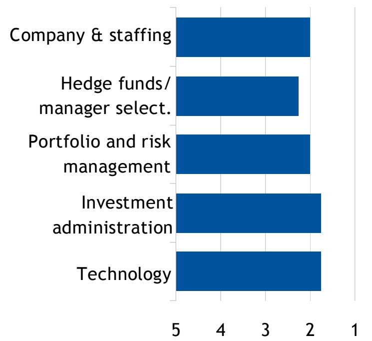
Fund of Hedge Fund Managers
Global
Rating Report

Man Investments

Asset Manager Rating

MANAGER RATING
M2+
FitchRatings
www.fitchratings.com

Rating Criteria



Source: Fitch

'M2+' Description

Strong: Asset manager operations demonstrate low vulnerability to operational and investment management failure.

Analysts

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Summary

On 21 October 2009, Fitch Ratings assigned Man Investments' fund of hedge funds (FoHF) management activities a 'M2+' rating.

Man Investments' 'M2+' rating reflects the stabilisation of its business and the swift consolidation of the two fund of hedge fund platforms: RMF Investment Management (RMF) and Man Glenwood (Glenwood). Despite a global re-organisation resulting in a 20% staff reduction, Fitch Ratings notes the otherwise stability of Man Investments' management and key investment staff. The agency also takes comfort from the continuity in the investment process, which has been refined with respect to risk and process controls. The migration to RMF's technological and operational platform has been completed, whilst the rationalisation of the product range is ongoing.

The rating is based on Man Investments' disciplined and well adhered to investment process, which is founded on RMF's process but incorporates certain refinements through more judgemental inputs and increased accountability as well as recent lessons learnt during the crisis. Specifically, the rating is supported by Man Investments' well-documented manager due diligence processes, which enhance the critical role of several dedicated risk management teams.

Top-down inputs are formalised in the strategic and tactical asset allocation processes, which are largely driven by a blend of quantitative models and judgmental approach, as reflected in the involvement of a new investment strategy team, which advises asset allocation committees and portfolio managers. The rating also reflects the company's risk management framework, which is deployed throughout the investment process. This is reflected in first and second levels of controls over the managers and portfolio risks based on hedge fund holdings, market sensitivity analysis and systematic risk-return analysis.

The rating further reflects the depth and breadth of Man Investments' specialised staff in all core investment functions and locations as well as the scalable processes and resources supporting the company's control environment and governance mechanisms. In particular, Man Investments benefits from a 45-strong risk management team and access to Man Group plc's shared support and control functions and a suite of integrated business and risk systems supported by in-house data management capabilities.

Challenges for Man Investments in the medium term include to complete the product range rationalisation and to demonstrate that the combined global team can effectively outperform by implementing a refined investment process. Man Investments will also be challenged to ensure its large size and tight controls do not impair flexibility, notably through an emphasis on individual accountability and judgment, as a complement to its procedures and models.

Manager Profile

Man Investments

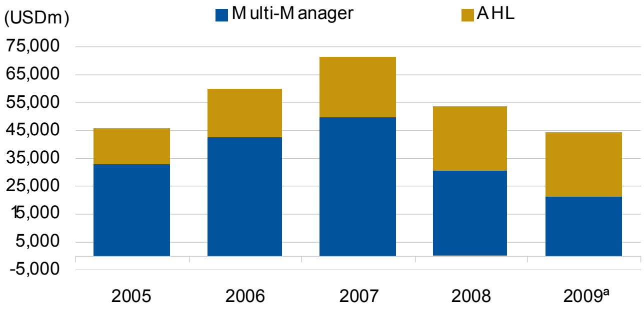
Man Investments is a provider of alternative investment products to institutional and private investors worldwide, essentially in the form of funds of hedge funds. As of end-June 2009, funds of hedge funds under management was USD116.9bn.

Man Investments in its current form results from the integration of the two funds of hedge funds subsidiaries of Man Group plc: RMF, which was established in 1992 and since 2002 has been an indirect subsidiary of Man Group, and Man Glenwood, which was established in 1987 and was acquired by Man Group plc in 2000.

Address	**Huobstrasse 3 8808 Pfäffikon SZ Switzerland**	**Ownership**	**Man Group plc**
Website	**www.maninvestments.com**	**CEO**	**Peter Clarke**
Type of organisation	**Investment management firm**	**CIO**	**Herbert Item**
Year founded	**1983**	**Managing Director**	**John Rowsell**
		COO	**Serge Cadelli**
Domicile, place of incorporation	**Switzerland, UK, US, Singapore, Guernsey**	**No. of hedge fund research analysts**	**28**
Registration(s)/jurisdiction(s)	**FINMA GCFC ,FSA, SEC for the relevant subsidiaries**	**No. of portfolio managers**	**19**
		No. of risk managers	**45**
		No. of employees	**176**

