Millennium Global Currency Management Review

Addressee

This paper is addressed to the Officers of Suffolk County Council as administering authority for the Suffolk County Council Pension Fund ("the Fund"). It relates to Millennium's active currency mandate. The paper reviews the manager, the manager's active currency strategy and performance over the period of the Fund's mandate.

Background

Suffolk County Council invested in the Millennium Global Currency Program on 1st April 2008. The objective of the mandate is to achieve a positive return from the active management of currency exposures in both developed and emerging market currencies with the allocation representing approximately 2½% of Fund's assets.

When assessing managers, our manager research team look at performance in the context of the manager's investment style and the market conditions in which they operate. In addition to performance, we also consider other factors including stability of personnel, changes in the value of assets under management and risk management processes. Millennium has struggled to perform over the past four years; this is partly a function of unfavourable conditions. There are aspects of their approach and wider factors affecting Millennium that merit a re-appraisal of the manager.

Recommendation

We do not believe that Millennium is likely to add value through its present approach to active management of currency exposures, largely because of prevailing market conditions. The recent environment has been challenging for active currency management, particularly with the elevated volatility in developed currency markets. In our view, Millennium has been slow to adapt to this environment (and its persistency); they continue to manage the portfolio to its longer-term strategic themes despite acknowledging that a greater emphasis on tactical positioning would have benefited performance during this difficult period. Because we do not believe financial conditions are due to change soon, we would recommend terminating the mandate.

Millennium Global Currency programme's process

Millennium takes a fundamental discretionary approach to active currency management. They set currency positions according to their analysis of various Fundamental factors and Market dynamics within a discretionary framework. The team focus on determining a number of key investment themes that will drive the long-term strategic positions within the portfolio; these will typically be made up of 10-15 currency pairs in up to 30 developed and emerging market currencies. The strategy enables Millennium to take concentrated positions in a currency which reflects the team's fundamental view. For example, the fund is currently considerably Short the Euro at 35% of the net asset value of the portfolio. We will discuss the impact this has had on performance in the next section. Millennium also takes tactical positions which they expect to have a shorter-term investment horizon and will often be driven by market dynamics rather than pure fundamentals.

