to manage balance sheets more conservatively than in the past. Corporate bond issuance has been robust over the past few years, but rather than increase leverage, companies have been terming out debt maturities, reducing reliance on bank debt and increasing cash on their balance sheets. This, we think, is helping CFOs sleep better at night.

Second, we expect re-leveraging risk to remain low. The environment for LBOs still looks very challenging and it has been our expectation over the past year that banks would have low appetite for LBO deals. We have moreover believed that the strategic M&A bid from cash-rich corporations would be a more competitive bid for most takeover targets. We think re-leveraging risk will eventually emerge, and when it does we think it will most likely come in the form of higher investment, stock buy-backs and dividend payouts. But we think these shifts in corporate behavior are unlikely as long as the operating environment for firms remains as risky as it has been.

In short, we expect recent improvements in balance sheet quality to persist, and this makes us comfortable with default and downgrade risk. However, as we discussed above, we think Europe will be a stubborn drag on credit spreads in the short term. Only when the sovereign concerns fade do we think the market can re-focus on credit fundamentals and allow the search-for-yield dynamic to bring spreads tighter.

Exhibit 16: Leverage – most commonly measured as debt-to-ebitda ratio – is lowest in 25 years.

Chart shows the de-seasonalized median total debt to EBITDA ratio for North American non-financial firms that are rated by S&P



Source: Goldman Sachs Global ECS Research, Compustat.

Exhibit 17: The deleveraging trend is robust to the inclusion of non-debt liabilities

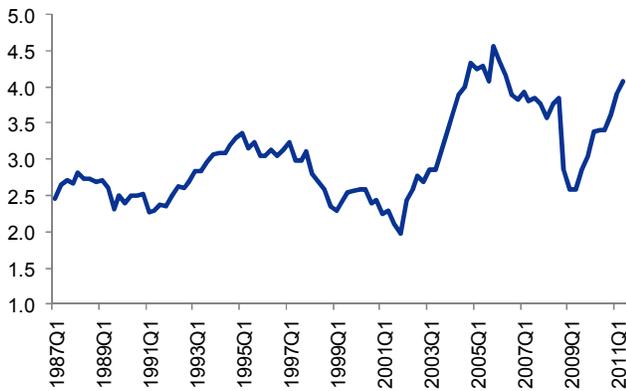
Chart shows the de-seasonalized median total liabilities as percentage of total asset for North American non-financial firms that are rated by S&P



Source: Goldman Sachs Global ECS Research, Compustat.

Exhibit 18: Interest coverage ratio has substantially improved

Chart shows the de-seasonalized median interest coverage ratio for North American firms that are rated by S&P



Source: Goldman Sachs Global ECS Research, Compustat.

Exhibit 19: The ongoing upgrade cycle is likely to persist

Chart shows the upgrade to downgrade ratio using 1-year transition rates for monthly refreshed cohorts. A ratio above 1 indicates improving credit quality while a ratio below 1 indicates deteriorating credit quality



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

What would make us (and the market) more constructive?

The root cause of the European sovereign crisis is institutional in nature. It will take years, not months or quarters, to build the required fiscal institutions for the Eurozone. In the meantime, we think policy makers need to address market concerns about the sovereign debt situation and the pressures on the banking system.

To address some of the pressures on sovereigns and banks, the ECB could, at least temporarily, purchase sovereign bonds more aggressively. But the problem with this anticipated policy response is that the ECB will merely be administering a higher dose to treat the symptoms, not the underlying causes. The market's awareness of the ECB's

great reluctance to undertake a role that properly belongs to fiscal policy limits the market's confidence that the ECB can buy "in size" if necessary. And even though continuing short-term funding support to European banks reduces the risk of systemic shocks, it also reduces the incentive to make politically difficult policy choices.

But sooner or later, policy makers will face incentives to act. We think the current elevated sovereign and bank funding costs cannot continue for long without eliciting a more muscular policy response than we have seen to date. We think the best (and perhaps only) way to do this is by injecting additional capital into the banking system. We are watching for signs of this policy development more than any other, but until more decisive policy action emerges, we are braced for wider spreads and greater volatility.

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Government Bonds: Bonds discount recession and more

In conjunction with downside revisions to our GDP growth projections, particularly in the Euro area, we have lowered our government bond yield forecasts by around 50 bp across the major markets. As before, our new numbers are below our *Sudoku* model estimates of ‘fair value’ to account for the impact of direct purchases by the Fed. We recognise that the escalation of stress in bank funding is precipitating a round of deleveraging. This could extend the departure of intermediate-maturity government securities in the major markets (US, Germany and the UK) from their fundamental underpinnings. Nevertheless, against what is now a very gloomy consensus, signs of policy initiatives from the European fiscal authorities could stabilise, and possibly reverse, the price action. With enhanced EFSF almost up and running, the likelihood of this happening over the next month has increased. We stated in the August issue of *Fixed Income Monthly* that we strongly doubted 10-year US Treasuries could sustain levels below 2.0% in this cycle, and we stick to that view.