Assets Under Management

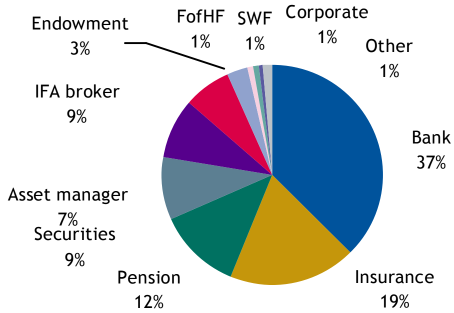
Growth in AUM



[a] September 2009
Source: Man Investments

Client Type

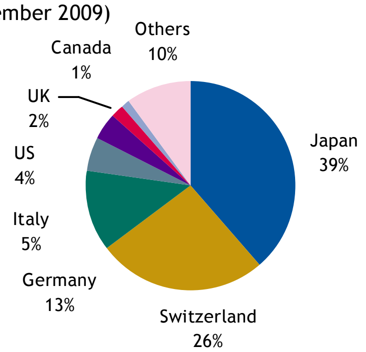
(As at 30 September 2009)



Source: Man Investments, based on the 50 largest clients

Client Geographic Location

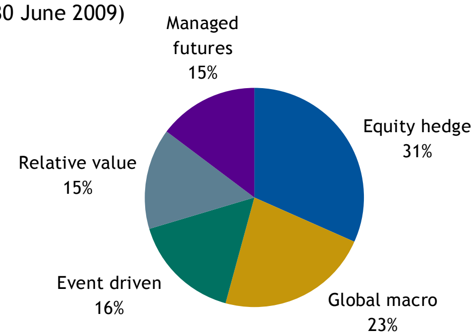
(As at 30 September 2009)



Source: Man Investments, based on the 50 largest clients

AUM by Strategy

(As at 30 June 2009)



Source: Man Investments

Man Investments

Key Rating Drivers	Rating M1

Strengths

- Long history, leading market presence and strong institutional background in fund of hedge funds management since 1992 for ex-RMF and 1987 for ex-Glenwood
- Completion of the merger and restructuring of RMF/Glenwood swiftly completed in less than 12 months
- Disciplined, structured and consistently executed investment process, based on a robust blend of quantitative and qualitative analysis that was largely unaffected by the consolidation with Glenwood
- Scalability and efficiency of processes and infrastructure, combined with ability to provide customised solutions and managed accounts
- Depth of specialised staff in all core functions and key locations (Switzerland, New York, London, Singapore, Chicago)

Challenges

- To finalise rationalisation of product range while retaining and diversifying investor base
- To demonstrate that staff of the combined Man Investments entity can work effectively as a team, on a global basis
- To ensure that its size does not impair flexibility, selectivity and ultimately performance. In particular, to maintain selective fund/manager investment processes, which effectively avoid severely underperforming funds and headline risk
- To emphasise individual accountability and judgment as well as fundamental top down views, to complement existing procedures and models

Company & Staffing — 2.00

- Deep and long experience as a manager of funds of hedge funds
- Business franchise and reputation adversely affected by financial crisis, resulting in a significant reduction in AUM and global restructuring to maintain scale and financial performance
- Integration of RM, MGS and Glenwood swiftly completed with no business disruption during merger process
- Experienced and stable senior management, with overall long company tenure and more than 15 years of industry experience
- Staff reduced by 20% post merger, affecting primarily Glenwood while maintaining most of RMF managers and key staff
- Preservation of depth and breadth of staff in all core functions, resulting in limited key person dependency post merger
- Disciplined, formalised corporate governance mechanisms strengthened in 2009
- Benefits of belonging to Man Group plc ('BBB+'/Outlook Stable).for financial backing, as well as access to infrastructure and shared support and control functions

Hedge Funds/Manager Selection — 2.25

- Superior sourcing capabilities resulting from size, reputation, vast network of relationships and deep data access
- Comprehensive due diligence process, based on a robust blend of quantitative (screening, performance and risk analysis) and qualitative analysis complemented by an independent operational due diligence conducted by an expanded dedicated team
- Manager selection process strengthened following losses resulting from indirect Madoff exposure, including veto right granted to the chief risk officer at investment committees and additional layer of manager analysis performed by the new investments team
- Well documented, risk-focused manager (re)approval process formalised in internal ratings and ratified at manager board level
- Significant focus on monitoring of existing approved managers (approximately 280 management companies as of September 2009 being reduced to a target 150 core list), based on systematic risk-return analysis (factor model, VaR), market sensitivity analysis and regular manager contacts, among others

Portfolio and Risk Management — 2.00

- Strategic asset allocation (SAA) and tactical asset allocation (TAA) are largely driven by quantitative models complemented by qualitative macro-views of a new strategy team
- More reactivity in asset allocation was brought through increased frequency of board meetings and the introduction of a systematic overlay programme in 2009
- Reinforced qualitative judgement and accountability for investment decisions
- Adequate procedure for portfolio rebalancing and hedge fund capacity management
- Use of multiple risk management approaches (full transparency, sensitivity analysis, return based analysis)- room for more aggregation of information
- Established risk management framework, actively and effectively deployed throughout the investment process
- Liquidity mismatch risk modelled via stress tests using sophisticated internally developed analytics

Investment Administration	1.75

- Detailed and transparent investor reporting, exemplifying the quality of Man Investments' focus on client service
- Straight-through processing is supported by a proprietary fund management tool (TPO), linked with middle office and accounting system (since recently, HedgeSphere)
- Efficient product set-up with the majority of portfolios allocated to two fund umbrellas, allowing for a high level of tailoring to investor needs
- All ex-Glenwood funds have migrated to former RMF systems and the operating model works in an efficient manner