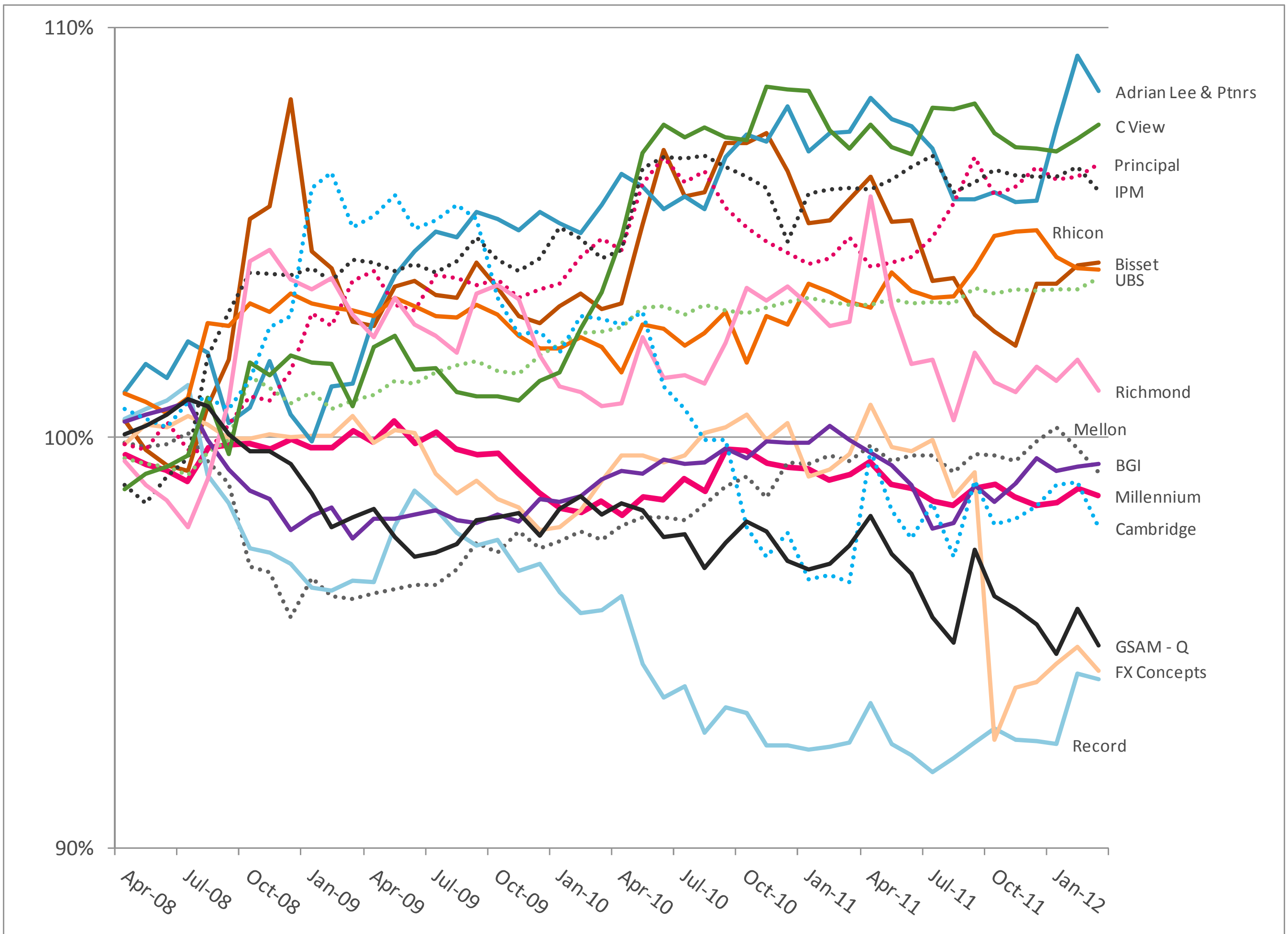
Part of Millennium's core investment philosophy centres around risk management. The firm has developed in house tools targeting efficiency in the risk management process. Effective risk management should focus on both the aggregate portfolio position and individual trades to reduce downside risk and to maximise returns. This is particularly the case for a discretionary approach where, unlike systematic funds, risk management is not inherent in the process. As part of Millennium's process, risk parameters are discretionarily set by the Chief Investment Officer, Michael Huttman. The strategic investments themes – which are longer-term and based on more fundamental factors - are allocated a larger risk budget than tactical positions which are shorter-term. The typical risk budget allocation is 10-12bps for a tactical position and up to 50bps for a strategic position. Millennium measures their risk budget using Value at Risk (VaR); this measures the risk of loss to the portfolio on any one day to a 95% confidence level. This measure takes into account diversification benefits of allocating across currency pairs. It does therefore have the potential to underestimate losses during periods when developed market currencies exhibit high correlation. For example, the markets have experienced periods of 'flight to safety' conditions over the last few years. In these conditions, investors will typically sell perceived higher risk assets, including emerging market currencies in favour of less risky assets such as developed market currencies. Millennium applies a strict stop loss policy, with the level pre-determined at the outset of the trade. This has the effect of closing loss-making positions in order to avoid further loss. However, there is a risk that this may close out a position after a sharp decline (i.e. after the horse has bolted) with no exposure able to capture any potential rebound from an oversold position. Millennium reviews stop loss levels on an ongoing basis, calibrating the size and volatility of the trades, adding to positions of strength and reducing losing positions.

Investment performance review

Millennium targets a performance of LIBOR + 10-15% at a target volatility of 15% per annum. Performance has disappointed over the four-year life of the Fund's investment in Millennium's Global Currency Program, with the manager returning -2.75% p.a. since inception in 2008. The pattern of delivery of return has been uncorrelated with equities and so has provided some diversification benefit. However, the mandate is also expected to deliver strong returns.