Euro area leads downward growth revisions

Following a previous adjustment in August in the same direction, we have downgraded our growth forecasts again and now look for real GDP growth in the advanced economies to expand by 1.6% this year and then slow further to 1.3% in 2012, down from 1.7% and 2.1% previously. Changes to our projections for the BRIC economies are comparatively small, as are those to our inflation forecasts.

The main driver of our shift in views has been the escalation of bank funding stress in the Euro area, alongside deeper public budget cuts in a number of

European countries. We now see the Euro area’s GDP contracting between 4Q2011 and 1Q2012, and estimate 2011 average real growth at 1.6% (from 1.7% earlier) and essentially flat in 2012, from 1.3% previously.

Such sharp revisions have knock-on effects in other regions through the usual trade and financial channels. We have revised our 2012 real GDP growth forecast to 1.4% in the US (from 2.0%) and to 1.0% in the UK (from 2.3%). Meanwhile, in the context of high commodity prices, headline CPI is expected to run at 2.3% in the US (unchanged), at 1.4% in Euroland (down from 1.7%) and at 2.5% in the UK (up from 2.4%).

Exhibit 20: Lowering our growth forecasts

	Real Gross Domestic Product [%yoy]				Consumer Prices [% yoy]			
	2011		2012		2011		2012	
	Old	New	Old	New	Old	New	Old	New
US	1.6	1.7	2.0	1.4	3.2	3.2	2.3	2.3
Euroland	1.7	1.6	1.3	0.1	2.6	2.6	1.7	1.4
Japan	-0.5	-0.6	2.6	2.2	0.0	0.1	0.0	0.1
UK	1.4	1.1	2.3	1.0	4.4	4.4	2.4	2.5
Canada	2.2	2.1	2.2	2.0	2.9	2.9	2.0	2.0
Australia	1.7	1.5	3.5	3.0	3.5	3.5	3.3	3.1
Switzerland	1.6	1.6	0.2	0.0	0.5	0.5	0.5	0.5
Sweden	4.5	4.3	2.7	1.5	2.8	2.6	2.7	2.0
New Zealand	2.4	2.1	3.4	2.7	4.4	4.3	2.5	2.3
Norway	1.4	0.9	2.4	1.4	1.6	1.6	1.7	1.4

Source: Goldman Sachs Global ECS Research.

Bond yields below their macro ‘fair value’...

Running our new global macro forecasts through our *Sudoku* model for benchmark bond yields, we find that the estimate for end-2011 10-yr equilibrium rates has declined by roughly 50 bp across the board, although it remains much higher than both spot yields and the forwards. Specifically, the framework indicates that 10-yr US Treasuries should end the year at 2.7% (from 3.1% previously). The model places 10-yr German Bunds at 2.5% (from 3.0%), 10-yr Gilts at 2.9% (from 3.5%) and 10-yr JGBs at 1.3%. Yields are now close to two standard deviations

“expensive” in the US. Valuations are somewhat less extreme in Germany and the UK, while bonds are closer to our measure of “fair value” in Japan and Sweden.

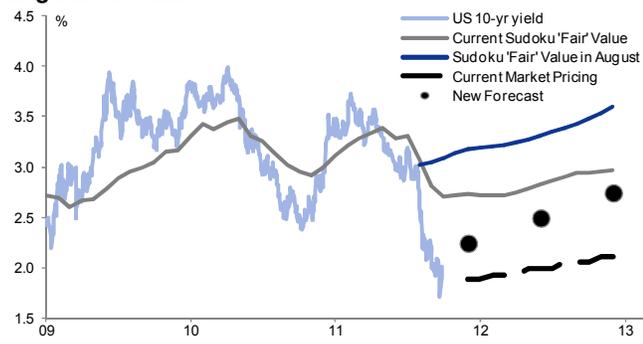
As a cross-check to this analysis, we use a “Taylor rule”-type approach in order to relate US benchmark yields at different maturities to a measure of spare capacity and core inflation, allowing rates to go negative (we first introduced this approach in the November 2010 issue of the *Fixed Income Monthly*).

Based on the current macro environment, 5-yr yields are trading within a 1-standard deviation band, whereas bonds further out on the term structure are close to 2 standard deviations too “rich”. If we plug into the model our new 1-yr ahead macro forecasts, which envisage marginally lower core inflation and a higher unemployment rate than we have today, we find that 5-yr yields should trade at 1.3% (i.e., they are well within the standard deviation envelope, as shown in Exhibit 22) and 10-yr yields at 3.2% (that is, they are 1.5 standard deviations “rich”).

...even accounting for Fed purchases

In assessing where government bonds should trade in relation to current and prospective macro factors, consideration should also be given to the direct

Exhibit 21: Our lower bond yield forecasts still imply negative returns



Source: Goldman Sachs Global ECS Research.

