

Fixed Income Team

4th Quarter 2015

Global Fixed Income Outlook

Holding Pattern

Executive Summary

Recent developments haven't altered our broadly constructive outlook for the global economy, but we see less cause for optimism (see forecasts p.2). The emerging markets (EM) slowdown is constraining global growth, momentum in the US and Europe is moderating and Japan faces stronger headwinds. The risks of policy missteps in China have manifested, raising the prospect of further volatility. And the benefits of lower oil prices are fading with no end in sight for the 'lower for longer' trend in commodities markets. The following themes guide our strategy toward year end:

- A combination of global risks, weak inflation and tighter financial conditions (see p.3) leaves monetary policy heading into year-end more dovish than we envisaged in prior Outlooks. The US Federal Reserve (Fed) may still raise rates this year, but the odds of a delay are growing.
- Inflation has so far proven fairly unresponsive to economic recovery, and even to massive stimulus (see p.4-5). We consider the limits of quantitative easing (QE) in the Eurozone and Japan and the implications for these economies and their currencies.
- China's recent actions related to stocks and the renminbi have contributed to policy uncertainty and the costs in terms of global market volatility are more apparent. We think the broader implications of China's transition may have been underestimated, but the risk of a sharper downturn hasn't necessarily increased (see p.6-7).
- EM assets have weakened under the combined pressures of the commodities slump, China's slowdown, dollar strength and fears of US Federal Reserve policy tightening (see p.7-8). We differentiate between the highest risk markets and those best placed for a relief rally.
- This backdrop leaves us tactical in rates and moderately constructive on corporate credit. This year's market retracement makes investment grade credit look more attractive, and we are monitoring risks stemming from the energy sector downturn in this late-cycle stage (p.8-9).

Regional Overview

- The US economy is caught in the cross-currents of domestic strength and global weakness. We think a December rate hike is a toss-up, with risks increasingly skewed to later. As a result, we are neutral US rates on an outright basis. We have revised our growth forecasts down to 2.4% in 2015 and 1.9% next year. Strengths include tightening in the labor market, improvements in the housing market and retail sales. Downside risks from tight financial conditions and weak global demand have increased, and capital expenditure faces headwinds from production cuts in the energy sector. Inflation remains subdued, but we see a rising trend, to 1.4% this year.
- We believe China's growth has fallen below the 7% target, as China passes the turning point of its transition from an industry-led to a services-driven economy. Following recent volatility we think policymakers will prioritize stability in the near term, but we remain negative on the renminbi. Our Chinese growth forecast is 6.7% for this year and 6.3% in 2016. The services sector is strengthening but not yet offsetting the slowdown in investment and manufacturing. We think the property market's stabilization is encouraging. Looking ahead, we expect further targeted stimulus by the People's Bank of China (PBoC) as financial conditions remain tight and recent interventions are just covering capital outflows.
- Eurozone growth momentum has leveled out. The refugee crisis has replaced Greek exit risk as the dominant policy challenge. We think the European Central Bank (ECB) is likely to expand quantitative easing (QE) in early 2016, and we see European rates outperforming the US. Our Eurozone growth forecast is little changed at 1.4% in 2015 and 1.2% next year. We see headwinds for exports due to weak EM demand and the firmer euro. Consensus on inflation has declined closer to our forecasts for 0.1% this year and 1% in 2016. We believe inflation is held back by a combination of low energy prices, a weak trend in services prices and pent-up deflation in goods prices, and poor demographics.
- Japan faces a possible relapse into recession, and we think the Bank of Japan (BoJ) is likely to ease again in the next six months. We suspect more QE could drive volatility in Japanese rates and we are modestly underweight. We cut our forecast for Japan's growth to 0.5% this year and 1.1% in 2016. The benefits of favorable terms of trade and tight labor market are yet to emerge. Consumption is still soft, and weak Asian demand is weighing on exports. The biggest revision to our forecasts is Japan's 2016 inflation rate, which we have cut from 1.5% to 0.7%. Wage growth has been disappointing, and yen depreciation has stalled.
- We think UK growth should pick up to 3% in 2016. We think the Bank of England (BoE) may hike in early 2016 but is unlikely to move before the Fed. We expect European rates to outperform the UK market. Consumption and business investment are contributing to growth, but currency strength and weaker EM demand for exports are headwinds. Inflation risks are more balanced as wages have edged up and the energy price impact is waning. We see price pressures picking up heading into year-end, driving inflation to around 1.2% in 2016.