Chart 1 below shows Millennium's performance relative to its peer group of active currency funds. The environment has been very challenging for active currency management generally with many managers in the universe having failed to deliver positive performance over the past 4 years.

Chart 1: Performance[1] of managers from Hymans Robertson's database (Apr 08 - Apr 12)



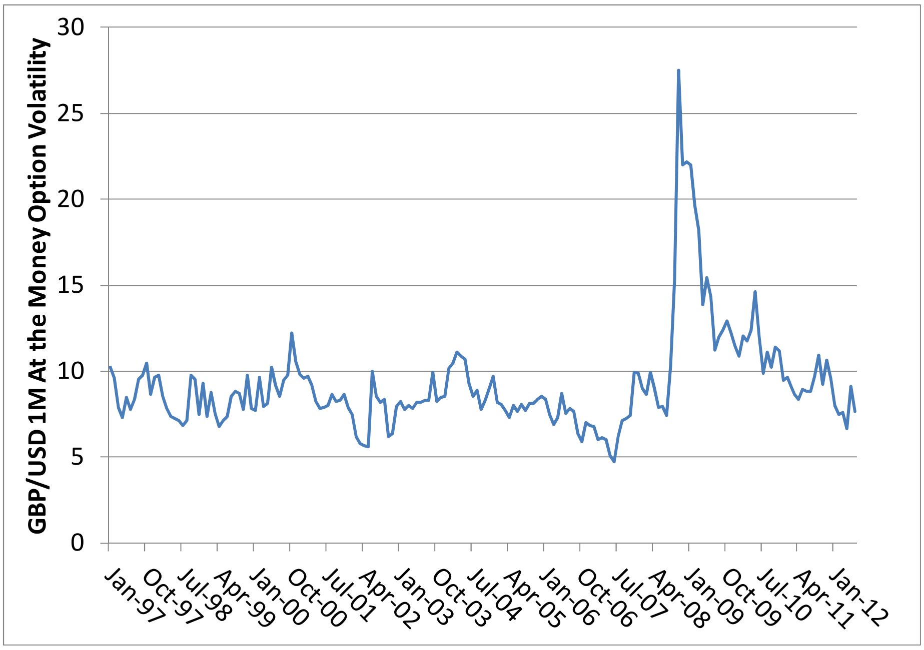
Source: Managers, Hymans Robertson

[1] Performance of the managers has been scaled to a 2% risk target so that the return patterns are consistent.

Conditions have proved particularly difficult for Millennium's approach. The strategy has a structural bias towards long-term strategic views, driven by fundamental analysis.

In recent years we have seen an increase in currency market volatility particularly in developed markets. This is highlighted in Chart 2 below. This volatility will typically cause 'choppy' currency markets, whereby a currency's strength could fluctuate significantly over the course of a month but end the month with no change in value. Millennium's strict risk management policy which has pre-defined stop-losses means that in this type of environment the long-term strategic positions will be stopped out and losses crystallised as the currencies trade outside of the pre-determined range. This also increases trading costs as they "stop out" losing positions more frequently.

Chart 2: Volatility in the exchange rate between GBP-USD, measured by 1mth at the money option pricing