Capital preservation in the driving seat

Given the prevailing degree of risk aversion, and open-market interventions by central banks, we have decided to preserve roughly a one-standard deviation gap between our forecasts and the model’s outputs (as we had done previously). But we now assume that this gap will erode only gradually after the next couple of quarters.

Specifically, we now project 10-yr US Treasuries to end the year at 2.25% and end 2012 at 2.75% (compared with 2.75% and 3.50% previously). The corresponding numbers are 2.0% and 2.5% for German Bunds (from 2.75% and 3.25%), and 1.1% and 1.3% for JGBs (from 1.3% and 1.4%). Exhibit 23 summarises our forecasts for all countries we track.

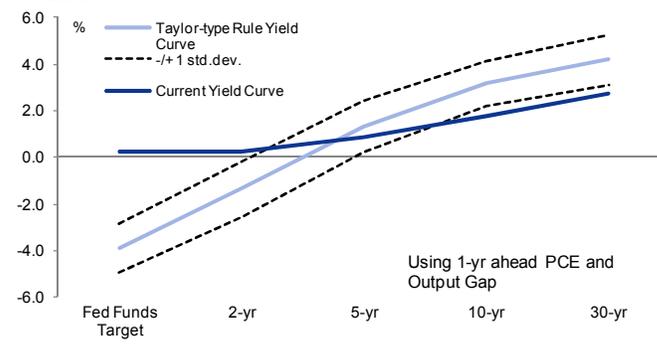
Although our latest set of forecasts still implies modestly negative returns in intermediate rates, we recognise that at the moment it is harder to base a trading view around point forecasts. The price action across asset classes is increasingly reminiscent of that in late 2008/early 2009, when deleveraging and capital protection were in the driving seat. A shift in Euro area policies is needed to

interventions by the Fed at the long-end of the yield curve.

We attempted to quantify these effects in earlier work, and concluded that the *cumulative* impact of these purchases could be in the region of 75-100 bp in the 10-yr area. The larger-than-expected targeting of ultra-long-dated securities through “operation twist” (launched on September 21) may have temporarily amplified these effects (30-yr zero coupon bond yields have rallied from 4.5% in late July to around 3% currently – the lowest since the Lehman default).

These magnitudes are, of course, unobservable, and thus subject to great uncertainty. Nonetheless, they suggest that US 10-yr Treasuries currently more than discount a weak global growth outlook (with a mild recession in the Euro area) *and* the effect of the Fed’s manipulation of the yield curve.

Exhibit 22: Long end US yields below ‘Taylor rule’ type estimates



Source: Bloomberg, Goldman Sachs Global ECS Research.

reduce tail risk, and the timing of such a shift remains uncertain.

Exhibit 23: New and old 10-yr bond yield forecasts

% p.a. eop.	2011		2012	
	Old	New	Old	New
US	2.75	2.25	3.50	2.75
Germany	2.75	2.00	3.25	2.50
Japan	1.25	1.10	1.40	1.30
UK	3.00	2.50	4.25	3.00
Canada	3.25	2.25	4.00	2.75
Australia	5.25	4.25	5.25	4.50
Switzerland	1.50	1.00	2.25	1.30
Sweden	3.00	2.00	3.50	2.25
New Zealand	5.00	4.25	5.75	4.75
Norway	3.25	2.50	4.00	2.75

Source: Goldman Sachs Global ECS Research.

Nonetheless, we highlight a couple of factors that argue against chasing the market here:

The big rally in rates occurred between mid-July and mid-August, when the market was confronted with weaker-than-expected activity numbers in the US, fuelling expectations of more quantitative easing, a deterioration in the Euro area sovereign and banking environment (with Italy coming under pressure), and the political confrontation on fiscal policy culminating in the US rating downgrade.

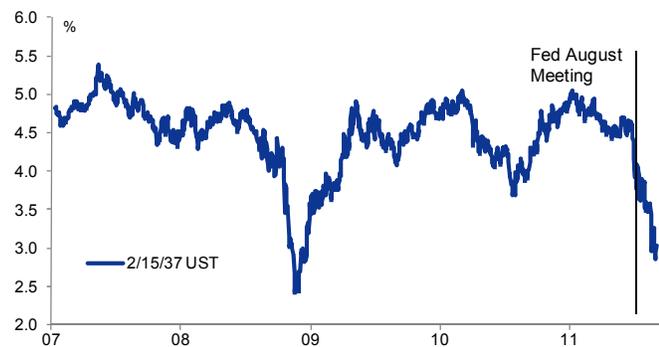
Since then, central banks have stepped in to provide further backstops (e.g., Dollar funding, the purchase of Italian and Spanish bonds) or outright stimulus ("operation twist" by the Fed and another round of quantitative easing in the UK). In addition, the ECB took further unconventional policy action this week, as expected (12- and 13-month LTROs, and €40 bn of purchases of covered bonds, in addition to the measures already in place).