We think the dollar's rally has probably lost momentum in the near term, barring more aggressive policy easing outside the US. We are modestly long the dollar versus select G10 and EM currencies.

We believe the US rates market is caught in the crosscurrents of a strong domestically-oriented economy and softness in sectors exposed to a weaker global environment. On an outright basis, we are neutral US rates but positioning tactically as the market adjusts to evolving economic data and financial conditions.

Hike in Haste, Repent in Leisure

Three months ago, we shared a reasonably widely held view that the Fed would raise interest rates for the first time in almost a decade in September. Now, a December move looks like a toss-up and the chances of an even longer wait have risen. That's despite unemployment having fallen close to 5% and improvement in the housing market and consumer demand. The Fed's latest statement expressed concerns about low inflation (see p.4), global risks (see p.6-8) and tight financial conditions. We think this last factor is the most plausible direct risk to US growth in the near term, and even if financial conditions abate to allow lift-off this year, we expect a very shallow trajectory.

Financial conditions have contributed to a delayed lift-off twice this year. In March, Fed Chair Janet Yellen's reference to the dollar's impact on import prices helped to erode consensus for a move in June. Since then, conditions have tightened to a post-crisis high, according to the Goldman Sachs Financial Conditions Index (GS FCI), due mainly to the deterioration in equity and credit markets.

Financial conditions have tightened considerably over the past year



Source: Goldman Sachs Financial Conditions Index, as of Oct. 1, 2015.

The possible impact is substantial: Goldman Sachs Global Investment Research (GIR) suggests a persistent 100 basis points (bps) tightening in the GS FCI could shave roughly 0.75 percentage point off growth. In this environment of non-stellar growth—even allowing for the offsetting effects of low oil prices—this is a substantial dent and a key factor in our reduced forecasts for the US this year and next.

Financial conditions are only one input in our US growth outlook and policy expectations, and a lagging one at that. Notable improvements in broader measures of unemployment, inflation and leading activity indicators could influence us to assign a higher probability to a December lift-off. However, in the absence of these signals, we think tight financial conditions present a plausible case for further delays, or, if growth deteriorates, a more dovish shift in messaging.

The precedent we have in mind is from 1998, when policymakers prepared markets in May for a hike against a backdrop of similarly low (though not guite as low) headline employment and weak inflation. By July global risks were mounting and financial conditions tightening, and in September, as crisis spread in EM, the Fed announced a rate cut.

To be sure, the global risks the Fed is monitoring today are different, as are the circumstances. No large hedge funds have collapsed or major sovereigns defaulted, EM growth is slowing from a faster rate and balance sheets are stronger. Moreover, in speeches since the September meeting, FOMC members including Yellen have signaled a preference to hike this year, to help ensure a shallow trajectory. Nevertheless, we suspect this risk of a policy reversal may weigh on the dovish side of a borderline case.

Amid this uncertainty, we believe that, in the absence of more convincing growth and inflation data, a 2015 hike could hang in the balance for a while yet. At any rate, against this backdrop we expect the Fed will remain focused on the mildest tightening it can muster.

On a relative basis we think European rates will outperform the US, the UK and Sweden given the continued downside risks to European growth and inflation relative to the other markets.

In the US we have added modest exposure to inflationlinked bonds (TIPs) as we think markets are underestimating the likely recovery in price pressures.

Inflation, or the Lack Thereof

Inflation globally continues to run behind what many would expect in an environment of moderate growth, and to test economic assumptions about the recovery. Market expectations for inflation remain subdued—in some cases we think too much so. While we doubt inflation will rise to hit official targets in any of the major economies in the next year, we see a modest upward trajectory, led by the US and China. We see stronger headwinds in Europe and particularly Japan, where poor growth has led us to slash our inflation forecast to 0.7% in 2016—our biggest revision this guarter.

Both domestic and external factors are holding back inflation. Generally speaking, the stronger headwinds are coming from the manufacturing sectors most exposed to global deflationary trends, while more domestically-focused services sector inflation tends to be somewhat healthier.