Technology	1.75

- Excellent range of proprietary tools covering all investment functions and including models to define the SAA/TAA, Heimdall, the main manager research and analysis tool, and TPO as the core portfolio management tool
- Recent migration of former middle-office system to HedgeSphere, improving functionality, depth of analysis and efficiency
- Central database collecting, analysing and reporting data come from various providers such as Stark, HFR and TASS
- Risk management systems are both proprietary (liquidity or return-based analysis) and third party (RiskMetrics for managed accounts)
- Overall good integration of systems, with strong reporting capabilities

Company & Staffing

Shareholding & Financial Standing

Man Investments is a provider of alternative investment products to institutional and private investors worldwide, essentially in the form of funds of hedge funds but also convertible funds, advisory and structured products. As of end September 2009, funds of hedge funds under management were USD16.98bn. Man Investments in its current form results from the integration of the two funds of hedge funds subsidiaries of Man Group plc: RMF and Man Glenwood. RMF was established in 1992 and since 2002 has been an indirect subsidiary of Man Group. Glenwood was established in 1987 and was acquired by Man Group plc in 2000. While RMF had a focus on institutional clients, Glenwood aimed more at private investors. Tracing its roots back to the 18th century, Man Group is a UK publicly listed company on the FTSE 100 index, with a market capitalisation of around GBP5.7bn as at September 2008. In addition to alternative multi-management, the second core pillar of Man Group's alternative investment business is AHL, a quantitative manager using systematic trading strategies (managed futures). Man Group also has affiliated single manager hedge funds. The group's AUM were USD44bn at end-September 2009, which break down as follows:

Man Investments' AUM as at September 2009

Business line	AUM (USDbn)
FoHF	16.9
Convertibles	0.9
Affiliated managers	0.7
Leveraged finance	3.2
Total	**21.7**

Source: Man Investments

The objective of the consolidation of RMF and Glenwood, announced in March 2009, was to maintain scale and operational and financial performance, while reducing complexities and re-aligning its business model to address investors' growing concerns over the fund of hedge fund model. Therefore, governance, transparency and risk management have been the underlying themes supporting the consolidation. In this context, a stated strategic initiative was the development of managed accounts, which represented about one third of AUM as at June 2009. The integration of RMF and Man Glenwood into Man Investment was completed in a few months, with no business disruption during the process, despite continued performance challenges and client redemption pressures.

The merger of RMF and Glenwood built on RMF's structured investment model characterised by a disciplined and scalable investment process, supported by substantial corporate infrastructure. The new integrated global platform is consistent with the company's objective to provide a broad range of products to institutional and private clients worldwide. The firm has a global presence, with analytical staff located in Switzerland, New York, Chicago, London and Singapore, which Fitch views positively. Despite a large-scale restructuring, Fitch notes that the integrated entity has largely kept RMF's investment and operational processes, infrastructure and key staff, while incorporating some refinements from Glenwood, resulting thereby in a degree of continuity and stability in the organisation. Man Investments now needs to demonstrate that its staff can work effectively as a team, implementing a global investment process, to ultimately deliver on its objectives. In the meantime, the company remains vulnerable to headline risk, which may further affect its AUM if it materialises.

Man Investments combines the advantages of a decentralised investment firm with flexibility and accountability, with the benefits of belonging to a large group with scale and support. Indeed, it benefits from the institutional support of Man Group, which provides financial strength and corporate infrastructure. Shared and centralised support functions provide scale and efficiencies to Man Investments in the areas of operations, technology, legal, relationship management and client service.

Fitch affirmed Man Group's Long-Term Issuer Default Rating (IDR) at 'BBB+' with Stable Outlook on 13 October 2009. The IDR reflects the company's strong franchise in alternative investment fund management, its consistent net cash or modest net debt position, its prudent liquidity management, and a long track record of solid, if volatile, cash generation. The rating also considers significant performance challenges, investor appetite and funding pressures, as well as the market, credit and liquidity risks that arise from exposures Man Group has to its funds, although these risks are well-controlled. More information on Man Group can be found on fitchresearch.com.

The company focuses on both institutional and private clients. A breakdown of RMF's clients reveals some client-type and geographical concentrations (see the charts on page 2), particularly among Swiss/ German insurance companies, with the five largest investors representing a third of AUM. These institutional clients have proved to be relatively stable investors, but retention and further diversification of the client base will help strengthen Man Investments' business franchise.

Experience in the Asset Management Industry

Man Investments has had deep experience as a fund of hedge funds manager across several hedge fund cycles, since 1993 for RMF and 1987 for Glenwood.. The business developed rapidly after launch, as has RMF and Glenwood's market presence and respect. In 2008, RMF was among the five largest fund of hedge fund managers. As of March 2008, RMF and Glenwood's AUM were USD28bn and USD6.9bn respectively. However, despite its institutional focus, RMF's franchise was adversely affected by the financial crisis, as reflected by a reduction in assets under management (AUM) which was more severe than the rest of the industry (FofHF AUM dropped by approximately 40% from peak to trough). Nevertheless, with USD16.9bn in fund of hedge funds AUM as of September 2009, Man Investments remains one of the 5 largest fund of hedge fund managers worldwide[1] as at June 2009. The reduction in AUM resulted from redemptions and negative investment returns. Specifically, RMF's reputation suffered from a USD360m (1.5% of AUM at the time of the event) investment loss due to indirect exposure to Madoff fraud. The company responded appropriately to this fraud, taking immediate steps to improve the investment process, as detailed in the *Hedge Fund Selection* section of this report.