Our measure of the "bond risk premium" on highly-rated government securities has made new lows. Relative to the current macro environment, intermediate bond yields are extremely depressed (the same is true taking into account our forecasts of macro variables, as discussed above).

Granted, this can be attributed to the effects of direct policy interventions in the US and UK, and the "flight to quality" to the benefit of German Bunds out of EMU peripherals. But with current spot yields so compressed, we think that any stabilisation in the financial risk environment (the enhanced EFSF should be fully ratified by mid-October and the discussion has already shifted to how the funds will be deployed) and/or improvement in the data could result in a reversal of the bull bond market.

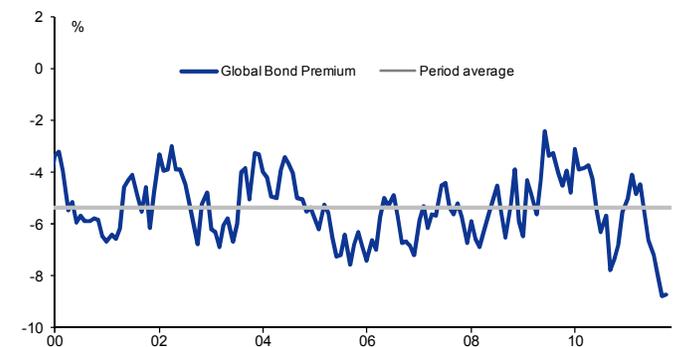
We stated in the August issue of *Fixed Income Monthly* that we strongly doubted 10-year US Treasuries could sustain levels below 2.0% in this cycle, and we stick to that view.

Exhibit 24: Sharp rally in US ultra long rates around "operation twist"



Source: Bloomberg.

Exhibit 25: Global bond premium makes fresh lows



Source: Goldman Sachs Global ECS Research.

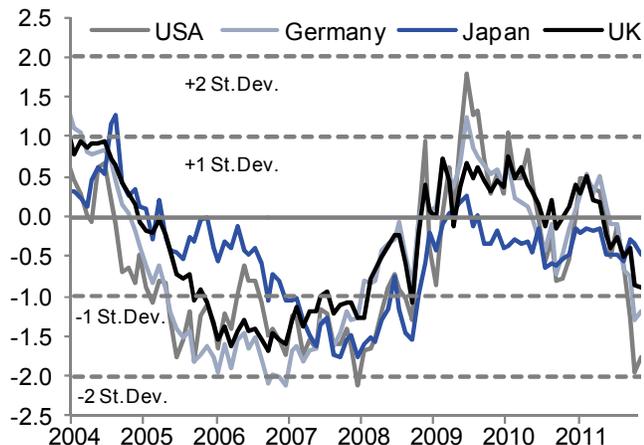
Exhibit 26: Interest rate forecasts: Policy, interbank, 10-year government and 10-year swap rates (%)

	Date	Policy rate	3-mth rates		10-yr rates				Date	Policy rate	3-mth rates		10-yr rates		
			Forecasts	Forward	Gov't Rate	Swap Rate	Swap rate (Forward)				Forecasts	Forward	Gov't Rate	Swap Rate	Swap rate (Forward)
USA	06-Oct-11	0.3	0.4	-	2.0	2.2	-	Japan	06-Oct-11	0.1	0.2	-	1.0	1.0	-
	Dec-11	0.1	0.3	0.5	2.3	2.5	2.2		Dec-11	0.1	0.4	0.3	1.1	1.3	1.0
	Mar-12	0.1	0.3	0.6	2.3	2.5	2.3		Mar-12	0.1	0.4	0.3	1.2	1.4	1.1
	Jun-12	0.1	0.3	0.6	2.5	2.7	2.4		Jun-12	0.1	0.4	0.3	1.2	1.4	1.1
	Sep-12	0.1	0.3	0.6	2.5	2.7	2.5		Sep-12	0.1	0.4	0.3	1.3	1.5	1.2
	Dec-12	0.1	0.3	0.7	2.8	3.0	2.5		Dec-12	0.1	0.4	0.3	1.3	1.5	1.2
Euro-zone*	06-Oct-11	1.5	1.5	-	1.9	2.6	-	UK	06-Oct-11	0.5	1.0	-	2.4	2.6	-
	Dec-11	1.0	1.2	1.3	2.0	2.3	2.7		Dec-11	0.5	0.8	1.0	2.5	2.7	2.7
	Mar-12	1.0	1.2	1.2	2.0	2.3	2.7		Mar-12	0.5	0.8	1.0	2.5	2.7	2.8
	Jun-12	1.0	1.2	1.2	2.0	2.3	2.7		Jun-12	0.5	0.8	1.0	2.8	3.0	2.8
	Sep-12	1.0	1.2	1.2	2.3	2.5	2.8		Sep-12	0.5	0.8	1.1	2.8	3.0	2.9
	Dec-12	1.0	1.2	1.2	2.5	2.8	2.9		Dec-12	0.5	0.8	1.1	3.0	3.3	3.0