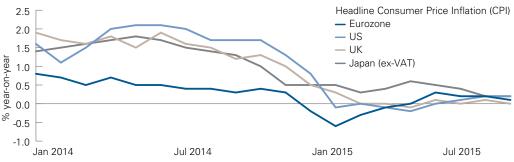
The biggest shared challenge on the home front is low wage growth. In Eurozone and Japan we don't expect much improvement in the foreseeable future. Upside for wages is limited in Europe, where unemployment remains in double digits and smaller economies are trying to cut unit labor costs to gain competitiveness. Wages are stagnant even in Japan, where unemployment is just 3.3%, and the modest pay increases the government secured from the private sector have barely moved the needle. We see some structural constraints on inflation, such as an aging workforce and, in Germany in particular, an increasing skew in job creation away from skilled manufacturing to the lower-paid services sector.

In the US, the jobless rate has fallen close to levels normally associated with rising wages, around 5%, but productivity is low and possibly hampered by underemployment, due to the still-high numbers of people who want full-time work but have settled for part time, or suspended their search. We expect US inflation will pick up moderately in the coming year, similar to the path in the UK, where residual economic slack is also winding up and recent data showed a promising increase in unit labor costs.

Among the main external factors restraining inflation are weakness in commodities markets and declining global demand. To the first point, World Trade Organization (WTO) data show the pace of global trade growth has slowed to half what it was five years ago, and is barely keeping up with even sluggish global economic growth. As demand slows, manufacturers lose pricing power— Chinese producers have been cutting prices for almost four years. This supply/demand imbalance will be difficult to correct in an environment of weakening global trade, where deflationary pressure may be among the few thriving exports. So far much of this pressure is coming to roost in the US, as the strong dollar is helping to keep a lid on prices of imported goods.

We see these challenges reflected in declining commodities prices. That said, oil prices are a big driver of headline inflation, and the main reason they have fallen is oversupply rather than declining demand. We think this imbalance will probably prevent a significant recovery in oil prices before at least the middle of next year, which is likely to continue to drag on headline inflation.

Inflation is yet to pick up meaningfully



Source: Bloomberg, as of Sept. 16, 2015.

The Limits of QE Infinity

In Europe and Japan, inflation is proving unresponsive even to massive stimulus. Both economies slipped back into deflation at the end of the third quarter, despite open-ended commitments to QE from their central banks. We think that structural disinflationary pressures in these countries will continue to test the limits of QE, but that the first resort for both the ECB and BoJ will be to ramp up their programs—most likely in the next few months—rather than reach for alternatives.

The size of their programs is already unprecedented—the BoJ is currently buying Japanese government bonds (JGB) at a rate of \$670bn a year. The intention is to continue until inflation gets to its 2%, which was initially supposed to happen by the end of this year. The deadline has been extended another six months, but we don't anticipate that will make much difference under the current circumstances. Japan's growth has contracted in five of the 11 quarters since Prime Minister Shinzo Abe came to power with an ambitious plan to drive Japan out of its prolonged 'lost decade.' The data on the 12th quarter don't look good, and another contraction will mark the second technical recession in a year.

In the Eurozone, while QE has had a similar struggle with inflation, the program has been praised for helping to restore market stability amid a flare-up in the sovereign debt crisis. The ECB's program was also a relatively aggressive move in January 2015, pledging €60bn purchases a month with a review in September 2016. With inflation still flouting its target of just under 2%, we believe an expansion is likely in the first quarter 2016 to take the program beyond this point.

In both cases, the question is whether more QE can actually do more. QE succeeded in driving both the euro and yen lower, but in both instances the pass-through of substantial currency depreciation to inflation appears to have been modest, or at least short-lived. Without more dramatic action, we think the downside for these currencies may be limited. The euro is buoyed by the Eurozone's expanding current account surplus. In Japan, currency-targeting policy is losing its luster. The competitive advantage for exporters is doubtful against a backdrop of widespread currency weakness. And the negatives of prolonged yen depreciation are showing up in increased import costs for domestically-oriented companies and knock-on expenses for households.

This drawback raises the concern that more-aggressive QE could even be counterproductive. Japan's 'shock and awe' policy easing just after Abe took office in 2013 gave a big boost to business and consumer confidence. Subsequent easings have had less impact and could undermine sentiment if the policy's effectiveness is in question. Moreover, increased JGB purchases may contribute to market volatility. The BoJ already owns a third of the market, and we think this scale of intervention could have unintended consequences if policy uncertainty increases.