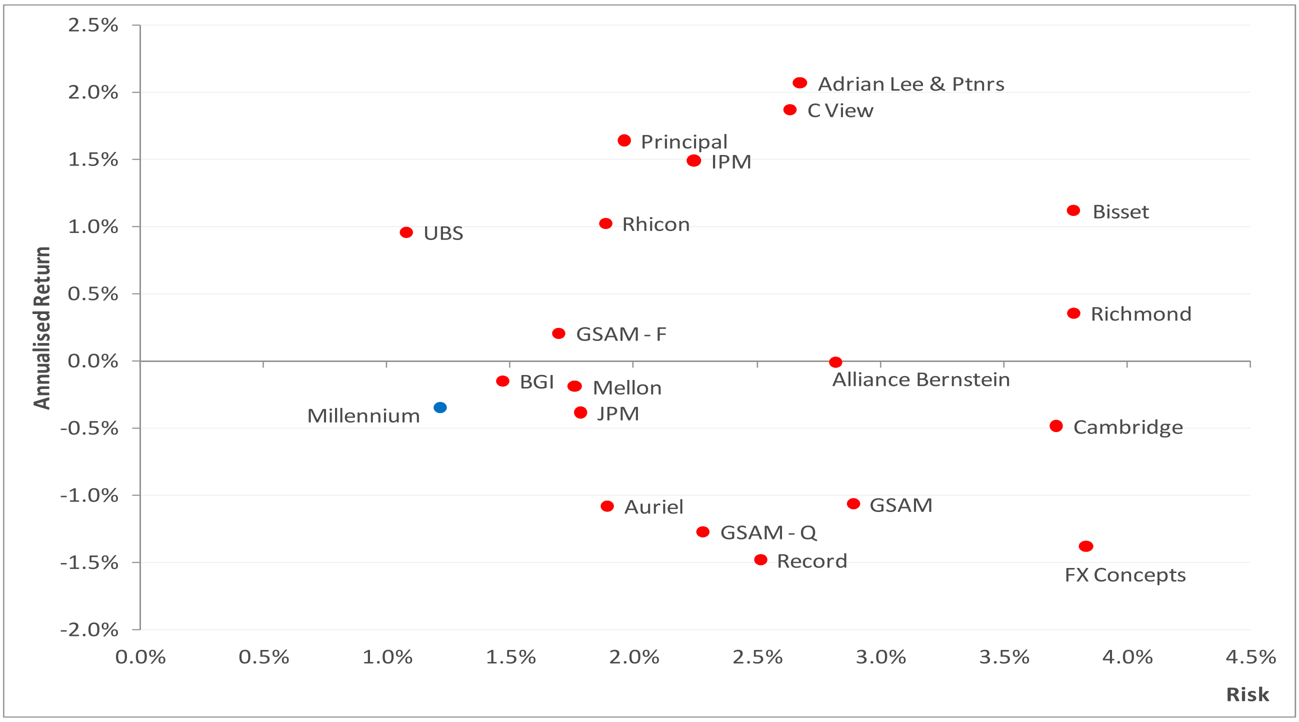
Source: Datastream, Hymans Robertson

In this environment there are few strong and sustained trends which Millennium's strategy needs to generate performance. The market continues to be characterised by short, sharp moves that tend to reverse as market "risk-on / risk-off" sentiment changes, reflecting continuing uncertainty about the economic outlook and monetary policy. We can see these conditions continuing for a period of years.

As described earlier in the report, Millennium is able to take concentrated positions in a currency to reflect a long-term strategic view. An example is Millennium's long held view on the instability in Europe. For over 18 months, Millennium has been cognisant that the Eurozone debt crisis and ensuing European recession pose downside risks to the Euro. Their portfolio has been positioned to reflect this; they are short the Euro. This has been expressed in a number of currency pairs, including Euro versus US$, Norwegian Krone and Sterling. This could be considered as risk mitigating, i.e. the Euro could have broken up. However, the Euro has proved surprisingly resilient in spite of the environment. Consequently, this allocation has, in aggregate, detracted from performance. Millennium admits that, in hindsight, its performance would have been better with a more dynamic process, i.e. with a greater allocation of the risk budget given to tactical positions. Millennium manages the portfolio such that its views on currencies are expressed either short or long against the Euro or USD. However since the global financial crisis started in 2007, these currencies have exhibited not only relatively higher volatility, but have also been used as 'safe haven' currencies for nervous investors in the 'risk-on/risk-off' environment. As such, trading in Euro and USD has not generally been driven by the fundamentals upon which Millennium's valuations heavily rely and this has had a negative impact on performance.

The ongoing monitoring of Millennium has also led us to the conclusion that the firm has been managing the portfolio below its risk target. This is clearly a reflection of the firm's lack of clarity over the market and has therefore taking the decision to manage the portfolio highly defensively. This is evidenced in Chart 3 below; Millennium has exhibited a significantly lower level of risk than many of its peers over the past 4-year period despite having the same risk target.