* 10-year government rate is for 10-year German Bund

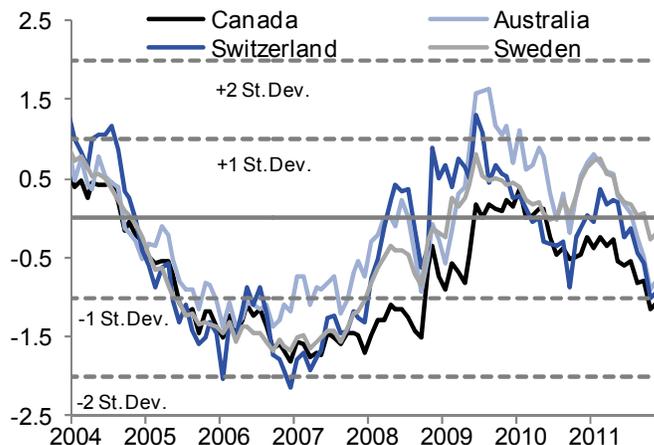
Source: Goldman Sachs Global ECS Research.

Exhibit 27: Degree of 10-year bond mispricing according to Sudoku



Source: Goldman Sachs Global ECS Research.

Exhibit 28: Degree of 10-year bond mispricing according to Sudoku



Source: Goldman Sachs Global ECS Research.

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FX: A gradual drift higher in EUR/\$ from a lower starting point

Given the latest global forecast revisions – and in particular the more marked downward revisions to our Euro-zone growth profile – we have recently shifted our EUR/\$ forecast path lower. Despite these revisions, however, our strongest conviction remains that the underlying broad Dollar weakening trend remains intact. This is also reflected in our broader global FX forecasts, which anticipate a trade-weighted depreciation of about 8% from current levels.

Our recent global growth forecast revisions have been downwards, with some of the most pronounced revisions in Europe. A key reason for these changes is the danger of a prolonged “muddling through” scenario for the Euro-zone fiscal crisis, which is now part of our base-line forecasts. Slow political progress linked to the complex and mainly reactive decision-making process in the Euro-zone will likely remain a dominant feature in the foreseeable future. The negative feedback loops at work in the Euro-zone feature more prominently in our projections. Slow political decision making, the resulting need for more frontloaded fiscal consolidation triggers slower growth and the need to tighten fiscal policy even more.

In FX space, this probably means that the fiscal risk premium will remain high on a permanent basis. Given these changes, the Euro is likely to remain under slightly more pressure throughout our forecasting horizon, which is reflected in a flat trade weighted trajectory. However, against the USD, we expect to see some EUR strength, which is exclusively the result of broad USD weakness in our projections: we anticipate 1.38, 1.42 and 1.48 in 3, 6 and 12 months.

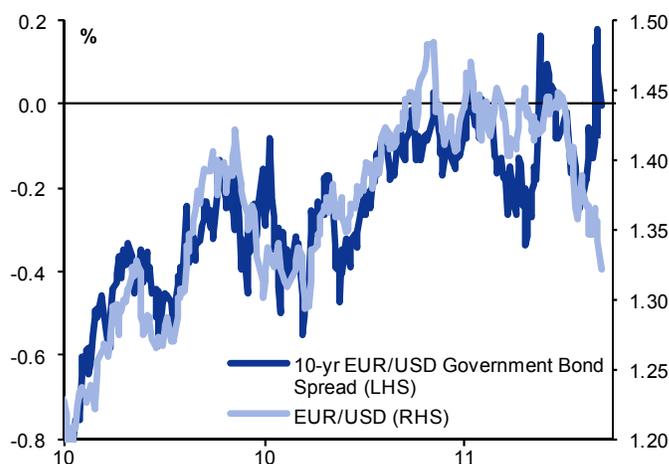
Relative monetary policy across the Atlantic

Although the focus is on the more notable changes in the Euro-zone, our US growth forecasts have been revised lower as well. Moreover, the Fed is now expected to announce a new asset purchase program before the end of the current “operation twist”. From a relative monetary policy point of view, it is therefore far from clear if conditions will ease more in the Euro-zone than in the US, although it is becoming increasingly difficult to make direct comparisons. As we have pointed out in the latest *FX Monthly*, it is becoming increasingly important to focus on intermediate maturities given the strong policy commitment by the Fed to keep rates very low over the next couple of years.

When looking at longer-dated rate differentials as a benchmark, it currently appears EUR/\$ has sold off too much. On our new forecasts, this current mismatch is expected to narrow from both sides. First, our new bond-

yield forecasts point to a 20 bp narrowing in the spread. And, second, moderate EUR/\$ appreciation would approximately close the remaining gap.

Exhibit 29: 10-yr government bond differentials have not moved meaningfully recently



Source: Goldman Sachs Global ECS Research.