Neither central bank is in a position to retreat from QE soon given the potential shock to the financial system of such massive liquidity withdrawal—at least not without a substitute policy, which would require some market preparation. However, we expect some adjustment to the existing programs. The BoJ may buy more longer-dated securities, as well as exchange-traded funds (ETFs) and/or real-estate investment trusts (REITs). For both banks, a cut to the deposit rate, or the interest on excess reserves, is another option, though possibly an unpalatable step given the implications of a further tax on savings and the potentially destabilizing effect on money markets. Another possibility would be to make a stronger appeal for fiscal support, which ECB President Mario Draghi has not been shy to do in the past. The problem is the political coordination, and the resolution is probably a while off yet.

We are neutral on the euro in the near term as we think the Eurozone's current account surplus limits the potential for further significant declines.

We are modestly short the yen versus the US dollar.

We hold a small short position in Japanese rates.

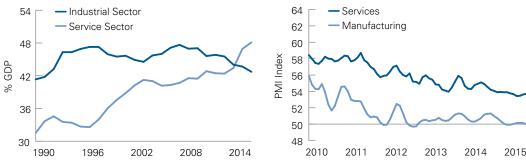
China's Flight Path on International Radar

China's unexpected policy actions in the last couple of months have shaken confidence in a smooth landing in the world's second-largest economy. We are hearing more concerns about the potential knock-on effects of China's transition to a "new normal" of consumption-driven growth in a market economy. Despite the recent volatility we believe China's policymakers have shown their willingness to make trade-offs between their reform and growth objectives and preserving financial stability. As a result, we think the potential for a shock from China is relatively low, but that doesn't blind us to risks in the very likely scenario of a lengthy slowdown with bumps along the way.

We are short a basket of Asian currencies that includes the Korean won, Singapore dollar, Taiwanese dollar and Chinese renminbi, which we expect to face pressure from a protracted slowdown in Chinese growth.

We see three main potential sources of spillover risk from China's transition: setbacks to global trade; market volatility stoked by policy uncertainty; and the possibility of a domestic crisis leading to contagion. We consider this last scenario as a tail risk. We forecast Chinese growth around 6.7% this year, just short of the 7% target, and slowing to 6.3% in 2016. This undershoot isn't so surprising given the difficulty of calibrating growth driven by consumer demand rather than by investment. And the common focus on manufacturing data overstates China's weakness, given that the services sector is performing well. As discussed in prior Outlooks, we have longstanding concerns such as China's large debt overhang, but we believe a crisis-free transition is still very possible and economic and social stability is a top priority for China's policymakers.

China's growth is slowing but the services sector provides support



Source: Bloomberg. Annual data through 2014. Purchasing managers indexes in right hand chart as of August 2015.

We are cautious in Southeast Asian markets given weakening regional demand for exports and reduced flexibility to ease policy, due to high levels of debt.

We are tactically long the Australian dollar.

Trade figures do show broader strains from China's slowdown. The WTO revised down its 2015 global trade growth forecast from 3.3% as of April to 2.8% as of September, citing the sharpest drop in Asia, including a cut to expected Chinese imports growth from 5.1% to 2.6%. This deterioration mainly reflects the decline of the commodities supercycle and doesn't necessarily capture the likely increased demand from China's expanding middle class for services overseas, such as education.

In the meantime, countries with growth models primarily built around servicing China's demand for resources are vulnerable. Australia is under pressure to diversify as 60% of its iron/ore exports go to China, as does close to 80% of South Africa's platinum, according to Barclays Research. Germany is selling fewer manufacturing parts and cars to China, which was previously a growth market. And European luxury goods exporters more generally have experienced declines in Chinese business as a result of the country's 'anti-extravaganza' crackdown. The US is relatively sheltered, given that its exports to China amount to less than 1% of GDP, though this number doesn't capture possible second-order exposures via the US's closest trading partners.

In addition, China's closest rivals in export markets—which are mainly in Southeast Asia—face a double-whammy from currency pressures as well as the changing structure of China's trade. Widespread currency weakness, stoked by central bank policy in Japan and Europe as well as China, keeps pressure on countries such as Taiwan and Korea to drive their currencies lower to maintain competitiveness. At the same time, China's exports are moving up the value chain, from low-cost input items toward higher-quality technological goods.