Man Investments positions itself as a one-stop-shop in the alternative investment management space. Therefore, the product offer is large, including diversified funds as well as numerous single strategy building blocks. The product offering has expanded over the past few years, but is now being rationalised to eliminate sub-scale products and to consolidate similar ones. The generic offering includes:

- funds of hedge funds (highly diversified, diversified, thematic);
- structured products (capital protected, income paying, SICAV/UCITS); and
- advisory services (tailor-made portfolios, co-managed mandates, access options).

This modular product structure enables the company to meet institutional client demand for tailored or structured solutions (representing 60% of AUM), using, where appropriate, Man Investments' structuring capabilities. Man Investments also quickly positioned itself as a leading provider of managed accounts (currently more than 60), which has represented up to a third of its AUM over the past few years.

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[1] Source: The Hedge Fund Journal

Corporate Independence & Governance

Disciplined and formalised corporate governance mechanisms contribute to preserving an optimal autonomy from Man Group combined with a high level of integration for operations and support. Corporate independence and governance have been a key focus and driver of the merger of Glenwood and RMF, in response to increased investor and regulatory scrutiny and a stricter regulatory framework.

A clear organisation of functional responsibilities, scalability of workflows, adequacy of systems and control functions support a strong control environment, evidenced by satisfactory internal and external (regulatory) audits. Specifically, Man Investments is fundamentally procedure-orientated, with procedures extensively documented and updated to reflect the recent consolidation. Process governance is provided by three key boards: the asset allocation board, the manager board and the newly created product and portfolio board, which meets quarterly to oversee and monitor all portfolio management activity.

Man Investments' directors operate at the Man Group level given that it is a group subsidiary. Man Investments' funds boards generally have five directors, two of which are fully independent, who meet on an annual basis.

The agency notes that the firm benefits from complete independence in the selection of its third-party service providers (fund administrators, custodians, data providers). The procedure includes quality checks and frequent reviews. Administrators are CITCO Fund Services (for the retail-oriented fund umbrella) and Swiss Financial Services (for the institutional fund umbrella).

Man Investments' local companies are supervised by the FINMA, the SEC, the FSA and CFTC, as well as local regulators in Guernsey and Singapore. Man Group is supervised by the UK's Financial Services Authority and has numerous regulated subsidiaries, including in the UK and US.

Staffing

Man Investments employed 176 people as at 30 September 2009. Staff levels have been reduced by approximately 20% since March 2009 as a result of the integration of the RMF and Glenwood businesses. Most of RMF's key staff remained in place, in particular the first and second layers of management in the new organisation, which brought an element of stability. The new organisation is meant to be global and therefore offers a better balance of staff across locations than in the past, with 58% in Switzerland, 24% in the US, 16% in the UK and a smaller representation in Asia.

The company is organised around four major business units: the hedge fund research team, the risk management team, the quantitative analysis team and the portfolio management team. New teams have emerged from the merger, demonstrating the focus that Man Investments places on top-down inputs and risk management. These are the investment strategy team and the overlay strategies team. Each of these teams takes a leading but coordinated role in the respective modules of the investment process. Overall, they are well qualified and experienced. Given the major re-organisation that became effective in June 2009, the teams need to demonstrate that they can work together well as a group, leverage their expertise effectively and demonstrate responsibility. Indeed, accountability of staff has been reinforced in the new structure. Specifically, portfolio managers (PM) now "own" the entire performance of all products. The adaptation of staff to the integrated investment process may be a challenge, albeit likely to have already been overcome at the time of writing. Analytical staff are located in five key financial centres (Switzerland, London, Chicago, New York and Singapore), which allow effective access to managers through a local presence.

Whilst staff reduction contributed to "right-size" the business, Man Investments managed to preserve the depth and breadth of staff in all functions. What used to be a key characteristic of RMF's resources results in minimal key person dependency, in line with the company's process-driven investment model, complemented by committee-based judgemental inputs. The modular but integrated approach to hedge fund investing emphasises the importance of team accountability and coordination, which is what Man Investments will need to demonstrate in its new structure.

Overall, and despite the merger, senior management teams show good stability. Man Investments' chief executive officer is Peter Clarke, who is also Man Group's CEO, demonstrating the focus placed by Man Group's top management on running the restructured alternative multi-management business. In the same vein, compared with the former RMF organisation, the roles of CEO and CIO have been separated, with Herbert Item, former CEO and CIO of RMF taking the role of CIO of Man Investments. To ensure an optimal segregation of functions at the top of the management structure, John Rowsell, former CIO of Man Glenwood, now oversees all risk and operations functions as well as the principal investments in affiliated managers. Man Investments benefits from an experienced and adequate management committee (see biographies in *Appendix A*), the members of which continue to take a hands-on approach at all key stages of the investment process, by attending the asset allocation board and the manager selection board and the newly created product and portfolio board. Senior managers demonstrate overall long company tenure and have more than 15 years of complementary industry experience.

The hedge fund research team of 28 is dedicated to all aspects of hedge fund due diligence, with the exception of operational due diligence and quantitative analysis, which are the responsibilities of the risk management group and the quantitative analysis team, respectively. The research team was the most affected by staff reductions as, prior to the merger, the combined research team represented 50 people. The hedge fund research team leader occupied this position at RMF and has 20 years of industry experience (including seven in the alternative investments industry). Beneath him, the seven hedge fund-style heads typically have eight to 10 years of experience and are supported by less senior analysts.