External USD pressures and speculative positioning

Our analysis would not be complete without a look at the key balance of payment trends, which continue to point to an extremely USD-negative picture. The latest 2Q BBoP (= current account + net FDI + net portfolio flows) has just posted the largest deficit ever, at 8.2% of GDP.

As regular readers will know, we believe the BBoP is still the most useful tool to assess medium-term trends in the USD. Since the USD started its decade-old downtrend in 2001, the BBoP has never recorded a surplus.

Of course, 2Q is now quite far back, but higher frequency data from TIC data or M&A activity suggests that improvements from the 8.2% deficit in 2Q have been relatively small and almost certainly not enough to put the 3Q BBoP into surplus.

Even on a bilateral basis, portfolio flows continue to be Dollar-negative and Euro-positive. More interestingly, last year's first Greek crisis, which led EUR/\$ all the way down to sub 1.20 levels, was not associated with notable bilateral Euro-zone outflows. The last TIC data point for July this year points in the same direction, although we need to see the August and September data to get a better picture of how capital flows have reacted to the very latest Euro-zone crisis.

The only clear evidence we have of strong EUR/\$ selling at the moment is from indicators of speculative positioning. Our Sentiment Index, for example, points to very sizable short positions, which creates notable "snap-back" risk should the situation in Europe stabilise.

Symmetric risk scenarios

To summarise our EUR/\$ view, the two main building blocks remain a large and persistent fiscal policy risk premium in the EUR, and a strong and persistent downtrend in the USD.

Combining the two suggests we will still end up with a gradual drift higher in EUR/\$ from a lower starting point.

The risks to this forecast are essentially symmetric.

Lower EUR/\$: The Italian debt situation is likely the biggest single risk for the Euro—and for the Euro-zone as a whole. The ECB is currently intervening in the Italian government bond markets to alleviate contagion pressures from Greece. Of course, the debt situation in Italy is quite different to that in Greece. The country already runs cyclically adjusted primary surpluses and on the latest IMF Fiscal Monitor projections, the debt level is expected to decline to only 114% of GDP by 2016. However, this is

based on still slightly optimistic assumptions and in addition the projected improvements are likely not convincing enough to build market confidence.

Without further clear growth enhancing reforms in Italy, the ECB may well end up with unsustainable quantities of Italian Government debt on the balance sheet.

The second main EUR/\$ downside scenario is continued growth weakness, beyond our new forecasts, and the resulting negative feedback loop of falling tax revenues and additional growth destroying fiscal tightening.

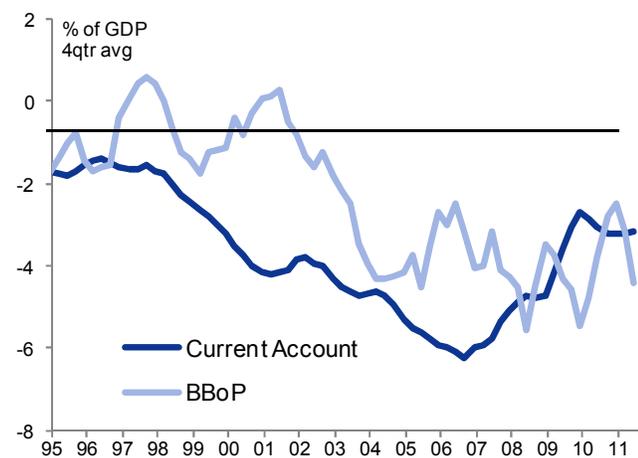
The third downside risk, though potentially related to the other ones, is continued broad weakness in cyclical assets. Given the persistently high negative correlation with the USD a negative growth shock would almost certainly boost the Dollar further and even more so if the shock originates outside the US.

Higher EUR/\$. Most of the upside scenarios are linked to better policy implementation in Europe, including with regards to the use of the enhanced EFSF—for example, for a proactive bank recapitalisation. Via the unwinding of the existing speculative short positions in the market this could lead to a notable bounce in EUR/\$, in particular when taking into account how low expectations are already.

A more hawkish ECB would likely lead to a stronger EUR also, although it is difficult to separate ECB tightening from a declining fiscal policy risk premium. More dovish surprises by the Fed would add to the upside risks for EUR/\$.

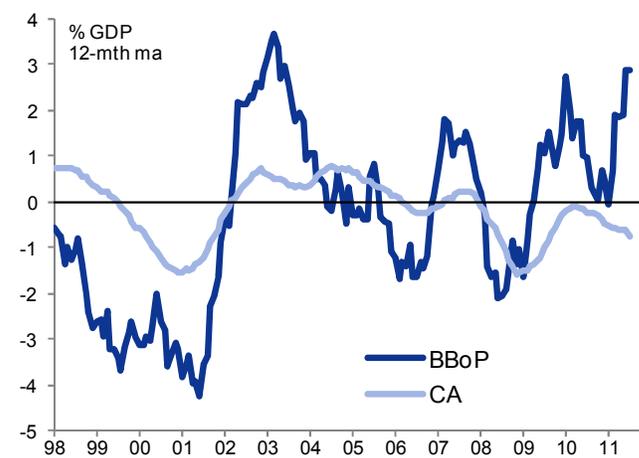
Finally, generally improving risk sentiment on the back of better cyclical data would likely lead to a steeper EUR/\$ trajectory than currently anticipated.