The knock-on effects of policy uncertainty are less clear-cut, but the summer's market volatility demonstrated how badly markets could take more surprises from Chinese authorities such as the renminbi devaluation and the response to the stock market slump. We think further volatility is possible given the likelihood of more data weakness and doubts about how policymakers will make the trade-off between their growth and reform objectives, and the need to address weaknesses in the financial system. In the near term at least we expect they will prioritize market stability, in order to reassure international observers that steady hands are at the controls.

EM Bowed but Unbroken

Slower EM growth and volatility in EM assets are no surprise considering that the dominant concerns in this macro environment converge in the developing world. The Fed's tightening cycle, China's transition and the commodities downturn are all essentially a reversal of conditions that have driven a wave of investment in EM and a 15-year bull market in EM assets. However, we think recent price action overstates—or at least overgeneralizes—the negative implications of the factors cited above. We believe developing economies are experiencing a cyclical slowdown, not balance sheet destruction leading to a wave of defaults, and some countries have better prospects than others as the headwinds subside.

We believe these adjustments have left intact a relatively firm

base of institutional investors.

EM assets are under pressure,

but we see opportunities

in certain sectors. We think

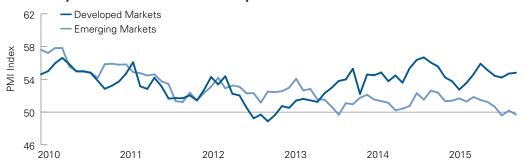
technicals and valuations are

attractive in many EM debt and currency markets, given

the extent of the selloff and

outflows.

EM activity has slowed relative to developed markets



Source: Bloomberg, as of Aug. 31, 2015.

- Fed tightening: While Fed tightening is often cited as a problem for EM, we believe a shallow and well-telegraphed path of hikes—which the Fed seems committed to—could be broadly positive for EM, relieving uncertainty and boosting sentiment on growth in the world's largest economy. EM borrowers with higher proportions of debt in US dollars rather than local currency may be more vulnerable, including some corporations that may have relied too much in recent years on cheap dollar funding. But one of the most encouraging developments in EM over the recent years has been the growing trend towards domestic currency issuance, to avoid the currency mismatch that crippled EM in '98.
- China's slowdown: As discussed in the previous section, we see challenges ahead for economies closest to China as it transitions to a slower but higher-quality growth model. Some EM economies are more levered to China's investment than to its consumption, and so will benefit less than others from this rebalancing.

We are long the Chilean peso, Colombian peso and Russian ruble—commodity-driven currencies that we think hold value versus the Israeli shekel.

currency weakness has mitigated the impact on producers whose revenues are in dollars, and overheads in local currency. We consider the implications of low oil prices in light of how well each country can weather a lower-for-longer oil price environment, including how diversified their economies are, and their policy flexibility to help cushion the impact.

In addition to overestimating the potential impact of these headwinds, we think markets may be underestimating the importance of policy flexibility as a differentiating factor in EM countries. Some countries are more willing and able to enact reforms and pursue policies that

In Brazilian debt, we see value in both nominal and real rates.

Can Energy Sap Credit?

Turning from the macro implications of our 'lower for longer' outlook for oil prices, we consider the reverberations in credit markets. After six years of a strong bull market, the credit cycle is aging and we are often asked if it can withstand the downturn in the energy sector, or whether the sharp deterioration in this sector will precipitate a widespread pickup in defaults. In our view, the gradual weakening in corporate credit this year has driven valuations to more-attractive levels that adequately compensate for the risks of default. However, we remain vigilant to signs of further deterioration in credit quality as the credit cycle advances into its late stages.

can lead to more sustainable growth. For instance, we think India is making gradual progress on much-needed reforms to open up to foreign investment, and Mexico has already committed to liberalizing its energy sector. By contrast, reforms in Brazil have taken a backseat to urgent measures to boost growth and tame inflation, and a corruption scandal has contributed to political

paralysis. Still, we believe the longer-term outlook for Brazil may be more promising, given good

demographics and a longstanding receptiveness to foreign investment.