The 19 portfolio managers implement the investment process on core / diversified funds, which includes fund picking, asset allocation, hedging and rebalancing (including hedge fund capacity management; see *Portfolio and Risk Management* section), among other key responsibilities. The accountability of PMs has been reinforced in the new organisation, to make them full "owners" of performance and to give them more leeway in investment decision-making, as part of a more judgement-driven portfolio construction process.

The quantitative research team of 19 has a leading role in economic and econometric research, asset allocation and portfolio construction and risk management. The head of the team had the same role at RMF and has 15 years of experience. There are, on average, two quant analysts by style.

The risk management team is split between investment risk management, operational due diligence and corporate risk, technology and new investments. The function is characterised by its depth, specialisation and independence. The sheer size of the team (45 risk analysts) highlights the importance given to these areas to build a robust and controlled process. As it is highly integrated into the investment process and supported by numerous tools, while having separate reporting lines, it provides a real challenge through formal interaction between investment staff and risk specialists. For instance, to reinforce controls over the hedge fund selection process, Man Investments has created a new investment team to provide an independent review of the initial due diligence. Other risk management teams include: the hedge fund risk management team of 18, which manages investment risk at the manager level; the product risk management team, which manages investment risk at the portfolio level; and the operational risk management team of 10, which manages operational and valuation risk at the manager level.

Hedge Fund/Manager Selection

Sourcing

Man Investments' sourcing capabilities result from its long track record and established market presence, reputation as a sophisticated investor, manager seeding programme and vast network of relationships managed through its global presence.

Sourcing capabilities are also supported by deep data access. The due diligence on existing hedge funds starts with an in-depth quantitative screening on a universe of over 6,000 managers, using various proprietary models. Large amounts of data are collected in a central database fed by Lipper TASS, HFR and Stark. Analysts identify candidates for due diligence based on performance analysis, which includes peer group and stress test analysis and its impact on a given portfolio.

Capacity is managed via capacity reservation agreements and lock-up acceptance for many of the managers in which Man Investments has invested.

Hedge Fund Selection

The hedge fund selection process involves inputs from the hedge fund research team (largely qualitative assessment), legal, the quants team (screening and performance analysis) and the risk management team (operational due diligence), among others. At the end of the process, a manager board selects funds and managers for its approved investment list. Once a manager is approved, its continued quality is monitored through the "change management process". Man Investments' process is risk-focused, thereby formalised and involving a significant input and challenge by risk management teams. The process was reviewed and refined following exposure to Madoff and consolidation with Glenwood.

Hedge fund assessment is modular, with ultimate manager approval reflecting all of the inputs. Research output is formalised in several ratings (namely a qualitative, quantitative, risk management, operational and legal rating), each reflecting a critical dimension of the assessment. Their combination forms the basis for the attribution of a) an overall rating, which indicates the weight a manager should have in a defined portfolio, and b) a "change management" rating, which shows how the relationship with a hedge fund manager should be managed and monitored. All due diligence reports (as well as meeting and calls memos) are highly documented, centralised and easily accessible by all in the Heimdall system. The average time for completion of the due diligence process ranges from three to six months, depending on the manager and the strategy.

Man Investments requires a certain level of transparency from the managers. Information is typically collected through the initial and ongoing risk management questionnaires. For liquidity and transparency purposes, Man Investments endeavours to invest via managed accounts as often as possible.

The monthly manager board, which is composed of the most senior investment professionals, approves (and re-approves quarterly) each hedge fund, decides on the intensity of the monitoring (aka change management process and validates the suitability of the manager in a portfolio context. It is worth noting that portfolio managers are only invited to these committees as non-active members, thereby highlighting the separation between the hedge fund selection and portfolio management process. In addition, in 2009, the chief risk officer (CRO) was awarded a veto right over hedge fund selection, subject to certain defined criteria.

Overall, Fitch views the selection process as very disciplined and systematic, supported by adequate tools and documentation/tracking procedures. Yet, a disciplined process does not exclude judgement calls, which was the main input of Glenwood's judgement-driven bottom-up investment process and which might have prevented RMF from having exposure to Madoff. Indeed, a challenge for RMF will be to maintain the flexibility of its investment process to avoid the pitfalls of bureaucratic investment decision-making.

Having invested in more than 1,000 funds since 1983, Man Investments has learnt from the exposure it had to various blow-ups, including the recent indirect exposure to Madoff. RMF was invested in two funds that were directly or indirectly sub-advised by Madoff Securities and for which Madoff Securities acted as a broker/dealer, executing the investment strategy for a total of USD360m. Operational due diligence has been refined in a number of areas (see below), while analysts now conduct autocorrelation analysis as part of the quantitative analysis of returns. Furthermore, Man Investments will not invest in a fund if it has no access to the ultimate decision-maker at the manager or sub-advisor level.

Man Investments is reducing its approved list from about 280 funds to 180-150 following the consolidation, thereby highlighting the increased selectivity of the manager. Approximately 33% of investments are currently held in managed accounts, which allows for full transparency on a daily basis and improved liquidity.

Operational Due Diligence

A dedicated and autonomous operational due diligence team of 10 located in Switzerland, the UK and the US conducts a thorough review of all underlying hedge funds' operational risks. The process includes the review of a compulsory operational risk questionnaire as well as a number of other requested documents, and an extensive on-site review. The depth and breadth of the analysis and dedicated resources was reinforced in 2009.