Exhibit 30: US BBoP vs. Current Account



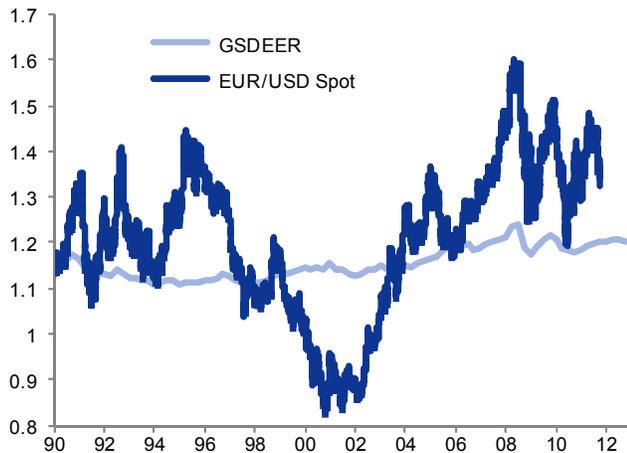
Source: National Sources, Goldman Sachs Global ECS Research.

Exhibit 31: Euroland BBoP vs. Current Account



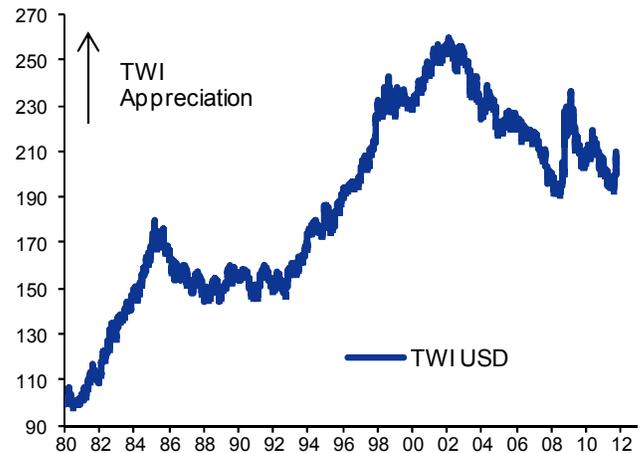
Source: National Sources, Goldman Sachs Global ECS Research.

Exhibit 32: €/ \$ spot vs. GSDEER



Source: Goldman Sachs Global ECS Research.

Exhibit 33: US trade weighted index



Source: Goldman Sachs Global ECS Research.

Sterling

Sterling is trading at a discount to “fair value” vs. the EUR. However, persistently higher inflation prints have started to erode GBP valuation. Cyclically, the consolidation in fiscal policy combined with an accommodative monetary policy stance is typically negative for FX. Thus, our near-term forecast reflects GBP softness from current levels. Most recently IP data came in below expectations, inflation remained high, and the BoE resumed asset purchases by 75 bn over 4 months. That said, the latest PMIs were above expectations. Recent EUR weakness has driven EUR/GBP lower but our forecasts point to a near-term rebound. Broader USD weakness should lead to considerable strength in Cable.

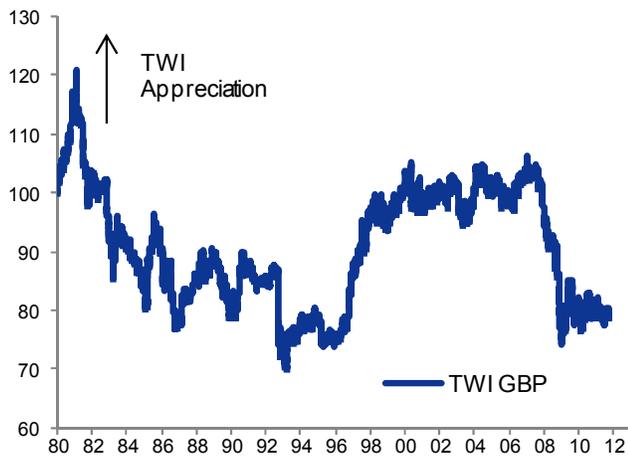
We keep our €/£ forecasts at 0.90 for 3 and 6 months and 0.84 in 12 months. This translates into £/\$ of 1.53, 1.58 and 1.76 in 3, 6 and 12 months. Current GSDEER for €/£ is 0.79 and for £/\$ 1.51.