Commodities downturn: Commodity production often requires significant investment,

resulting in "supercycles" in which supply adjusts only gradually to sustained changes in

first is a demand-side change, driven particularly in the industrial metals sector by China's

slowing growth: China accounts for roughly half of global demand for copper and iron/ore. The second is a supply-side change. Crude oil producers are battling for market share rather than cut production in response to lower prices, resulting in a significant supply overhang. We think these developments are a challenge for EM, as many EM countries produce commodities. However, commodity production costs and investment tend to be much lower in EM, which reduces the need to take projects offline and slash capital expenditure. As a result, a significant rebound in prices may not be required to turn a profit. Additionally, EM

demand and price. Commodity markets today are adjusting to two major changes. The

We base our moderately constructive view on credit for this quarter on our belief that the weaker trend in credit this year is due in large part to technical pressures and an aggressive pricing of the risks stemming from the commodities slump. First on the technical backdrop, investment grade (IG) issuance this year is on track for a new record around \$1.3 trillion, spurred by the desire to lock in low rates ahead of the Fed hike and to finance the significant pickup in mergers and acquisitions (M&A), which we will revisit below. The market has struggled somewhat to absorb this surge of supply, but we expect it to subside heading into year end, relieving some pressure on spreads.

As for the repricing of commodities-related risks, the most exposed sectors—energy, metals and mining and natural gas—account for around 18% of the high yield (HY) benchmark indexes. In Europe the proportion is far smaller, at around 4%. The cheapness of these sectors relative to the rest of the HY market is almost unprecedented, as they are trading in distressed territory while spreads in other sectors average less than half those levels. Moreover, industry sectors that tend to benefit from low commodity prices—such as leisure, lodging and retailers—account for around another 15% of benchmark HY indexes. In the IG spectrum, industries negatively impacted by commodities weakness account for about 13% of the benchmarks, while around 13% is comprised of industries that stand to gain.

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We are moderately

constructive on credit.

In the investment grade sector we favor financials, which we believe are least exposed to M&A risk.

In high yield we are positive on leisure, lodging and retailers. In the energy sector we see opportunities in middle stream companies.

Our case for holding an overweight in credit includes a fair appraisal of market fundamentals heading into year end. While M&A has increased significantly—a typical late-cycle development and a warning signal for credit negative corporate behavior—we believe that much of the activity to date has been more strategic than aggressive, and created relatively high-quality capital structures. Indeed in many cases, the market has rewarded deals on both the side of the acquirer and of the acquired. In another late-cycle sign, leverage has also risen, but mainly among the highest quality companies. Asset values have also increased, and coverage remains stable. Moreover, in the HY sector, where the lower credit quality of the issuers can make refinancing particularly difficult in a less benign market environment, companies have largely covered their funding needs through to 2017. Defaults remain low and we anticipate a pickup in the coming year, focused in the energy sector, with the broader market default rate reaching around 5.5% in 2017.

We also continue to see supportive conditions in the macro environment, despite the more somber outlook this quarter. Growth remains positive and monetary policy is still very accommodative. The Fed's apparent commitment to a shallow path of hikes is also favorable for credit markets. Despite this relatively non-threatening backdrop, spreads on IG and HY credit currently suggest a material risk of the US entering recession, which we think is unlikely. An additional factor favoring credit in the near term is the positive seasonal effects, as credit tends to do better in the months around year end.

The risks to our view are mainly a sudden spike in risk aversion, possibly stemming from a further commodities slump or a deeper shock to global growth.

Risk Considerations

Investments in fixed-income securities are subject to credit and interest rate risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. Credit risk is the risk that an issuer will default on payments of interest and principal. This risk is higher when investing in high yield bonds, also known as junk bonds, which have lower ratings and are subject to greater volatility. All fixed income investments may be worth less than their original cost upon redemption or maturity.

Emerging markets securities may be less liquid and more volatile and are subject to a number of additional risks, including but not limited to currency fluctuations and political instability.

The currency market affords investors a substantial degree of leverage. This leverage presents the potential for substantial profits but also entails a high degree of risk including the risk that losses may be similarly substantial. Such transactions are considered suitable only for investors who are experienced in transactions of that kind. Currency fluctuations will also affect the value of an investment.

Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity.

One basis point is equal to 1/100th of a percent.

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