Chart 3: Risk vs. Return[2] of managers from Hymans Robertson's database (Apr 08 - Apr 12)



Source: Managers, Hymans Robertson

We understand the rationale for Millennium's prudence during this period and would not encourage excessive risk taking; however, we conclude that this has dampened the fund's return potential, as the defensive stance has left the portfolio unable to exploit favourable currency market moves. We also believe that the manager is being paid to take a certain level of risk and we would reasonably expect it do so over the long-term.

Corporate perspective

Millennium has suffered some reputational damage over the past year in two areas. We do not believe these issues would carry a great deal of importance if Millennium's performance had been positive.

The firm previously had a number of hedge fund offerings under the Millennium brand, managed separately from the currency fund. In 2011, Michael Balboa, the portfolio manager of Millennium's Global Emerging Credit Fund (MGEC), was arrested on charges of fraud committed whilst he ran the fund. MGEC was set up by Balboa in 2006 and liquidated in October 2008. The fund was valued at around $800m at its height but the liquidators estimate the likely recovery to be zero. A non-US investor recently filed a putative class action complaint against Mr. Balboa, Millennium and other defendants for an amount of approximately $800 million. Millennium regard this claim as highly speculative, relating to a discontinued area of the firm's business which does not involve any of the firm's current clients, funds, products, counterparties, systems or controls. We agree that this part of the business was separate from the firm's currency management but the distraction of dealing with ongoing litigation combined with the potential for client redemptions due to damage to the firm's reputation can only have a negative impact on the broader firm.

Millennium also suffered through its relationship with MF Global – the prime broker which filed for bankruptcy in 2011. Although it did not directly affect the Global Currency Fund which does not trade using futures, it did have an impact on clients, including the Suffolk Fund, which had equitised capital held in managed accounts with MF Global. This inevitably raises some concerns over the level of operational due diligence Millennium carries out with counterparties and other related service providers.

[2] Performance of the managers has been scaled to a 2% risk target.

Conclusion and recommendation

We had advocated active currency management as a source of returns uncorrelated with traditional equity and bond markets. Between 2002 and 2007, currency exhibited low correlation with equities. As a result, the argument for maintaining currency as a stand-alone asset class was strong. However, in the past four years many currency managers, including Millennium, have delivered negative performance, often during periods of volatility in the equity markets and thus undermining the case for currency as a diversifier. Part of the problem has come from floored interest rates which have made interest rate carry positions hard to exploit. Another problem has been the macro-level impact of political and central banks decisions which have over-ridden fundamental-based assessments of value across many asset classes, and not just currency. We believe that these conditions are unlikely to change in the short or even medium term.

We have included a page at the end of this paper, taken from Millennium's report as at end March 2011. This shows their performance record month by month over the course of their mandate. Millennium has struggled to deliver performance over this period. Performance was particularly weak from June 2009 to February 2010 and again from November 2010 to end 2011.

We do not believe the firm's core investment philosophy is wrong – the investment team has historically shown the ability to generate alpha from actively managing a currency portfolio within a fundamental and discretionary framework. However, we are not convinced that Millennium will be able to achieve its performance target (and therefore add value) to the Fund until there is a change in financial conditions. We do not consider such a change to be imminent. Taking this into account, and combining that result with Millennium's inertia to consider adopting a greater element of tactical management in their approach, we would recommend that the Committee consider termination of Millennium's mandate.

If Millennium's mandate were terminated, we would apportion the assets they manage across Legal & General's passive equity and bond mandate. Millennium also conducts passive hedging of approximately 50% of the Fund's Euro exposure, and it would be necessary to consider that position if the mandate were terminated.

We do still believe that outperformance can be generated through active currency management, but potentially using a more tactical approach. The Fund will be exposed to modest elements of active currency within Winton Capital's Futures Fund and BlueCrest Capital's AllBlue Fund. Both managers will dynamically trade developed and emerging market currencies on a tactical basis, as part of their managed futures programmes.