Man Investments' operational due diligence focuses on assessing the manager's business management, functional responsibilities, operations, controls and outsourcing. The scope expands to the hedge fund's middle- and back-office functions as well as the administrator, prime brokers and other service providers. Reference checks on managers are performed by style analysts and external service providers.

Conclusions of the operational due diligence are documented in a detailed operational risk management assessment report for each manager and subsequently stored in the Heimdall system. They are an integral part of the selection process and funds can be rejected based solely on operational concerns, through the veto right that the CRO has at the manager board.

Following the Madoff fraud, Man Investments has heightened the scope of the manager review when key service providers are affiliated, irrespective of the level of controls. Furthermore, Man Investments will not invest in a fund that carries out custody of its own assets with a non-publicly listed entity that is also affiliated with the managers. Another rejection criterion is when a fund allocates assets to another unaffiliated fund or advisor, although there are some documented exceptions to this restriction.

Portfolio and Risk Management

Man Investments implements a standard but structured investment process: a combination of top-down asset allocation (strategic and tactical asset allocations) and bottom-up manager selection (see above). This process is based on a deeply-rooted philosophy that risk management should be embedded across all modules of the investment value chain. The process combines the discipline and repeatability of an ex-RMF institutional-oriented process with the judgemental inputs of the Glenwood bottom-up process, which business model and private investor focus allowed for more reactive or opportunistic approaches.

Portfolio Construction

Strategic asset allocation (SAA) defines annually the allocation between Man Investments' conceptual hedge fund styles[2], in line with the company's long-term views on the economy and the hedge fund industry. This process is driven heavily by quantitative models, which perform a simulation-based optimisation, including final sensitivity analysis, with historical and forward-looking inputs for risk / return expectations on strategies. The allocation weight varies between each fund's objectives and guideline but typically a 10% to 35% allocation band is allowed for each style in a standard diversified fund.

Tactical asset allocation (TAA) is defined four times a year to reflect near-term hedge fund industry views or more often if needed. TAA weights are derived from an assessment and scenario analysis by style experts of the likely impact of the expected change in market conditions on a six-month horizon on hedge fund strategies. It considers predefined macro-economic scenarios by the chief investment officer and the bottom-up views from the hedge fund research team on each "style". A proprietary algorithm, which is fed with the above qualitative inputs, calculates the TAA weights. TAA weights can fluctuate by up to 10% from SAA (with the magnitude defined for each style) for diversified funds. Tactical allocations are actively reviewed as demonstrated by the increased frequency of asset allocation meetings, which have become quarterly, instead of semi-annually in 2008. However, the timely and effective revision of TAA is a challenge for Man Investments given the size of some funds and the illiquidity of certain strategies. In recognition of this challenge, Man Investments has created an overlay programme through two funds, which have been designed to hedge equity-tail risk and volatility.

SAA and TAA are agreed by the asset allocation board, which is composed of the most senior investment professionals of the firm. As such, senior management has a leading role in defining the top-down inputs of the portfolio construction process. Specifically, their decision reconciles the allocation model outputs and the judgemental inputs. While there may be room for an increased formalisation of the process to incorporate these macro top-down views in the ultimate SAA and TAA, the asset allocation boards and PMs benefit from the expert judgement of the dedicated team.

Portfolio management specialists effectively construct portfolios with all the abovementioned building blocks, taking into account portfolio constraints (in terms of liquidity, capacity and transparency) and aim to achieve optimal diversification in all styles. Depending on the respective product guidelines, which vary significantly, their main task is the selection of the most suitable investment from the approved list, while adhering to the SAA and TAA style weights defined by the top-down investment strategy process.

Portfolios are rebalanced on a monthly basis. Beyond asset allocation decisions, reasons for disposing of a fund are numerous, but include style drift, departure of key persons, administration concerns (such as pricing issues) and deterioration of performance relative to peers. Fund disposal is decided by the manager board. Turnover for highly diversified portfolios has remained stable and relatively low over time, at around 10-15% per annum.

Risk Monitoring

Fitch notes that risk management at Man Investments, whist a distinct function, is not a separate discipline, but is effectively and actively embedded in the investment process, as part of a deeply-rooted risk management culture in the organisation. Risk management is also supported by good access to data, strong analytics and deep resources dedicated to the function.

[2] Equity hedge, relative value, event driven, global macro, managed futures

Ongoing portfolio risk management in terms of risk-return and liquidity analysis is primarily the responsibility of the product risk manager with the support of the quantitative analysts. Hedge fund risk analysts monitor individual hedge fund risks. Operational due diligence analysts are in charge of the ongoing monitoring of underlying operational risks. Compliance with investment guidelines along with other product-specific risks is the responsibility of product risk management.

Hedge fund monitoring is an ongoing qualitative and quantitative process. The process takes up approximately 70% of the time of a hedge fund research analyst. Frequency and depth of the monitoring is defined by the change management rating. For instance, change management questionnaires covering all critical risk issues are bi-monthly to semi-annually and the frequency of contact ranges from ongoing to three times a year. RMF has designed and implemented a dedicated framework to collect hedge fund information, not only on the largest positions and total gross/net exposure, but also on various risk factors such as asset class, sectors and credit quality. These factors are specific to each hedge fund strategy. Quantitative warning signals are defined based on absolute and relative return. For instance, 25 triggers are tested every month, therefore requiring further investigation and decisions on the fund. Extraordinary fund reviews can be triggered not only by warning signals but also by analysts' inputs, unexpected changes in valuation or the occurrence of an external event. On a monthly basis, the investment risk committee meets and reviews the fund for which a warning signal has been detected.