\$/JPY

\$/JPY has been driven by a mixture of factors over the past three months: a pick-up in foreign buying of Japanese equity (subsequently reversed), European sovereign tensions, interest rate differentials, MoF intervention and the decision by the SNB to peg the CHF to the EUR. The Yen appreciation influences have dominated the depreciation effects, pushing \$/JPY to 76.60. We now think that the Yen will continue to strengthen slowly given the challenges facing the Dollar. Sharp Yen appreciation moves are likely to precipitate further intervention.

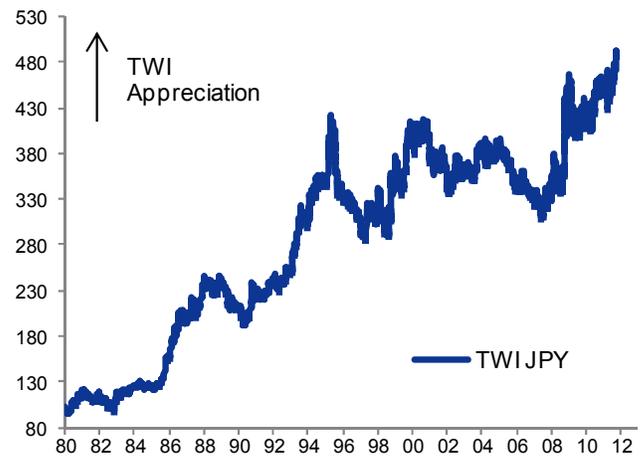
We maintain our \$/JPY forecast at 77, 76 and 74 in 3, 6 and 12 months. This translates into €/JPY of 106.3, 107.9 and 109.5. Current GSDEER for \$/JPY is 105.8 and for €/JPY 126.9.

Exhibit 34: £ trade weighted index



Source: Goldman Sachs Global ECS Research.

Exhibit 35: JPY trade weighted index



Source: Goldman Sachs Global ECS Research.

Exhibit 36: Major FX Forecasts

	3-Month Horizon		6-Month Horizon		12-Month Horizon		
	Current*	Forward	Forecast	Forward	Forecast	Forward	Forecast
EUR/\$	1.34	1.34	1.38	1.34	1.42	1.34	1.48
\$/¥	76.7	76.6	77.0	76.5	76.0	76.1	74.0
EUR/¥	102.5	102.3	106.3	102.1	107.9	101.8	109.5
EUR/CHF	1.23	1.23	1.21	1.23	1.21	1.22	1.21
CHF/¥	83.0	83.1	87.8	83.2	89.2	83.3	90.5
\$/CHF	0.92	0.92	0.88	0.92	0.85	0.91	0.82
EUR/£	0.86	0.86	0.90	0.86	0.90	0.87	0.84
£/\$	1.55	1.55	1.53	1.54	1.58	1.54	1.76
£/¥	118.7	118.4	118.1	118.1	119.9	117.5	130.4
£/CHF	1.43	1.42	1.34	1.42	1.34	1.41	1.44
EUR/NOK	7.82	7.85	7.70	7.89	7.70	7.94	7.60
EUR/SEK	9.16	9.20	9.00	9.23	8.90	9.27	8.80
A\$/	0.97	0.95	0.95	0.95	1.00	0.93	1.00
NZ\$/	0.77	0.76	0.74	0.76	0.78	0.75	0.82
\$/C\$	1.04	1.04	0.96	1.05	0.94	1.05	0.92
\$/CNY	6.36	6.37	6.29	6.38	6.20	6.38	6.02

* Close 05 October 11

Source: Goldman Sachs Global ECS Research.

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Alt AC

We, Thomas Stolper, Samantha Dart and Francesco Garzarelli, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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We, Peter Oppenheimer, Anders Nielsen and Charles P. Himmelberg, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Disclosure Appendix

Option Specific Disclosures

Price target methodology: Please refer to the analyst's previously published research for methodology and risks associated with equity price targets.

Pricing Disclosure: Option prices and volatility levels in this note are indicative only, and are based on our estimates of recent mid-market levels. All prices and levels exclude transaction costs unless otherwise stated.

Buying Options - Investors who buy call (put) options risk loss of the entire premium paid if the underlying security finishes below (above) the strike price at expiration. Investors who buy call or put spreads also risk a maximum loss of the premium paid. The maximum gain on a long call or put spread is the difference between the strike prices, less the premium paid.

Selling Options - Investors who sell calls on securities they do not own risk unlimited loss of the security price less the strike price. Investors who sell covered calls (sell calls while owning the underlying security) risk having to deliver the underlying security or pay the difference between the security price and the strike price, depending on whether the option is settled by physical delivery or cash-settled. Investors who sell puts risk loss of the strike price less the premium received for selling the put. Investors who sell put or call spreads risk a maximum loss of the difference between the strikes less the premium received, while their maximum gain is the premium received.

For options settled by physical delivery, the above risks assume the options buyer or seller, buys or sells the resulting securities at the settlement price on expiry.

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	Rating Distribution			Investment Banking Relationships		
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