Disclaimer

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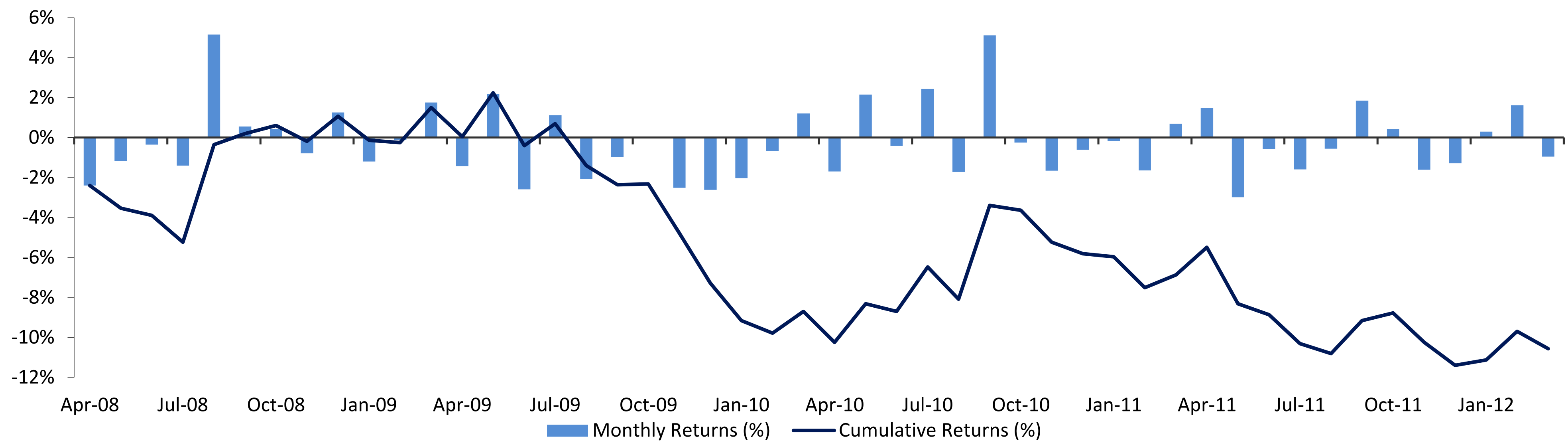
For and on behalf of Hymans Robertson LLP

Risk Warning

Please note the value of investments, and income from them, may fall as well as rise. This includes equities, government or corporate bonds, and property, whether held directly or in a pooled or collective investment vehicle. Further, investments in developing or emerging markets may be more volatile and less marketable than in mature markets. Exchange rates may also affect the value of an overseas investment. As a result, an investor may not get back the amount originally invested. Past performance is not necessarily a guide to future performance.

Net Returns since Inception to 31 March 2012[1]

Returns (%)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Year
2008	-	-	-	-2.40	-1.17	-0.36	-1.40	5.15	0.56	0.41	-0.79	1.26	**1.08**
2009	-1.19	-0.12	1.76	-1.43	2.19	-2.59	1.11	-2.08	-0.98	0.04	-2.52	-2.62	**-8.26**
2010	-2.03	-0.68	1.20	-1.70	2.15	-0.42	2.43	-1.72	5.11	-0.25	-1.66	-0.61	**1.59**
2011	-0.17	-1.64	0.69	1.48	-2.99	-0.59	-1.59	-0.56	1.85	0.43	-1.61	-1.29	**-5.92**
2012	0.30	1.61	-0.96										**0.94**
Return for Q1-2012													**0.94**
Annualised Return Since Inception													**-2.75**
Cumulative Return Since Inception													**-10.57**



Source: Millennium Global as at 31 March 2012.

1. Returns are shown net of fees since inception of 1 April 2008. For illustrative purposes only. Past performance should not be construed as a guarantee of future performance and the value of such an investment may fall as well as rise. Certain accounting assumptions have been made and some estimated values used in compiling this data. Investment professional use only. Not for public distribution. Information provided herein was supplied in good faith based on information which we believe, but do not guarantee, to be accurate or complete however we are not responsible for error or omissions that may occur.

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