Risk-adjusted performance, in particular, strategy shifts and excessive risks, are monitored quantitatively on a monthly basis. This monitoring is performed at the single manager level as well as by the peer group. Risk management takes into account information obtained from the database and risk questionnaire and is aggregated at portfolio levels to derive meaningful risk stats, such as return break-out, drawdown, performance drifts or correlation changes. Man Investments highlights that monthly risk exposure questionnaires are filled out in a timely and appropriate manner by a substantial number of managers, representing 80% of total AUM. Performance attribution, risk factor analysis, asset allocation reviews, value-at-risk (VaR) analysis and stress tests are conducted on a monthly or quarterly basis. Basic stress tests and scenario analyses are run directly on the Trading and Portfolio Optimisation (TPO) tool, the primary portfolio management system.

Liquidity mismatch risk is modelled via stress tests conducted in a sophisticated dedicated proprietary system. Scenarios of significant, simultaneous client redemptions are simulated and subsequently compared with each product's underlying liquidity structures and bridging facilities. The approach adopted is disciplined and conservative, highlighting the focus placed by Man Investments on the management of this critical risk. Fitch also notes that the funds of funds have rather conservative redemption terms.

Operational risks are monitored as part of the change management process (see *Operational Due Diligence*). The intensity of operational risk monitoring depends on the manager's operational risk rating. In particular, the rating determines the frequency of the completion of the operational risk questionnaire and on-site reviews.

Man Investments is characterised by its significant use of managed accounts, using its own platform, which offers better transparency and liquidity than individual hedge fund investments. As such, monitoring of managed accounts is daily, and is based on comprehensive risk reports covering all relevant risk measures, such as VaR, leverage and P/L drawdown, against fully transparent limits set via RiskMetrics.

Investment Administration

Reporting & Communication

Fitch notes an overall good level of communication and transparency towards investors, a reflection of the quality of Man Investments' service to clients. Client reporting is flexible and informative. Man produces a wide range of periodic client reporting. In addition to weekly performance estimates for most products, the monthly e-NAV report provides clients with estimated monthly performance by the seventh business day. All other reports are produced within the industry standard timeframe of the 15th to 20th business day.

Further to this, Man conducts periodic telephone conferences and face-to-face review meetings with clients. These provide the opportunity to discuss specific aspects of a client's portfolio and typically cover past performance, the contribution to total return at a style and manager level and the firm's market outlook.

Client review meetings are held on a semi-annual or annual basis. Unlike some of its competitors, Man Investments does not provide investors with fact sheets or systematic information packages on underlying hedge funds.

Administration

While all funds have external administrators, Man Investments benefits from the capabilities of the shared Man Group as operations and support service provider. Cash management, trade support (trade reconciliation), asset servicing (monitoring of guidelines and restrictions, monitoring of guaranteed products) and accounting (calculation of daily NAV estimates, NAV reconciliation) are the responsibility of the product management division of Man Group (155 people).

All ex-Glenwood funds have migrated to the ex-RMF operational management model, which is highly scalable. No incident was reported during the process. The fund range rationalisation, which is in progress, may increase operational risk during the transition period when products are going to be merged or closed. This is, however, necessary to reduce complexity and ultimately strengthen the scalability of administration processes.

The official NAV calculation of Man Investments' funds is either monthly or weekly. For all products, it is independently calculated by the administrator. Man Group product management performs a shadow book-keeping, which includes an automated daily calculation of fund of funds NAV estimates through the use of two independent algorithms, driven by prices originating from various sources, ranked by independence.

Previously, RMF's fund performance was calculated in accordance with Global Investment Performance Standards (GIPS), and the firm will seek to maintain GIPS compliance.

Man Investments has strict oversight and control of outsourced functions to service providers, via key performance indicators (KPI) on service level agreements (SLA) and regular monitoring visits.

Technology

Man Investments' IT platform is an extension of RMF's platform. All ex-Glenwood portfolio and underlying data (including hedge fund research) have migrated to the existing RMF platform.

Front Office

Man Investments uses a wide range of proprietary and third-party applications. Trading and Portfolio Optimisation tool (TPO) is the main front- to middle-office system, used for position keeping, order generation, trading, guidelines and limit monitoring, as well as simulation and scenario analysis. It is flexible, customised for Man Investments' needs and well integrated with internal databases and accounting systems, as well as Heimdall and Price Collection System (PCS) (see below).

To support underlying hedge fund research and the monitoring process, Man Investments makes full use of a proprietary shared application called Heimdall. Heimdall stores all qualitative information on the hedge funds that Man Investments has either invested in through RMF or seriously monitored. All records from the other companies will be migrated into Heimdall.

Man Investments also benefits from a wide range of risk analytics, specifically designed for fund investments or managed accounts. The hedge fund investment process includes various proprietary tools used for quantitative warning signal tools, hedge fund and peer group risk analysis and fund efficiency tools (to ensure the suitability of an investment for a particular fund). Man Investments also uses a sophisticated in-house liquidity risk management tool, allowing for asset and liability stress tests. The core risk analytics for managed accounts is RiskMetrics, supplemented by proprietary risk reporting tools. Finally, Man Investments models market risk factors across all accounts, through Risk Spy, a proprietary tool, based on Bloomberg interactive data access.

Finally, a proprietary application called Atlas is currently being rolled out to the rest of Man Investments to store product reference data, particularly useful for investor reporting.

Middle & Back Office

Fund administration is supported by HedgeSphere, a third party accounting and middle-office system dedicated to FoHF management and covering specific items such as partial payments, notice periods and equalisation factors. It is used by Man Group product management for all related tasks. As at July 2009, almost all modules of Hedge Sphere had been implemented to replace Larra, the previous fund accounting system. To collect and analyse NAV from administrators, Man Group product management uses PCS, a proprietary application.

Data Management

Man Investments has a strong ability to collect, analyse and report vast amounts of data through the use of a proprietary database. The Quantmaster database, which stores cleaned and enriched data over 6,100 hedge funds, is fed by HFR, TASS and Stark. The database accounts for survivorship bias. Heimdall, a proprietary database, complements the master database with qualitative analysis on the hedge funds that Man Investments has historically researched for investment. Man Investments demonstrates good reporting capabilities, on the whole, supported by a flexible underlying database infrastructure.

Integration

Man Investments' systems are well integrated, with some exception, notably between some risk analytics. TPO offers a high level of integration from trade order to settlement and is interfaced with Hedge Sphere, Heimdall, PCS and Atlas.

Integration is facilitated by a central database infrastructure: datamart feeds a number of risk analytics, such as the liquidity risk tool. Man Investments is finalising the integration of risk analytics and TPO into a single enterprise-wide risk management and monitoring platform.

IT Security

Man Group has a full disaster recovery and business continuity plan in place for all its offices.

Appendix A

Members of Man Investments Management Committee

	Background highlights
Peter Clarke **Chief Executive Officer** Years in firm: 16 Years of industry experience : 18	Mr Clarke is chief executive of Man Group plc, chairman of the firm's management committee and is also chief executive officer of Man Investments. Mr Clarke joined Man Group in 1993 and was appointed CEO in 2007. From 2000 until 2007, Mr Clarke served as Man Group's finance director, presiding over the acquisition of RMF and pursuing a strategy of focusing the business on alternative investment management. Previously worked with Morgan Grenfell and Citicorp and took a leading role in Man Group's listing on the London Stock Exchange in 1994 and the associated completion of its 100% acquisition of AHL. Mr Clarke is a trustee of the UK's Hedge Fund Standards Board and a regular keynote speaker at and contributor to industry conferences. Mr Clarke graduated with an MA in law from Queens' College Cambridge and subsequently qualified as a solicitor in 1985.
Herbert Item **investment Officer** Member of Man Investments' management committees Years in firm: 12 Years of industry experience : 22	Prior to joining Man Investments (RMF) in 1997, Mr Item spent seven years with Salomon Brothers, of which four were in London, responsible for trading substantial equity and equity derivatives books. Mr Item previously completed assignments in Zürich and Frankfurt for the same company. He began his career with Swiss Bank Corporation (SBC) in 1987. Mr Item received his Master's in business administration from the University of St. Gallen, Switzerland, specialising in banking and finance. He is a CFA charterholder and a member of the Swiss CFA Society (SCFAS).
John Rowsell **Managing Director** Years in firm: 8 Years of industry experience : 18	Responsible for all business functions. Previously, Mr Rowsell was CIO of Man Glenwood and was chairman of the investment and management committees. He was responsible for firm-wide management. Previously, Mr Rowsell also served as chief executive officer for Glenwood. Prior to joining Glenwood, Mr. Rowsell managed an internal hedge fund at McKinsey & Company. He was a managing director in alternative asset management at Carr Global Advisors, a subsidiary of Crédit Agricole Indosuez. He has also been the director of research for Crédit Agricole Futures. Mr Rowsell was an advisor to Goldman Sachs as a member of the index policy committee, Goldman Sachs Commodity Index. He was also a director at the Chicago Mercantile Exchange and an adjunct professor at the Illinois Institute of Technology, Stuart School of Business. Mr Rowsell received a BSc from the University of Guelph in Canada and his MS and Ph.D. from Virginia Polytechnic Institute.
Serge Cadelli **Chief Operating Officer of Man Investments** Years in firm: 3 Years of industry experience: 23	Mr Cadelli heads up product strategy, operations and client services. Prior to his current responsibilities, Mr Cadelli was chief operating officer of RMF Investment Management as well as chief operating officer & chief risk officer of RMF USA. He was also a member of the management committee of RMF Investment Management. Mr Cadelli started his career in 1986 at Credit Suisse, where he held various management positions, first in corporate finance and later in portfolio management in Geneva, Milan and Zurich. In 1999, he moved to Zurich Financial Services to become chief investment officer for ZFS's Swiss operations. In 2002, he was appointed to head of group investments for Continental Europe. From 2003, until he joined RMF in 2005, he was group treasurer & chief investment officer at Converium. Mr Cadelli graduated from the Solvay Institute, the business administration school of the Université Libre de Bruxelles. He holds a Ph.D. from the Hautes Etudes Commerciales, Lausanne.

Source: Man Investments